



**Generation Interconnection
Feasibility Study Report
for
Queue Project AF2-047
CRESWELL-RIDERS CREEK 115 KV
99.8 MW Capacity / 150 MW Energy**

July 2020

Table of Contents

1	Introduction	5
2	Preface	5
3	General.....	5
4	Point of Interconnection	6
5	Cost Summary	6
6	Transmission Owner Scope of Work	7
7	Schedule.....	8
8	Transmission Owner Analysis	8
8.1	Power Flow Analysis.....	8
9	Interconnection Customer Requirements	9
9.1	System Protection	9
9.2	Compliance Issues and Interconnection Customer Requirements.....	9
9.3	Power Factor Requirements	10
10	Revenue Metering and SCADA Requirements.....	10
10.1	PJM Requirements	10
10.1.1	Meteorological Data Reporting Requirements.....	10
10.2	Interconnected Transmission Owner Requirements	10
11	Summer Peak - Load Flow Analysis.....	10
11.1	Generation Deliverability	11
11.2	Multiple Facility Contingency.....	11
11.3	Contribution to Previously Identified Overloads	11
11.4	Potential Congestion due to Local Energy Deliverability	16
11.5	System Reinforcements - Summer Peak Load Flow - Primary POI	21
11.6	Flow Gate Details	28
11.6.1	Index 1.....	29
11.6.2	Index 2.....	32
11.6.3	Index 3.....	33
11.6.4	Index 4.....	34
11.6.5	Index 5.....	38
11.6.6	Index 6.....	40

11.6.7	Index 7.....	42
11.6.8	Index 8.....	44
11.6.9	Index 9.....	45
11.6.10	Index 10.....	48
11.6.11	Index 11.....	49
11.6.12	Index 12.....	51
11.6.13	Index 13.....	52
11.6.14	Index 14.....	55
11.6.15	Index 15.....	58
11.6.16	Index 16.....	61
11.6.17	Index 17.....	67
11.6.18	Index 18.....	70
11.6.19	Index 19.....	73
11.6.20	Index 20.....	76
11.6.21	Index 21.....	79
11.6.22	Index 22.....	81
11.6.23	Index 23.....	83
11.6.24	Index 24.....	86
11.6.25	Index 25.....	89
11.6.26	Index 26.....	92
11.6.27	Index 27.....	95
11.6.28	Index 28.....	96
11.6.29	Index 29.....	98
11.6.30	Index 30.....	99
11.6.31	Index 31.....	100
11.6.32	Index 32.....	101
11.6.33	Index 33.....	104
11.6.34	Index 34.....	106
11.6.35	Index 35.....	109
11.6.36	Index 36.....	113
11.6.37	Index 37.....	117
11.6.38	Index 38.....	120

11.6.39	Index 39.....	122
11.6.40	Index 40.....	123
11.6.41	Index 41.....	124
11.6.42	Index 42.....	126
11.6.43	Index 43.....	128
11.6.44	Index 44.....	130
11.6.45	Index 45.....	133
11.7	Queue Dependencies.....	136
11.8	Contingency Descriptions	141
12	Short Circuit Analysis	148
13	Affected Systems.....	148
13.1	TVA.....	148
13.2	Duke Energy Progress	148
Attachment 1: One Line Diagram.....		149

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 generating facility located in Washington County, North Carolina. The installed facilities will have a total capability of 150 MW with 99.8 MW of this output being

recognized by PJM as Capacity. The proposed in-service date for this project is June 01, 2022. This study does not imply a TO commitment to this in-service date.

Queue Number	AF2-047
Project Name	CRESWELL-RIDERS CREEK 115 KV
State	North Carolina
County	Washington
Transmission Owner	Dominion
MFO	150
MWE	150
MWC	99.8
Fuel	Solar
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

AF2-047 will interconnect with the Dominion transmission system. The primary POI is a single line tap between Creswell 115 kV substation and Riders Creek 115 kV substation. The IC is responsible for securing right-of-way, permits and constructing the proposed attachment line from the storage facility site to the proposed new substation. 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.

There is no secondary point of interconnection specified for AF2-047.

5 Cost Summary

The AF2-047 project will be responsible for the following costs:

Description	Total Cost
Total Physical Interconnection Costs	\$ 8,800,000
Total System Network Upgrade Costs	\$ 793,120,000
Total Costs	\$ 80,192,000

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 AF2-047 was evaluated as a 99.8 MW Capacity (150.0 MW Energy) injection at a single line tap between Creswell 115 kV substation and Riders Creek 115 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 AF2-047 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	\$ 1,700,000
New three breaker ring-bus substation	\$ 5,500,000
Re-arrange 115kV line to cut-in new substation	\$ 1,600,000
Total Physical Interconnection Costs	\$ 8,800,000

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.

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

7 Schedule

The 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 further deficiencies were identified.

9 Interconnection Customer Requirements

9.1 System Protection

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

9.2 Compliance Issues and Interconnection Customer Requirements

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

1. The purchase and installation of a fully rated protection device (circuit breaker, circuit switcher, fuse) to protect the IC’s GSU transformer(s).
2. The purchase and installation of the minimum required Dominion generation interconnection relaying and control facilities as described in the System Protection 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.

10.1.1 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)

10.2 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

The Queue Project AF2-047 was evaluated as a 150.0 MW (Capacity 99.8 MW) injection tapping the Creswell to Riders Creek 115 kV line in the Dominion area. Project AF2-047 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AF2-047 was studied with a commercial probability of 53.0 %. Potential network impacts were as follows:

11.1 Generation Deliverability

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC/D C	MW IMPACT
96828791	313845	6HATHAWAY	230.0	DVP	304222	6ROCKYMT30T	230.0	CPL E	1	DVP_P 1-2: LN 2181	single	478.0	98.86	100.55	DC	8.1
97890724	313885	6WALBMR L	230.0	DVP	313714	6PERQUIMANS	230.0	DVP	1	Base Case	single	733.200012207	95.43	102.31	DC	50.43
97890698	314203	6MACKKEYS	230.0	DVP	314637	6EDENTON	230.0	DVP	1	Base Case	single	731.320007324	99.49	106.39	DC	50.43
96828741	314574	6EVERETS	230.0	DVP	304451	6GREENVILLE	230.0	CPL E	1	DVP_P 1-2: LN 2131	single	478.0	99.42	103.87	DC	21.24
97891100	314579	6HORNRT N	230.0	DVP	934330	AD1-057 TAP	230.0	DVP	1	DVP_P 1-2: LN 238-B	single	441.799987793	98.99	100.19	DC	5.32
97115034	314596	3POPLR C	115.0	DVP	314573	3EVERETS	115.0	DVP	1	DVP_P 1-2: LN 2092	single	269.779998779	96.6	104.25	DC	20.64
97115035	314596	3POPLR C	115.0	DVP	314573	3EVERETS	115.0	DVP	1	DVP_P 1-2: LN 2131	single	269.779998779	95.69	103.34	DC	20.64
97115049	314614	3TRWBRD G2	115.0	DVP	314596	3POPLR C	115.0	DVP	1	DVP_P 1-2: LN 2092	single	285.760009766	93.19	100.42	DC	20.64
97890736	314637	6EDENTON	230.0	DVP	313885	6WALBMR L	230.0	DVP	1	Base Case	single	733.200012207	95.43	102.31	DC	50.43
97890657	314638	6ELIZ CT	230.0	DVP	314647	6SHAWBRO	230.0	DVP	1	DVP_P 1-2: LN 2144	single	571.520019531	97.51	104.82	DC	41.76
97890649	314662	6SHERTFORD	230.0	DVP	314651	6WINFALL	230.0	DVP	1	Base Case	single	733.200012207	98.71	105.58	DC	50.43

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 LOADING %	POST PROJECT LOADING %	AC/D C	MW IMPACT
97708582	314550	6HICKORY	230.0	DVP	314466	6FENTRESS	230.0	DVP	1	DVP_P4 -2: 26922	breaker	699.0	97.15	101.57	DC	30.89

11.3 Contribution to Previously Identified Overloads

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC/D C	MW IMPACT
97708360	313714	6PERQUIMANS	230.0	DVP	314662	6SHERTFORD	230.0	DVP	1	DVP_P4-2: 246T2034	breaker	897.0	200.97	213.27	DC	110.36

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/D C	MW IMPACT
977083 61	3137 14	6PERQUIMANS	230.0	DVP	3146 62	6S HERTFORD	230.0	DVP	1	DVP_P4-2: 203462	breaker	897.0	196.57	208.87	DC	110.36
978906 32	3137 14	6PERQUIMANS	230.0	DVP	3146 62	6S HERTFORD	230.0	DVP	1	DVP_P1-2: LN 246	single	733.200012 207	125.24	132.62	DC	54.35
978906 33	3137 14	6PERQUIMANS	230.0	DVP	3146 62	6S HERTFORD	230.0	DVP	1	DVP_P1-2: LN 2034-B	single	733.200012 207	109.65	119.66	DC	73.42
978906 37	3137 14	6PERQUIMANS	230.0	DVP	3146 62	6S HERTFORD	230.0	DVP	1	Base Case	single	733.200012 207	100.51	107.39	DC	50.43
985372 22	3137 14	6PERQUIMANS	230.0	DVP	3146 62	6S HERTFORD	230.0	DVP	1	DVP_P7-1: LN 25-2034-A	tower	897.0	224.14	239.26	DC	135.65
978908 28	3138 45	6HATHAWAY	230.0	DVP	3145 91	6NASH	230.0	DVP	1	DVP_P1-2: LN 2058	single	449.320007 324	109.74	111.58	DC	8.24
977084 59	3138 51	6ECITYDP2	230.0	DVP	3146 38	6ELIZ CT	230.0	DVP	1	DVP_P4-2: 246T247	breaker	1204.0	139.03	144.78	DC	69.21
977084 60	3138 51	6ECITYDP2	230.0	DVP	3146 38	6ELIZ CT	230.0	DVP	1	DVP_P4-2: 24742	breaker	1204.0	114.86	120.09	DC	62.93
977083 90	3138 85	6WALBMRL	230.0	DVP	3137 14	6PERQUIMANS	230.0	DVP	1	DVP_P4-2: 246T2034	breaker	897.0	172.5	184.8	DC	110.36
977083 91	3138 85	6WALBMRL	230.0	DVP	3137 14	6PERQUIMANS	230.0	DVP	1	DVP_P4-2: 203462	breaker	897.0	167.79	180.1	DC	110.36
978907 19	3138 85	6WALBMRL	230.0	DVP	3137 14	6PERQUIMANS	230.0	DVP	1	DVP_P1-2: LN 246	single	733.200012 207	120.15	127.53	DC	54.35
978907 20	3138 85	6WALBMRL	230.0	DVP	3137 14	6PERQUIMANS	230.0	DVP	1	DVP_P1-2: LN 2034-B	single	733.200012 207	104.34	114.35	DC	73.42
985372 42	3138 85	6WALBMRL	230.0	DVP	3137 14	6PERQUIMANS	230.0	DVP	1	DVP_P7-1: LN 25-2034-A	tower	897.0	192.62	207.74	DC	135.65
977083 80	3142 03	6MACKEYS	230.0	DVP	3146 37	6EDENTON	230.0	DVP	1	DVP_P4-2: 246T2034	breaker	895.0	176.0	188.33	DC	110.36
977083 81	3142 03	6MACKEYS	230.0	DVP	3146 37	6EDENTON	230.0	DVP	1	DVP_P4-2: 203462	breaker	895.0	171.29	183.62	DC	110.36
978906 93	3142 03	6MACKEYS	230.0	DVP	3146 37	6EDENTON	230.0	DVP	1	DVP_P1-2: LN 246	single	731.320007 324	124.27	131.67	DC	54.35
978906 94	3142 03	6MACKEYS	230.0	DVP	3146 37	6EDENTON	230.0	DVP	1	DVP_P1-2: LN 2034-B	single	731.320007 324	108.42	118.46	DC	73.42
985372 32	3142 03	6MACKEYS	230.0	DVP	3146 37	6EDENTON	230.0	DVP	1	DVP_P7-1: LN 25-2034-A	tower	895.0	196.17	211.32	DC	135.65
978906 60	3142 09	6SKIFF CREEK	230.0	DVP	3143 86	6KINGS M	230.0	DVP	1	DVP_P1-2: LN 557	single	441.799987 793	189.19	189.8	DC	5.92
978906 63	3142 09	6SKIFF CREEK	230.0	DVP	3143 86	6KINGS M	230.0	DVP	1	DVP_P1-2: LN 567	single	441.799987 793	145.89	146.58	DC	6.78
977084 69	3142 87	6CHESTFB	230.0	DVP	3142 76	6BASIN	230.0	DVP	1	DVP_P4-2: 562T563	breaker	812.0	141.01	141.51	DC	8.95
978907 01	3142 96	6PENNIMA N	230.0	DVP	3144 15	6WALR209	230.0	DVP	1	DVP_P1-2: LN 557	single	441.799987 793	177.79	178.4	DC	5.92

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/D C	MW IMPACT
97890704	314296	6PENNIMAN	230.0	DVP	314415	6WALR209	230.0	DVP	1	DVP_P1-2: LN 567	single	441.799987793	134.48	135.18	DC	6.78
97890681	314386	6KINGS M	230.0	DVP	314296	6PENNIMAN	230.0	DVP	1	DVP_P1-2: LN 557	single	441.799987793	181.43	182.04	DC	5.92
97890684	314386	6KINGS M	230.0	DVP	314296	6PENNIMAN	230.0	DVP	1	DVP_P1-2: LN 567	single	441.799987793	138.12	138.82	DC	6.78
97890769	314415	6WALR209	230.0	DVP	314391	6LIGH209	230.0	DVP	1	DVP_P1-2: LN 557	single	441.799987793	162.67	163.28	DC	5.92
97890772	314415	6WALR209	230.0	DVP	314391	6LIGH209	230.0	DVP	1	DVP_P1-2: LN 567	single	441.799987793	119.36	120.06	DC	6.78
97890817	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P1-2: LN 246	single	678.679992676	124.59	125.26	DC	10.34
97708506	314466	6FENTRES	230.0	DVP	314508	6THRASHER	230.0	DVP	1	DVP_P4-2: 231T2026	breaker	830.0	132.11	132.75	DC	11.75
97708615	314466	6FENTRES	230.0	DVP	934060	AD1-033 TAP	230.0	DVP	1	DVP_P4-2: 2110T2128	breaker	830.0	112.16	112.86	DC	13.04
97708581	314550	6HICKORY	230.0	DVP	314466	6FENTRES	230.0	DVP	1	DVP_P4-2: 246T247	breaker	699.0	109.38	114.43	DC	35.31
97708511	314561	6CAROLNA	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	DVP_P4-2: 246T247	breaker	459.0	126.01	131.19	DC	23.81
97708512	314561	6CAROLNA	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	DVP_P4-2: 218T2160	breaker	459.0	119.25	124.68	DC	24.95
97708513	314561	6CAROLNA	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	DVP_P4-2: 2020T2144	breaker	459.0	114.99	120.85	DC	26.91
97890867	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P1-2: LN 246	single	678.679992676	109.63	110.31	DC	10.34
97890607	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	157.04	163.21	DC	35.45
97890608	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	DVP_P1-2: LN 2131	single	571.520019531	156.72	162.88	DC	35.45
97890613	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	Base Case	single	571.520019531	100.11	102.38	DC	13.06
96828740	314574	6EVERETS	230.0	DVP	304451	6GREENVILLE	230.0	CPL E	1	DVP_P1-2: LN 2092	single	478.0	100.03	104.47	DC	21.24
96829163	314574	6EVERETS	230.0	DVP	304451	6GREENVILLE	230.0	CPL E	1	DVP_P7-1: LN 2058-2181	tower	478.0	172.17	176.82	DC	22.18
97890619	314575	6NUCO TP	230.0	DVP	957790	AF2-073 TAP	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	150.64	156.8	DC	35.45
97890620	314575	6NUCO TP	230.0	DVP	957790	AF2-073 TAP	230.0	DVP	1	DVP_P1-2: LN 2131	single	571.520019531	150.33	156.49	DC	35.45
97115904	314576	3FIVE PT	115.0	DVP	314622	3WHARTON	115.0	DVP	1	DVP_P7-1: LN 25-2034-A	tower	91.0	223.7	230.76	DC	14.23

ID	FROM BUS#	FROM BUS	kV	FROM BUS ARE A	TO BUS#	TO BUS	kV	TO BUS ARE A	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE C T LOADI NG %	POST PROJE C T LOADI NG %	AC D C	MW IMPA CT
97890779	314583	6LAKEVEW	230.0	DVP	924510	AB2-100 TAP	230.0	DVP	1	DVP_P1-2: LN 246	single	375.059997559	136.23	138.92	DC	10.09
97890780	314583	6LAKEVEW	230.0	DVP	924510	AB2-100 TAP	230.0	DVP	1	3145723EMPORIA 115925170AB2-174 TAP 1151	single	375.059997559	127.51	129.68	DC	8.12
97890784	314583	6LAKEVEW	230.0	DVP	924510	AB2-100 TAP	230.0	DVP	1	Base Case	single	375.059997559	106.55	108.54	DC	7.45
97115908	314592	3PANTEGO	115.0	DVP	925120	AB2-169 TAP	115.0	DVP	1	DVP_P7-1: LN 25-2034-A	tower	91.0	176.91	183.97	DC	14.26
97114761	314596	3POPLR C	115.0	DVP	314573	3EVERETS	115.0	DVP	1	DVP_P4-2: 246T2034	breaker	349.0	149.99	159.38	DC	32.78
97114756	314614	3TRWBRDG 2	115.0	DVP	314596	3POPLR C	115.0	DVP	1	DVP_P4-2: 246T2034	breaker	350.0	151.19	160.55	DC	32.78
97890576	314616	6TRWBRDG	230.0	DVP	933990	AD1-023 TAP	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	125.58	138.67	DC	74.84
97890577	314616	6TRWBRDG	230.0	DVP	933990	AD1-023 TAP	230.0	DVP	1	DVP_P1-2: LN 2131	single	571.520019531	124.17	137.26	DC	74.84
97890557	314620	6CASHIE	230.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	161.86	174.95	DC	74.84
97890558	314620	6CASHIE	230.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P1-2: LN 2131	single	571.520019531	160.45	173.54	DC	74.84
97708395	314637	6EDENTON	230.0	DVP	313885	6WALBMRL	230.0	DVP	1	DVP_P4-2: 246T2034	breaker	897.0	172.5	184.8	DC	110.36
97708396	314637	6EDENTON	230.0	DVP	313885	6WALBMRL	230.0	DVP	1	DVP_P4-2: 203462	breaker	897.0	167.79	180.1	DC	110.36
97890731	314637	6EDENTON	230.0	DVP	313885	6WALBMRL	230.0	DVP	1	DVP_P1-2: LN 246	single	733.200012207	120.16	127.54	DC	54.35
97890732	314637	6EDENTON	230.0	DVP	313885	6WALBMRL	230.0	DVP	1	DVP_P1-2: LN 2034-B	single	733.200012207	104.35	114.37	DC	73.42
98537237	314637	6EDENTON	230.0	DVP	313885	6WALBMRL	230.0	DVP	1	DVP_P7-1: LN 25-2034-A	tower	897.0	192.63	207.75	DC	135.65
97708335	314638	6ELIZ CT	230.0	DVP	314647	6SHAWBRO	230.0	DVP	1	DVP_P4-2: 246T247	breaker	699.0	231.83	241.73	DC	69.2
97708336	314638	6ELIZ CT	230.0	DVP	314647	6SHAWBRO	230.0	DVP	1	DVP_P4-2: 24742	breaker	699.0	195.1	204.1	DC	62.92
97890656	314638	6ELIZ CT	230.0	DVP	314647	6SHAWBRO	230.0	DVP	1	DVP_P1-2: LN 247	single	571.520019531	114.33	121.63	DC	41.75
97708454	314639	6TANGLEW	230.0	DVP	313851	6ECITYDP2	230.0	DVP	1	DVP_P4-2: 246T247	breaker	1204.0	141.0	146.76	DC	69.21
97708455	314639	6TANGLEW	230.0	DVP	313851	6ECITYDP2	230.0	DVP	1	DVP_P4-2: 24742	breaker	1204.0	116.84	122.06	DC	62.93
97708642	314645	6SLIGO L269	230.0	DVP	314466	6FENTRES	230.0	DVP	1	DVP_P4-2: 246T247	breaker	699.0	102.51	107.36	DC	33.82

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC/D C	MW IMPACT
97708449	314651	6WINFALL	230.0	DVP	314639	6TANGLEW	230.0	DVP	1	DVP_P4-2: 246T247	breaker	1163.0	148.46	154.42	DC	69.22
97708450	314651	6WINFALL	230.0	DVP	314639	6TANGLEW	230.0	DVP	1	DVP_P4-2: 24742	breaker	1163.0	124.62	130.04	DC	62.94
97708365	314662	6S HERTFORD	230.0	DVP	314651	6WINFALL	230.0	DVP	1	DVP_P4-2: 246T2034	breaker	897.0	199.74	212.04	DC	110.36
97708366	314662	6S HERTFORD	230.0	DVP	314651	6WINFALL	230.0	DVP	1	DVP_P4-2: 203462	breaker	897.0	195.05	207.35	DC	110.36
97890644	314662	6S HERTFORD	230.0	DVP	314651	6WINFALL	230.0	DVP	1	DVP_P1-2: LN 246	single	733.200012207	123.43	130.81	DC	54.35
97890645	314662	6S HERTFORD	230.0	DVP	314651	6WINFALL	230.0	DVP	1	DVP_P1-2: LN 2034-B	single	733.200012207	107.85	117.87	DC	73.42
98537227	314662	6S HERTFORD	230.0	DVP	314651	6WINFALL	230.0	DVP	1	DVP_P7-1: LN 25-2034-A	tower	897.0	222.81	237.93	DC	135.65
96828765	314903	8CHCKAHM	500.0	DVP	314908	8ELMONT	500.0	DVP	1	DVP_P1-2: LN 563	single	2442.12011719	163.73	163.81	DC	26.97
96828766	314903	8CHCKAHM	500.0	DVP	314908	8ELMONT	500.0	DVP	1	DVP_P1-2: LN 576	single	2442.12011719	161.04	161.12	DC	27.01
96828777	314914	8MDLTHAN	500.0	DVP	314918	8NO ANNA	500.0	DVP	1	DVP_P1-2: LN 574	single	2442.12011719	149.95	150.03	DC	26.26
96828778	314914	8MDLTHAN	500.0	DVP	314918	8NO ANNA	500.0	DVP	1	DVP_P1-2: LN 557	single	2442.12011719	139.11	139.16	DC	25.38
96828671	314924	8SURREY	500.0	DVP	314903	8CHCKAHM	500.0	DVP	1	DVP_P4-2: 56372	breaker	3144.0	124.14	124.18	DC	37.75
96828672	314924	8SURREY	500.0	DVP	314903	8CHCKAHM	500.0	DVP	1	DVP_P4-2: 563T576	breaker	3144.0	114.0	114.04	DC	37.91
97890673	924510	AB2-100 TAP	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 246	single	375.059997559	152.61	155.29	DC	10.06
97890674	924510	AB2-100 TAP	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	3145723EMPORIA 115 925170 AB2-174 TAP 115 1	single	375.059997559	143.75	145.9	DC	8.09
97890678	924510	AB2-100 TAP	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	single	375.059997559	122.87	124.85	DC	7.41
97115903	925120	AB2-169 TAP	115.0	DVP	314576	3FIVE PT	115.0	DVP	1	DVP_P7-1: LN 25-2034-A	tower	91.0	235.46	242.51	DC	14.23
97890568	933990	AD1-023 TAP	230.0	DVP	314620	6CASHIE	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	136.48	149.57	DC	74.84
97890569	933990	AD1-023 TAP	230.0	DVP	314620	6CASHIE	230.0	DVP	1	DVP_P1-2: LN 2131	single	571.520019531	135.07	148.16	DC	74.84
97708593	934060	AD1-033 TAP	230.0	DVP	314481	6LANDSTN	230.0	DVP	1	DVP_P4-2: 2110T2128	breaker	830.0	116.51	117.22	DC	13.04
97890984	934330	AD1-057 TAP	230.0	DVP	313845	6HATHAWAY	230.0	DVP	1	DVP_P1-2: LN 238-B	single	441.799987793	107.56	108.77	DC	5.32

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
97708631	938530	AE1-072 TAP	230.0	DVP	314645	6SLIGO L269	230.0	DVP	1	DVP_P4-2: 246T247	breaker	699.0	103.66	108.5	DC	33.82
97890595	957790	AF2-073 TAP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	150.79	156.96	DC	35.45
97890596	957790	AF2-073 TAP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	DVP_P1-2: LN 2131	single	571.520019531	149.82	156.0	DC	35.45
97890583	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 2092	single	571.520019531	151.06	157.24	DC	35.45
97890584	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 2131	single	571.520019531	150.36	156.54	DC	35.45

11.4 Potential Congestion due to Local Energy Deliverability

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

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
97891186	313701	6CHINQUAPI N	230.0	DVP	314609	6TARBORO	230.0	DVP	1	DVP_P1-2: LN 218	operation	441.799987793	104.08	108.17	DC	18.09
97890999	313713	6SWAMP	230.0	DVP	314648	6SUNBURY	230.0	DVP	1	DVP_P1-2: LN 2020	operation	984.179992676	142.56	149.2	DC	65.33
97890626	313714	6PERQUIMANS	230.0	DVP	314662	6S HERTFORD	230.0	DVP	1	DVP_P1-2: LN 2034-B	operation	733.200012207	240.47	255.52	DC	110.34
97890631	313714	6PERQUIMANS	230.0	DVP	314662	6S HERTFORD	230.0	DVP	1	Base Case	operation	733.200012207	196.05	206.39	DC	75.79
96828787	313845	6HATHAWAY	230.0	DVP	304222	6ROCKYMT2 30T	230.0	CPL E	1	DVP_P1-2: LN 2181	operation	478.0	135.79	136.94	DC	12.18
97890823	313845	6HATHAWAY	230.0	DVP	314591	6NASH	230.0	DVP	1	DVP_P1-2: LN 2058	operation	449.320007324	150.25	151.49	DC	12.39
97891020	313851	6ECITYDP2	230.0	DVP	314638	6ELIZ CT	230.0	DVP	1	DVP_P1-2: LN 247	operation	984.179992676	140.41	146.78	DC	62.76
97890713	313885	6WALBMRL	230.0	DVP	313714	6PERQUIMANS	230.0	DVP	1	DVP_P1-2: LN 2034-B	operation	733.200012207	205.27	220.32	DC	110.34
97890718	313885	6WALBMRL	230.0	DVP	313714	6PERQUIMANS	230.0	DVP	1	Base Case	operation	733.200012207	165.92	176.26	DC	75.79

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
97890687	314203	6MACKEYS	230.0	DVP	314637	6EDENTON	230.0	DVP	1	DVP_P1-2: LN 2034-B	operation	731.320007324	209.61	224.7	DC	110.34
97890692	314203	6MACKEYS	230.0	DVP	314637	6EDENTON	230.0	DVP	1	Base Case	operation	731.320007324	170.16	180.53	DC	75.79
97890707	314203	6MACKEYS	230.0	DVP	314594	6PLYMOTH	230.0	DVP	1	DVP_P1-2: LN 2092	operation	789.599975586	204.37	223.36	DC	149.96
97890712	314203	6MACKEYS	230.0	DVP	314594	6PLYMOTH	230.0	DVP	1	Base Case	operation	789.599975586	97.76	107.15	DC	74.17
97890658	314209	6SKIFF CREEK	230.0	DVP	314386	6KINGS M	230.0	DVP	1	DVP_P1-2: LN 567	operation	441.799987793	236.08	236.68	DC	10.19
97891081	314209	6SKIFF CREEK	230.0	DVP	314413	6WALR285	230.0	DVP	1	DVP_P1-2: LN 567	operation	678.679992676	138.49	139.04	DC	9.83
97890832	314287	6CHESTFB	230.0	DVP	314276	6BASIN	230.0	DVP	1	DVP_P1-2: LN 563	operation	663.640014648	172.07	172.3	DC	9.19
97890699	314296	6PENNIMAN	230.0	DVP	314415	6WALR209	230.0	DVP	1	DVP_P1-2: LN 567	operation	441.799987793	224.67	225.27	DC	10.19
97890679	314386	6KINGS M	230.0	DVP	314296	6PENNIMAN	230.0	DVP	1	DVP_P1-2: LN 567	operation	441.799987793	228.32	228.91	DC	10.19
97891238	314390	6LIGH285	230.0	DVP	314214	6CHCKAHM	230.0	DVP	1	DVP_P1-2: LN 567	operation	678.679992676	119.04	119.47	DC	9.83
97891131	314391	6LIGH209	230.0	DVP	314388	6LANEXA	230.0	DVP	1	DVP_P1-2: LN 567	operation	663.640014648	132.56	132.95	DC	10.19
97891155	314413	6WALR285	230.0	DVP	314390	6LIGH285	230.0	DVP	1	DVP_P1-2: LN 567	operation	678.679992676	129.96	130.51	DC	9.83
97890767	314415	6WALR209	230.0	DVP	314391	6LIGH209	230.0	DVP	1	DVP_P1-2: LN 567	operation	441.799987793	209.55	210.15	DC	10.19
97890811	314435	6SAPONY	230.0	DVP	314282	6CARSON	230.0	DVP	1	DVP_P1-2: LN 246	operation	678.679992676	178.12	179.15	DC	15.54
97890891	314466	6FENTRES	230.0	DVP	314508	6THRASHER	230.0	DVP	1	DVP_P1-2: LN 271-B	operation	678.679992676	156.82	157.79	DC	14.46
97891102	314466	6FENTRES	230.0	DVP	934060	AD1-033 TAP	230.0	DVP	1	DVP_P1-2: LN 2128	operation	678.679992676	131.71	132.47	DC	11.44
97891126	314550	6HICKORY	230.0	DVP	314466	6FENTRES	230.0	DVP	1	3146456SLIGO L269 230 938530 AE1-072 TAP 230 1	operation	571.520019531	118.38	123.86	DC	31.28
97890969	314561	6CAROLNA	230.0	DVP	314583	6LAKEVEW	230.0	DVP	1	DVP_P1-2: LN 2092	operation	375.059997559	140.38	147.55	DC	26.86
97890861	314563	6CLUBHSE	230.0	DVP	940480	AE2-033 TAP	230.0	DVP	1	DVP_P1-2: LN 246	operation	678.679992676	159.11	160.15	DC	15.55
97890928	314564	6EDGECOM	230.0	DVP	313845	6HATHAWAY	230.0	DVP	1	DVP_P1-2: LN 218	operation	441.799987793	108.69	112.79	DC	18.09
97890602	314569	6GEARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	262.27	271.6	DC	53.28

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC/DC	MW IMPACT
97890609	314569	6EARLEYS	230.0	DVP	314575	6NUCO TP	230.0	DVP	1	Base Case	operation	571.520019531	142.19	143.74	DC	19.64
96828734	314574	6EVERETS	230.0	DVP	304451	6GREENVILLE	230.0	CPL E	1	DVP_P1-2: LN 2092	operation	478.0	171.17	177.85	DC	31.92
96828739	314574	6EVERETS	230.0	DVP	304451	6GREENVILLE	230.0	CPL E	1	Base Case	operation	478.0	119.15	123.04	DC	18.57
97890614	314575	6NUCO TP	230.0	DVP	957790	AF2-073 TAP	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	255.87	265.2	DC	53.28
97890621	314575	6NUCO TP	230.0	DVP	957790	AF2-073 TAP	230.0	DVP	1	Base Case	operation	571.520019531	135.78	137.33	DC	19.64
97890774	314583	6LAKEVIEW	230.0	DVP	924510	AB2-100 TAP	230.0	DVP	1	DVP_P1-2: LN 246	operation	375.059997559	190.94	192.77	DC	15.17
97890778	314583	6LAKEVIEW	230.0	DVP	924510	AB2-100 TAP	230.0	DVP	1	Base Case	operation	375.059997559	149.46	150.81	DC	11.19
96828793	314591	6NASH	230.0	DVP	304226	6PA-RMOUNT#4	230.0	CPL E	1	DVP_P1-2: LN 2058	operation	478.0	135.92	137.09	DC	12.39
97890737	314594	6PLYMOUTH	230.0	DVP	314616	6TRWBRDG	230.0	DVP	1	DVP_P1-2: LN 2092	operation	789.599975586	202.08	221.07	DC	149.96
97890742	314594	6PLYMOUTH	230.0	DVP	314616	6TRWBRDG	230.0	DVP	1	Base Case	operation	789.599975586	95.47	104.86	DC	74.17
97115028	314596	3POPLR C	115.0	DVP	314573	3EVERETS	115.0	DVP	1	3146206CASHIE 230933990AD1-023 TAP 230 1	operation	269.779998779	196.26	208.42	DC	32.8
97115033	314596	3POPLR C	115.0	DVP	314573	3EVERETS	115.0	DVP	1	Base Case	operation	247.220001221	107.33	113.77	DC	15.91
97115182	314613	3TRWBRDG	115.0	DVP	314621	3WEYRHAUESER	115.0	DVP	1	DVP_P1-2: LN 2034-A	operation	269.779998779	128.64	139.22	DC	28.55
97115043	314614	3TRWBRDG2	115.0	DVP	314596	3POPLR C	115.0	DVP	1	3146206CASHIE 230933990AD1-023 TAP 230 1	operation	285.760009766	187.28	198.76	DC	32.8
97115048	314614	3TRWBRDG2	115.0	DVP	314596	3POPLR C	115.0	DVP	1	Base Case	operation	284.820007324	95.17	100.75	DC	15.91
97890570	314616	6TRWBRDG	230.0	DVP	933990	AD1-023 TAP	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	290.93	310.61	DC	112.48
97890575	314616	6TRWBRDG	230.0	DVP	933990	AD1-023 TAP	230.0	DVP	1	Base Case	operation	571.520019531	147.9	157.51	DC	54.92
97890551	314620	6CASHIE	230.0	DVP	314569	6EARLEYS	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	336.95	356.64	DC	112.48
97890556	314620	6CASHIE	230.0	DVP	314569	6EARLEYS	230.0	DVP	1	Base Case	operation	571.520019531	174.23	183.84	DC	54.92
97115072	314621	3WEYRHAUESER	115.0	DVP	314614	3TRWBRDG2	115.0	DVP	1	DVP_P1-2: LN 2034-A	operation	269.779998779	166.98	177.54	DC	28.51
97890725	314637	6EDENTON	230.0	DVP	313885	6WALBMRL	230.0	DVP	1	DVP_P1-2: LN 2034-B	operation	733.200012207	205.28	220.33	DC	110.34
97890730	314637	6EDENTON	230.0	DVP	313885	6WALBMRL	230.0	DVP	1	Base Case	operation	733.200012207	165.92	176.26	DC	75.79

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
97890650	314638	6ELIZ CT	230.0	DVP	314647	6SHAWBRO	230.0	DVP	1	DVP_P1-2: LN 247	operation	571.520019531	238.43	249.41	DC	62.75
97890655	314638	6ELIZ CT	230.0	DVP	314647	6SHAWBRO	230.0	DVP	1	Base Case	operation	568.700012207	152.6	159.03	DC	36.57
97890993	314639	6TANGLEW	230.0	DVP	313851	6ECITYDP2	230.0	DVP	1	DVP_P1-2: LN 247	operation	984.179992676	142.82	149.2	DC	62.76
97891134	314645	6SLIGO L269	230.0	DVP	314466	6FENTRES	230.0	DVP	1	3145506HICKORY 230 937220 AD2-160 TAP 230 1	operation	571.520019531	119.45	124.85	DC	30.88
97891247	314647	6SHAWBRO	230.0	DVP	938530	AE1-072 TAP	230.0	DVP	1	3145506HICKORY 230 937220 AD2-160 TAP 230 1	operation	571.520019531	104.45	109.85	DC	30.88
97891015	314648	6SUNBURY	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 2020	operation	984.179992676	141.17	147.81	DC	65.33
97890845	314651	6WINFALL	230.0	DVP	314639	6TANGLEW	230.0	DVP	1	DVP_P1-2: LN 247	operation	898.640014648	160.59	167.58	DC	62.77
97890850	314651	6WINFALL	230.0	DVP	314639	6TANGLEW	230.0	DVP	1	Base Case	operation	823.440002441	115.04	119.48	DC	36.59
97891229	314651	6WINFALL	230.0	DVP	313713	6SWAMP	230.0	DVP	1	DVP_P1-2: LN 2020	operation	984.179992676	114.2	120.84	DC	65.35
97890638	314662	6SHERTFORD	230.0	DVP	314651	6WINFALL	230.0	DVP	1	DVP_P1-2: LN 2034-B	operation	733.200012207	238.61	253.66	DC	110.34
97890643	314662	6SHERTFORD	230.0	DVP	314651	6WINFALL	230.0	DVP	1	Base Case	operation	733.200012207	192.41	202.75	DC	75.79
96828810	314924	8SURREY	500.0	DVP	314903	8CHCKAHM	500.0	DVP	1	DVP_P1-2: LN 563	operation	2442.12011719	144.49	144.55	DC	37.11
96828865	314927	8YADKIN	500.0	DVP	314928	8SUFFOLK	500.0	DVP	1	DVP_P1-2: LN 579	operation	2442.12011719	125.2	125.7	DC	27.71
96828919	314927	8YADKIN	500.0	DVP	314923	8SEPTA	500.0	DVP	1	DVP_P1-2: LN 565	operation	2442.12011719	113.99	114.52	DC	30.09
96828937	314928	8SUFFOLK	500.0	DVP	314924	8SURREY	500.0	DVP	1	DVP_P1-2: LN 579	operation	2442.12011719	102.48	102.78	DC	35.88
97890668	924510	AB2-100 TAP	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	DVP_P1-2: LN 246	operation	375.059997559	212.98	214.8	DC	15.12
97890672	924510	AB2-100 TAP	230.0	DVP	314563	6CLUBHSE	230.0	DVP	1	Base Case	operation	375.059997559	170.0	171.34	DC	11.14
97890562	933990	AD1-023 TAP	230.0	DVP	314620	6CASHIE	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	307.77	327.45	DC	112.48
97890567	933990	AD1-023 TAP	230.0	DVP	314620	6CASHIE	230.0	DVP	1	Base Case	operation	571.520019531	158.81	168.42	DC	54.92
97891084	934060	AD1-033 TAP	230.0	DVP	314481	6LANDSTN	230.0	DVP	1	DVP_P1-2: LN 2128	operation	678.679992676	135.68	136.44	DC	11.44

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC/DC	MW IMPACT
97891108	938530	AE1-072 TAP	230.0	DVP	314645	6SLIGO L269	230.0	DVP	1	3145506HICKORY 230 937220 AD2-160 TAP 230 1	operation	571.520019531	120.83	126.24	DC	30.88
97890590	957790	AF2-073 TAP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	254.75	264.08	DC	53.28
97890597	957790	AF2-073 TAP	230.0	DVP	957820	AF2-076 TAP	230.0	DVP	1	Base Case	operation	571.520019531	132.9	134.44	DC	19.64
97890578	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	DVP_P1-2: LN 2092	operation	571.520019531	255.02	264.35	DC	53.28
97890585	957820	AF2-076 TAP	230.0	DVP	314537	6SUFFOLK	230.0	DVP	1	Base Case	operation	571.520019531	132.88	134.43	DC	19.64

11.5 System Reinforcements - Summer Peak Load Flow - Primary POI

ID	Idx	Facility	Upgrade Description	Cost
97890608,97890607,97890613	25	6GEARLEYS 230.0 kV - 6NUCO TP 230.0 kV Ckt 1	<u>DVP</u> dom-017 (1102) : Rebuild 13.7 miles of 230 kV Line 246 from Earleys to Nucor Tap with 2-636 ACSR. Project Type : FAC Cost : \$20,550,000 Time Estimate : 30-36 Months	\$20,550,000
97890619,97890620	26	6NUCO TP 230.0 kV - AF2-073 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-222 (1340) : Rebuild 18.1 miles of 230 kV Line 246 from Nuco TP to AF2-073 with 2-636 ACSR. Project Type : FAC Cost : \$27,150,000 Time Estimate : 36-40 Months	\$27,150,000
97890724,97890720,97708391,97708390,98537242,97890719	2	6WALBMRL 230.0 kV - 6PERQUIMANS 230.0 kV Ckt 1	<u>DVP</u> dom-203 (1321) : Wreck and rebuild 16.7 miles of existing single circuit line 2131 between Mackeys to Perquimans 230 kV. Add new circuit between Mackeys to Perquimans 230 kV, constructed as a double circuit line. Utilize 2-636 ACSR for all new and modified circuits. Add a breaker at each 230 kV terminal. Project Type : CON Cost : \$44,150,000 Time Estimate : 36-40 Months	\$44,150,000
97890736,98537237,97890732,97890731,97708395,97708396	8	6EDENTON 230.0 kV - 6WALBMRL 230.0 kV Ckt 1		
97890698,97890693,98537232,97708380,97708381,97890694	3	6MACKEYS 230.0 kV - 6EDENTON 230.0 kV Ckt 1		
97890557,97890558	31	6CASHIE 230.0 kV - 6GEARLEYS 230.0 kV Ckt 1	<u>DVP</u> dom-063 (1148) : Rebuild 20.57 miles of 230 kV Line 2034 from Cashie to Earleys with 2-636 ACSR. Project Type : FAC Cost : \$30,855,000 Time Estimate : 36-40 Months dom-251 (1369) : Rebuild 20.556 miles of 230 kV Line 2034 from Cashie to Earleys with 2-795 ACSR. Upgrade wave trap at Earleys 230 kV and line switch at Cashie 230 kV. Project Type : FAC Cost : \$31,284,000 Time Estimate : 36-40 Months	\$62,139,000
97890583,97890584	45	AF2-076 TAP 230.0 kV - 6SUFFOLK 230.0 kV Ckt 1	<u>DVP</u> dom-243 (1361) : Rebuild 2.8 miles of 230 kV Line 246 from AF2-076 Tap to Suffolk with 2-768 ACSS. Project Type : FAC Cost : \$4,200,000 Time Estimate : 36-40 Months	\$4,200,000

ID	Idx	Facility	Upgrade Description	Cost
97708454,9770 8455	32	6TANGLEW 230.0 kV - 6ECITYDP2 230.0 kV Ckt 1	<u>DVP</u> dom-200 (1318) : Wreck and rebuild 5.6 miles of existing single circuit line 2020 between Elizabeth City to Pasquotank 230 kV. Add new circuit between Elizabeth City to Pasquotank 230 kV, constructed as a double circuit line. Utilize 2-636 ACSR for all new and modified circuits. Add a three breaker station at Pasquotank and Elizabeth City DP 230 kV. Project Type : CON Cost : \$27,000,000 Time Estimate : 36-40 Months	\$54,325,000
97708449,9770 8450	34	6WINFALL 230.0 kV - 6TANGLEW 230.0 kV Ckt 1	dom-256 (1374) : Wreck and rebuild 9.97 miles of existing single circuit line 2020 between Winfall to Pasquotank 230 kV. Add new circuit between Winfall to Pasquotank 230 kV, constructed as a double circuit line. Utilize 2-636 ACSR for all new and modified circuits. Add a breaker at Pasquotank 230 kV and at Winfall 230 kV. Project Type : CON Cost : \$27,325,000 Time Estimate : 36-40 Months	
97708460,9770 8459	14	6ECITYDP2 230.0 kV - 6ELIZ CT 230.0 kV Ckt 1		
97708506	21	6FENTRES 230.0 kV - 6THRASHER 230.0 kV Ckt 1	<u>DVP</u> dom-213 (1331) : Rebuild 5.86 miles of 230 kV Line 2128 from Fentress to Thrasher with 2-636 ACSR. Replace Line Lead at Fentress 230 kV. Project Type : FAC Cost : \$8,790,000 Time Estimate : 30-36 Months	\$8,790,000
96828766,9682 8765	35	8CHCKAHM 500.0 kV - 8ELMONT 500.0 kV Ckt 1	<u>DVP</u> n6207 (1310) : Rebuild 27.72 miles of 500 kV Line 557 from Chickahominy to Elmont with 3-1351.5 113C ACSR. Project Type : FAC Cost : \$85,932,000 Time Estimate : 48-60 Months	\$85,932,000
96828777,9682 8778	36	8MDLTHAN 500.0 kV - 8NO ANNA 500.0 kV Ckt 1	<u>DVP</u> n5609 (1266) : Rebuild 41.13 miles of 500 kV Line 576 from Midlothian to North Anna with 3-1351.5 125C ACSR. Project Type : FAC Cost : \$127,503,000 Time Estimate : 48-60 Months n6055 (1271) : Replace Wavetraps at Milothian and North Anna 500kV substations Project Type : FAC Cost : \$300,000 Time Estimate : 16-18 Months	\$127,803,000

ID	Idx	Facility	Upgrade Description	Cost
97708631	43	AE1-072 TAP 230.0 kV - 6SLIGO L269 230.0 kV Ckt 1	<u>DVP</u> dom-239 (1357) : Rebuild 1.7 miles of 230 kV line 269 from AE1-072 Tap to Sligo with 2-636 ACSR. Project Type : FAC Cost : \$2,550,000 Time Estimate : 30-36 Months	\$2,550,000
97708615	22	6FENTRES 230.0 kV - AD1-033 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-214 (1332) : Rebuild 1.5 miles of 230 kV Line 271 from Fentress to AD1-033 Tap with 2-636 ACSR. Replace Relays (CT) at both terminals and Line Lead at Fentress 230 kV. Project Type : FAC Cost : \$2,490,000 Time Estimate : 30-36 Months	\$2,490,000
97115903	39	AB2-169 TAP 115.0 kV - 3FIVE PT 115.0 kV Ckt 1	<u>DVP</u> n6142 (1285) : Rebuild 5.14 miles of 115 kV Line 189 from AB2-169 Tap to Five Points DP with 636 ACSR. Project Type : FAC Cost : \$6,682,000 Time Estimate : 30-36 Months	\$6,682,000
97890769,9789 0772	19	6WALR209 230.0 kV - 6LIGH209 230.0 kV Ckt 1	<u>DVP</u> b3056 (1083) : PJM Baseline Upgrade b3056. Partial Rebuild 230 kV Line #2113 Waller to Lightfoot. The baseline project has a projected in-service date of 12/30/2024. Project Type : FAC	\$0
97115904	27	3FIVE PT 115.0 kV - 3WHARTON 115.0 kV Ckt 1	<u>DVP</u> n6143 (1286) : Rebuild 5.88 miles of 115 kV Line 189 from Five Points DP to Wharton with 636 ACSR. Project Type : FAC Cost : \$7,644,000 Time Estimate : 30-36 Months	\$7,644,000
97890660,9789 0663	15	6SKIFF CREEK 230.0 kV - 6KINGS M 230.0 kV Ckt 1	<u>DVP</u> dom-066 (1151) : Rebuild 1.55 miles of 230 kV Line 2154 from Skiffes Creek to Kings Mill with 2-636 ACSR. Project Type : FAC Cost : \$3,875,000 Time Estimate : 30-36 Months	\$3,875,000
97890681,9789 0684	18	6KINGS M 230.0 kV - 6PENNIMAN 230.0 kV Ckt 1	<u>DVP</u> b3057 (1084) : PJM Baseline Upgrade b3057. Rebuild 6.1 miles of Waller-Skiffess Creek 230 kV Line (#2154) between Waller and Kings Mill to current standards with a minimum summer emergency rating of 1047 MVA utilizing single circuit steel structures. Remove this 6.1 mile section of Line #58 between Waller and Kings Mill. Rebuild the 1.6 miles of Line	\$0

ID	Idx	Facility	Upgrade Description	Cost
97890701,97890704	17	6PENNIMAN 230.0 kV - 6WALR209 230.0 kV Ckt 1	#2154 and #19 between Kings Mill and Skiffes Creek to current standards with a minimum summer emergency rating of 1047 MVA at 230 kV for Line #2154 and 261 MVA at 115 kV for Line #19, utilizing double circuit steel structures. The baseline project has a projected in-service date of 12/30/2024. Project Type : CON	
97115049,97114756	7	3TRWBRDG2 115.0 kV - 3POPLR C 115.0 kV Ckt 1	<u>DVP</u> dom-254 (1372) : 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
97890568,97890569	40	AD1-023 TAP 230.0 kV - 6CASHIE 230.0 kV Ckt 1	<u>DVP</u> dom-233 (1351) : Rebuild 5.3 miles of 230 kV line 2034 from AD1-023 Tap to Cashie with 2-795 ACSR. Project Type : FAC Cost : \$7,950,000 Time Estimate : 36-42 Months	\$7,950,000
97890673,97890678,97890674	38	AB2-100 TAP 230.0 kV - 6CLUBHSE 230.0 kV Ckt 1	<u>DVP</u> dom-048 (1133) : Rebuild 2.0 miles of 230 kV Line 254 from Clubhouse to AB2-100 Tap with 2-636 ACSR. Project Type : FAC Cost : \$3,000,000 Time Estimate : 30-36 Months	\$3,000,000
96828791	1	6HATHAWAY 230.0 kV - 6ROCKYMT230T 230.0 kV Ckt 1	<u>CPL</u> NonPJMArea (939) : The external (i.e. Non-PJM) Transmission Owner, CPLE, will not evaluate this violation until the impact study phase. <u>DVP</u> dom-003 (1088) : For DEV portion, rebuild 4.13 miles of 230 kV Line 2058 from Hathaway to Rocky Mountain with 2-636 ACSR. Project Type : FAC Cost : \$10,325,000 Time Estimate : 30-36 Months	\$10,325,000
97115034,97115035,97114761	6	3POPLR C 115.0 kV - 3EVERETS 115.0 kV Ckt 1	<u>DVP</u> dom-175 (1245) : 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

ID	Idx	Facility	Upgrade Description	Cost
97708469	16	6CHESTF B 230.0 kV - 6BASIN 230.0 kV Ckt 1	<u>DVP</u> dom-012 (1097) : Rebuild 12.4 miles of 230 kV Line 259 from Chesterfield to Basin with 2-636 ACSR. Project Type : FAC Cost : \$31,000,000 Time Estimate : 30-36 Months	\$31,000,000
96829163,9682 8740,96828741	4	6EVERETS 230.0 kV - 6GREENVILLE T 230.0 kV Ckt 1	<u>CPL</u> NonPJM Area (939) : The external (i.e. Non-PJM) Transmission Owner, CPL, will not evaluate this violation until the impact study phase. <u>DVP</u> dom-173 (1243) : 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
97708581,9770 8582	11	6HICKORY 230.0 kV - 6FENTRES 230.0 kV Ckt 1	<u>DVP</u> dom-218 (1336) : Rebuild 4.27 miles of 230 kV Line 2087 from Hickory to Fentress with 2-636 ACSR. Project Type : FAC Cost : \$6,405,000 Time Estimate : 30-36 Months	\$6,405,000
97708360,9770 8361,97890637, 97890632,9789 0633,98537222	12	6PERQUIMANS 230.0 kV - 6S HERTFORD 230.0 kV Ckt 1	dom-257 (1375) : Wreck and rebuild 8.0 miles of existing single circuit line 2131 between Winfall to Perquimans 230 kV. Add new circuit between Winfall to Perquimans 230 kV, constructed as a double circuit line. Utilize 2-636 ACSR for all new and modified circuits. Add a Breaker at Perquimans 230 kV and two breakers at Winfall 230 kV. Project Type : CON Cost : \$23,600,000 Time Estimate : 30-36 Months	\$23,600,000
97708365,9770 8366,97890645, 97890644,9789 0649,98537227	10	6S HERTFORD 230.0 kV - 6WINFALL 230.0 kV Ckt 1		
97890984	42	AD1-057 TAP 230.0 kV - 6HATHAWAY 230.0 kV Ckt 1	<u>DVP</u> dom-076 (1161) : Rebuild 12.8 miles of 230 KV Line 2056 from AD1-057 Tap to Hathaway with 2-636 ACSR. Project Type : FAC Cost : \$19,200,000 Time Estimate : 30-36 Months	\$19,200,000
97115908	29	3PANTEGO 115.0 kV - AB2- 169 TAP 115.0 kV Ckt 1	<u>DVP</u> dom-147 (1218) : Reconductor 8.6 miles of 115 kV Line 1031 from Pantego to AB2-169 Tap with 636 ACSR. Project Type : FAC Cost : \$5,160,000 Time Estimate : 30-36 Months	\$5,160,000

ID	Idx	Facility	Upgrade Description	Cost
97708513,97708512,97708511	23	6CAROLNA 230.0 kV - 6LAKEVEW 230.0 kV Ckt 1	<u>DVP</u> dom-220 (1338) : 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
97891100	5	6HORNRTN 230.0 kV - AD1-057 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-077 (1162) : Rebuild 16 miles of 230 kV Line 2056 from Hornertown to AD1-057 TAP with 2-636 ACSR. Project Type : FAC Cost : \$24,000,000 Time Estimate : 36-40 Months	\$24,000,000
97890828	13	6HATHAWAY 230.0 kV - 6NASH 230.0 kV Ckt 1	<u>DVP</u> dom-143 (1214) : Rebuild 0.76 miles of 230 kV Line 2181 from Hathaway to Nash with 2-636 ACSR. Project Type : FAC Cost : \$1,900,000 Time Estimate : 30-36 Months	\$1,900,000
97708642	33	6SLIGO L269 230.0 kV - 6FENTRES 230.0 kV Ckt 1	<u>DVP</u> dom-225 (1343) : Rebuild 21.64 miles of 230 kV Line 269 from Sligo to Fentress with 2-636 ACSR. Project Type : FAC Cost : \$32,460,000 Time Estimate : 36-40 Months	\$32,460,000
97890817	20	6SAPONY 230.0 kV - 6CARSON 230.0 kV Ckt 1	<u>DVP</u> dom-051 (1136) : Rebuild 11.79 miles of 230 kV Line 238 from Sapony to Carson with 2-795 150C ACSR. Project Type : FAC Cost : \$17,685,000 Time Estimate : 30-36 Months	\$17,685,000
97708593	41	AD1-033 TAP 230.0 kV - 6LANDSTN 230.0 kV Ckt 1	<u>DVP</u> dom-234 (1352) : Rebuild 7.4 miles of 230 kV Line 271 from AD1-033 Tap to Landstown with 2-636 ACSR. Replace Relays (CT) at both terminals and Line Lead at Landstown 230 kV. Project Type : FAC Cost : \$11,340,000 Time Estimate : 30-36 Months	\$11,340,000
97890577,97890576	30	6TRWBRDG 230.0 kV - AD1-023 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-223 (1341) : Rebuild 9.2 miles of 230 kV Line 2034 from Trowbridge to AD1-023 with 2-636 ACSR. Project Type : FAC Cost : \$13,800,000 Time Estimate : 30-36 Months	\$13,800,000

ID	Idx	Facility	Upgrade Description	Cost
97708336,97708335,97890657,97890656	9	6ELIZ CT 230.0 kV - 6SHAWBRO 230.0 kV Ckt 1	<u>DVP</u> dom-255 (1373) : Rebuild 10.28 miles of 230 kV Line 2021 from Elizabeth City to Shawboro with 2-768.2 ACSS 250C. Replace Breaker, Breaker Lead, Wave Trap and Line lead at Elizabeth City 230 kV. Replace Wavetrap, relay (Secondary CT), Line Lead at Shawboro 230 kV. Project Type : FAC Cost : \$17,140,000 Time Estimate : 36-40 Months	\$17,140,000
97890867	24	6CLUBHSE 230.0 kV - AE2-033 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-047 (1132) : Rebuild 14.28 miles of 230 kV Line 238 from Clubhouse to AE2-033 Tap with 2-795 150C ACSR. Project Type : FAC Cost : \$21,420,000 Time Estimate : 30-36 Months	\$21,420,000
96828671,96828672	37	8SURREY 500.0 kV - 8CHCKAHM 500.0 kV Ckt 1	<u>DVP</u> dom-040 (1125) : Replace Terminal Equipment at Surry and Chickahominy Substations Project Type : FAC Cost : \$4,000,000 Time Estimate : 16-18 Months	\$4,000,000
97890779,97890780,97890784	28	6LAKEVEW 230.0 kV - AB2-100 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-049 (1134) : Rebuild 16.0 miles of 230 kV Line 254 from AB2-100 Tap to Lakeview with 2-636 ACSR. Project Type : FAC Cost : \$24,000,000 Time Estimate : 30-36 Months	\$24,000,000
97890596,97890595	44	AF2-073 TAP 230.0 kV - AF2-076 TAP 230.0 kV Ckt 1	<u>DVP</u> dom-242 (1360) : Rebuild 9.8 miles of 230 kV Line 246 from AF2-073 Tap to AF2-076 Tap with 2-795 ACSR. Project Type : FAC Cost : \$14,700,000 Time Estimate : 36-40 Months	\$14,700,000
			TOTAL COST	\$793,120,000

11.6 Flow Gate Details

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

11.6.1 Index 1

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
96828791	313845	6HATHAWAY	DVP	304222	6ROCKYMT230T	CPL	1	DVP_P1-2: LN 2181	single	478.0	98.86	100.55	DC	8.1

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
315131	1EDGECEMA (Deactivation : 22/04/2019)	25.0630	80/20	25.0630
315132	1EDGECEMB (Deactivation : 22/04/2019)	25.0630	80/20	25.0630
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
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
960331	AF2-324 C O1	21.0875	80/20	21.0875
960351	AF2-326 C	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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CHEOAH	CHEOAH	1.1001	Confirmed LTF	1.1001
EDWARDS	EDWARDS	0.4070	Confirmed LTF	0.4070
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

11.6.2 Index 2

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
98537242	313885	6WALBMRL	DVP	313714	6PERQUIMANS	DVP	1	DVP_P7-1: LN 25-2034-A	tower	897.0	192.62	207.74	DC	135.65

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315292	1DOMTR78	6.8353	50/50	6.8353
315294	1DOMTR10	51.3559	50/50	51.3559
315614	AA2-178 C	8.7358	50/50	8.7358
920692	AA2-178 E	21.7046	50/50	21.7046
925121	AB2-169 C	3.2999	50/50	3.2999
925122	AB2-169 E	17.1686	50/50	17.1686
934521	AD1-076 C	282.9665	50/50	282.9665
934522	AD1-076 E	144.0861	50/50	144.0861
940491	AE2-034 C	37.9831	50/50	37.9831
940492	AE2-034 E	16.2785	50/50	16.2785
945711	AF1-236 C O1	415.8247	50/50	415.8247
945712	AF1-236 E O1	678.4509	50/50	678.4509
957531	AF2-047 C	90.2551	50/50	90.2551
957532	AF2-047 E	45.3989	50/50	45.3989
959511	AF2-242	12.5770	50/50	12.5770
WEC	WEC	0.0271	Confirmed LTF	0.0271
LGEE	LGEE	0.0513	Confirmed LTF	0.0513
CPLE	CPLE	0.4624	Confirmed LTF	0.4624
CBM-W2	CBM-W2	1.2367	Confirmed LTF	1.2367
NY	NY	0.0619	Confirmed LTF	0.0619
CBM-W1	CBM-W1	0.9883	Confirmed LTF	0.9883
TVA	TVA	0.2702	Confirmed LTF	0.2702
O-066	O-066	0.8534	Confirmed LTF	0.8534
CBM-S2	CBM-S2	2.6761	Confirmed LTF	2.6761
CBM-S1	CBM-S1	1.4825	Confirmed LTF	1.4825
G-007	G-007	0.1321	Confirmed LTF	0.1321
MADISON	MADISON	0.0907	Confirmed LTF	0.0907
MEC	MEC	0.1748	Confirmed LTF	0.1748

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
98537232	314203	6MACKEYS	DVP	314637	6EDENTON	DVP	1	DVP_P7-1: LN 25-2034-A	tower	895.0	196.17	211.32	DC	135.65

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315292	1DOMTR78	6.8353	50/50	6.8353
315294	1DOMTR10	51.3559	50/50	51.3559
315614	AA2-178 C	8.7358	50/50	8.7358
920692	AA2-178 E	21.7046	50/50	21.7046
925121	AB2-169 C	3.2999	50/50	3.2999
925122	AB2-169 E	17.1686	50/50	17.1686
934521	AD1-076 C	282.9665	50/50	282.9665
934522	AD1-076 E	144.0861	50/50	144.0861
940491	AE2-034 C	37.9831	50/50	37.9831
940492	AE2-034 E	16.2785	50/50	16.2785
945711	AF1-236 C O1	415.8247	50/50	415.8247
945712	AF1-236 E O1	678.4509	50/50	678.4509
957531	AF2-047 C	90.2551	50/50	90.2551
957532	AF2-047 E	45.3989	50/50	45.3989
959511	AF2-242	12.5770	50/50	12.5770
WEC	WEC	0.0271	Confirmed LTF	0.0271
LGEE	LGEE	0.0513	Confirmed LTF	0.0513
CPL	CPL	0.4624	Confirmed LTF	0.4624
CBM-W2	CBM-W2	1.2367	Confirmed LTF	1.2367
NY	NY	0.0619	Confirmed LTF	0.0619
CBM-W1	CBM-W1	0.9883	Confirmed LTF	0.9883
TVA	TVA	0.2702	Confirmed LTF	0.2702
O-066	O-066	0.8534	Confirmed LTF	0.8534
CBM-S2	CBM-S2	2.6761	Confirmed LTF	2.6761
CBM-S1	CBM-S1	1.4825	Confirmed LTF	1.4825
G-007	G-007	0.1321	Confirmed LTF	0.1321
MADISON	MADISON	0.0907	Confirmed LTF	0.0907
MEC	MEC	0.1748	Confirmed LTF	0.1748

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
96829163	314574	6EVERETS	DVP	304451	6GREENVILE T	CPL	1	DVP_P7-1: LN 2058-2181	tower	478.0	172.17	176.82	DC	22.18

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	0.4689	Adder	1.04
960352	AF2-326 E	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

11.6.5 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
97891100	314579	6HORNRTN	DVP	934330	AD1-057 TAP	DVP	1	DVP_P1-2: LN 238-B	single	441.8	98.99	100.19	DC	5.32

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.0638	80/20	0.0638
314582	3KELFORD	0.2213	80/20	0.2213
314589	3MURPHYS	0.0642	80/20	0.0642
314704	3LAWRENC	0.2207	80/20	0.2207
315115	1S HAMPT1	0.8537	80/20	0.8537
315126	1ROARAP2	1.6346	80/20	1.6346
315128	1ROARAP4	1.5599	80/20	1.5599
315136	1ROSEMG1	5.7033	80/20	5.7033
315137	1ROSEMS1	3.5366	80/20	3.5366
315138	1ROSEMG2	2.6729	80/20	2.6729
315139	1GASTONA	7.1708	80/20	7.1708
315141	1GASTONB	7.1708	80/20	7.1708
315158	1KERR 1	0.1813	80/20	0.1813
315159	1KERR 2	0.5076	80/20	0.5076
315160	1KERR 3	0.5076	80/20	0.5076
315161	1KERR 4	0.5076	80/20	0.5076
315162	1KERR 5	0.5076	80/20	0.5076
315163	1KERR 6	0.5076	80/20	0.5076
315164	1KERR 7	0.5076	80/20	0.5076
315602	1HOLLOMANSOL	0.9307	80/20	0.9307
315606	3AA2-053SOLA	1.5664	80/20	1.5664
315607	3AA1-063SOLA	1.4183	80/20	1.4183
315608	3AA2-088SOLA	0.7630	80/20	0.7630
315614	AA2-178 C	0.5150	80/20	0.5150
920671	AA2-174 C OP	0.0717	80/20	0.0717
922922	AB1-081 C OP	-6.7183	Adder	-7.9
923262	AB1-132 C OP (Suspended)	31.7453	80/20	31.7453
923572	AB1-173 C OP	2.1932	80/20	2.1932
923582	AB1-173AC OP	2.1932	80/20	2.1932
923801	AB2-015 C OP	4.3320	80/20	4.3320
923911	AB2-031 C O1	2.1770	80/20	2.1770
923991	AB2-040 C O1	7.1482	80/20	7.1482
924021	AB2-043 C O1	0.1773	80/20	0.1773
924161	AB2-060 C OP	0.5038	80/20	0.5038
924301	AB2-077 C O1 (Suspended)	0.6464	80/20	0.6464
924311	AB2-078 C O1 (Suspended)	0.6464	80/20	0.6464
924321	AB2-079 C O1 (Suspended)	0.6464	80/20	0.6464
924501	AB2-099 C (Suspended)	0.3737	80/20	0.3737

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924511	AB2-100 C	4.3678	80/20	4.3678
925171	AB2-174 C O1	1.1364	80/20	1.1364
925781	AC1-054 C O1	4.4398	80/20	4.4398
926071	AC1-086 C	46.7487	80/20	46.7487
933991	AD1-023 C	5.5074	80/20	5.5074
934521	AD1-076 C	19.3478	80/20	19.3478
936361	AD2-046 C O1	3.7056	80/20	3.7056
936401	AD2-051 C O1	5.6613	80/20	5.6613
936481	AD2-063 C O1	4.5126	80/20	4.5126
938171	AE1-026 C O1	14.6109	80/20	14.6109
938221	AE1-035 C	1.3488	80/20	1.3488
938771	AE1-103 C O1	1.6771	80/20	1.6771
939181	AE1-148 C O1	3.6148	80/20	3.6148
940491	AE2-034 C	2.2390	80/20	2.2390
940661	AE2-053 O1	1.3388	80/20	1.3388
941541	AE2-151 C	0.6758	80/20	0.6758
942451	AE2-258	0.7668	80/20	0.7668
942471	AE2-260 C O1	31.2548	80/20	31.2548
943171	AE2-346 C	0.8968	80/20	0.8968
943911	AF1-059	9.3640	80/20	9.3640
945711	AF1-236 C O1	24.5119	80/20	24.5119
946281	AF1-292 C	1.2648	80/20	1.2648
957521	AF2-046 C	11.3443	80/20	11.3443
957531	AF2-047 C	5.3203	80/20	5.3203
959731	AF2-264 C	1.4740	80/20	1.4740
960081	AF2-299 C	2.1317	80/20	2.1317
960811	AF2-372 C	0.4083	80/20	0.4083
960831	AF2-374 C	0.9655	80/20	0.9655
961091	AF2-400 C	0.2339	80/20	0.2339
NEWTON	NEWTON	0.8284	Confirmed LTF	0.8284
FARMERCITY	FARMERCITY	0.0474	Confirmed LTF	0.0474
G-007A	G-007A	0.2949	Confirmed LTF	0.2949
VFT	VFT	0.7805	Confirmed LTF	0.7805
CALDERWOOD	CALDERWOOD	0.6441	Confirmed LTF	0.6441
PRAIRIE	PRAIRIE	2.2265	Confirmed LTF	2.2265
CHEOAH	CHEOAH	0.6607	Confirmed LTF	0.6607
EDWARDS	EDWARDS	0.2513	Confirmed LTF	0.2513
TILTON	TILTON	0.4448	Confirmed LTF	0.4448
GIBSON	GIBSON	0.4008	Confirmed LTF	0.4008
BLUEG	BLUEG	1.2378	Confirmed LTF	1.2378
TRIMBLE	TRIMBLE	0.3929	Confirmed LTF	0.3929
CATAWBA	CATAWBA	0.6877	Confirmed LTF	0.6877

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
97114761	314596	3POPLR C	DVP	314573	3EVERETS	DVP	1	DVP_P4-2: 246T2034	breaker	349.0	149.99	159.38	DC	32.78

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	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

11.6.7 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
97114756	314614	3TRWBRDG2	DVP	314596	3POPLR C	DVP	1	DVP_P4-2: 246T2034	breaker	350.0	151.19	160.55	DC	32.78

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	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

11.6.8 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
98537237	314637	6EDENTON	DVP	313885	6WALBMRL	DVP	1	DVP_P7-1: LN 25-2034-A	tower	897.0	192.63	207.75	DC	135.65

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315292	1DOMTR78	6.8353	50/50	6.8353
315294	1DOMTR10	51.3559	50/50	51.3559
315614	AA2-178 C	8.7358	50/50	8.7358
920692	AA2-178 E	21.7046	50/50	21.7046
925121	AB2-169 C	3.2999	50/50	3.2999
925122	AB2-169 E	17.1686	50/50	17.1686
934521	AD1-076 C	282.9665	50/50	282.9665
934522	AD1-076 E	144.0861	50/50	144.0861
940491	AE2-034 C	37.9831	50/50	37.9831
940492	AE2-034 E	16.2785	50/50	16.2785
945711	AF1-236 C O1	415.8247	50/50	415.8247
945712	AF1-236 E O1	678.4509	50/50	678.4509
957531	AF2-047 C	90.2551	50/50	90.2551
957532	AF2-047 E	45.3989	50/50	45.3989
959511	AF2-242	12.5770	50/50	12.5770
WEC	WEC	0.0271	Confirmed LTF	0.0271
LGEE	LGEE	0.0513	Confirmed LTF	0.0513
CPLE	CPLE	0.4624	Confirmed LTF	0.4624
CBM-W2	CBM-W2	1.2367	Confirmed LTF	1.2367
NY	NY	0.0619	Confirmed LTF	0.0619
CBM-W1	CBM-W1	0.9883	Confirmed LTF	0.9883
TVA	TVA	0.2702	Confirmed LTF	0.2702
O-066	O-066	0.8534	Confirmed LTF	0.8534
CBM-S2	CBM-S2	2.6761	Confirmed LTF	2.6761
CBM-S1	CBM-S1	1.4825	Confirmed LTF	1.4825
G-007	G-007	0.1321	Confirmed LTF	0.1321
MADISON	MADISON	0.0907	Confirmed LTF	0.0907
MEC	MEC	0.1748	Confirmed LTF	0.1748

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
97708335	314638	6ELIZ CT	DVP	314647	6SHAWBRO	DVP	1	DVP_P4-2: 246T247	breaker	699.0	231.83	241.73	DC	69.2

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.2925	50/50	0.2925
314582	3KELFORD	0.4234	50/50	0.4234
314589	3MURPHYS	0.0577	50/50	0.0577
314638	6ELIZ CT	1.0159	50/50	1.0159
314639	6TANGLEW	1.7856	50/50	1.7856
315292	1DOMTR78	2.8225	50/50	2.8225
315294	1DOMTR10	21.2064	50/50	21.2064
315601	1CONETOE2SOL	1.2226	50/50	1.2226
315602	1HOLLOMANSOL	1.8876	50/50	1.8876
315605	6W1-029WIND	3.1395	50/50	3.1395
315606	3AA2-053SOLA	0.9449	50/50	0.9449
315611	6Z1-036WIND	23.6387	50/50	23.6387
315614	AA2-178 C	4.4565	50/50	4.4565
900672	V4-068 E	0.1834	50/50	0.1834
901082	W1-029 E	122.0103	50/50	122.0103
913392	Y1-086 E	9.6096	50/50	9.6096
916042	Z1-036 E (Suspended)	158.3791	50/50	158.3791
917122	Z2-027 E	4.4364	50/50	4.4364
917332	Z2-043 E	1.0673	50/50	1.0673
917512	Z2-088 E OP1	3.0377	50/50	3.0377
918512	AA1-065 E OP	4.8998	50/50	4.8998
918532	AA1-067 E	0.7268	50/50	0.7268
919692	AA2-053 E OP	2.3521	50/50	2.3521
919702	AA2-057 E OP	1.7580	Adder	2.07
920592	AA2-165 E	0.2416	Adder	0.28
920671	AA2-174 C OP	0.0433	50/50	0.0433
920672	AA2-174 E OP	0.2718	50/50	0.2718
920692	AA2-178 E	11.0724	50/50	11.0724
923262	AB1-132 C OP (Suspended)	7.1000	Adder	8.35
923263	AB1-132 E OP (Suspended)	3.0429	Adder	3.58
923831	AB2-022 C	10.0746	50/50	10.0746
923832	AB2-022 E	5.4248	50/50	5.4248
924501	AB2-099 C (Suspended)	0.5431	50/50	0.5431
924502	AB2-099 E (Suspended)	0.2328	50/50	0.2328
925121	AB2-169 C	1.8456	50/50	1.8456
925122	AB2-169 E	9.6022	50/50	9.6022
926071	AC1-086 C	10.4556	Adder	12.3
926072	AC1-086 E	4.7587	Adder	5.6
926201	AC1-098 C	4.4387	50/50	4.4387
926202	AC1-098 E	2.6443	50/50	2.6443

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
926211	AC1-099 C	1.4874	50/50	1.4874
926212	AC1-099 E	0.8736	50/50	0.8736
927021	AC1-189 C	7.3671	50/50	7.3671
927022	AC1-189 E	3.6697	50/50	3.6697
927141	AC1-208 C	5.6746	50/50	5.6746
927142	AC1-208 E	2.5198	50/50	2.5198
932631	AC2-084 C	6.3275	50/50	6.3275
932632	AC2-084 E	3.1165	50/50	3.1165
933991	AD1-023 C	25.6993	50/50	25.6993
933992	AD1-023 E	13.9907	50/50	13.9907
934521	AD1-076 C	120.4421	50/50	120.4421
934522	AD1-076 E	61.3289	50/50	61.3289
936401	AD2-051 C O1	10.5471	50/50	10.5471
936402	AD2-051 E O1	4.5288	50/50	4.5288
938171	AE1-026 C O1	57.9119	50/50	57.9119
938172	AE1-026 E O1	15.2785	50/50	15.2785
938221	AE1-035 C	2.7357	50/50	2.7357
938222	AE1-035 E	1.3475	50/50	1.3475
940491	AE2-034 C	19.3767	50/50	19.3767
940492	AE2-034 E	8.3043	50/50	8.3043
941501	AE2-147 C	60.6681	50/50	60.6681
941502	AE2-147 E	40.4454	50/50	40.4454
941541	AE2-151 C	1.1190	50/50	1.1190
941542	AE2-151 E	0.6025	50/50	0.6025
942851	AE2-304 C	2.3247	50/50	2.3247
942852	AE2-304 E	0.9041	50/50	0.9041
943171	AE2-346 C	1.3035	50/50	1.3035
943172	AE2-346 E	0.5586	50/50	0.5586
944871	AF1-152 C	20.2227	50/50	20.2227
944872	AF1-152 E	13.4818	50/50	13.4818
945711	AF1-236 C O1	212.1287	50/50	212.1287
945712	AF1-236 E O1	346.1048	50/50	346.1048
957521	AF2-046 C	11.3053	50/50	11.3053
957522	AF2-046 E	5.6867	50/50	5.6867
957531	AF2-047 C	46.0427	50/50	46.0427
957532	AF2-047 E	23.1598	50/50	23.1598
957861	AF2-080 C	6.6911	50/50	6.6911
957862	AF2-080 E	2.9661	50/50	2.9661
959511	AF2-242	11.1792	50/50	11.1792
959731	AF2-264 C	1.8162	50/50	1.8162
959732	AF2-264 E	0.8946	50/50	0.8946
960831	AF2-374 C	1.1373	50/50	1.1373
960832	AF2-374 E	1.8555	50/50	1.8555
WEC	WEC	0.1931	Confirmed LTF	0.1931
LGEE	LGEE	0.3611	Confirmed LTF	0.3611
CPL	CPL	2.2670	Confirmed LTF	2.2670
CBM-W2	CBM-W2	7.5512	Confirmed LTF	7.5512
NY	NY	0.1864	Confirmed LTF	0.1864
CBM-W1	CBM-W1	7.2683	Confirmed LTF	7.2683
TVA	TVA	1.5680	Confirmed LTF	1.5680
O-066	O-066	2.7350	Confirmed LTF	2.7350
CBM-S2	CBM-S2	13.7102	Confirmed LTF	13.7102

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-S1	CBM-S1	8.7671	Confirmed LTF	8.7671
G-007	G-007	0.4274	Confirmed LTF	0.4274
MADISON	MADISON	0.4234	Confirmed LTF	0.4234
MEC	MEC	1.1536	Confirmed LTF	1.1536
AA2-074	AA2-074	1.5448	LTF	1.5448

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
98537227	314662	6S HERTFORD	DVP	314651	6WINFALL	DVP	1	DVP_P7-1: LN 25-2034-A	tower	897.0	222.81	237.93	DC	135.65

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315292	1DOMTR78	6.8353	50/50	6.8353
315294	1DOMTR10	51.3559	50/50	51.3559
315611	6Z1-036WIND	36.7189	50/50	36.7189
315614	AA2-178 C	8.7358	50/50	8.7358
916042	Z1-036 E (Suspended)	246.0166	50/50	246.0166
920692	AA2-178 E	21.7046	50/50	21.7046
925121	AB2-169 C	3.2999	50/50	3.2999
925122	AB2-169 E	17.1686	50/50	17.1686
934521	AD1-076 C	282.9665	50/50	282.9665
934522	AD1-076 E	144.0861	50/50	144.0861
940491	AE2-034 C	37.9831	50/50	37.9831
940492	AE2-034 E	16.2785	50/50	16.2785
942851	AE2-304 C	3.4261	50/50	3.4261
942852	AE2-304 E	1.3324	50/50	1.3324
945711	AF1-236 C O1	415.8247	50/50	415.8247
945712	AF1-236 E O1	678.4509	50/50	678.4509
957531	AF2-047 C	90.2551	50/50	90.2551
957532	AF2-047 E	45.3989	50/50	45.3989
959511	AF2-242	12.5770	50/50	12.5770
WEC	WEC	0.0271	Confirmed LTF	0.0271
LGEE	LGEE	0.0513	Confirmed LTF	0.0513
CPLE	CPLE	0.4624	Confirmed LTF	0.4624
CBM-W2	CBM-W2	1.2367	Confirmed LTF	1.2367
NY	NY	0.0619	Confirmed LTF	0.0619
CBM-W1	CBM-W1	0.9883	Confirmed LTF	0.9883
TVA	TVA	0.2702	Confirmed LTF	0.2702
O-066	O-066	0.8534	Confirmed LTF	0.8534
CBM-S2	CBM-S2	2.6761	Confirmed LTF	2.6761
CBM-S1	CBM-S1	1.4825	Confirmed LTF	1.4825
G-007	G-007	0.1321	Confirmed LTF	0.1321
MADISON	MADISON	0.0907	Confirmed LTF	0.0907
MEC	MEC	0.1748	Confirmed LTF	0.1748

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
97708581	314550	6HICKORY	DVP	314466	6FENTRES	DVP	1	DVP_P4-2: 246T247	breaker	699.0	109.38	114.43	DC	35.31

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314638	6ELIZ CT	0.5186	50/50	0.5186
314639	6TANGLEW	0.9114	50/50	0.9114
314643	3O INLET	1.1127	50/50	1.1127
315294	1DOMTR10	9.1912	Adder	10.81
315603	6AA1-139SOLA	8.4750	50/50	8.4750
315605	6W1-029WIND	1.6024	50/50	1.6024
315611	6Z1-036WIND	12.0639	50/50	12.0639
315614	AA2-178 C	2.2736	50/50	2.2736
901082	W1-029 E	62.2749	50/50	62.2749
913392	Y1-086 E	4.9053	50/50	4.9053
916042	Z1-036 E (Suspended)	80.8279	50/50	80.8279
917122	Z2-027 E	2.2645	50/50	2.2645
917332	Z2-043 E	0.4615	Adder	0.54
918512	AA1-065 E OP	2.1212	Adder	2.5
918532	AA1-067 E	0.3144	Adder	0.37
919152	AA1-139 E	21.0568	50/50	21.0568
920692	AA2-178 E	5.6489	50/50	5.6489
923831	AB2-022 C	5.1427	50/50	5.1427
923832	AB2-022 E	2.7691	50/50	2.7691
924501	AB2-099 C (Suspended)	0.2349	Adder	0.28
924502	AB2-099 E (Suspended)	0.1007	Adder	0.12
925122	AB2-169 E	4.1602	Adder	4.89
933991	AD1-023 C	13.1041	50/50	13.1041
933992	AD1-023 E	7.1339	50/50	7.1339
934521	AD1-076 C	61.4269	50/50	61.4269
934522	AD1-076 E	31.2785	50/50	31.2785
936401	AD2-051 C O1	4.5653	Adder	5.37
936402	AD2-051 E O1	1.9603	Adder	2.31
937221	AD2-160 C O1	22.7304	50/50	22.7304
937222	AD2-160 E O1	11.9196	50/50	11.9196
938171	AE1-026 C O1	25.0968	Adder	29.53
938172	AE1-026 E O1	6.6211	Adder	7.79
938221	AE1-035 C	1.1843	Adder	1.39
938222	AE1-035 E	0.5833	Adder	0.69
938531	AE1-072 C O1	38.7587	50/50	38.7587
938532	AE1-072 E O1	20.2048	50/50	20.2048
940491	AE2-034 C	9.8855	50/50	9.8855
940492	AE2-034 E	4.2367	50/50	4.2367
941501	AE2-147 C	30.9654	50/50	30.9654
941502	AE2-147 E	20.6436	50/50	20.6436
941541	AE2-151 C	0.4841	Adder	0.57

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
941542	AE2-151 E	0.2607	Adder	0.31
942401	AE2-253 C	23.9085	50/50	23.9085
942402	AE2-253 E	10.7415	50/50	10.7415
942851	AE2-304 C	1.1865	50/50	1.1865
942852	AE2-304 E	0.4614	50/50	0.4614
943171	AE2-346 C	0.5637	Adder	0.66
943172	AE2-346 E	0.2416	Adder	0.28
944871	AF1-152 C	10.3218	50/50	10.3218
944872	AF1-152 E	6.8812	50/50	6.8812
945711	AF1-236 C O1	108.2231	50/50	108.2231
945712	AF1-236 E O1	176.5746	50/50	176.5746
957531	AF2-047 C	23.4899	50/50	23.4899
957532	AF2-047 E	11.8156	50/50	11.8156
957871	AF2-081 C O1	32.7550	50/50	32.7550
957872	AF2-081 E O1	14.0378	50/50	14.0378
959511	AF2-242	2.5659	Adder	5.7
960831	AF2-374 C	0.2607	Adder	0.58
960832	AF2-374 E	0.4253	Adder	0.94
WEC	WEC	0.0885	Confirmed LTF	0.0885
LGEE	LGEE	0.1660	Confirmed LTF	0.1660
CPL	CPL	1.1365	Confirmed LTF	1.1365
CBM-W2	CBM-W2	3.5954	Confirmed LTF	3.5954
NY	NY	0.1128	Confirmed LTF	0.1128
CBM-W1	CBM-W1	3.3026	Confirmed LTF	3.3026
TVA	TVA	0.7560	Confirmed LTF	0.7560
O-066	O-066	1.6128	Confirmed LTF	1.6128
CBM-S2	CBM-S2	6.8146	Confirmed LTF	6.8146
CBM-S1	CBM-S1	4.2004	Confirmed LTF	4.2004
G-007	G-007	0.2517	Confirmed LTF	0.2517
MADISON	MADISON	0.2157	Confirmed LTF	0.2157
MEC	MEC	0.5387	Confirmed LTF	0.5387

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
98537222	313714	6PERQUIMANS	DVP	314662	6S HERTFORD	DVP	1	DVP_P7-1: LN 25-2034-A	tower	897.0	224.14	239.26	DC	135.65

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315292	1DOMTR78	6.8353	50/50	6.8353
315294	1DOMTR10	51.3559	50/50	51.3559
315611	6Z1-036WIND	36.7189	50/50	36.7189
315614	AA2-178 C	8.7358	50/50	8.7358
916042	Z1-036 E (Suspended)	246.0166	50/50	246.0166
920692	AA2-178 E	21.7046	50/50	21.7046
925121	AB2-169 C	3.2999	50/50	3.2999
925122	AB2-169 E	17.1686	50/50	17.1686
934521	AD1-076 C	282.9665	50/50	282.9665
934522	AD1-076 E	144.0861	50/50	144.0861
940491	AE2-034 C	37.9831	50/50	37.9831
940492	AE2-034 E	16.2785	50/50	16.2785
945711	AF1-236 C O1	415.8247	50/50	415.8247
945712	AF1-236 E O1	678.4509	50/50	678.4509
957531	AF2-047 C	90.2551	50/50	90.2551
957532	AF2-047 E	45.3989	50/50	45.3989
959511	AF2-242	12.5770	50/50	12.5770
WEC	WEC	0.0271	Confirmed LTF	0.0271
LGEE	LGEE	0.0513	Confirmed LTF	0.0513
CPLE	CPLE	0.4624	Confirmed LTF	0.4624
CBM-W2	CBM-W2	1.2367	Confirmed LTF	1.2367
NY	NY	0.0619	Confirmed LTF	0.0619
CBM-W1	CBM-W1	0.9883	Confirmed LTF	0.9883
TVA	TVA	0.2702	Confirmed LTF	0.2702
O-066	O-066	0.8534	Confirmed LTF	0.8534
CBM-S2	CBM-S2	2.6761	Confirmed LTF	2.6761
CBM-S1	CBM-S1	1.4825	Confirmed LTF	1.4825
G-007	G-007	0.1321	Confirmed LTF	0.1321
MADISON	MADISON	0.0907	Confirmed LTF	0.0907
MEC	MEC	0.1748	Confirmed LTF	0.1748

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
97890828	313845	6HATHAWAY	DVP	314591	6NASH	DVP	1	DVP_P1-2: LN 2058	single	449.32	109.74	111.58	DC	8.24

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
315131	1EDGECEMA (Deactivation : 22/04/2019)	26.1992	80/20	26.1992
315132	1EDGECEMB (Deactivation : 22/04/2019)	26.1992	80/20	26.1992
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
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
960331	AF2-324 C O1	22.0434	80/20	22.0434
960351	AF2-326 C	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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CHEOAH	CHEOAH	1.1086	Confirmed LTF	1.1086
EDWARDS	EDWARDS	0.4095	Confirmed LTF	0.4095
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

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
97708459	313851	6ECITYDP2	DVP	314638	6ELIZ CT	DVP	1	DVP_P4-2: 246T247	breaker	1204.0	139.03	144.78	DC	69.21

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.2926	50/50	0.2926
314582	3KELFORD	0.4235	50/50	0.4235
314589	3MURPHYS	0.0577	50/50	0.0577
314639	6TANGLEW	1.7857	50/50	1.7857
315131	1EDGECEMA (Deactivation : 22/04/2019)	4.5435	Adder	5.35
315132	1EDGECEMB (Deactivation : 22/04/2019)	4.5435	Adder	5.35
315292	1DOMTR78	2.8229	50/50	2.8229
315294	1DOMTR10	21.2090	50/50	21.2090
315601	1CONETOE2SOL	1.2230	50/50	1.2230
315602	1HOLLOMANSOL	1.8880	50/50	1.8880
315605	6W1-029WIND	3.1396	50/50	3.1396
315606	3AA2-053SOLA	0.9453	50/50	0.9453
315611	6Z1-036WIND	23.6402	50/50	23.6402
315614	AA2-178 C	4.4569	50/50	4.4569
900672	V4-068 E	0.1834	50/50	0.1834
901082	W1-029 E	122.0175	50/50	122.0175
916042	Z1-036 E (Suspended)	158.3896	50/50	158.3896
917122	Z2-027 E	4.4366	50/50	4.4366
917332	Z2-043 E	1.0676	50/50	1.0676
917342	Z2-044 E	0.2871	Adder	0.34
917512	Z2-088 E OP1	3.0386	50/50	3.0386
918512	AA1-065 E OP	4.9008	50/50	4.9008
918532	AA1-067 E	0.7270	50/50	0.7270
919692	AA2-053 E OP	2.3531	50/50	2.3531
919702	AA2-057 E OP	1.7587	Adder	2.07
920592	AA2-165 E	0.2417	Adder	0.28
920671	AA2-174 C OP	0.0433	50/50	0.0433
920672	AA2-174 E OP	0.2719	50/50	0.2719
920692	AA2-178 E	11.0734	50/50	11.0734
922922	AB1-081 C OP	4.2759	Adder	5.03
922923	AB1-081 E OP	1.8325	Adder	2.16
923262	AB1-132 C OP (Suspended)	7.1029	Adder	8.36
923263	AB1-132 E OP (Suspended)	3.0441	Adder	3.58
923831	AB2-022 C	-2.4861	Adder	-2.92
924152	AB2-059 E OP	2.5961	Adder	3.05
924501	AB2-099 C (Suspended)	0.5433	50/50	0.5433
924502	AB2-099 E (Suspended)	0.2328	50/50	0.2328
925121	AB2-169 C	1.8459	50/50	1.8459

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925122	AB2-169 E	9.6037	50/50	9.6037
925591	AC1-034 C	3.2642	Adder	3.84
925592	AC1-034 E	2.4625	Adder	2.9
926071	AC1-086 C	10.4598	Adder	12.31
926072	AC1-086 E	4.7606	Adder	5.6
926201	AC1-098 C	4.4402	50/50	4.4402
926202	AC1-098 E	2.6452	50/50	2.6452
926211	AC1-099 C	1.4879	50/50	1.4879
926212	AC1-099 E	0.8739	50/50	0.8739
927021	AC1-189 C	7.3692	50/50	7.3692
927022	AC1-189 E	3.6708	50/50	3.6708
927141	AC1-208 C	5.6768	50/50	5.6768
927142	AC1-208 E	2.5208	50/50	2.5208
932631	AC2-084 C	6.3296	50/50	6.3296
932632	AC2-084 E	3.1176	50/50	3.1176
933991	AD1-023 C	25.7024	50/50	25.7024
933992	AD1-023 E	13.9924	50/50	13.9924
934331	AD1-057 C O1	4.9380	Adder	5.81
934332	AD1-057 E O1	2.6341	Adder	3.1
934521	AD1-076 C	120.4549	50/50	120.4549
934522	AD1-076 E	61.3355	50/50	61.3355
936401	AD2-051 C O1	10.5492	50/50	10.5492
936402	AD2-051 E O1	4.5297	50/50	4.5297
938171	AE1-026 C O1	57.9195	50/50	57.9195
938172	AE1-026 E O1	15.2805	50/50	15.2805
938221	AE1-035 C	2.7363	50/50	2.7363
938222	AE1-035 E	1.3477	50/50	1.3477
940491	AE2-034 C	19.3784	50/50	19.3784
940492	AE2-034 E	8.3050	50/50	8.3050
940571	AE2-044 C	2.1380	Adder	2.52
940572	AE2-044 E	0.9163	Adder	1.08
941501	AE2-147 C	60.6717	50/50	60.6717
941502	AE2-147 E	40.4478	50/50	40.4478
941541	AE2-151 C	1.1192	50/50	1.1192
941542	AE2-151 E	0.6026	50/50	0.6026
942851	AE2-304 C	2.3249	50/50	2.3249
942852	AE2-304 E	0.9041	50/50	0.9041
943171	AE2-346 C	1.3038	50/50	1.3038
943172	AE2-346 E	0.5588	50/50	0.5588
944141	AF1-082	1.3744	Adder	1.62
944871	AF1-152 C	20.2239	50/50	20.2239
944872	AF1-152 E	13.4826	50/50	13.4826
945711	AF1-236 C O1	212.1471	50/50	212.1471
945712	AF1-236 E O1	346.1348	50/50	346.1348
957521	AF2-046 C	11.3093	50/50	11.3093
957522	AF2-046 E	5.6887	50/50	5.6887
957531	AF2-047 C	46.0467	50/50	46.0467
957532	AF2-047 E	23.1618	50/50	23.1618
957861	AF2-080 C	6.6930	50/50	6.6930
957862	AF2-080 E	2.9670	50/50	2.9670
959231	AF2-214 C	2.4483	Adder	5.43
959232	AF2-214 E	3.6705	Adder	8.15

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959511	AF2-242	11.1811	50/50	11.1811
959731	AF2-264 C	1.8168	50/50	1.8168
959732	AF2-264 E	0.8948	50/50	0.8948
960122	AF2-303 E O1	3.1139	Adder	6.91
960331	AF2-324 C O1	2.0261	Adder	4.5
960332	AF2-324 E O1	1.0878	Adder	2.41
960351	AF2-326 C	0.6454	Adder	1.43
960352	AF2-326 E	0.1614	Adder	0.36
960831	AF2-374 C	1.1376	50/50	1.1376
960832	AF2-374 E	1.8560	50/50	1.8560
WEC	WEC	0.1944	Confirmed LTF	0.1944
LGEE	LGEE	0.3634	Confirmed LTF	0.3634
CPL	CPL	2.2696	Confirmed LTF	2.2696
CBM-W2	CBM-W2	7.5839	Confirmed LTF	7.5839
NY	NY	0.1841	Confirmed LTF	0.1841
CBM-W1	CBM-W1	7.3183	Confirmed LTF	7.3183
TVA	TVA	1.5736	Confirmed LTF	1.5736
O-066	O-066	2.7082	Confirmed LTF	2.7082
CBM-S2	CBM-S2	13.7333	Confirmed LTF	13.7333
CBM-S1	CBM-S1	8.8012	Confirmed LTF	8.8012
G-007	G-007	0.4233	Confirmed LTF	0.4233
MADISON	MADISON	0.4234	Confirmed LTF	0.4234
MEC	MEC	1.1600	Confirmed LTF	1.1600
AA2-074	AA2-074	1.5467	LTF	1.5467

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
97890660	314209	6SKIIF CREEK	DVP	314386	6KINGS M	DVP	1	DVP_P1-2: LN 557	single	441.8	189.19	189.8	DC	5.92

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314295	6BIRDNECK	0.0190	80/20	0.0190
314421	6WINCHST	0.1068	80/20	0.1068
314491	3PENDLTN	0.1417	80/20	0.1417
314507	3THOMPSN	0.1420	80/20	0.1420
315092	1YORKTN3	19.7928	80/20	19.7928
315098	1CHESPKA	0.1878	80/20	0.1878
315099	1CHESPKB (Deactivation : 31/05/2019)	1.2174	80/20	1.2174
315108	1ELIZAR1	1.3851	80/20	1.3851
315109	1ELIZAR2	1.3611	80/20	1.3611
315110	1ELIZAR3	1.4028	80/20	1.4028
315233	1SURRY 2	14.1584	80/20	14.1584
315260	1GOSPORTA	0.1499	80/20	0.1499
315261	1GOSPORTB	0.1915	80/20	0.1915
315262	1GOSPORTC	0.1625	80/20	0.1625
315294	1DOMTR10	2.8994	Adder	3.41
315603	6AA1-139SOLA	1.0487	80/20	1.0487
315611	6Z1-036WIND	2.1634	Adder	2.55
923801	AB2-015 C OP	2.3426	Adder	2.76
923831	AB2-022 C	0.7771	Adder	0.91
924241	AB2-068 OP	103.1274	80/20	103.1274
925861	AC1-065 C	-2.5606	Adder	-3.01
926291	AC1-107 O1 (Suspended)	155.6640	80/20	155.6640
926661	AC1-147 C	0.9207	80/20	0.9207
926751	AC1-161 C O1	14.0262	80/20	14.0262
926781	AC1-164 C	-19.1190	Adder	-22.49
932041	AC2-012 C	4.1650	80/20	4.1650
932501	AC2-070 C	-0.5260	Adder	-0.62
932591	AC2-079 C O1	1.4213	Adder	1.67
932831	AC2-110 C	-1.0242	Adder	-1.2
933261	AC2-137 C	-0.8007	Adder	-0.94
933271	AC2-138 C	-0.5952	Adder	-0.7
933291	AC2-141 C	14.0262	80/20	14.0262
933731	AC2-196 C	0.7368	80/20	0.7368
933991	AD1-023 C	3.5849	Adder	4.22
934061	AD1-033 C	3.0929	80/20	3.0929
934191	AD1-046 C	-2.9738	Adder	-3.5
934521	AD1-076 C	15.1972	Adder	17.88
935111	AD1-144 C	0.7431	80/20	0.7431
936151	AD2-021	-0.0913	Adder	-0.11
936301	AD2-039 C	-1.0242	Adder	-1.2
936341	AD2-044 C	-0.1860	Adder	-0.22

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936661	AD2-085 C	0.8449	Adder	0.99
937221	AD2-160 C O1	2.3862	80/20	2.3862
937251	AD2-164 (Withdrawn : 06/30/2020)	3.5284	80/20	3.5284
937541	AD2-215 C	0.7508	80/20	0.7508
938031	AE1-004 C	-1.0242	Adder	-1.2
938171	AE1-026 C O1	8.6260	Adder	10.15
938221	AE1-035 C	0.5712	Adder	0.67
938531	AE1-072 C O1	7.0982	80/20	7.0982
938771	AE1-103 C O1	1.0078	Adder	1.19
938961	AE1-124 C	-1.2883	Adder	-1.52
939311	AE1-162 C	0.6635	Adder	0.78
939411	AE1-173 C	23.5375	Adder	27.69
939421	AE1-174 C (Withdrawn : 06/16/2020)	0.1619	80/20	0.1619
939431	AE1-175 C	1.0764	80/20	1.0764
940251	AE2-007 O1	70.9831	80/20	70.9831
940491	AE2-034 C	2.1167	Adder	2.49
940641	AE2-051 C O1	3.9803	Adder	4.68
940891	AE2-078 C	0.8045	Adder	0.95
940901	AE2-079 C	0.8045	Adder	0.95
941101	AE2-104 C O1	1.0508	Adder	1.24
941281	AE2-122 C O1	11.6664	80/20	11.6664
941291	AE2-123 C O1	11.9895	80/20	11.9895
941301	AE2-124 C O1	10.9073	80/20	10.9073
941501	AE2-147 C	5.2464	Adder	6.17
941591	AE2-156 O1	7.3200	80/20	7.3200
942131	AE2-225 C	0.8680	80/20	0.8680
942171	AE2-229 C	0.8680	80/20	0.8680
942341	AE2-247 C	0.3648	Adder	0.43
942401	AE2-253 C	2.5099	80/20	2.5099
942851	AE2-304 C	0.2047	Adder	0.24
943461	AF1-017 C	0.3300	Adder	0.39
943611	AF1-032 C	0.7088	80/20	0.7088
943621	AF1-033 C	0.8045	Adder	0.95
944501	AF1-115 C O1	2.4500	Adder	2.88
944581	AF1-123 C O1	20.1615	80/20	20.1615
944591	AF1-124 C O1	20.1615	80/20	20.1615
944601	AF1-125 C O1	20.1615	80/20	20.1615
944871	AF1-152 C	1.7488	Adder	2.06
945361	AF1-201 C O1	4.4523	Adder	5.24
945711	AF1-236 C O1	23.1723	Adder	27.26
957491	AF2-043 C	0.8680	80/20	0.8680
957531	AF2-047 C	2.6657	Adder	5.92
957631	AF2-057	1.4614	80/20	1.4614
957791	AF2-073 C (Withdrawn : 07/02/2020)	1.6336	Adder	3.63
957801	AF2-074 C (Withdrawn : 07/02/2020)	0.7260	Adder	1.61
957821	AF2-076 C O1	0.9586	Adder	2.13
957871	AF2-081 C O1	4.0533	80/20	4.0533
958161	AF2-110 C	0.2296	Adder	0.51
960101	AF2-301 C	1.3805	80/20	1.3805

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961091	AF2-400 C	0.0670	Adder	0.15
WEC	WEC	0.1178	Confirmed LTF	0.1178
LGEE	LGEE	0.2253	Confirmed LTF	0.2253
CPL	CPL	1.6332	Confirmed LTF	1.6332
CBM-W2	CBM-W2	5.3890	Confirmed LTF	5.3890
NY	NY	0.3102	Confirmed LTF	0.3102
CBM-W1	CBM-W1	4.2909	Confirmed LTF	4.2909
TVA	TVA	1.1788	Confirmed LTF	1.1788
CBM-S2	CBM-S2	10.8144	Confirmed LTF	10.8144
CBM-S1	CBM-S1	6.4667	Confirmed LTF	6.4667
MADISON	MADISON	0.3871	Confirmed LTF	0.3871
MEC	MEC	0.7595	Confirmed LTF	0.7595

11.6.16 Index 16

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
97708469	314287	6CHESTF B	DVP	314276	6BASIN	DVP	1	DVP_P4-2: 562T563	breaker	812.0	141.01	141.51	DC	8.95

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
315074	1HOPCGN1 (Deactivation : 25/06/2019)	5.9815	50/50	5.9815
315075	1HOPCGN2 (Deactivation : 25/06/2019)	5.9040	50/50	5.9040
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
315131	1EDGECEMA (Deactivation : 22/04/2019)	2.9753	Adder	3.5
315132	1EDGECEMB (Deactivation : 22/04/2019)	2.9753	Adder	3.5
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
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
924512	AB2-100 E	2.8115	Adder	3.31
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	9.7494	Adder	11.47
925332	AB2-190 E	4.1783	Adder	4.92
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
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	7.8344	Adder	9.22
935162	AD1-151 E O1	5.2229	Adder	6.14
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
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	1.5563	Adder	1.83
940571	AE2-044 C	1.4309	Adder	1.68

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
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	7.2256	Adder	8.5
942472	AE2-260 E O1	10.2487	Adder	12.06
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
946282	AF1-292 E	0.4491	Adder	0.53
957481	AF2-042 C O1	8.0495	Adder	17.87
957482	AF2-042 E O1	5.3664	Adder	11.91
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 O1	0.7804	Adder	1.73
957822	AF2-076 E O1	0.5202	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
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
960122	AF2-303 E O1	2.0391	Adder	4.53
960132	AF2-304 E O1	2.7453	Adder	6.09
960331	AF2-324 C O1	1.3268	Adder	2.95

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960332	AF2-324 E O1	0.7123	Adder	1.58
960351	AF2-326 C	0.4329	Adder	0.96
960352	AF2-326 E	0.1082	Adder	0.24
960361	AF2-327 C	0.7803	Adder	1.73
960362	AF2-327 E	0.1951	Adder	0.43
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 O1	0.2726	Adder	0.61
961112	AF2-402 E O1	0.4457	Adder	0.99
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

11.6.17 Index 17

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
97890701	314296	6PENNINGMAN	DVP	314415	6WALR209	DVP	1	DVP_P1-2: LN 557	single	441.8	177.79	178.4	DC	5.92

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314295	6BIRDNECK	0.0190	80/20	0.0190
314421	6WINCHST	0.1068	80/20	0.1068
314491	3PENDLTN	0.1417	80/20	0.1417
314507	3THOMPSN	0.1420	80/20	0.1420
315092	1YORKTN3	19.7928	80/20	19.7928
315098	1CHESPKA	0.1878	80/20	0.1878
315099	1CHESPKB (Deactivation : 31/05/2019)	1.2174	80/20	1.2174
315108	1ELIZAR1	1.3851	80/20	1.3851
315109	1ELIZAR2	1.3611	80/20	1.3611
315110	1ELIZAR3	1.4028	80/20	1.4028
315233	1SURRY 2	14.1584	80/20	14.1584
315260	1GOSPORTA	0.1499	80/20	0.1499
315261	1GOSPORTB	0.1915	80/20	0.1915
315262	1GOSPORTC	0.1625	80/20	0.1625
315294	1DOMTR10	2.8994	Adder	3.41
315603	6AA1-139SOLA	1.0487	80/20	1.0487
315611	6Z1-036WIND	2.1634	Adder	2.55
923801	AB2-015 C OP	2.3426	Adder	2.76
923831	AB2-022 C	0.7771	Adder	0.91
924241	AB2-068 OP	103.1274	80/20	103.1274
925861	AC1-065 C	-2.5606	Adder	-3.01
926291	AC1-107 O1 (Suspended)	155.6640	80/20	155.6640
926661	AC1-147 C	0.9207	80/20	0.9207
926751	AC1-161 C O1	14.0262	80/20	14.0262
926781	AC1-164 C	-19.1190	Adder	-22.49
932041	AC2-012 C	4.1650	80/20	4.1650
932501	AC2-070 C	-0.5260	Adder	-0.62
932591	AC2-079 C O1	1.4213	Adder	1.67
932831	AC2-110 C	-1.0242	Adder	-1.2
933261	AC2-137 C	-0.8007	Adder	-0.94
933271	AC2-138 C	-0.5952	Adder	-0.7
933291	AC2-141 C	14.0262	80/20	14.0262
933731	AC2-196 C	0.7368	80/20	0.7368
933991	AD1-023 C	3.5849	Adder	4.22
934061	AD1-033 C	3.0929	80/20	3.0929
934191	AD1-046 C	-2.9738	Adder	-3.5
934521	AD1-076 C	15.1972	Adder	17.88
935111	AD1-144 C	0.7431	80/20	0.7431
936151	AD2-021	-0.0913	Adder	-0.11
936301	AD2-039 C	-1.0242	Adder	-1.2
936341	AD2-044 C	-0.1860	Adder	-0.22

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936661	AD2-085 C	0.8449	Adder	0.99
937221	AD2-160 C O1	2.3862	80/20	2.3862
937251	AD2-164 (Withdrawn : 06/30/2020)	3.5284	80/20	3.5284
937541	AD2-215 C	0.7508	80/20	0.7508
938031	AE1-004 C	-1.0242	Adder	-1.2
938171	AE1-026 C O1	8.6260	Adder	10.15
938221	AE1-035 C	0.5712	Adder	0.67
938531	AE1-072 C O1	7.0982	80/20	7.0982
938771	AE1-103 C O1	1.0078	Adder	1.19
938961	AE1-124 C	-1.2883	Adder	-1.52
939311	AE1-162 C	0.6635	Adder	0.78
939411	AE1-173 C	23.5375	Adder	27.69
939421	AE1-174 C (Withdrawn : 06/16/2020)	0.1619	80/20	0.1619
939431	AE1-175 C	1.0764	80/20	1.0764
940251	AE2-007 O1	70.9831	80/20	70.9831
940491	AE2-034 C	2.1167	Adder	2.49
940641	AE2-051 C O1	3.9803	Adder	4.68
940891	AE2-078 C	0.8045	Adder	0.95
940901	AE2-079 C	0.8045	Adder	0.95
941101	AE2-104 C O1	1.0508	Adder	1.24
941281	AE2-122 C O1	11.6664	80/20	11.6664
941291	AE2-123 C O1	11.9895	80/20	11.9895
941301	AE2-124 C O1	10.9073	80/20	10.9073
941501	AE2-147 C	5.2464	Adder	6.17
941591	AE2-156 O1	7.3200	80/20	7.3200
942131	AE2-225 C	0.8680	80/20	0.8680
942171	AE2-229 C	0.8680	80/20	0.8680
942341	AE2-247 C	0.3648	Adder	0.43
942401	AE2-253 C	2.5099	80/20	2.5099
942851	AE2-304 C	0.2047	Adder	0.24
943461	AF1-017 C	0.3300	Adder	0.39
943611	AF1-032 C	0.7088	80/20	0.7088
943621	AF1-033 C	0.8045	Adder	0.95
944501	AF1-115 C O1	2.4500	Adder	2.88
944581	AF1-123 C O1	20.1615	80/20	20.1615
944591	AF1-124 C O1	20.1615	80/20	20.1615
944601	AF1-125 C O1	20.1615	80/20	20.1615
944871	AF1-152 C	1.7488	Adder	2.06
945361	AF1-201 C O1	4.4523	Adder	5.24
945711	AF1-236 C O1	23.1723	Adder	27.26
957491	AF2-043 C	0.8680	80/20	0.8680
957531	AF2-047 C	2.6657	Adder	5.92
957631	AF2-057	1.4614	80/20	1.4614
957791	AF2-073 C (Withdrawn : 07/02/2020)	1.6336	Adder	3.63
957801	AF2-074 C (Withdrawn : 07/02/2020)	0.7260	Adder	1.61
957821	AF2-076 C O1	0.9586	Adder	2.13
957871	AF2-081 C O1	4.0533	80/20	4.0533
958161	AF2-110 C	0.2296	Adder	0.51
960101	AF2-301 C	1.3805	80/20	1.3805

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961091	AF2-400 C	0.0670	Adder	0.15
WEC	WEC	0.1178	Confirmed LTF	0.1178
LGEE	LGEE	0.2253	Confirmed LTF	0.2253
CPL	CPL	1.6332	Confirmed LTF	1.6332
CBM-W2	CBM-W2	5.3890	Confirmed LTF	5.3890
NY	NY	0.3102	Confirmed LTF	0.3102
CBM-W1	CBM-W1	4.2909	Confirmed LTF	4.2909
TVA	TVA	1.1788	Confirmed LTF	1.1788
CBM-S2	CBM-S2	10.8144	Confirmed LTF	10.8144
CBM-S1	CBM-S1	6.4667	Confirmed LTF	6.4667
MADISON	MADISON	0.3871	Confirmed LTF	0.3871
MEC	MEC	0.7595	Confirmed LTF	0.7595

11.6.18 Index 18

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
97890681	314386	6KINGS M	DVP	314296	6PENNIMAN	DVP	1	DVP_P1-2: LN 557	single	441.8	181.43	182.04	DC	5.92

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314295	6BIRDNECK	0.0190	80/20	0.0190
314421	6WINCHST	0.1068	80/20	0.1068
314491	3PENDLTN	0.1417	80/20	0.1417
314507	3THOMPSN	0.1420	80/20	0.1420
315092	1YORKTN3	19.7928	80/20	19.7928
315098	1CHESPKA	0.1878	80/20	0.1878
315099	1CHESPKB (Deactivation : 31/05/2019)	1.2174	80/20	1.2174
315108	1ELIZAR1	1.3851	80/20	1.3851
315109	1ELIZAR2	1.3611	80/20	1.3611
315110	1ELIZAR3	1.4028	80/20	1.4028
315233	1SURRY 2	14.1584	80/20	14.1584
315260	1GOSPORTA	0.1499	80/20	0.1499
315261	1GOSPORTB	0.1915	80/20	0.1915
315262	1GOSPORTC	0.1625	80/20	0.1625
315294	1DOMTR10	2.8994	Adder	3.41
315603	6AA1-139SOLA	1.0487	80/20	1.0487
315611	6Z1-036WIND	2.1634	Adder	2.55
923801	AB2-015 C OP	2.3426	Adder	2.76
923831	AB2-022 C	0.7771	Adder	0.91
924241	AB2-068 OP	103.1274	80/20	103.1274
925861	AC1-065 C	-2.5606	Adder	-3.01
926291	AC1-107 O1 (Suspended)	155.6640	80/20	155.6640
926661	AC1-147 C	0.9207	80/20	0.9207
926751	AC1-161 C O1	14.0262	80/20	14.0262
926781	AC1-164 C	-19.1190	Adder	-22.49
932041	AC2-012 C	4.1650	80/20	4.1650
932501	AC2-070 C	-0.5260	Adder	-0.62
932591	AC2-079 C O1	1.4213	Adder	1.67
932831	AC2-110 C	-1.0242	Adder	-1.2
933261	AC2-137 C	-0.8007	Adder	-0.94
933271	AC2-138 C	-0.5952	Adder	-0.7
933291	AC2-141 C	14.0262	80/20	14.0262
933731	AC2-196 C	0.7368	80/20	0.7368
933991	AD1-023 C	3.5849	Adder	4.22
934061	AD1-033 C	3.0929	80/20	3.0929
934191	AD1-046 C	-2.9738	Adder	-3.5
934521	AD1-076 C	15.1972	Adder	17.88
935111	AD1-144 C	0.7431	80/20	0.7431
936151	AD2-021	-0.0913	Adder	-0.11
936301	AD2-039 C	-1.0242	Adder	-1.2
936341	AD2-044 C	-0.1860	Adder	-0.22

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936661	AD2-085 C	0.8449	Adder	0.99
937221	AD2-160 C O1	2.3862	80/20	2.3862
937251	AD2-164 (Withdrawn : 06/30/2020)	3.5284	80/20	3.5284
937541	AD2-215 C	0.7508	80/20	0.7508
938031	AE1-004 C	-1.0242	Adder	-1.2
938171	AE1-026 C O1	8.6260	Adder	10.15
938221	AE1-035 C	0.5712	Adder	0.67
938531	AE1-072 C O1	7.0982	80/20	7.0982
938771	AE1-103 C O1	1.0078	Adder	1.19
938961	AE1-124 C	-1.2883	Adder	-1.52
939311	AE1-162 C	0.6635	Adder	0.78
939411	AE1-173 C	23.5375	Adder	27.69
939421	AE1-174 C (Withdrawn : 06/16/2020)	0.1619	80/20	0.1619
939431	AE1-175 C	1.0764	80/20	1.0764
940251	AE2-007 O1	70.9831	80/20	70.9831
940491	AE2-034 C	2.1167	Adder	2.49
940641	AE2-051 C O1	3.9803	Adder	4.68
940891	AE2-078 C	0.8045	Adder	0.95
940901	AE2-079 C	0.8045	Adder	0.95
941101	AE2-104 C O1	1.0508	Adder	1.24
941281	AE2-122 C O1	11.6664	80/20	11.6664
941291	AE2-123 C O1	11.9895	80/20	11.9895
941301	AE2-124 C O1	10.9073	80/20	10.9073
941501	AE2-147 C	5.2464	Adder	6.17
941591	AE2-156 O1	7.3200	80/20	7.3200
942131	AE2-225 C	0.8680	80/20	0.8680
942171	AE2-229 C	0.8680	80/20	0.8680
942341	AE2-247 C	0.3648	Adder	0.43
942401	AE2-253 C	2.5099	80/20	2.5099
942851	AE2-304 C	0.2047	Adder	0.24
943461	AF1-017 C	0.3300	Adder	0.39
943611	AF1-032 C	0.7088	80/20	0.7088
943621	AF1-033 C	0.8045	Adder	0.95
944501	AF1-115 C O1	2.4500	Adder	2.88
944581	AF1-123 C O1	20.1615	80/20	20.1615
944591	AF1-124 C O1	20.1615	80/20	20.1615
944601	AF1-125 C O1	20.1615	80/20	20.1615
944871	AF1-152 C	1.7488	Adder	2.06
945361	AF1-201 C O1	4.4523	Adder	5.24
945711	AF1-236 C O1	23.1723	Adder	27.26
957491	AF2-043 C	0.8680	80/20	0.8680
957531	AF2-047 C	2.6657	Adder	5.92
957631	AF2-057	1.4614	80/20	1.4614
957791	AF2-073 C (Withdrawn : 07/02/2020)	1.6336	Adder	3.63
957801	AF2-074 C (Withdrawn : 07/02/2020)	0.7260	Adder	1.61
957821	AF2-076 C O1	0.9586	Adder	2.13
957871	AF2-081 C O1	4.0533	80/20	4.0533
958161	AF2-110 C	0.2296	Adder	0.51
960101	AF2-301 C	1.3805	80/20	1.3805

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961091	AF2-400 C	0.0670	Adder	0.15
WEC	WEC	0.1178	Confirmed LTF	0.1178
LGEE	LGEE	0.2253	Confirmed LTF	0.2253
CPL	CPL	1.6332	Confirmed LTF	1.6332
CBM-W2	CBM-W2	5.3890	Confirmed LTF	5.3890
NY	NY	0.3102	Confirmed LTF	0.3102
CBM-W1	CBM-W1	4.2909	Confirmed LTF	4.2909
TVA	TVA	1.1788	Confirmed LTF	1.1788
CBM-S2	CBM-S2	10.8144	Confirmed LTF	10.8144
CBM-S1	CBM-S1	6.4667	Confirmed LTF	6.4667
MADISON	MADISON	0.3871	Confirmed LTF	0.3871
MEC	MEC	0.7595	Confirmed LTF	0.7595

11.6.19 Index 19

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
97890769	314415	6WALR209	DVP	314391	6LIGH209	DVP	1	DVP_P1-2: LN 557	single	441.8	162.67	163.28	DC	5.92

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314295	6BIRDNECK	0.0190	80/20	0.0190
314421	6WINCHST	0.1068	80/20	0.1068
314491	3PENDLTN	0.1417	80/20	0.1417
314507	3THOMPSN	0.1420	80/20	0.1420
315092	1YORKTN3	19.7928	80/20	19.7928
315098	1CHESPKA	0.1878	80/20	0.1878
315099	1CHESPKB (Deactivation : 31/05/2019)	1.2174	80/20	1.2174
315108	1ELIZAR1	1.3851	80/20	1.3851
315109	1ELIZAR2	1.3611	80/20	1.3611
315110	1ELIZAR3	1.4028	80/20	1.4028
315233	1SURRY 2	14.1584	80/20	14.1584
315260	1GOSPORTA	0.1499	80/20	0.1499
315261	1GOSPORTB	0.1915	80/20	0.1915
315262	1GOSPORTC	0.1625	80/20	0.1625
315294	1DOMTR10	2.8994	Adder	3.41
315603	6AA1-139SOLA	1.0487	80/20	1.0487
315611	6Z1-036WIND	2.1634	Adder	2.55
923801	AB2-015 C OP	2.3426	Adder	2.76
923831	AB2-022 C	0.7771	Adder	0.91
924241	AB2-068 OP	103.1274	80/20	103.1274
925861	AC1-065 C	-2.5606	Adder	-3.01
926291	AC1-107 O1 (Suspended)	155.6640	80/20	155.6640
926661	AC1-147 C	0.9207	80/20	0.9207
926751	AC1-161 C O1	14.0262	80/20	14.0262
926781	AC1-164 C	-19.1190	Adder	-22.49
932041	AC2-012 C	4.1650	80/20	4.1650
932501	AC2-070 C	-0.5260	Adder	-0.62
932591	AC2-079 C O1	1.4213	Adder	1.67
932831	AC2-110 C	-1.0242	Adder	-1.2
933261	AC2-137 C	-0.8007	Adder	-0.94
933271	AC2-138 C	-0.5952	Adder	-0.7
933291	AC2-141 C	14.0262	80/20	14.0262
933731	AC2-196 C	0.7368	80/20	0.7368
933991	AD1-023 C	3.5849	Adder	4.22
934061	AD1-033 C	3.0929	80/20	3.0929
934191	AD1-046 C	-2.9738	Adder	-3.5
934521	AD1-076 C	15.1972	Adder	17.88
935111	AD1-144 C	0.7431	80/20	0.7431
936151	AD2-021	-0.0913	Adder	-0.11
936301	AD2-039 C	-1.0242	Adder	-1.2
936341	AD2-044 C	-0.1860	Adder	-0.22

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936661	AD2-085 C	0.8449	Adder	0.99
937221	AD2-160 C O1	2.3862	80/20	2.3862
937251	AD2-164 (Withdrawn : 06/30/2020)	3.5284	80/20	3.5284
937541	AD2-215 C	0.7508	80/20	0.7508
938031	AE1-004 C	-1.0242	Adder	-1.2
938171	AE1-026 C O1	8.6260	Adder	10.15
938221	AE1-035 C	0.5712	Adder	0.67
938531	AE1-072 C O1	7.0982	80/20	7.0982
938771	AE1-103 C O1	1.0078	Adder	1.19
938961	AE1-124 C	-1.2883	Adder	-1.52
939311	AE1-162 C	0.6635	Adder	0.78
939411	AE1-173 C	23.5375	Adder	27.69
939421	AE1-174 C (Withdrawn : 06/16/2020)	0.1619	80/20	0.1619
939431	AE1-175 C	1.0764	80/20	1.0764
940251	AE2-007 O1	70.9831	80/20	70.9831
940491	AE2-034 C	2.1167	Adder	2.49
940641	AE2-051 C O1	3.9803	Adder	4.68
940891	AE2-078 C	0.8045	Adder	0.95
940901	AE2-079 C	0.8045	Adder	0.95
941101	AE2-104 C O1	1.0508	Adder	1.24
941281	AE2-122 C O1	11.6664	80/20	11.6664
941291	AE2-123 C O1	11.9895	80/20	11.9895
941301	AE2-124 C O1	10.9073	80/20	10.9073
941501	AE2-147 C	5.2464	Adder	6.17
941591	AE2-156 O1	7.3200	80/20	7.3200
942131	AE2-225 C	0.8680	80/20	0.8680
942171	AE2-229 C	0.8680	80/20	0.8680
942341	AE2-247 C	0.3648	Adder	0.43
942401	AE2-253 C	2.5099	80/20	2.5099
942851	AE2-304 C	0.2047	Adder	0.24
943461	AF1-017 C	0.3300	Adder	0.39
943611	AF1-032 C	0.7088	80/20	0.7088
943621	AF1-033 C	0.8045	Adder	0.95
944501	AF1-115 C O1	2.4500	Adder	2.88
944581	AF1-123 C O1	20.1615	80/20	20.1615
944591	AF1-124 C O1	20.1615	80/20	20.1615
944601	AF1-125 C O1	20.1615	80/20	20.1615
944871	AF1-152 C	1.7488	Adder	2.06
945361	AF1-201 C O1	4.4523	Adder	5.24
945711	AF1-236 C O1	23.1723	Adder	27.26
957491	AF2-043 C	0.8680	80/20	0.8680
957531	AF2-047 C	2.6657	Adder	5.92
957631	AF2-057	1.4614	80/20	1.4614
957791	AF2-073 C (Withdrawn : 07/02/2020)	1.6336	Adder	3.63
957801	AF2-074 C (Withdrawn : 07/02/2020)	0.7260	Adder	1.61
957821	AF2-076 C O1	0.9586	Adder	2.13
957871	AF2-081 C O1	4.0533	80/20	4.0533
958161	AF2-110 C	0.2296	Adder	0.51
960101	AF2-301 C	1.3805	80/20	1.3805

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961091	AF2-400 C	0.0670	Adder	0.15
WEC	WEC	0.1178	Confirmed LTF	0.1178
LGEE	LGEE	0.2253	Confirmed LTF	0.2253
CPL	CPL	1.6332	Confirmed LTF	1.6332
CBM-W2	CBM-W2	5.3890	Confirmed LTF	5.3890
NY	NY	0.3102	Confirmed LTF	0.3102
CBM-W1	CBM-W1	4.2909	Confirmed LTF	4.2909
TVA	TVA	1.1788	Confirmed LTF	1.1788
CBM-S2	CBM-S2	10.8144	Confirmed LTF	10.8144
CBM-S1	CBM-S1	6.4667	Confirmed LTF	6.4667
MADISON	MADISON	0.3871	Confirmed LTF	0.3871
MEC	MEC	0.7595	Confirmed LTF	0.7595

11.6.20 Index 20

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
97890817	314435	6SAPONY	DVP	314282	6CARSON	DVP	1	DVP_P1-2: LN 246	single	678.68	124.59	125.26	DC	10.34

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
315131	1EDGECEMA (Deactivation : 22/04/2019)	10.4823	80/20	10.4823
315132	1EDGECEMB (Deactivation : 22/04/2019)	10.4823	80/20	10.4823
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924151	AB2-059 C OP	2.0304	80/20	2.0304
924301	AB2-077 C O1 (Suspended)	1.4183	Adder	1.67
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
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	2.5820	Adder	3.04
941541	AE2-151 C	1.3698	80/20	1.3698
942451	AE2-258	1.6869	Adder	1.98
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
960331	AF2-324 C O1	8.8196	80/20	8.8196
960351	AF2-326 C	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

11.6.21 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
97708506	314466	6FENTRES	DVP	314508	6THRASHER	DVP	1	DVP_P4-2: 231T2026	breaker	830.0	132.11	132.75	DC	11.75

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314491	3PENDLTN	0.2227	50/50	0.2227
314638	6ELIZ CT	0.3016	50/50	0.3016
314639	6TANGLEW	0.4711	50/50	0.4711
314643	3O INLET	0.7667	50/50	0.7667
315603	6AA1-139SOLA	4.6330	50/50	4.6330
315605	6W1-029WIND	0.5152	50/50	0.5152
315611	6Z1-036WIND	4.4503	50/50	4.4503
901082	W1-029 E	20.0240	50/50	20.0240
913392	Y1-086 E	2.8526	50/50	2.8526
916042	Z1-036 E (Suspended)	29.8169	50/50	29.8169
916192	Z1-068 E	0.7963	Adder	0.94
917122	Z2-027 E	1.1705	50/50	1.1705
919152	AA1-139 E	11.5110	50/50	11.5110
920692	AA2-178 E	1.5985	Adder	1.88
923831	AB2-022 C	2.9906	50/50	2.9906
923832	AB2-022 E	1.6103	50/50	1.6103
925522	AC1-027 E	0.7376	50/50	0.7376
926661	AC1-147 C	-1.1355	Adder	-1.34
933731	AC2-196 C	3.7660	50/50	3.7660
933732	AC2-196 E	2.5082	50/50	2.5082
934061	AD1-033 C	14.8218	50/50	14.8218
934062	AD1-033 E	9.8812	50/50	9.8812
934521	AD1-076 C	15.5843	Adder	18.33
934522	AD1-076 E	7.9355	Adder	9.34
937221	AD2-160 C O1	11.0238	50/50	11.0238
937222	AD2-160 E O1	5.7807	50/50	5.7807
938531	AE1-072 C O1	29.8413	50/50	29.8413
938532	AE1-072 E O1	15.5562	50/50	15.5562
939311	AE1-162 C	-0.6348	Adder	-0.75
940491	AE2-034 C	2.7975	Adder	3.29
940492	AE2-034 E	1.1989	Adder	1.41
941281	AE2-122 C O1	23.4393	50/50	23.4393
941282	AE2-122 E O1	94.5834	50/50	94.5834
941291	AE2-123 C O1	24.0884	50/50	24.0884
941292	AE2-123 E O1	93.9344	50/50	93.9344
941301	AE2-124 C O1	35.4336	50/50	35.4336
941302	AE2-124 E O1	155.4783	50/50	155.4783
941501	AE2-147 C	9.9567	50/50	9.9567
941502	AE2-147 E	6.6378	50/50	6.6378
941592	AE2-156 BAT	10.1900	50/50	10.1900
942401	AE2-253 C	11.5951	50/50	11.5951

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942402	AE2-253 E	5.2094	50/50	5.2094
942851	AE2-304 C	0.4460	50/50	0.4460
942852	AE2-304 E	0.1735	50/50	0.1735
944581	AF1-123 C O1	32.6724	50/50	32.6724
944582	AF1-123 E O1	74.8107	50/50	74.8107
944591	AF1-124 C O1	32.6724	50/50	32.6724
944592	AF1-124 E O1	74.8107	50/50	74.8107
944601	AF1-125 C O1	32.6724	50/50	32.6724
944602	AF1-125 E O1	74.8107	50/50	74.8107
944871	AF1-152 C	3.3189	50/50	3.3189
944872	AF1-152 E	2.2126	50/50	2.2126
945711	AF1-236 C O1	30.6254	Adder	36.03
945712	AF1-236 E O1	49.9678	Adder	58.79
957531	AF2-047 C	3.5231	Adder	7.82
957532	AF2-047 E	1.7721	Adder	3.93
957632	AF2-057 BAT	2.1204	50/50	2.1204
957871	AF2-081 C O1	17.9060	50/50	17.9060
957872	AF2-081 E O1	7.6740	50/50	7.6740
WEC	WEC	0.0321	Confirmed LTF	0.0321
LGEE	LGEE	0.0599	Confirmed LTF	0.0599
CPL	CPL	0.2686	Confirmed LTF	0.2686
CBM-W2	CBM-W2	1.1384	Confirmed LTF	1.1384
NY	NY	0.0050	Confirmed LTF	0.0050
CBM-W1	CBM-W1	1.2385	Confirmed LTF	1.2385
TVA	TVA	0.2268	Confirmed LTF	0.2268
O-066	O-066	0.1142	Confirmed LTF	0.1142
CBM-S2	CBM-S2	1.7513	Confirmed LTF	1.7513
CBM-S1	CBM-S1	1.2865	Confirmed LTF	1.2865
G-007	G-007	0.0187	Confirmed LTF	0.0187
MADISON	MADISON	0.0504	Confirmed LTF	0.0504
MEC	MEC	0.1843	Confirmed LTF	0.1843

11.6.22 Index 22

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
97708615	314466	6FENTRES	DVP	934060	AD1-033 TAP	DVP	1	DVP_P4-2: 2110T2128	breaker	830.0	112.16	112.86	DC	13.04

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314638	6ELIZ CT	0.2648	50/50	0.2648
314639	6TANGLEW	0.4272	50/50	0.4272
314643	3O INLET	0.6457	50/50	0.6457
315294	1DOMTR10	3.3004	Adder	3.88
315603	6AA1-139SOLA	3.8597	50/50	3.8597
315605	6W1-029WIND	0.5452	50/50	0.5452
315611	6Z1-036WIND	4.5548	50/50	4.5548
901082	W1-029 E	21.1879	50/50	21.1879
913392	Y1-086 E	2.5047	50/50	2.5047
916042	Z1-036 E (Suspended)	30.5172	50/50	30.5172
917122	Z2-027 E	1.0613	50/50	1.0613
919152	AA1-139 E	9.5897	50/50	9.5897
920692	AA2-178 E	1.7734	Adder	2.09
923831	AB2-022 C	2.6259	50/50	2.6259
923832	AB2-022 E	1.4139	50/50	1.4139
926661	AC1-147 C	-1.8982	Adder	-2.23
933731	AC2-196 C	3.0719	50/50	3.0719
933732	AC2-196 E	2.0459	50/50	2.0459
933991	AD1-023 C	3.9475	Adder	4.64
933992	AD1-023 E	2.1490	Adder	2.53
934521	AD1-076 C	18.8718	Adder	22.2
934522	AD1-076 E	9.6095	Adder	11.31
937221	AD2-160 C O1	9.1220	50/50	9.1220
937222	AD2-160 E O1	4.7835	50/50	4.7835
938531	AE1-072 C O1	25.0552	50/50	25.0552
938532	AE1-072 E O1	13.0613	50/50	13.0613
939311	AE1-162 C	-0.8246	Adder	-0.97
940491	AE2-034 C	3.1034	Adder	3.65
940492	AE2-034 E	1.3300	Adder	1.56
941501	AE2-147 C	10.5354	50/50	10.5354
941502	AE2-147 E	7.0236	50/50	7.0236
941592	AE2-156 BAT	16.0800	50/50	16.0800
942401	AE2-253 C	9.5948	50/50	9.5948
942402	AE2-253 E	4.3107	50/50	4.3107
942851	AE2-304 C	0.4499	50/50	0.4499
942852	AE2-304 E	0.1750	50/50	0.1750
944581	AF1-123 C O1	20.1136	Adder	23.66
944582	AF1-123 E O1	46.0545	Adder	54.18
944591	AF1-124 C O1	20.1136	Adder	23.66
944592	AF1-124 E O1	46.0545	Adder	54.18
944601	AF1-125 C O1	20.1136	Adder	23.66

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944602	AF1-125 E O1	46.0545	Adder	54.18
944871	AF1-152 C	3.5118	50/50	3.5118
944872	AF1-152 E	2.3412	50/50	2.3412
945711	AF1-236 C O1	33.9749	Adder	39.97
945712	AF1-236 E O1	55.4327	Adder	65.21
957531	AF2-047 C	3.9084	Adder	8.68
957532	AF2-047 E	1.9659	Adder	4.36
957632	AF2-057 BAT	3.5448	50/50	3.5448
957871	AF2-081 C O1	14.9173	50/50	14.9173
957872	AF2-081 E O1	6.3931	50/50	6.3931
WEC	WEC	0.0573	Confirmed LTF	0.0573
LGEE	LGEE	0.1061	Confirmed LTF	0.1061
CPL	CPL	0.4922	Confirmed LTF	0.4922
CBM-W2	CBM-W2	2.0229	Confirmed LTF	2.0229
NY	NY	0.0111	Confirmed LTF	0.0111
CBM-W1	CBM-W1	2.1893	Confirmed LTF	2.1893
TVA	TVA	0.4046	Confirmed LTF	0.4046
O-066	O-066	0.2352	Confirmed LTF	0.2352
CBM-S2	CBM-S2	3.1501	Confirmed LTF	3.1501
CBM-S1	CBM-S1	2.2919	Confirmed LTF	2.2919
G-007	G-007	0.0374	Confirmed LTF	0.0374
MADISON	MADISON	0.0907	Confirmed LTF	0.0907
MEC	MEC	0.3257	Confirmed LTF	0.3257

11.6.23 Index 23

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
97708511	314561	6CAROLNA	DVP	314583	6LAKEVEW	DVP	1	DVP_P4-2: 246T247	breaker	459.0	126.01	131.19	DC	23.81

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314539	3UNCAMP	1.4053	Adder	1.65
314541	3WATKINS	0.5711	50/50	0.5711
314574	6EVERETS	0.2227	50/50	0.2227
314582	3KELFORD	0.6290	50/50	0.6290
314589	3MURPHYS	0.1233	50/50	0.1233
315115	1S HAMPT1	1.3410	50/50	1.3410
315126	1ROARAP2	2.6110	50/50	2.6110
315128	1ROARAP4	2.4916	50/50	2.4916
315292	1DOMTR78	1.4736	50/50	1.4736
315294	1DOMTR10	11.0717	50/50	11.0717
315602	1HOLLOMANSOL	2.5426	50/50	2.5426
315606	3AA2-053SOLA	2.6531	50/50	2.6531
315607	3AA1-063SOLA	2.3064	50/50	2.3064
315608	3AA2-088SOLA	1.2826	50/50	1.2826
315611	6Z1-036WIND	3.8033	Adder	4.47
315614	AA2-178 C	1.5334	50/50	1.5334
900672	V4-068 E	0.3918	50/50	0.3918
901082	W1-029 E	14.4727	Adder	17.03
907092	X1-038 E	3.5132	Adder	4.13
916042	21-036 E (Suspended)	25.4821	Adder	29.98
917122	Z2-027 E	0.3785	Adder	0.45
917332	Z2-043 E	1.5854	50/50	1.5854
918492	AA1-063AE OP	6.3046	50/50	6.3046
918512	AA1-065 E OP	6.6002	50/50	6.6002
918532	AA1-067 E	0.5533	50/50	0.5533
919692	AA2-053 E OP	6.6044	50/50	6.6044
919702	AA2-057 E OP	1.4685	Adder	1.73
920042	AA2-088 E OP	12.1315	50/50	12.1315
920592	AA2-165 E	0.2018	Adder	0.24
920671	AA2-174 C OP	0.1215	50/50	0.1215
920672	AA2-174 E OP	0.7632	50/50	0.7632
920692	AA2-178 E	3.8098	50/50	3.8098
923572	AB1-173 C OP	1.6126	50/50	1.6126
923573	AB1-173 E OP	0.7525	50/50	0.7525
923582	AB1-173AC OP	1.6126	50/50	1.6126
923583	AB1-173AE OP	0.7525	50/50	0.7525
923801	AB2-015 C OP	6.6240	50/50	6.6240
923802	AB2-015 E OP	5.4317	50/50	5.4317
923911	AB2-031 C O1	1.6006	50/50	1.6006
923912	AB2-031 E O1	0.7884	50/50	0.7884
923991	AB2-040 C O1	5.2558	50/50	5.2558

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
923992	AB2-040 E O1	4.3002	50/50	4.3002
924501	AB2-099 C (Suspended)	0.8753	50/50	0.8753
924502	AB2-099 E (Suspended)	0.3751	50/50	0.3751
925121	AB2-169 C	1.0466	50/50	1.0466
925122	AB2-169 E	5.4450	50/50	5.4450
925172	AB2-174 E O1	2.5943	Adder	3.05
925781	AC1-054 C O1	6.8250	50/50	6.8250
925782	AC1-054 E O1	3.1441	50/50	3.1441
926201	AC1-098 C	6.3394	50/50	6.3394
926202	AC1-098 E	3.7766	50/50	3.7766
926211	AC1-099 C	2.1244	50/50	2.1244
926212	AC1-099 E	1.2476	50/50	1.2476
927141	AC1-208 C	8.9621	50/50	8.9621
927142	AC1-208 E	3.9795	50/50	3.9795
932631	AC2-084 C	9.0370	50/50	9.0370
932632	AC2-084 E	4.4510	50/50	4.4510
933991	AD1-023 C	16.1927	50/50	16.1927
933992	AD1-023 E	8.8153	50/50	8.8153
934521	AD1-076 C	59.2718	50/50	59.2718
934522	AD1-076 E	30.1811	50/50	30.1811
936361	AD2-046 C O1	4.4782	Adder	5.27
936362	AD2-046 E O1	2.0593	Adder	2.42
936401	AD2-051 C O1	14.9094	50/50	14.9094
936402	AD2-051 E O1	6.4019	50/50	6.4019
938171	AE1-026 C O1	42.1521	50/50	42.1521
938172	AE1-026 E O1	11.1207	50/50	11.1207
938221	AE1-035 C	3.6851	50/50	3.6851
938222	AE1-035 E	1.8151	50/50	1.8151
938771	AE1-103 C O1	2.1079	Adder	2.48
938772	AE1-103 E O1	2.9109	Adder	3.42
939181	AE1-148 C O1	4.3151	Adder	5.08
939182	AE1-148 E O1	2.8767	Adder	3.38
940491	AE2-034 C	6.6671	50/50	6.6671
940492	AE2-034 E	2.8573	50/50	2.8573
940661	AE2-053 O1	1.5982	Adder	1.88
941501	AE2-147 C	7.1964	Adder	8.47
941502	AE2-147 E	4.7976	Adder	5.64
941541	AE2-151 C	1.6871	50/50	1.6871
941542	AE2-151 E	0.9085	50/50	0.9085
942851	AE2-304 C	0.3142	Adder	0.37
942852	AE2-304 E	0.1222	Adder	0.14
943171	AE2-346 C	2.1008	50/50	2.1008
943172	AE2-346 E	0.9004	50/50	0.9004
944871	AF1-152 C	2.3988	Adder	2.82
944872	AF1-152 E	1.5992	Adder	1.88
945711	AF1-236 C O1	72.9887	50/50	72.9887
945712	AF1-236 E O1	119.0867	50/50	119.0867
946012	AF1-266 BAT	7.7860	Merchant Transmission	7.7860
957521	AF2-046 C	22.6277	50/50	22.6277
957522	AF2-046 E	11.3818	50/50	11.3818
957531	AF2-047 C	15.8423	50/50	15.8423
957532	AF2-047 E	7.9687	50/50	7.9687

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959511	AF2-242	6.8918	50/50	6.8918
959731	AF2-264 C	3.2046	50/50	3.2046
959732	AF2-264 E	1.5784	50/50	1.5784
960831	AF2-374 C	2.0586	50/50	2.0586
960832	AF2-374 E	3.3588	50/50	3.3588
961091	AF2-400 C	0.3577	50/50	0.3577
961092	AF2-400 E	0.5869	50/50	0.5869
WEC	WEC	0.0466	Confirmed LTF	0.0466
LGEE	LGEE	0.0873	Confirmed LTF	0.0873
CPL	CPL	0.5715	Confirmed LTF	0.5715
CBM-W2	CBM-W2	1.7772	Confirmed LTF	1.7772
NY	NY	0.0503	Confirmed LTF	0.0503
CBM-W1	CBM-W1	1.7514	Confirmed LTF	1.7514
TVA	TVA	0.3654	Confirmed LTF	0.3654
O-066	O-066	0.7325	Confirmed LTF	0.7325
CBM-S2	CBM-S2	3.2079	Confirmed LTF	3.2079
CBM-S1	CBM-S1	2.0533	Confirmed LTF	2.0533
G-007	G-007	0.1144	Confirmed LTF	0.1144
MADISON	MADISON	0.0927	Confirmed LTF	0.0927
MEC	MEC	0.2749	Confirmed LTF	0.2749

11.6.24 Index 24

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
97890867	314563	6CLUBHSE	DVP	940480	AE2-033 TAP	DVP	1	DVP_P1-2: LN 246	single	678.68	109.63	110.31	DC	10.34

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
315131	1EDGECEMA (Deactivation : 22/04/2019)	10.4870	80/20	10.4870
315132	1EDGECEMB (Deactivation : 22/04/2019)	10.4870	80/20	10.4870
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
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924151	AB2-059 C OP	2.0312	80/20	2.0312
924301	AB2-077 C O1 (Suspended)	1.4190	Adder	1.67
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
960331	AF2-324 C O1	8.8235	80/20	8.8235
960351	AF2-326 C	2.8450	80/20	2.8450
960811	AF2-372 C	0.4751	Adder	1.05

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
960831	AF2-374 C	1.7405	80/20	1.7405
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

11.6.25 Index 25

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
97890607	314569	6EARLEYS	DVP	314575	6NUCO TP	DVP	1	DVP_P1-2: LN 2092	single	571.52	157.04	163.21	DC	35.45

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
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.0439	80/20	9.0439
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.0439	80/20	9.0439
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
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	3.4313	80/20	3.4313
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
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	14.9192	80/20	14.9192
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	163.3302	80/20	163.3302
946281	AF1-292 C	0.9859	80/20	0.9859
957521	AF2-046 C	20.4051	80/20	20.4051
957531	AF2-047 C	35.4510	80/20	35.4510
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
960331	AF2-324 C O1	7.6094	80/20	7.6094
960351	AF2-326 C	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
MADISON	MADISON	0.7056	Confirmed LTF	0.7056
MEC	MEC	1.9799	Confirmed LTF	1.9799

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

11.6.26 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
97890620	314575	6NUCO TP	DVP	957790	AF2-073 TAP	DVP	1	DVP_P1-2: LN 2131	single	571.52	150.33	156.49	DC	35.45

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
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.0439	80/20	9.0439
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.0439	80/20	9.0439
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
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	3.4313	80/20	3.4313
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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
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	14.9192	80/20	14.9192
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	163.3302	80/20	163.3302
946281	AF1-292 C	0.9859	80/20	0.9859
957521	AF2-046 C	20.4051	80/20	20.4051
957531	AF2-047 C	35.4510	80/20	35.4510
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
960331	AF2-324 C O1	7.6094	80/20	7.6094
960351	AF2-326 C	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

11.6.27 Index 27

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
97115904	314576	3FIVE PT	DVP	314622	3WHARTON	DVP	1	DVP_P7-1: LN 25-2034-A	tower	91.0	223.7	230.76	DC	14.23

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315292	1DOMTR78	1.7828	50/50	1.7828
315294	1DOMTR10	13.3948	50/50	13.3948
315611	6Z1-036WIND	1.9137	Adder	2.25
916042	Z1-036 E (Suspended)	12.8221	Adder	15.08
920692	AA2-178 E	1.9358	Adder	2.28
925121	AB2-169 C	3.4223	50/50	3.4223
925122	AB2-169 E	17.8052	50/50	17.8052
934521	AD1-076 C	37.4930	50/50	37.4930
934522	AD1-076 E	19.0914	50/50	19.0914
940491	AE2-034 C	3.3876	Adder	3.99
940492	AE2-034 E	1.4518	Adder	1.71
945711	AF1-236 C O1	37.0859	Adder	43.63
945712	AF1-236 E O1	60.5085	Adder	71.19
957531	AF2-047 C	4.2662	Adder	9.47
957532	AF2-047 E	2.1459	Adder	4.76
NEWTON	NEWTON	0.1891	Confirmed LTF	0.1891
FARMERCITY	FARMERCITY	0.0109	Confirmed LTF	0.0109
G-007A	G-007A	0.1247	Confirmed LTF	0.1247
VFT	VFT	0.3354	Confirmed LTF	0.3354
CALDERWOOD	CALDERWOOD	0.1511	Confirmed LTF	0.1511
PRAIRIE	PRAIRIE	0.5114	Confirmed LTF	0.5114
CHEOAH	CHEOAH	0.1552	Confirmed LTF	0.1552
EDWARDS	EDWARDS	0.0570	Confirmed LTF	0.0570
TILTON	TILTON	0.1008	Confirmed LTF	0.1008
GIBSON	GIBSON	0.0912	Confirmed LTF	0.0912
BLUEG	BLUEG	0.2812	Confirmed LTF	0.2812
TRIMBLE	TRIMBLE	0.0890	Confirmed LTF	0.0890
CATAWBA	CATAWBA	0.1620	Confirmed LTF	0.1620

11.6.28 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
97890779	314583	6LAKEVEW	DVP	924510	AB2-100 TAP	DVP	1	DVP_P1-2: LN 246	single	375.06	136.23	138.92	DC	10.09

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
315131	1EDGECEMA (Deactivation : 22/04/2019)	10.1604	80/20	10.1604
315132	1EDGECEMB (Deactivation : 22/04/2019)	10.1604	80/20	10.1604
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
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	1CONETOESOL	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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
926211	AC1-099 C	2.1569	80/20	2.1569
927021	AC1-189 C	8.7154	80/20	8.7154
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
960331	AF2-324 C O1	8.5488	80/20	8.5488
960351	AF2-326 C	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
CPL	CPL	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

11.6.29 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
97115908	314592	3PANTEGO	DVP	925120	AB2-169 TAP	DVP	1	DVP_P7-1: LN 25-2034-A	tower	91.0	176.91	183.97	DC	14.26

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315292	1DOMTR78	1.7846	50/50	1.7846
315294	1DOMTR10	13.4084	50/50	13.4084
315611	6Z1-036WIND	1.9207	Adder	2.26
916042	Z1-036 E (Suspended)	12.8688	Adder	15.14
920692	AA2-178 E	1.9398	Adder	2.28
934521	AD1-076 C	37.5572	50/50	37.5572
934522	AD1-076 E	19.1241	50/50	19.1241
940491	AE2-034 C	3.3947	Adder	3.99
940492	AE2-034 E	1.4549	Adder	1.71
945711	AF1-236 C O1	37.1640	Adder	43.72
945712	AF1-236 E O1	60.6360	Adder	71.34
957531	AF2-047 C	4.2752	Adder	9.49
957532	AF2-047 E	2.1505	Adder	4.77
NEWTON	NEWTON	0.1676	Confirmed LTF	0.1676
FARMERCITY	FARMERCITY	0.0097	Confirmed LTF	0.0097
G-007A	G-007A	0.1726	Confirmed LTF	0.1726
VFT	VFT	0.4644	Confirmed LTF	0.4644
CALDERWOOD	CALDERWOOD	0.1411	Confirmed LTF	0.1411
PRAIRIE	PRAIRIE	0.4598	Confirmed LTF	0.4598
CHEOAH	CHEOAH	0.1451	Confirmed LTF	0.1451
EDWARDS	EDWARDS	0.0500	Confirmed LTF	0.0500
TILTON	TILTON	0.0882	Confirmed LTF	0.0882
GIBSON	GIBSON	0.0803	Confirmed LTF	0.0803
BLUEG	BLUEG	0.2465	Confirmed LTF	0.2465
TRIMBLE	TRIMBLE	0.0779	Confirmed LTF	0.0779
CATAWBA	CATAWBA	0.1551	Confirmed LTF	0.1551

11.6.30 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
97890576	314616	6TRWBRDG	DVP	933990	AD1-023 TAP	DVP	1	DVP_P1-2: LN 2092	single	571.52	125.58	138.67	DC	74.84

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.1347	80/20	0.1347
315292	1DOMTR78	5.1530	80/20	5.1530
315294	1DOMTR10	38.7161	80/20	38.7161
315611	6Z1-036WIND	29.2449	80/20	29.2449
315614	AA2-178 C	7.2436	80/20	7.2436
925121	AB2-169 C	2.8959	80/20	2.8959
927021	AC1-189 C	2.9754	80/20	2.9754
934521	AD1-076 C	240.4865	80/20	240.4865
940491	AE2-034 C	31.4950	80/20	31.4950
945711	AF1-236 C O1	344.7948	80/20	344.7948
957531	AF2-047 C	74.8380	80/20	74.8380
957861	AF2-080 C	2.7024	80/20	2.7024
959511	AF2-242	14.3837	80/20	14.3837
WEC	WEC	0.0476	Confirmed LTF	0.0476
LGEE	LGEE	0.0890	Confirmed LTF	0.0890
CPL	CPL	0.6787	Confirmed LTF	0.6787
CBM-W2	CBM-W2	1.9738	Confirmed LTF	1.9738
NY	NY	0.0597	Confirmed LTF	0.0597
CBM-W1	CBM-W1	1.7764	Confirmed LTF	1.7764
TVA	TVA	0.4158	Confirmed LTF	0.4158
CBM-S2	CBM-S2	3.8957	Confirmed LTF	3.8957
CBM-S1	CBM-S1	2.3089	Confirmed LTF	2.3089
MADISON	MADISON	0.1230	Confirmed LTF	0.1230
MEC	MEC	0.2924	Confirmed LTF	0.2924

11.6.31 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
97890557	314620	6CASHIE	DVP	314569	6GEARLEYS	DVP	1	DVP_P1-2: LN 2092	single	571.52	161.86	174.95	DC	74.84

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.1347	80/20	0.1347
315292	1DOMTR78	5.1530	80/20	5.1530
315294	1DOMTR10	38.7161	80/20	38.7161
315611	6Z1-036WIND	29.2449	80/20	29.2449
315614	AA2-178 C	7.2436	80/20	7.2436
925121	AB2-169 C	2.8959	80/20	2.8959
927021	AC1-189 C	2.9754	80/20	2.9754
933991	AD1-023 C	62.3814	80/20	62.3814
934521	AD1-076 C	240.4865	80/20	240.4865
938171	AE1-026 C O1	158.2513	80/20	158.2513
940491	AE2-034 C	31.4950	80/20	31.4950
945711	AF1-236 C O1	344.7948	80/20	344.7948
957531	AF2-047 C	74.8380	80/20	74.8380
957861	AF2-080 C	2.7024	80/20	2.7024
959511	AF2-242	14.3837	80/20	14.3837
WEC	WEC	0.0476	Confirmed LTF	0.0476
LGEE	LGEE	0.0890	Confirmed LTF	0.0890
CPL	CPL	0.6787	Confirmed LTF	0.6787
CBM-W2	CBM-W2	1.9738	Confirmed LTF	1.9738
NY	NY	0.0597	Confirmed LTF	0.0597
CBM-W1	CBM-W1	1.7764	Confirmed LTF	1.7764
TVA	TVA	0.4158	Confirmed LTF	0.4158
CBM-S2	CBM-S2	3.8957	Confirmed LTF	3.8957
CBM-S1	CBM-S1	2.3089	Confirmed LTF	2.3089
MADISON	MADISON	0.1230	Confirmed LTF	0.1230
MEC	MEC	0.2924	Confirmed LTF	0.2924

11.6.32 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
97708454	314639	6TANGLEW	DVP	313851	6ECITYDP2	DVP	1	DVP_P4-2: 246T247	breaker	1204.0	141.0	146.76	DC	69.21

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.2926	50/50	0.2926
314582	3KELFORD	0.4235	50/50	0.4235
314589	3MURPHYS	0.0577	50/50	0.0577
314639	6TANGLEW	1.7857	50/50	1.7857
315131	1EDGECEMA (Deactivation : 22/04/2019)	4.5435	Adder	5.35
315132	1EDGECEMB (Deactivation : 22/04/2019)	4.5435	Adder	5.35
315292	1DOMTR78	2.8229	50/50	2.8229
315294	1DOMTR10	21.2090	50/50	21.2090
315601	1CONETOESOL	1.2230	50/50	1.2230
315602	1HOLLOMANSOL	1.8880	50/50	1.8880
315605	6W1-029WIND	3.1396	50/50	3.1396
315606	3AA2-053SOLA	0.9453	50/50	0.9453
315611	6Z1-036WIND	23.6402	50/50	23.6402
315614	AA2-178 C	4.4569	50/50	4.4569
900672	V4-068 E	0.1834	50/50	0.1834
901082	W1-029 E	122.0175	50/50	122.0175
916042	Z1-036 E (Suspended)	158.3896	50/50	158.3896
917122	Z2-027 E	4.4366	50/50	4.4366
917332	Z2-043 E	1.0676	50/50	1.0676
917342	Z2-044 E	0.2871	Adder	0.34
917512	Z2-088 E OP1	3.0386	50/50	3.0386
918512	AA1-065 E OP	4.9008	50/50	4.9008
918532	AA1-067 E	0.7270	50/50	0.7270
919692	AA2-053 E OP	2.3531	50/50	2.3531
919702	AA2-057 E OP	1.7587	Adder	2.07
920592	AA2-165 E	0.2417	Adder	0.28
920671	AA2-174 C OP	0.0433	50/50	0.0433
920672	AA2-174 E OP	0.2719	50/50	0.2719
920692	AA2-178 E	11.0734	50/50	11.0734
922922	AB1-081 C OP	4.2759	Adder	5.03
922923	AB1-081 E OP	1.8325	Adder	2.16
923262	AB1-132 C OP (Suspended)	7.1029	Adder	8.36
923263	AB1-132 E OP (Suspended)	3.0441	Adder	3.58
923831	AB2-022 C	-2.4861	Adder	-2.92
924152	AB2-059 E OP	2.5961	Adder	3.05
924501	AB2-099 C (Suspended)	0.5433	50/50	0.5433
924502	AB2-099 E (Suspended)	0.2328	50/50	0.2328
925121	AB2-169 C	1.8459	50/50	1.8459

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925122	AB2-169 E	9.6037	50/50	9.6037
925591	AC1-034 C	3.2642	Adder	3.84
925592	AC1-034 E	2.4625	Adder	2.9
926071	AC1-086 C	10.4598	Adder	12.31
926072	AC1-086 E	4.7606	Adder	5.6
926201	AC1-098 C	4.4402	50/50	4.4402
926202	AC1-098 E	2.6452	50/50	2.6452
926211	AC1-099 C	1.4879	50/50	1.4879
926212	AC1-099 E	0.8739	50/50	0.8739
927021	AC1-189 C	7.3692	50/50	7.3692
927022	AC1-189 E	3.6708	50/50	3.6708
927141	AC1-208 C	5.6768	50/50	5.6768
927142	AC1-208 E	2.5208	50/50	2.5208
932631	AC2-084 C	6.3296	50/50	6.3296
932632	AC2-084 E	3.1176	50/50	3.1176
933991	AD1-023 C	25.7024	50/50	25.7024
933992	AD1-023 E	13.9924	50/50	13.9924
934331	AD1-057 C O1	4.9380	Adder	5.81
934332	AD1-057 E O1	2.6341	Adder	3.1
934521	AD1-076 C	120.4549	50/50	120.4549
934522	AD1-076 E	61.3355	50/50	61.3355
936401	AD2-051 C O1	10.5492	50/50	10.5492
936402	AD2-051 E O1	4.5297	50/50	4.5297
938171	AE1-026 C O1	57.9195	50/50	57.9195
938172	AE1-026 E O1	15.2805	50/50	15.2805
938221	AE1-035 C	2.7363	50/50	2.7363
938222	AE1-035 E	1.3477	50/50	1.3477
940491	AE2-034 C	19.3784	50/50	19.3784
940492	AE2-034 E	8.3050	50/50	8.3050
940571	AE2-044 C	2.1380	Adder	2.52
940572	AE2-044 E	0.9163	Adder	1.08
941501	AE2-147 C	60.6717	50/50	60.6717
941502	AE2-147 E	40.4478	50/50	40.4478
941541	AE2-151 C	1.1192	50/50	1.1192
941542	AE2-151 E	0.6026	50/50	0.6026
942851	AE2-304 C	2.3249	50/50	2.3249
942852	AE2-304 E	0.9041	50/50	0.9041
943171	AE2-346 C	1.3038	50/50	1.3038
943172	AE2-346 E	0.5588	50/50	0.5588
944141	AF1-082	1.3744	Adder	1.62
944871	AF1-152 C	20.2239	50/50	20.2239
944872	AF1-152 E	13.4826	50/50	13.4826
945711	AF1-236 C O1	212.1471	50/50	212.1471
945712	AF1-236 E O1	346.1348	50/50	346.1348
957521	AF2-046 C	11.3093	50/50	11.3093
957522	AF2-046 E	5.6887	50/50	5.6887
957531	AF2-047 C	46.0467	50/50	46.0467
957532	AF2-047 E	23.1618	50/50	23.1618
957861	AF2-080 C	6.6930	50/50	6.6930
957862	AF2-080 E	2.9670	50/50	2.9670
959231	AF2-214 C	2.4483	Adder	5.43
959232	AF2-214 E	3.6705	Adder	8.15

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959511	AF2-242	11.1811	50/50	11.1811
959731	AF2-264 C	1.8168	50/50	1.8168
959732	AF2-264 E	0.8948	50/50	0.8948
960122	AF2-303 E O1	3.1139	Adder	6.91
960331	AF2-324 C O1	2.0261	Adder	4.5
960332	AF2-324 E O1	1.0878	Adder	2.41
960351	AF2-326 C	0.6454	Adder	1.43
960352	AF2-326 E	0.1614	Adder	0.36
960831	AF2-374 C	1.1376	50/50	1.1376
960832	AF2-374 E	1.8560	50/50	1.8560
WEC	WEC	0.1944	Confirmed LTF	0.1944
LGEE	LGEE	0.3634	Confirmed LTF	0.3634
CPL	CPL	2.2696	Confirmed LTF	2.2696
CBM-W2	CBM-W2	7.5839	Confirmed LTF	7.5839
NY	NY	0.1841	Confirmed LTF	0.1841
CBM-W1	CBM-W1	7.3183	Confirmed LTF	7.3183
TVA	TVA	1.5736	Confirmed LTF	1.5736
O-066	O-066	2.7082	Confirmed LTF	2.7082
CBM-S2	CBM-S2	13.7333	Confirmed LTF	13.7333
CBM-S1	CBM-S1	8.8012	Confirmed LTF	8.8012
G-007	G-007	0.4233	Confirmed LTF	0.4233
MADISON	MADISON	0.4234	Confirmed LTF	0.4234
MEC	MEC	1.1600	Confirmed LTF	1.1600
AA2-074	AA2-074	1.5467	LTF	1.5467

11.6.33 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
97708642	314645	6SLIGO L269	DVP	314466	6FENTRES	DVP	1	DVP_P4-2: 246T247	breaker	699.0	102.51	107.36	DC	33.82

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314638	6ELIZ CT	0.4967	50/50	0.4967
314639	6TANGLEW	0.8729	50/50	0.8729
314643	3O INLET	1.0656	50/50	1.0656
315294	1DOMTR10	8.8062	Adder	10.36
315603	6AA1-139SOLA	4.0686	50/50	4.0686
315605	6W1-029WIND	1.5347	50/50	1.5347
315611	6Z1-036WIND	11.5545	50/50	11.5545
315614	AA2-178 C	2.1779	50/50	2.1779
901082	W1-029 E	59.6431	50/50	59.6431
913392	Y1-086 E	4.6979	50/50	4.6979
916042	Z1-036 E (Suspended)	77.4154	50/50	77.4154
917122	Z2-027 E	2.1688	50/50	2.1688
917332	Z2-043 E	0.4426	Adder	0.52
917512	Z2-088 E OP1	1.2591	Adder	1.48
918512	AA1-065 E OP	2.0333	Adder	2.39
918532	AA1-067 E	0.3014	Adder	0.35
919152	AA1-139 E	10.1088	50/50	10.1088
920692	AA2-178 E	5.4110	50/50	5.4110
923831	AB2-022 C	4.9252	50/50	4.9252
923832	AB2-022 E	2.6520	50/50	2.6520
924501	AB2-099 C (Suspended)	0.2252	Adder	0.26
924502	AB2-099 E (Suspended)	0.0965	Adder	0.11
925122	AB2-169 E	3.9865	Adder	4.69
926201	AC1-098 C	1.8393	Adder	2.16
926202	AC1-098 E	1.0958	Adder	1.29
926211	AC1-099 C	0.6164	Adder	0.73
926212	AC1-099 E	0.3620	Adder	0.43
927021	AC1-189 C	3.0543	Adder	3.59
927022	AC1-189 E	1.5214	Adder	1.79
932631	AC2-084 C	2.6220	Adder	3.08
932632	AC2-084 E	1.2914	Adder	1.52
933991	AD1-023 C	12.5555	50/50	12.5555
933992	AD1-023 E	6.8353	50/50	6.8353
934521	AD1-076 C	58.8485	50/50	58.8485
934522	AD1-076 E	29.9656	50/50	29.9656
936401	AD2-051 C O1	4.3765	Adder	5.15
936402	AD2-051 E O1	1.8792	Adder	2.21
937221	AD2-160 C O1	6.2104	50/50	6.2104
937222	AD2-160 E O1	3.2566	50/50	3.2566
938171	AE1-026 C O1	24.0460	Adder	28.29
938172	AE1-026 E O1	6.3439	Adder	7.46

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938221	AE1-035 C	1.1352	Adder	1.34
938222	AE1-035 E	0.5591	Adder	0.66
938531	AE1-072 C O1	44.8847	50/50	44.8847
938532	AE1-072 E O1	23.3983	50/50	23.3983
940491	AE2-034 C	9.4693	50/50	9.4693
940492	AE2-034 E	4.0583	50/50	4.0583
941501	AE2-147 C	29.6568	50/50	29.6568
941502	AE2-147 E	19.7712	50/50	19.7712
941541	AE2-151 C	0.4642	Adder	0.55
941542	AE2-151 E	0.2499	Adder	0.29
942401	AE2-253 C	6.5322	50/50	6.5322
942402	AE2-253 E	2.9348	50/50	2.9348
942851	AE2-304 C	1.1364	50/50	1.1364
942852	AE2-304 E	0.4419	50/50	0.4419
943171	AE2-346 C	0.5406	Adder	0.64
943172	AE2-346 E	0.2317	Adder	0.27
944871	AF1-152 C	9.8856	50/50	9.8856
944872	AF1-152 E	6.5904	50/50	6.5904
945711	AF1-236 C O1	103.6665	50/50	103.6665
945712	AF1-236 E O1	169.1401	50/50	169.1401
957521	AF2-046 C	2.4827	Adder	5.51
957522	AF2-046 E	1.2488	Adder	2.77
957531	AF2-047 C	22.5009	50/50	22.5009
957532	AF2-047 E	11.3181	50/50	11.3181
957861	AF2-080 C	1.4702	Adder	3.26
957862	AF2-080 E	0.6518	Adder	1.45
957871	AF2-081 C O1	15.7248	50/50	15.7248
957872	AF2-081 E O1	6.7392	50/50	6.7392
959511	AF2-242	2.4593	Adder	5.46
959731	AF2-264 C	0.3991	Adder	0.89
959732	AF2-264 E	0.1966	Adder	0.44
960831	AF2-374 C	0.2499	Adder	0.55
960832	AF2-374 E	0.4078	Adder	0.91
WEC	WEC	0.0885	Confirmed LTF	0.0885
LGEE	LGEE	0.1660	Confirmed LTF	0.1660
CPL	CPL	1.0961	Confirmed LTF	1.0961
CBM-W2	CBM-W2	3.5381	Confirmed LTF	3.5381
NY	NY	0.1012	Confirmed LTF	0.1012
CBM-W1	CBM-W1	3.3151	Confirmed LTF	3.3151
TVA	TVA	0.7406	Confirmed LTF	0.7406
O-066	O-066	1.4650	Confirmed LTF	1.4650
CBM-S2	CBM-S2	6.5950	Confirmed LTF	6.5950
CBM-S1	CBM-S1	4.1322	Confirmed LTF	4.1322
G-007	G-007	0.2288	Confirmed LTF	0.2288
MADISON	MADISON	0.2076	Confirmed LTF	0.2076
MEC	MEC	0.5355	Confirmed LTF	0.5355

11.6.34 Index 34

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
97708449	314651	6WINFALL	DVP	314639	6TANGLEW	DVP	1	DVP_P4-2: 246T247	breaker	1163.0	148.46	154.42	DC	69.22

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.2927	50/50	0.2927
314582	3KELFORD	0.4237	50/50	0.4237
314589	3MURPHYS	0.0578	50/50	0.0578
315131	1EDGECEMA (Deactivation : 22/04/2019)	4.5469	Adder	5.35
315132	1EDGECEMB (Deactivation : 22/04/2019)	4.5469	Adder	5.35
315292	1DOMTR78	2.8235	50/50	2.8235
315294	1DOMTR10	21.2142	50/50	21.2142
315601	1CONETOESOL	1.2237	50/50	1.2237
315602	1HOLLOMANSOL	1.8886	50/50	1.8886
315605	6W1-029WIND	3.1400	50/50	3.1400
315606	3AA2-053SOLA	0.9459	50/50	0.9459
315611	6Z1-036WIND	23.6430	50/50	23.6430
315614	AA2-178 C	4.4575	50/50	4.4575
900672	V4-068 E	0.1836	50/50	0.1836
901082	W1-029 E	122.0302	50/50	122.0302
916042	Z1-036 E (Suspended)	158.4079	50/50	158.4079
917332	Z2-043 E	1.0681	50/50	1.0681
917342	Z2-044 E	0.2873	Adder	0.34
917512	Z2-088 E OP1	3.0403	50/50	3.0403
918492	AA1-063AE OP	1.6965	Adder	2.0
918512	AA1-065 E OP	4.9025	50/50	4.9025
918532	AA1-067 E	0.7273	50/50	0.7273
919692	AA2-053 E OP	2.3546	50/50	2.3546
919702	AA2-057 E OP	1.7600	Adder	2.07
920592	AA2-165 E	0.2419	Adder	0.28
920671	AA2-174 C OP	0.0433	50/50	0.0433
920672	AA2-174 E OP	0.2721	50/50	0.2721
920692	AA2-178 E	11.0750	50/50	11.0750
922922	AB1-081 C OP	4.2792	Adder	5.03
922923	AB1-081 E OP	1.8340	Adder	2.16
923262	AB1-132 C OP (Suspended)	7.1079	Adder	8.36
923263	AB1-132 E OP (Suspended)	3.0462	Adder	3.58
923831	AB2-022 C	-2.4854	Adder	-2.92
924152	AB2-059 E OP	2.5981	Adder	3.06
924501	AB2-099 C (Suspended)	0.5435	50/50	0.5435
924502	AB2-099 E (Suspended)	0.2329	50/50	0.2329
925121	AB2-169 C	1.8464	50/50	1.8464
925122	AB2-169 E	9.6061	50/50	9.6061

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925591	AC1-034 C	3.2667	Adder	3.84
925592	AC1-034 E	2.4644	Adder	2.9
926071	AC1-086 C	10.4672	Adder	12.31
926072	AC1-086 E	4.7640	Adder	5.6
926201	AC1-098 C	4.4428	50/50	4.4428
926202	AC1-098 E	2.6468	50/50	2.6468
926211	AC1-099 C	1.4888	50/50	1.4888
926212	AC1-099 E	0.8744	50/50	0.8744
927021	AC1-189 C	7.3729	50/50	7.3729
927022	AC1-189 E	3.6727	50/50	3.6727
927141	AC1-208 C	5.6807	50/50	5.6807
927142	AC1-208 E	2.5225	50/50	2.5225
932631	AC2-084 C	6.3334	50/50	6.3334
932632	AC2-084 E	3.1194	50/50	3.1194
933991	AD1-023 C	25.7086	50/50	25.7086
933992	AD1-023 E	13.9958	50/50	13.9958
934331	AD1-057 C O1	4.9422	Adder	5.81
934332	AD1-057 E O1	2.6364	Adder	3.1
934521	AD1-076 C	120.4774	50/50	120.4774
934522	AD1-076 E	61.3469	50/50	61.3469
936401	AD2-051 C O1	10.5528	50/50	10.5528
936402	AD2-051 E O1	4.5313	50/50	4.5313
938171	AE1-026 C O1	57.9347	50/50	57.9347
938172	AE1-026 E O1	15.2845	50/50	15.2845
938221	AE1-035 C	2.7372	50/50	2.7372
938222	AE1-035 E	1.3482	50/50	1.3482
940491	AE2-034 C	19.3813	50/50	19.3813
940492	AE2-034 E	8.3063	50/50	8.3063
940571	AE2-044 C	2.1396	Adder	2.52
940572	AE2-044 E	0.9170	Adder	1.08
941501	AE2-147 C	60.6780	50/50	60.6780
941502	AE2-147 E	40.4520	50/50	40.4520
941541	AE2-151 C	1.1197	50/50	1.1197
941542	AE2-151 E	0.6029	50/50	0.6029
942851	AE2-304 C	2.3251	50/50	2.3251
942852	AE2-304 E	0.9042	50/50	0.9042
943171	AE2-346 C	1.3044	50/50	1.3044
943172	AE2-346 E	0.5590	50/50	0.5590
944141	AF1-082	1.3755	Adder	1.62
944871	AF1-152 C	20.2260	50/50	20.2260
944872	AF1-152 E	13.4840	50/50	13.4840
945711	AF1-236 C O1	212.1793	50/50	212.1793
945712	AF1-236 E O1	346.1873	50/50	346.1873
957521	AF2-046 C	11.3163	50/50	11.3163
957522	AF2-046 E	5.6922	50/50	5.6922
957531	AF2-047 C	46.0537	50/50	46.0537
957532	AF2-047 E	23.1653	50/50	23.1653
957861	AF2-080 C	6.6964	50/50	6.6964
957862	AF2-080 E	2.9685	50/50	2.9685
959231	AF2-214 C	2.4502	Adder	5.44
959232	AF2-214 E	3.6733	Adder	8.15
959511	AF2-242	11.1845	50/50	11.1845

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959731	AF2-264 C	1.8178	50/50	1.8178
959732	AF2-264 E	0.8954	50/50	0.8954
960122	AF2-303 E O1	3.1162	Adder	6.92
960331	AF2-324 C O1	2.0276	Adder	4.5
960332	AF2-324 E O1	1.0886	Adder	2.42
960351	AF2-326 C	0.6459	Adder	1.43
960352	AF2-326 E	0.1615	Adder	0.36
960831	AF2-374 C	1.1381	50/50	1.1381
960832	AF2-374 E	1.8569	50/50	1.8569
WEC	WEC	0.1969	Confirmed LTF	0.1969
LGEE	LGEE	0.3680	Confirmed LTF	0.3680
CPL	CPL	2.2749	Confirmed LTF	2.2749
CBM-W2	CBM-W2	7.6495	Confirmed LTF	7.6495
NY	NY	0.1797	Confirmed LTF	0.1797
CBM-W1	CBM-W1	7.4184	Confirmed LTF	7.4184
TVA	TVA	1.5848	Confirmed LTF	1.5848
O-066	O-066	2.6544	Confirmed LTF	2.6544
CBM-S2	CBM-S2	13.7795	Confirmed LTF	13.7795
CBM-S1	CBM-S1	8.8693	Confirmed LTF	8.8693
G-007	G-007	0.4150	Confirmed LTF	0.4150
MADISON	MADISON	0.4234	Confirmed LTF	0.4234
MEC	MEC	1.1727	Confirmed LTF	1.1727
AA2-074	AA2-074	1.5502	LTF	1.5502

11.6.35 Index 35

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
96828765	314903	8CHCKAHM	DVP	314908	8ELMONT	DVP	1	DVP_P1-2: LN 563	single	2442.12	163.73	163.81	DC	26.97

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314295	6BIRDNECK	0.0813	80/20	0.0813
314421	6WINCHST	0.2482	80/20	0.2482
314491	3PENDLTN	0.6068	80/20	0.6068
314507	3THOMPSN	0.6099	80/20	0.6099
315092	1YORKTN3	44.1974	80/20	44.1974
315098	1CHESPKA	0.8066	80/20	0.8066
315099	1CHESPKB (Deactivation : 31/05/2019)	5.2288	80/20	5.2288
315108	1ELIZAR1	5.9415	80/20	5.9415
315109	1ELIZAR2	5.8383	80/20	5.8383
315110	1ELIZAR3	6.0175	80/20	6.0175
315233	1SURRY 2	53.8009	80/20	53.8009
315260	1GOSPORTA	0.6439	80/20	0.6439
315261	1GOSPORTB	0.8224	80/20	0.8224
315262	1GOSPORTC	0.6980	80/20	0.6980
315294	1DOMTR10	13.7739	Adder	16.2
315603	6AA1-139SOLA	4.4977	80/20	4.4977
315611	6Z1-036WIND	9.5313	Adder	11.21
923801	AB2-015 C OP	11.2140	Adder	13.19
923831	AB2-022 C	3.3523	Adder	3.94
924241	AB2-068 OP	611.1006	80/20	611.1006
924501	AB2-099 C (Suspended)	0.7143	Adder	0.84
925061	AB2-161 C O1 (Suspended)	4.1804	Adder	4.92
925331	AB2-190 C	23.2754	Adder	27.38
925861	AC1-065 C	4.3238	Adder	5.09
926071	AC1-086 C	7.8864	Adder	9.28
926291	AC1-107 O1 (Suspended)	922.4160	80/20	922.4160
926661	AC1-147 C	3.9544	80/20	3.9544
926751	AC1-161 C O1	57.6606	80/20	57.6606
926781	AC1-164 C	54.9677	Adder	64.67
932041	AC2-012 C	17.8889	80/20	17.8889
932581	AC2-078 C O1	4.3793	Adder	5.15
932591	AC2-079 C O1	7.5131	Adder	8.84
932831	AC2-110 C	1.7295	Adder	2.03
933261	AC2-137 C	2.2815	Adder	2.68
933291	AC2-141 C	57.6606	80/20	57.6606
933731	AC2-196 C	3.1486	80/20	3.1486
933991	AD1-023 C	16.9234	Adder	19.91
934011	AD1-025 C	19.8686	Adder	23.37
934061	AD1-033 C	13.2199	80/20	13.2199
934141	AD1-041 C	6.8442	Adder	8.05

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934521	AD1-076 C	70.8965	Adder	83.41
934571	AD1-082 C	9.5270	Adder	11.21
935111	AD1-144 C	2.4996	Adder	2.94
935161	AD1-151 C O1	18.7035	Adder	22.0
936041	AD2-007 C	0.9491	Adder	1.12
936051	AD2-008 C	3.4591	Adder	4.07
936151	AD2-021	0.2602	Adder	0.31
936301	AD2-039 C	1.7295	Adder	2.03
936401	AD2-051 C O1	10.8936	Adder	12.82
936591	AD2-074 C	6.0389	Adder	7.1
936661	AD2-085 C	4.4965	Adder	5.29
937221	AD2-160 C O1	10.2234	80/20	10.2234
937251	AD2-164 (Withdrawn : 06/30/2020)	8.5333	80/20	8.5333
937541	AD2-215 C	2.5253	Adder	2.97
938031	AE1-004 C	1.7295	Adder	2.03
938171	AE1-026 C O1	41.0026	Adder	48.24
938221	AE1-035 C	2.7948	Adder	3.29
938491	AE1-068 C O1	70.7597	Adder	83.25
938501	AE1-069 C O1	55.3100	Adder	65.07
938531	AE1-072 C O1	30.4743	80/20	30.4743
938631	AE1-085 C O1	9.8056	Adder	11.54
938771	AE1-103 C O1	4.7784	Adder	5.62
939191	AE1-149 C O1	11.2210	Adder	13.2
939311	AE1-162 C	2.9920	Adder	3.52
939411	AE1-173 C	120.2335	Adder	141.45
939421	AE1-174 C (Withdrawn : 06/16/2020)	0.6390	80/20	0.6390
939431	AE1-175 C	4.2491	80/20	4.2491
939611	AE1-191 C	13.6884	Adder	16.1
940061	AE2-000BC O1	19.8020	Adder	23.3
940231	AE2-005 C	1.7295	Adder	2.03
940251	AE2-007 O1	304.5231	80/20	304.5231
940471	AE2-031 C	38.5649	Adder	45.37
940481	AE2-033 C	16.5492	Adder	19.47
940491	AE2-034 C	9.6494	Adder	11.35
940551	AE2-041 O1	9.4340	Adder	11.1
940641	AE2-051 C O1	21.9991	Adder	25.88
940651	AE2-052	3.7403	Adder	4.4
940891	AE2-078 C	3.2115	Adder	3.78
940901	AE2-079 C	3.2115	Adder	3.78
941031	AE2-094 C	46.4323	Adder	54.63
941101	AE2-104 C O1	4.7122	Adder	5.54
941281	AE2-122 C O1	49.9327	80/20	49.9327
941291	AE2-123 C O1	51.3154	80/20	51.3154
941301	AE2-124 C O1	46.6691	80/20	46.6691
941501	AE2-147 C	22.7029	Adder	26.71
941541	AE2-151 C	1.3213	Adder	1.55
941591	AE2-156 O1	31.4270	80/20	31.4270
942131	AE2-225 C	3.1125	Adder	3.66
942171	AE2-229 C	3.1125	Adder	3.66
942341	AE2-247 C	1.9469	Adder	2.29
942401	AE2-253 C	10.7533	80/20	10.7533

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942551	AE2-270	31.6799	Adder	37.27
942851	AE2-304 C	0.8943	Adder	1.05
942931	AE2-313 C	41.7565	Adder	49.13
943171	AE2-346 C	1.7143	Adder	2.02
943431	AF1-014 C	1.6385	Adder	1.93
943461	AF1-017 C	1.7615	Adder	2.07
943471	AF1-018	9.4340	Adder	11.1
943611	AF1-032 C	2.5419	Adder	2.99
943621	AF1-033 C	3.2115	Adder	3.78
943741	AF1-042 C	3.1599	Adder	3.72
944011	AF1-069 C	15.1712	Adder	17.85
944501	AF1-115 C O1	9.7805	Adder	11.51
944581	AF1-123 C O1	85.7552	80/20	85.7552
944591	AF1-124 C O1	85.7552	80/20	85.7552
944601	AF1-125 C O1	85.7552	80/20	85.7552
944871	AF1-152 C	7.5676	Adder	8.9
945361	AF1-201 C O1	23.5046	Adder	27.65
945711	AF1-236 C O1	105.6374	Adder	124.28
945811	AF1-246 C O1	7.8319	Adder	9.21
946011	AF1-266	13.8530	Adder	16.3
957481	AF2-042 C O1	29.4654	Adder	65.41
957491	AF2-043 C	1.6496	Adder	3.66
957521	AF2-046 C	10.9010	Adder	24.2
957531	AF2-047 C	12.1522	Adder	26.97
957601	AF2-054 C	1.4483	Adder	3.21
957631	AF2-057	6.2768	80/20	6.2768
957711	AF2-065 C	8.5631	Adder	19.01
957791	AF2-073 C (Withdrawn : 07/02/2020)	7.1284	Adder	15.82
957801	AF2-074 C (Withdrawn : 07/02/2020)	3.1682	Adder	7.03
957821	AF2-076 C O1	4.0733	Adder	9.04
957831	AF2-077 C	1.6126	Adder	3.58
957871	AF2-081 C O1	17.3830	80/20	17.3830
958161	AF2-110 C	1.0296	Adder	2.29
959511	AF2-242	4.9841	Adder	11.06
959731	AF2-264 C	1.4561	Adder	3.23
960101	AF2-301 C	2.0041	Adder	4.45
960361	AF2-327 C	1.8017	Adder	4.0
960831	AF2-374 C	0.7953	Adder	1.77
961091	AF2-400 C	0.3209	Adder	0.71
961111	AF2-402 C O1	0.7442	Adder	1.65
WEC	WEC	0.5887	Confirmed LTF	0.5887
LGEE	LGEE	1.1313	Confirmed LTF	1.1313
CPL	CPL	9.4138	Confirmed LTF	9.4138
CBM-W2	CBM-W2	29.0417	Confirmed LTF	29.0417
NY	NY	1.8221	Confirmed LTF	1.8221
CBM-W1	CBM-W1	21.1669	Confirmed LTF	21.1669
TVA	TVA	6.4848	Confirmed LTF	6.4848
CBM-S2	CBM-S2	62.0599	Confirmed LTF	62.0599
CBM-S1	CBM-S1	35.2728	Confirmed LTF	35.2728
MADISON	MADISON	2.3023	Confirmed LTF	2.3023
MEC	MEC	3.9503	Confirmed LTF	3.9503

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
AA2-074	AA2-074	6.4107	LTF	6.4107

11.6.36 Index 36

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
96828777	314914	8MDLTHAN	DVP	314918	8NO ANNA	DVP	1	DVP_P1-2: LN 574	single	2442.12	149.95	150.03	DC	26.26

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314295	6BIRDNECK	0.0726	80/20	0.0726
314491	3PENDLTN	0.5418	80/20	0.5418
314507	3THOMPSN	0.5451	80/20	0.5451
314947	8GREENSVILLE	87.0542	80/20	87.0542
315060	1CHESTF5 (Deactivation : 31/05/2023)	69.3084	Adder	81.54
315065	1CHESTF6 (Deactivation : 31/05/2023)	146.9609	Adder	172.9
315074	1HOPCGN1 (Deactivation : 25/06/2019)	9.9733	Adder	11.73
315075	1HOPCGN2 (Deactivation : 25/06/2019)	9.8441	Adder	11.58
315083	1SPRUNCA (Deactivation : 12/01/2021)	13.2114	Adder	15.54
315084	1SPRUNCB (Deactivation : 12/01/2021)	13.2114	Adder	15.54
315098	1CHESPKA	0.7204	80/20	0.7204
315099	1CHESPKB (Deactivation : 31/05/2019)	4.6698	80/20	4.6698
315102	1BRUNSWICKG1	14.2990	80/20	14.2990
315103	1BRUNSWICKG2	14.2990	80/20	14.2990
315104	1BRUNSWICKG3	14.2990	80/20	14.2990
315105	1BRUNSWICKS1	29.7062	80/20	29.7062
315108	1ELIZAR1	5.2967	80/20	5.2967
315109	1ELIZAR2	5.2047	80/20	5.2047
315110	1ELIZAR3	5.3644	80/20	5.3644
315260	1GOSPORTA	0.5752	80/20	0.5752
315261	1GOSPORTB	0.7348	80/20	0.7348
315262	1GOSPORTC	0.6236	80/20	0.6236
315294	1DOMTR10	13.9892	Adder	16.46
315603	6AA1-139SOLA	4.0434	80/20	4.0434
315611	6Z1-036WIND	8.9548	Adder	10.54
923262	AB1-132 C OP (Suspended)	17.9107	Adder	21.07
923572	AB1-173 C OP	2.8821	Adder	3.39
923582	AB1-173AC OP	2.8821	Adder	3.39
923801	AB2-015 C OP	11.2353	Adder	13.22
923831	AB2-022 C	3.0540	Adder	3.59
923911	AB2-031 C O1	2.8607	Adder	3.37
923991	AB2-040 C O1	9.3934	Adder	11.05
924501	AB2-099 C (Suspended)	0.7533	Adder	0.89

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925051	AB2-160 C O1 (Suspended)	6.7647	Adder	7.96
925061	AB2-161 C O1 (Suspended)	4.4017	Adder	5.18
925331	AB2-190 C	24.7625	Adder	29.13
926071	AC1-086 C	26.3756	Adder	31.03
926201	AC1-098 C	7.7123	Adder	9.07
926211	AC1-099 C	2.5844	Adder	3.04
926661	AC1-147 C	3.5317	80/20	3.5317
926751	AC1-161 C O1	47.9555	80/20	47.9555
926781	AC1-164 C	42.3513	Adder	49.83
927021	AC1-189 C	10.6067	Adder	12.48
927141	AC1-208 C	11.2696	Adder	13.26
932041	AC2-012 C	15.9765	80/20	15.9765
932581	AC2-078 C O1	5.2283	Adder	6.15
932591	AC2-079 C O1	7.5172	Adder	8.84
932631	AC2-084 C	10.9941	Adder	12.93
933261	AC2-137 C	2.2372	Adder	2.63
933291	AC2-141 C	47.9555	80/20	47.9555
933501	AC2-165 C	12.0834	Adder	14.22
933731	AC2-196 C	2.8076	80/20	2.8076
933991	AD1-023 C	17.0211	Adder	20.02
934011	AD1-025 C	20.8815	Adder	24.57
934061	AD1-033 C	11.7902	80/20	11.7902
934331	AD1-057 C O1	12.3833	Adder	14.57
934521	AD1-076 C	70.5939	Adder	83.05
934571	AD1-082 C	10.0312	Adder	11.8
934611	AD1-087 C O1	10.1365	Adder	11.93
935111	AD1-144 C	2.2639	Adder	2.66
935161	AD1-151 C O1	19.8984	Adder	23.41
935171	AD1-152 C O1	10.0735	Adder	11.85
936041	AD2-007 C	0.9975	Adder	1.17
936051	AD2-008 C	3.6354	Adder	4.28
936151	AD2-021	0.2551	Adder	0.3
936401	AD2-051 C O1	11.3172	Adder	13.31
936661	AD2-085 C	4.5093	Adder	5.31
937221	AD2-160 C O1	9.1692	80/20	9.1692
937251	AD2-164 (Withdrawn : 06/30/2020)	5.9277	Adder	6.97
937481	AD2-202 C O1	2.6863	Adder	3.16
937541	AD2-215 C	2.2873	Adder	2.69
938171	AE1-026 C O1	41.4837	Adder	48.8
938221	AE1-035 C	2.8952	Adder	3.41
938491	AE1-068 C O1	100.6401	80/20	100.6401
938501	AE1-069 C O1	78.7983	80/20	78.7983
938531	AE1-072 C O1	27.4650	80/20	27.4650
938551	AE1-074 C	3.8930	80/20	3.8930
938561	AE1-075 C	2.7423	Adder	3.23
938631	AE1-085 C O1	11.4826	Adder	13.51
938771	AE1-103 C O1	4.7449	Adder	5.58
939191	AE1-149 C O1	13.7333	Adder	16.16
939311	AE1-162 C	2.7747	Adder	3.26
939411	AE1-173 C	149.3664	80/20	149.3664

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
939421	AE1-174 C (Withdrawn : 06/16/2020)	0.4234	Adder	0.5
939431	AE1-175 C	2.8157	Adder	3.31
940061	AE2-000BC O1	20.8501	Adder	24.53
940251	AE2-007 O1	271.5376	80/20	271.5376
940431	AE2-027 C O1	15.5613	Adder	18.31
940471	AE2-031 C	54.8831	80/20	54.8831
940481	AE2-033 C	20.8408	Adder	24.52
940491	AE2-034 C	9.3934	Adder	11.05
940541	AE2-040 O1	3.4936	Adder	4.11
940641	AE2-051 C O1	28.9125	80/20	28.9125
940651	AE2-052	4.5778	Adder	5.39
940891	AE2-078 C	2.9818	Adder	3.51
940901	AE2-079 C	2.9818	Adder	3.51
941031	AE2-094 C	65.8378	80/20	65.8378
941101	AE2-104 C O1	4.4295	Adder	5.21
941281	AE2-122 C O1	44.5730	80/20	44.5730
941291	AE2-123 C O1	45.8073	80/20	45.8073
941301	AE2-124 C O1	41.6587	80/20	41.6587
941501	AE2-147 C	20.9564	Adder	24.65
941541	AE2-151 C	1.3946	Adder	1.64
941591	AE2-156 O1	28.0450	80/20	28.0450
942001	AE2-212 C	2.6820	Adder	3.16
942131	AE2-225 C	2.8329	Adder	3.33
942151	AE2-227 C	2.4906	Adder	2.93
942161	AE2-228 C	2.6217	Adder	3.08
942171	AE2-229 C	2.8329	Adder	3.33
942341	AE2-247 C	1.9544	Adder	2.3
942371	AE2-250 C O1	12.0162	Adder	14.14
942401	AE2-253 C	9.6445	80/20	9.6445
942471	AE2-260 C O1	18.5888	Adder	21.87
942551	AE2-270	33.2584	Adder	39.13
942851	AE2-304 C	0.8325	Adder	0.98
942931	AE2-313 C	59.4251	80/20	59.4251
943171	AE2-346 C	1.8079	Adder	2.13
943461	AF1-017 C	1.7682	Adder	2.08
943611	AF1-032 C	2.3136	Adder	2.72
943621	AF1-033 C	2.9818	Adder	3.51
943911	AF1-059	20.1459	Adder	23.7
944011	AF1-069 C	21.5117	80/20	21.5117
944501	AF1-115 C O1	9.0810	Adder	10.68
944581	AF1-123 C O1	75.6758	80/20	75.6758
944591	AF1-124 C O1	75.6758	80/20	75.6758
944601	AF1-125 C O1	75.6758	80/20	75.6758
944631	AF1-128 O1	53.9362	Adder	63.45
944871	AF1-152 C	6.9855	Adder	8.22
945361	AF1-201 C O1	18.7020	Adder	22.0
945711	AF1-236 C O1	102.8352	Adder	120.98
945811	AF1-246 C O1	11.7046	80/20	11.7046
946011	AF1-266	17.4454	Adder	20.52
946261	AF1-291 C	2.6208	Adder	3.08
946281	AF1-292 C	1.9260	Adder	2.27
957481	AF2-042 C O1	37.5028	Adder	83.25

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957491	AF2-043 C	1.5015	Adder	3.33
957521	AF2-046 C	11.4733	Adder	25.47
957531	AF2-047 C	11.8298	Adder	26.26
957631	AF2-057	5.6058	80/20	5.6058
957711	AF2-065 C	8.9897	Adder	19.95
957791	AF2-073 C (Withdrawn : 07/02/2020)	6.7042	Adder	14.88
957801	AF2-074 C (Withdrawn : 07/02/2020)	2.9797	Adder	6.61
957821	AF2-076 C O1	3.7337	Adder	8.29
957831	AF2-077 C	1.2826	Adder	2.85
957861	AF2-080 C	5.1057	Adder	11.33
957871	AF2-081 C O1	15.6274	80/20	15.6274
957911	AF2-085	6.6342	80/20	6.6342
958141	AF2-108	2.1259	Adder	4.72
958161	AF2-110 C	0.9678	Adder	2.15
958501	AF2-144 C	1.2252	Adder	2.72
959511	AF2-242	5.2814	Adder	11.72
959531	AF2-244 C	1.1291	Adder	2.51
959641	AF2-255 C	0.3300	Adder	0.73
959651	AF2-256 C	0.3474	Adder	0.77
959661	AF2-257 C	0.3473	Adder	0.77
959671	AF2-258 C	0.3554	Adder	0.79
959681	AF2-259 C	1.8222	Adder	4.04
959731	AF2-264 C	1.5342	Adder	3.41
959751	AF2-266 O1	5.9398	Adder	13.18
960081	AF2-299 C	1.7205	Adder	3.82
960101	AF2-301 C	1.7837	Adder	3.96
960361	AF2-327 C	1.9591	Adder	4.35
960831	AF2-374 C	0.8589	Adder	1.91
961091	AF2-400 C	0.3216	Adder	0.71
961111	AF2-402 C O1	0.7744	Adder	1.72
WEC	WEC	1.4084	Confirmed LTF	1.4084
LGEE	LGEE	2.7116	Confirmed LTF	2.7116
CPL	CPL	12.2708	Confirmed LTF	12.2708
CBM-W2	CBM-W2	54.2096	Confirmed LTF	54.2096
NY	NY	3.1001	Confirmed LTF	3.1001
CBM-W1	CBM-W1	52.2543	Confirmed LTF	52.2543
TVA	TVA	11.2714	Confirmed LTF	11.2714
CBM-S2	CBM-S2	86.3821	Confirmed LTF	86.3821
CBM-S1	CBM-S1	63.3718	Confirmed LTF	63.3718
MADISON	MADISON	2.7861	Confirmed LTF	2.7861
MEC	MEC	8.3693	Confirmed LTF	8.3693
AA2-074	AA2-074	8.3677	LTF	8.3677

11.6.37 Index 37

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
96828671	314924	8SURRY	DVP	314903	8CHCKAHM	DVP	1	DVP_P4-2: 56372	breaker	3144.0	124.14	124.18	DC	37.75

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314295	6BIRDNECK	0.0797	50/50	0.0797
314491	3PENDLTN	0.5945	50/50	0.5945
315099	1CHESPKB (Deactivation : 31/05/2019)	5.0906	50/50	5.0906
315108	1ELIZAR1	5.8124	50/50	5.8124
315109	1ELIZAR2	5.7114	50/50	5.7114
315110	1ELIZAR3	5.8868	50/50	5.8868
315233	1SURRY 2	57.5621	50/50	57.5621
315611	6Z1-036WIND	9.0596	Adder	10.66
901082	W1-029 E	43.7765	Adder	51.5
913392	Y1-086 E	3.1043	Adder	3.65
916042	Z1-036 E (Suspended)	60.6991	Adder	71.41
916192	Z1-068 E	3.2350	50/50	3.2350
917122	Z2-027 E	1.4822	Adder	1.74
919152	AA1-139 E	9.3195	Adder	10.96
923831	AB2-022 C	3.2546	Adder	3.83
923832	AB2-022 E	1.7525	Adder	2.06
925522	AC1-027 E	1.9693	50/50	1.9693
926661	AC1-147 C	3.2724	Adder	3.85
926662	AC1-147 E	1.9219	Adder	2.26
926751	AC1-161 C O1	61.2820	50/50	61.2820
926752	AC1-161 E O1	26.1596	50/50	26.1596
932041	AC2-012 C	14.8039	Adder	17.42
932042	AC2-012 E	24.1537	Adder	28.42
933291	AC2-141 C	61.2820	50/50	61.2820
933292	AC2-141 E	26.1596	50/50	26.1596
933731	AC2-196 C	3.1091	50/50	3.1091
933732	AC2-196 E	2.0707	50/50	2.0707
934061	AD1-033 C	13.0410	50/50	13.0410
934062	AD1-033 E	8.6940	50/50	8.6940
935111	AD1-144 C	2.2831	Adder	2.69
935112	AD1-144 E	1.2475	Adder	1.47
937221	AD2-160 C O1	10.0493	50/50	10.0493
937222	AD2-160 E O1	5.2697	50/50	5.2697
937541	AD2-215 C	2.3067	Adder	2.71
937542	AD2-215 E	1.2239	Adder	1.44
938491	AE1-068 C O1	77.1061	Adder	90.71
938492	AE1-068 E O1	42.5867	Adder	50.1
938501	AE1-069 C O1	60.1989	Adder	70.82
938502	AE1-069 E O1	34.4163	Adder	40.49
938531	AE1-072 C O1	25.3651	Adder	29.84
938532	AE1-072 E O1	13.2228	Adder	15.56

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
939411	AE1-173 C	150.3792	50/50	150.3792
939412	AE1-173 E	100.2528	50/50	100.2528
940251	AE2-007 O1	297.7305	50/50	297.7305
940471	AE2-031 C	42.0613	Adder	49.48
940472	AE2-031 E	28.0409	Adder	32.99
940641	AE2-051 C O1	28.1961	50/50	28.1961
940642	AE2-051 E O1	18.7974	50/50	18.7974
941031	AE2-094 C	50.7085	Adder	59.66
941032	AE2-094 E	22.7111	Adder	26.72
941101	AE2-104 C O1	4.3209	Adder	5.08
941102	AE2-104 E O1	6.8696	Adder	8.08
941281	AE2-122 C O1	48.9825	50/50	48.9825
941282	AE2-122 E O1	197.6563	50/50	197.6563
941291	AE2-123 C O1	50.3389	50/50	50.3389
941292	AE2-123 E O1	196.3000	50/50	196.3000
941301	AE2-124 C O1	45.8152	50/50	45.8152
941302	AE2-124 E O1	201.0316	50/50	201.0316
941501	AE2-147 C	21.7673	Adder	25.61
941502	AE2-147 E	14.5115	Adder	17.07
941591	AE2-156 O1	30.6510	50/50	30.6510
942131	AE2-225 C	2.9829	Adder	3.51
942132	AE2-225 E	1.9886	Adder	2.34
942171	AE2-229 C	2.9829	Adder	3.51
942172	AE2-229 E	1.9886	Adder	2.34
942401	AE2-253 C	10.5701	50/50	10.5701
942402	AE2-253 E	4.7489	50/50	4.7489
942851	AE2-304 C	0.8544	Adder	1.01
942852	AE2-304 E	0.3323	Adder	0.39
942931	AE2-313 C	45.5422	Adder	53.58
942932	AE2-313 E	30.3615	Adder	35.72
943611	AF1-032 C	2.4360	Adder	2.87
943612	AF1-032 E	1.2926	Adder	1.52
944011	AF1-069 C	16.5684	Adder	19.49
944012	AF1-069 E	6.4365	Adder	7.57
944581	AF1-123 C O1	86.3490	50/50	86.3490
944582	AF1-123 E O1	197.7150	50/50	197.7150
944591	AF1-124 C O1	86.3490	50/50	86.3490
944592	AF1-124 E O1	197.7150	50/50	197.7150
944601	AF1-125 C O1	86.3490	50/50	86.3490
944602	AF1-125 E O1	197.7150	50/50	197.7150
944871	AF1-152 C	7.2558	Adder	8.54
944872	AF1-152 E	4.8372	Adder	5.69
945711	AF1-236 C O1	8.7491	Adder	10.29
945712	AF1-236 E O1	14.2748	Adder	16.79
957491	AF2-043 C	1.5809	Adder	3.51
957492	AF2-043 E	1.0540	Adder	2.34
957531	AF2-047 C	11.3142	Adder	25.11
957532	AF2-047 E	5.6911	Adder	12.63
957631	AF2-057	2.7530	Adder	6.11
957791	AF2-073 C (Withdrawn : 07/02/2020)	6.7042	Adder	14.88
957792	AF2-073 E (Withdrawn : 07/02/2020)	4.2863	Adder	9.51

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957801	AF2-074 C (Withdrawn : 07/02/2020)	2.9797	Adder	6.61
957802	AF2-074 E (Withdrawn : 07/02/2020)	1.9050	Adder	4.23
957821	AF2-076 C O1	3.8881	Adder	8.63
957822	AF2-076 E O1	2.5921	Adder	5.75
957871	AF2-081 C O1	7.6834	Adder	17.06
957872	AF2-081 E O1	3.2929	Adder	7.31
958161	AF2-110 C	0.9441	Adder	2.1
958162	AF2-110 E	1.4767	Adder	3.28
WEC	WEC	0.6980	Confirmed LTF	0.6980
LGEE	LGEE	1.3327	Confirmed LTF	1.3327
CPLE	CPLE	9.4151	Confirmed LTF	9.4151
CBM-W2	CBM-W2	31.7690	Confirmed LTF	31.7690
NY	NY	1.7077	Confirmed LTF	1.7077
CBM-W1	CBM-W1	25.4954	Confirmed LTF	25.4954
TVA	TVA	6.9412	Confirmed LTF	6.9412
O-066	O-066	23.2982	Confirmed LTF	23.2982
CBM-S2	CBM-S2	63.1523	Confirmed LTF	63.1523
CBM-S1	CBM-S1	38.0929	Confirmed LTF	38.0929
G-007	G-007	3.6296	Confirmed LTF	3.6296
MADISON	MADISON	2.2740	Confirmed LTF	2.2740
MEC	MEC	4.4937	Confirmed LTF	4.4937
AA2-074	AA2-074	6.4138	LTF	6.4138

11.6.38 Index 38

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
97890673	924510	AB2-100 TAP	DVP	314563	6CLUBHSE	DVP	1	DVP_P1-2: LN 246	single	375.06	152.61	155.29	DC	10.06

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
315131	1EDGECSMA (Deactivation : 22/04/2019)	10.1401	80/20	10.1401
315132	1EDGECSMB (Deactivation : 22/04/2019)	10.1401	80/20	10.1401
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
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	1CONETOESOL	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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
926201	AC1-098 C	6.4236	80/20	6.4236
926211	AC1-099 C	2.1526	80/20	2.1526
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
960331	AF2-324 C O1	8.5317	80/20	8.5317
960351	AF2-326 C	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
CPL	CPL	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

11.6.39 Index 39

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
97115903	925120	AB2-169 TAP	DVP	314576	3FIVE PT	DVP	1	DVP_P7-1: LN 25-2034-A	tower	91.0	235.46	242.51	DC	14.23

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315292	1DOMTR78	1.7828	50/50	1.7828
315294	1DOMTR10	13.3948	50/50	13.3948
315611	6Z1-036WIND	1.9137	Adder	2.25
916042	Z1-036 E (Suspended)	12.8221	Adder	15.08
920692	AA2-178 E	1.9358	Adder	2.28
925121	AB2-169 C	3.4223	50/50	3.4223
925122	AB2-169 E	17.8052	50/50	17.8052
934521	AD1-076 C	37.4930	50/50	37.4930
934522	AD1-076 E	19.0914	50/50	19.0914
940491	AE2-034 C	3.3876	Adder	3.99
940492	AE2-034 E	1.4518	Adder	1.71
945711	AF1-236 C O1	37.0859	Adder	43.63
945712	AF1-236 E O1	60.5085	Adder	71.19
957531	AF2-047 C	4.2662	Adder	9.47
957532	AF2-047 E	2.1459	Adder	4.76
NEWTON	NEWTON	0.1891	Confirmed LTF	0.1891
FARMERCITY	FARMERCITY	0.0109	Confirmed LTF	0.0109
G-007A	G-007A	0.1247	Confirmed LTF	0.1247
VFT	VFT	0.3354	Confirmed LTF	0.3354
CALDERWOOD	CALDERWOOD	0.1511	Confirmed LTF	0.1511
PRAIRIE	PRAIRIE	0.5114	Confirmed LTF	0.5114
CHEOAH	CHEOAH	0.1552	Confirmed LTF	0.1552
EDWARDS	EDWARDS	0.0570	Confirmed LTF	0.0570
TILTON	TILTON	0.1008	Confirmed LTF	0.1008
GIBSON	GIBSON	0.0912	Confirmed LTF	0.0912
BLUEG	BLUEG	0.2812	Confirmed LTF	0.2812
TRIMBLE	TRIMBLE	0.0890	Confirmed LTF	0.0890
CATAWBA	CATAWBA	0.1620	Confirmed LTF	0.1620

11.6.40 Index 40

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
97890568	933990	AD1-023 TAP	DVP	314620	6CASHIE	DVP	1	DVP_P1-2: LN 2092	single	571.52	136.48	149.57	DC	74.84

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314574	6EVERETS	0.1347	80/20	0.1347
315292	1DOMTR78	5.1530	80/20	5.1530
315294	1DOMTR10	38.7161	80/20	38.7161
315611	6Z1-036WIND	29.2449	80/20	29.2449
315614	AA2-178 C	7.2436	80/20	7.2436
925121	AB2-169 C	2.8959	80/20	2.8959
927021	AC1-189 C	2.9754	80/20	2.9754
933991	AD1-023 C	62.3814	80/20	62.3814
934521	AD1-076 C	240.4865	80/20	240.4865
940491	AE2-034 C	31.4950	80/20	31.4950
945711	AF1-236 C O1	344.7948	80/20	344.7948
957531	AF2-047 C	74.8380	80/20	74.8380
957861	AF2-080 C	2.7024	80/20	2.7024
959511	AF2-242	14.3837	80/20	14.3837
WEC	WEC	0.0476	Confirmed LTF	0.0476
LGEE	LGEE	0.0890	Confirmed LTF	0.0890
CPL	CPL	0.6787	Confirmed LTF	0.6787
CBM-W2	CBM-W2	1.9738	Confirmed LTF	1.9738
NY	NY	0.0597	Confirmed LTF	0.0597
CBM-W1	CBM-W1	1.7764	Confirmed LTF	1.7764
TVA	TVA	0.4158	Confirmed LTF	0.4158
CBM-S2	CBM-S2	3.8957	Confirmed LTF	3.8957
CBM-S1	CBM-S1	2.3089	Confirmed LTF	2.3089
MADISON	MADISON	0.1230	Confirmed LTF	0.1230
MEC	MEC	0.2924	Confirmed LTF	0.2924

11.6.41 Index 41

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
97708593	934060	AD1-033 TAP	DVP	314481	6LANDSTN	DVP	1	DVP_P4-2: 2110T2128	breaker	830.0	116.51	117.22	DC	13.04

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314638	6ELIZ CT	0.2648	50/50	0.2648
314639	6TANGLEW	0.4272	50/50	0.4272
314643	3O INLET	0.6457	50/50	0.6457
315294	1DOMTR10	3.3004	Adder	3.88
315603	6AA1-139SOLA	3.8597	50/50	3.8597
315605	6W1-029WIND	0.5452	50/50	0.5452
315611	6Z1-036WIND	4.5548	50/50	4.5548
901082	W1-029 E	21.1879	50/50	21.1879
913392	Y1-086 E	2.5047	50/50	2.5047
916042	Z1-036 E (Suspended)	30.5172	50/50	30.5172
917122	Z2-027 E	1.0613	50/50	1.0613
919152	AA1-139 E	9.5897	50/50	9.5897
920692	AA2-178 E	1.7734	Adder	2.09
923831	AB2-022 C	2.6259	50/50	2.6259
923832	AB2-022 E	1.4139	50/50	1.4139
926661	AC1-147 C	-1.8982	Adder	-2.23
933731	AC2-196 C	3.0719	50/50	3.0719
933732	AC2-196 E	2.0459	50/50	2.0459
933991	AD1-023 C	3.9475	Adder	4.64
933992	AD1-023 E	2.1490	Adder	2.53
934061	AD1-033 C	15.0637	50/50	15.0637
934062	AD1-033 E	10.0425	50/50	10.0425
934521	AD1-076 C	18.8718	Adder	22.2
934522	AD1-076 E	9.6095	Adder	11.31
937221	AD2-160 C O1	9.1220	50/50	9.1220
937222	AD2-160 E O1	4.7835	50/50	4.7835
938171	AE1-026 C O1	8.7681	Adder	10.32
938172	AE1-026 E O1	2.3132	Adder	2.72
938531	AE1-072 C O1	25.0552	50/50	25.0552
938532	AE1-072 E O1	13.0613	50/50	13.0613
939311	AE1-162 C	-0.8246	Adder	-0.97
940491	AE2-034 C	3.1034	Adder	3.65
940492	AE2-034 E	1.3300	Adder	1.56
941501	AE2-147 C	10.5354	50/50	10.5354
941502	AE2-147 E	7.0236	50/50	7.0236
941592	AE2-156 BAT	16.0800	50/50	16.0800
942401	AE2-253 C	9.5948	50/50	9.5948
942402	AE2-253 E	4.3107	50/50	4.3107
942851	AE2-304 C	0.4499	50/50	0.4499
942852	AE2-304 E	0.1750	50/50	0.1750
944581	AF1-123 C O1	20.1136	Adder	23.66

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944582	AF1-123 E O1	46.0545	Adder	54.18
944591	AF1-124 C O1	20.1136	Adder	23.66
944592	AF1-124 E O1	46.0545	Adder	54.18
944601	AF1-125 C O1	20.1136	Adder	23.66
944602	AF1-125 E O1	46.0545	Adder	54.18
944871	AF1-152 C	3.5118	50/50	3.5118
944872	AF1-152 E	2.3412	50/50	2.3412
945711	AF1-236 C O1	33.9749	Adder	39.97
945712	AF1-236 E O1	55.4327	Adder	65.21
957531	AF2-047 C	3.9084	Adder	8.68
957532	AF2-047 E	1.9659	Adder	4.36
957632	AF2-057 BAT	3.5448	50/50	3.5448
957871	AF2-081 C O1	14.9173	50/50	14.9173
957872	AF2-081 E O1	6.3931	50/50	6.3931
WEC	WEC	0.0573	Confirmed LTF	0.0573
LGEE	LGEE	0.1061	Confirmed LTF	0.1061
CPL	CPL	0.4922	Confirmed LTF	0.4922
CBM-W2	CBM-W2	2.0229	Confirmed LTF	2.0229
NY	NY	0.0111	Confirmed LTF	0.0111
CBM-W1	CBM-W1	2.1893	Confirmed LTF	2.1893
TVA	TVA	0.4046	Confirmed LTF	0.4046
O-066	O-066	0.2352	Confirmed LTF	0.2352
CBM-S2	CBM-S2	3.1501	Confirmed LTF	3.1501
CBM-S1	CBM-S1	2.2919	Confirmed LTF	2.2919
G-007	G-007	0.0374	Confirmed LTF	0.0374
MADISON	MADISON	0.0907	Confirmed LTF	0.0907
MEC	MEC	0.3257	Confirmed LTF	0.3257

11.6.42 Index 42

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
97890984	934330	AD1-057 TAP	DVP	313845	6HATHAWAY	DVP	1	DVP_P1-2: LN 238-B	single	441.8	107.56	108.77	DC	5.32

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314572	3EMPORIA	0.0638	80/20	0.0638
314582	3KELFORD	0.2213	80/20	0.2213
314589	3MURPHYS	0.0642	80/20	0.0642
314704	3LAWRENC	0.2207	80/20	0.2207
315115	1S HAMPT1	0.8537	80/20	0.8537
315126	1ROARAP2	1.6346	80/20	1.6346
315128	1ROARAP4	1.5599	80/20	1.5599
315136	1ROSEMG1	5.7033	80/20	5.7033
315137	1ROSEMS1	3.5366	80/20	3.5366
315138	1ROSEMG2	2.6729	80/20	2.6729
315139	1GASTONA	7.1708	80/20	7.1708
315141	1GASTONB	7.1708	80/20	7.1708
315158	1KERR 1	0.1813	80/20	0.1813
315159	1KERR 2	0.5076	80/20	0.5076
315160	1KERR 3	0.5076	80/20	0.5076
315161	1KERR 4	0.5076	80/20	0.5076
315162	1KERR 5	0.5076	80/20	0.5076
315163	1KERR 6	0.5076	80/20	0.5076
315164	1KERR 7	0.5076	80/20	0.5076
315602	1HOLLOMANSOL	0.9307	80/20	0.9307
315606	3AA2-053SOLA	1.5664	80/20	1.5664
315607	3AA1-063SOLA	1.4183	80/20	1.4183
315608	3AA2-088SOLA	0.7630	80/20	0.7630
315614	AA2-178 C	0.5150	80/20	0.5150
920671	AA2-174 C OP	0.0717	80/20	0.0717
922922	AB1-081 C OP	-6.7183	Adder	-7.9
923262	AB1-132 C OP (Suspended)	31.7453	80/20	31.7453
923572	AB1-173 C OP	2.1932	80/20	2.1932
923582	AB1-173AC OP	2.1932	80/20	2.1932
923801	AB2-015 C OP	4.3320	80/20	4.3320
923911	AB2-031 C O1	2.1770	80/20	2.1770
923991	AB2-040 C O1	7.1482	80/20	7.1482
924021	AB2-043 C O1	0.1773	80/20	0.1773
924161	AB2-060 C OP	0.5038	80/20	0.5038
924301	AB2-077 C O1 (Suspended)	0.6464	80/20	0.6464
924311	AB2-078 C O1 (Suspended)	0.6464	80/20	0.6464
924321	AB2-079 C O1 (Suspended)	0.6464	80/20	0.6464
924501	AB2-099 C (Suspended)	0.3737	80/20	0.3737

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924511	AB2-100 C	4.3678	80/20	4.3678
925171	AB2-174 C O1	1.1364	80/20	1.1364
925781	AC1-054 C O1	4.4398	80/20	4.4398
926071	AC1-086 C	46.7487	80/20	46.7487
933991	AD1-023 C	5.5074	80/20	5.5074
934331	AD1-057 C O1	38.2904	80/20	38.2904
934521	AD1-076 C	19.3478	80/20	19.3478
936361	AD2-046 C O1	3.7056	80/20	3.7056
936401	AD2-051 C O1	5.6613	80/20	5.6613
936481	AD2-063 C O1	4.5126	80/20	4.5126
938171	AE1-026 C O1	14.6109	80/20	14.6109
938221	AE1-035 C	1.3488	80/20	1.3488
938771	AE1-103 C O1	1.6771	80/20	1.6771
939181	AE1-148 C O1	3.6148	80/20	3.6148
940491	AE2-034 C	2.2390	80/20	2.2390
940661	AE2-053 O1	1.3388	80/20	1.3388
941541	AE2-151 C	0.6758	80/20	0.6758
942451	AE2-258	0.7668	80/20	0.7668
942471	AE2-260 C O1	31.2548	80/20	31.2548
943171	AE2-346 C	0.8968	80/20	0.8968
943911	AF1-059	9.3640	80/20	9.3640
945711	AF1-236 C O1	24.5119	80/20	24.5119
946281	AF1-292 C	1.2648	80/20	1.2648
957521	AF2-046 C	11.3443	80/20	11.3443
957531	AF2-047 C	5.3203	80/20	5.3203
959731	AF2-264 C	1.4740	80/20	1.4740
960081	AF2-299 C	2.1317	80/20	2.1317
960811	AF2-372 C	0.4083	80/20	0.4083
960831	AF2-374 C	0.9655	80/20	0.9655
961091	AF2-400 C	0.2339	80/20	0.2339
NEWTON	NEWTON	0.8284	Confirmed LTF	0.8284
FARMERCITY	FARMERCITY	0.0474	Confirmed LTF	0.0474
G-007A	G-007A	0.2949	Confirmed LTF	0.2949
VFT	VFT	0.7805	Confirmed LTF	0.7805
CALDERWOOD	CALDERWOOD	0.6441	Confirmed LTF	0.6441
PRAIRIE	PRAIRIE	2.2265	Confirmed LTF	2.2265
CHEOAH	CHEOAH	0.6607	Confirmed LTF	0.6607
EDWARDS	EDWARDS	0.2513	Confirmed LTF	0.2513
TILTON	TILTON	0.4448	Confirmed LTF	0.4448
GIBSON	GIBSON	0.4008	Confirmed LTF	0.4008
BLUEG	BLUEG	1.2378	Confirmed LTF	1.2378
TRIMBLE	TRIMBLE	0.3929	Confirmed LTF	0.3929
CATAWBA	CATAWBA	0.6877	Confirmed LTF	0.6877

11.6.43 Index 43

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
97708631	938530	AE1-072 TAP	DVP	314645	6SLIGO L269	DVP	1	DVP_P4-2: 246T247	breaker	699.0	103.66	108.5	DC	33.82

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314638	6ELIZ CT	0.4967	50/50	0.4967
314639	6TANGLEW	0.8729	50/50	0.8729
314643	3O INLET	1.0656	50/50	1.0656
315294	1DOMTR10	8.8062	Adder	10.36
315603	6AA1-139SOLA	4.0686	50/50	4.0686
315605	6W1-029WIND	1.5347	50/50	1.5347
315611	6Z1-036WIND	11.5545	50/50	11.5545
315614	AA2-178 C	2.1779	50/50	2.1779
901082	W1-029 E	59.6431	50/50	59.6431
913392	Y1-086 E	4.6979	50/50	4.6979
916042	Z1-036 E (Suspended)	77.4154	50/50	77.4154
917122	Z2-027 E	2.1688	50/50	2.1688
917332	Z2-043 E	0.4426	Adder	0.52
917512	Z2-088 E OP1	1.2591	Adder	1.48
918512	AA1-065 E OP	2.0333	Adder	2.39
918532	AA1-067 E	0.3014	Adder	0.35
919152	AA1-139 E	10.1088	50/50	10.1088
920692	AA2-178 E	5.4110	50/50	5.4110
923831	AB2-022 C	4.9252	50/50	4.9252
923832	AB2-022 E	2.6520	50/50	2.6520
924501	AB2-099 C (Suspended)	0.2252	Adder	0.26
924502	AB2-099 E (Suspended)	0.0965	Adder	0.11
925122	AB2-169 E	3.9865	Adder	4.69
926201	AC1-098 C	1.8393	Adder	2.16
926202	AC1-098 E	1.0958	Adder	1.29
926211	AC1-099 C	0.6164	Adder	0.73
926212	AC1-099 E	0.3620	Adder	0.43
927021	AC1-189 C	3.0543	Adder	3.59
927022	AC1-189 E	1.5214	Adder	1.79
932631	AC2-084 C	2.6220	Adder	3.08
932632	AC2-084 E	1.2914	Adder	1.52
933991	AD1-023 C	12.5555	50/50	12.5555
933992	AD1-023 E	6.8353	50/50	6.8353
934521	AD1-076 C	58.8485	50/50	58.8485
934522	AD1-076 E	29.9656	50/50	29.9656
936401	AD2-051 C O1	4.3765	Adder	5.15
936402	AD2-051 E O1	1.8792	Adder	2.21
937221	AD2-160 C O1	6.2104	50/50	6.2104
937222	AD2-160 E O1	3.2566	50/50	3.2566
938171	AE1-026 C O1	24.0460	Adder	28.29
938172	AE1-026 E O1	6.3439	Adder	7.46

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938221	AE1-035 C	1.1352	Adder	1.34
938222	AE1-035 E	0.5591	Adder	0.66
938531	AE1-072 C O1	44.8847	50/50	44.8847
938532	AE1-072 E O1	23.3983	50/50	23.3983
940491	AE2-034 C	9.4693	50/50	9.4693
940492	AE2-034 E	4.0583	50/50	4.0583
941501	AE2-147 C	29.6568	50/50	29.6568
941502	AE2-147 E	19.7712	50/50	19.7712
941541	AE2-151 C	0.4642	Adder	0.55
941542	AE2-151 E	0.2499	Adder	0.29
942401	AE2-253 C	6.5322	50/50	6.5322
942402	AE2-253 E	2.9348	50/50	2.9348
942851	AE2-304 C	1.1364	50/50	1.1364
942852	AE2-304 E	0.4419	50/50	0.4419
943171	AE2-346 C	0.5406	Adder	0.64
943172	AE2-346 E	0.2317	Adder	0.27
944871	AF1-152 C	9.8856	50/50	9.8856
944872	AF1-152 E	6.5904	50/50	6.5904
945711	AF1-236 C O1	103.6665	50/50	103.6665
945712	AF1-236 E O1	169.1401	50/50	169.1401
957521	AF2-046 C	2.4827	Adder	5.51
957522	AF2-046 E	1.2488	Adder	2.77
957531	AF2-047 C	22.5009	50/50	22.5009
957532	AF2-047 E	11.3181	50/50	11.3181
957861	AF2-080 C	1.4702	Adder	3.26
957862	AF2-080 E	0.6518	Adder	1.45
957871	AF2-081 C O1	15.7248	50/50	15.7248
957872	AF2-081 E O1	6.7392	50/50	6.7392
959511	AF2-242	2.4593	Adder	5.46
959731	AF2-264 C	0.3991	Adder	0.89
959732	AF2-264 E	0.1966	Adder	0.44
960831	AF2-374 C	0.2499	Adder	0.55
960832	AF2-374 E	0.4078	Adder	0.91
WEC	WEC	0.0885	Confirmed LTF	0.0885
LGEE	LGEE	0.1660	Confirmed LTF	0.1660
CPL	CPL	1.0961	Confirmed LTF	1.0961
CBM-W2	CBM-W2	3.5381	Confirmed LTF	3.5381
NY	NY	0.1012	Confirmed LTF	0.1012
CBM-W1	CBM-W1	3.3151	Confirmed LTF	3.3151
TVA	TVA	0.7406	Confirmed LTF	0.7406
O-066	O-066	1.4650	Confirmed LTF	1.4650
CBM-S2	CBM-S2	6.5950	Confirmed LTF	6.5950
CBM-S1	CBM-S1	4.1322	Confirmed LTF	4.1322
G-007	G-007	0.2288	Confirmed LTF	0.2288
MADISON	MADISON	0.2076	Confirmed LTF	0.2076
MEC	MEC	0.5355	Confirmed LTF	0.5355

11.6.44 Index 44

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
97890596	957790	AF2-073 TAP	DVP	957820	AF2-076 TAP	DVP	1	DVP_P1-2: LN 2131	single	571.52	149.82	156.0	DC	35.45

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
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.0439	80/20	9.0439
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.0439	80/20	9.0439
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
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	3.4313	80/20	3.4313
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924511	AB2-100 C	1.2658	80/20	1.2658
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	14.9192	80/20	14.9192
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	163.3302	80/20	163.3302
946281	AF1-292 C	0.9859	80/20	0.9859
957521	AF2-046 C	20.4051	80/20	20.4051
957531	AF2-047 C	35.4510	80/20	35.4510
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
960331	AF2-324 C O1	7.6094	80/20	7.6094
960351	AF2-326 C	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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
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

11.6.45 Index 45

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
97890583	957820	AF2-076 TAP	DVP	314537	6SUFFOLK	DVP	1	DVP_P1-2: LN 2092	single	571.52	151.06	157.24	DC	35.45

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
315131	1EDGECEMA (Deactivation : 22/04/2019)	9.0439	80/20	9.0439
315132	1EDGECEMB (Deactivation : 22/04/2019)	9.0439	80/20	9.0439
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
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	3.4313	80/20	3.4313
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

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
924511	AB2-100 C	1.2658	80/20	1.2658
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
936401	AD2-051 C O1	19.8648	80/20	19.8648
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	14.9192	80/20	14.9192
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	163.3302	80/20	163.3302
946281	AF1-292 C	0.9859	80/20	0.9859
957521	AF2-046 C	20.4051	80/20	20.4051
957531	AF2-047 C	35.4510	80/20	35.4510
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
957821	AF2-076 C O1	25.8699	80/20	25.8699
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
960331	AF2-324 C O1	7.6094	80/20	7.6094
960351	AF2-326 C	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
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

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
AB2-068	Chickahominy 500kV	Engineering and Procurement
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
AB2-134	Hopewell-Surry 230kV	In Service
AB2-160	Reams 115kV	Suspended
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
AB2-190	Hopewell-Surry 230kV	Engineering and Procurement
AC1-027	Pendleton 34.5kV	In Service
AC1-034	Heartsease DP - Mayo Dunbar 115kV	Active
AC1-036	Twittys Creek 34.5kV	Engineering and Procurement

Queue Number	Project Name	Status
AC1-054	Kerr Dam–Eatons Ferry 115 kV	Engineering and Procurement
AC1-065	Harmony Village-Shackleford 115kV	Engineering and Procurement
AC1-086	Thelma 230kV	Active
AC1-098	Dawson-South Justice 115kV	Engineering and Procurement
AC1-099	Dawson-South Justice 115kV	Engineering and Procurement
AC1-107	Chickahominy 500kV	Suspended
AC1-131	PJM-CPLE	Confirmed
AC1-147	Grassfield 34.5kV	Engineering and Procurement
AC1-161	Septa 500kV	Active
AC1-164	Chickahominy 230kV	Engineering and Procurement
AC1-189	Chinquapin-Everetts 230kV	Active
AC1-208	Cox-Whitakers 115kV	Active
AC1-216	Hopewell-Surry 230kV	Under Construction
AC2-012	Grassfield-Great Bridge 115kV	Active
AC2-070	Old Church 34.5kV	Engineering and Procurement
AC2-078	Disputanta-Waverly 115kV	Active
AC2-079	Ivor-Oakridge 115kV	Active
AC2-084	Dawson-South Justice 115kV	Active
AC2-110	Harmony Village-Shackleford 115kV	Engineering and Procurement
AC2-137	Elko 34.5kV	Under Construction
AC2-138	Northern Neck 34.5kV	Under Construction
AC2-141	Septa 500kV	Active
AC2-165	Bremo-Powhatan 230kV	Active
AC2-196	Fentress 34.5kV	Engineering and Procurement
AD1-023	Cashie-Trowbridge 230 kV	Active
AD1-025	Hopewell-Surry 230 kV	Active
AD1-033	Fentress-Landstown 230 kV	Active
AD1-041	Harmony Village-Shackleford 115 kV	Active
AD1-046	Oak Grove 34.5 kV III	Engineering and Procurement
AD1-057	Hornertown-Hathaway 230 kV	Active
AD1-076	Trowbridge 230 kV	Active
AD1-082	Bakers Pond-Ivor 115kV	Active
AD1-087	Clover-Sedge Hill 230 kV	Active
AD1-144	Kings Fork 34.5 kV	Engineering and Procurement
AD1-151	Hopewell-Surry 230 kV	Active
AD1-152	Clover-Sedge Hill 230 kV	Active
AD2-007	Hopewell-Surry 230 kV	Active
AD2-008	Hopewell-Surry 230 kV	Active
AD2-021	Elko 34.5 kV	Under Construction
AD2-033	Chase City-Lunenburg 115 kV	Active
AD2-039	Harmony Village-Shackleford 115 kV	Engineering and Procurement
AD2-044	Northern Neck 34.5 kV	Under Construction
AD2-046	Boydton DP-Kerr Dam 115 kV	Active
AD2-051	Earleys – Northampton 230kV	Active
AD2-063	Central-Chase City 115kV	Active
AD2-074	Garner DP-Lancaster 115 kV	Active
AD2-085	Myrtle-Windsor DP 115kV	Active
AD2-097	Spruance NUG 230kV	In Service
AD2-160	Hickory-Moyock 230kV	Active
AD2-164	Peninsula 34.5kV	Withdrawn
AD2-202	Clover-Sedge Hill 230kV	Active
AD2-215	Kings Fork 34.5 kV	Engineering and Procurement

Queue Number	Project Name	Status
AE1-004	Harmony Village-Shackleford 115 kV	Engineering and Procurement
AE1-026	Cashie 230 kV	Active
AE1-035	Earleys 230 kV	Engineering and Procurement
AE1-068	Carson-Rogers Rd 500 kV	Active
AE1-069	Carson-Rogers Road 500 kV	Active
AE1-072	Shawboro-Sligo 230 kV	Active
AE1-074	Winterpock 34.5 kV	Engineering and Procurement
AE1-075	Powhatan 34.5 kV	Engineering and Procurement
AE1-085	Bakers Pond-Bell Ave 115 kV	Active
AE1-103	Holland-Union Camp 115 kV	Active
AE1-124	Oak Grove 34.5 kV	Engineering and Procurement
AE1-148	Kerr Dam-Ridge Rd 115 kV	Active
AE1-149	Disputanta-Poe 115 kV	Active
AE1-162	Smithfield 34.5 kV	Engineering and Procurement
AE1-173	Carson-Suffolk 500 kV	Active
AE1-174	Light Foot 34.5 kV	Withdrawn
AE1-175	Light Foot 34.5 kV	Engineering and Procurement
AE1-191	Harmony Village-Shackleford 115 kV	Active
AE2-000B	N/A	N/A
AE2-005	Harmony Village-Shackleford 115 kV	Engineering and Procurement
AE2-006	Twittys Creek 34.5 kV	Engineering and Procurement
AE2-007	Chesapeake 230 kV	Active
AE2-027	Harrowgate-Locks 115kV	Active
AE2-031	Carson-Rawlings 500 kV	Active
AE2-033	Clubhouse-Sappony 230 kV	Active
AE2-034	Mackeys 230 kV	Active
AE2-040	Sapony 34.5 kV	Active
AE2-041	Harmony Village 230 kV	Active
AE2-044	Anaconda-Dunbar 115 kV	Active
AE2-051	Carson-Septa 500 kV	Active
AE2-052	Disputanta-Poe 115 kV	Active
AE2-053	Kerr Dam-Ridge Road 115 kV	Active
AE2-078	Poolesville 34.5 kV	Engineering and Procurement
AE2-079	Poolesville 34.5 kV	Engineering and Procurement
AE2-094	Carson-Rogers Road 500 kV	Active
AE2-104	Suffolk 115 kV	Active
AE2-122	Birdneck-Landstown 230 kV	Active
AE2-123	Birdneck-Landstown 230 kV	Active
AE2-124	Landstown 230 kV	Active
AE2-147	Swamp 230 kV	Active
AE2-151	Earleys 34.5kV	Engineering and Procurement
AE2-156	Yadkin 115 kV	Active
AE2-212	Harrowgate 34 kV	Active
AE2-225	Suffolk 34 kV	Engineering and Procurement
AE2-227	Iron Bridge 34 kV	Active
AE2-228	Tyler 34 kv	Active
AE2-229	Suffolk 34 kV	Engineering and Procurement
AE2-247	Myrtle-Windsor 115 kV	Active
AE2-250	Purdy Sw.-Reams 115 kV	Active
AE2-253	Hickory-Moyock 230 kV	Active
AE2-258	Chase City 115 kV	Active
AE2-260	Clubhouse 230 kV	Active

Queue Number	Project Name	Status
AE2-270	Hopewell-Surry 230 kV	Active
AE2-304	South Hertford 34 kV	Engineering and Procurement
AE2-313	Carson-Rawlings 500 kV	Active
AE2-346	Ahoskie 34.5 kV	Active
AF1-014	Harmony Village-Shackleford 115 kV	Active
AF1-017	Myrtle-Windsor 115 kV	Active
AF1-018	Harmony Village 230 kV	Active
AF1-032	Suffolk 34.5 kV	Engineering and Procurement
AF1-033	Poolesville 34 kV	Engineering and Procurement
AF1-042	Garner DP-Lancaster 115 kV	Active
AF1-059	Brodnax-South Hill 115 kV	Active
AF1-069	Carson-Rogers Rd 500 kV	Active
AF1-082	Heartsease-Mayo Dunbar DP	Active
AF1-115	Poolesville 230 kV	Active
AF1-123	Fentress 500 kV	Active
AF1-124	Fentress 500 kV	Active
AF1-125	Fentress 500 kV	Active
AF1-128	Chesterfield 230 kV	Active
AF1-152	Swamp 230 kV	Active
AF1-201	Hayes-Whitemarsh 115 kV	Active
AF1-236	Mackeys 230 kV	Active
AF1-246	Clover-Rawlings 500 kV	Active
AF1-266	Clubhouse-Sapony 230 kV	Active
AF1-291	Tyler 34.5 kV	Engineering and Procurement
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
AF2-054	Wan 34.5 kV	Active
AF2-057	Grassfield 34.5 kV	Active
AF2-065	Surry-Hopewell 230 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
AF2-077	White Marsh 34.5 kV	Active
AF2-080	Chinquapin-Everetts 230 kV	Active
AF2-081	Moyock 230 kV	Active
AF2-085	Midlothian 34.5 kV	Active
AF2-108	Locks 34.5 kV	Active
AF2-110	Suffolk 115 kV	Active
AF2-144	Powhatan 34.5 kV	Active
AF2-214	Heartsease DP-Anaconda 115 kV	Active
AF2-222	Pamplin-Chase City 115 kV	Active
AF2-242	Wharton 115 kV	Active
AF2-244	Powhatan 34.5 kV	Active
AF2-255	Iron Bridge 34.5 kV	Active
AF2-256	Tyler 34.5 kV	Active
AF2-257	Tyler 34.5 kV	Active
AF2-258	Harrowgate 34.5 kV	Active
AF2-259	Locks 34.5 kV	Active
AF2-264	Tunis 34.5 kV	Active

Queue Number	Project Name	Status
AF2-266	Clover 230 kV	Active
AF2-299	Fields 34.5 kV	Active
AF2-301	Poolesville-Winchester 230 kV	Active
AF2-303	Edgecombe 230 kV	Active
AF2-304	Surry-Hopewell 230 kV	Active
AF2-324	Edgecombe 230 kV	Active
AF2-326	Edgecombe 13 kV	Active
AF2-327	Wakefield 13 kV	Active
AF2-372	Black Branch 34.5 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
Z1-068	Birdneck 34.5kV	Under Construction
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

Contingency Name	Contingency Definition
DVP_P1-2: LN 567	CONTINGENCY 'DVP_P1-2: LN 567' OPEN BRANCH FROM BUS 314903 TO BUS 314924 CKT 1 /* 8CHCKAHM 500.00 - 8SURREY 500.00 END
DVP_P1-2: LN 565	CONTINGENCY 'DVP_P1-2: LN 565' OPEN BRANCH FROM BUS 314927 TO BUS 314928 CKT 1 /* 8YADKIN 500.00 - 8SUFFOLK 500.00 END
DVP_P1-2: LN 563	CONTINGENCY 'DVP_P1-2: LN 563' OPEN BRANCH FROM BUS 314902 TO BUS 314914 CKT 1 /* 8CARSON 500.00 - 8MDLTHAN 500.00 END
DVP_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 247	CONTINGENCY 'DVP_P1-2: LN 247' OPEN BRANCH FROM BUS 313713 TO BUS 314648 CKT 1 /* 6SWAMP 230.00 - 6SUNBURY 230.00 OPEN BRANCH FROM BUS 314537 TO BUS 314648 CKT 1 /* 6SUFFOLK 230.00 - 6SUNBURY 230.00 OPEN BUS 314648 /* ISLAND: 6SUNBURY 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
314550 6HICKORY 230 937220 AD2-160 TAP 230 1	CONTINGENCY '314550 6HICKORY 230 937220 AD2-160 TAP 230 1' OPEN BRANCH FROM BUS 314550 TO BUS 937220 CKT 1 END

Contingency Name	Contingency Definition
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
DVP_P4-2: 203462	CONTINGENCY 'DVP_P4-2: 203462' /* EARLEYS 230 KV 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 OPEN BRANCH FROM BUS 314568 TO BUS 314569 CKT 2 /* 3EARLEYS 115.00 - 6EARLEYS 230.00 END
DVP_P4-2: 24742	CONTINGENCY 'DVP_P4-2: 24742' /* SUFFOLK 230 KV OPEN BRANCH FROM BUS 313713 TO BUS 314648 CKT 1 /* 6SWAMP 230.00 - 6SUNBURY 230.00 OPEN BRANCH FROM BUS 314537 TO BUS 314648 CKT 1 /* 6SUFFOLK 230.00 - 6SUNBURY 230.00 OPEN BUS 314648 /* ISLAND: 6SUNBURY 230.00 OPEN BRANCH FROM BUS 314536 TO BUS 314537 CKT 1 /* 3SUFFOLK 115.00 - 6SUFFOLK 230.00 OPEN BRANCH FROM BUS 314537 TO BUS 314928 CKT 1 /* 6SUFFOLK 230.00 - 8SUFFOLK 500.00 REMOVE SWSHUNT FROM BUS 314537 END

Contingency Name	Contingency Definition
DVP_P4-2: 26922	CONTINGENCY 'DVP_P4-2: 26922' /* FENTRESS 230 KV OPEN BRANCH FROM BUS 314466 TO BUS 314645 CKT 1 /* 6FENTRES 230.00 - 6SLIGO L269 230.00 OPEN BRANCH FROM BUS 314645 TO BUS 938530 CKT 1 /* 6SLIGO L269 230.00 - AE1-072 TAP 230.00 OPEN BUS 314645 /* ISLAND: 6SLIGO L269 230.00 OPEN BRANCH FROM BUS 314466 TO BUS 314909 CKT 2 /* 6FENTRES 230.00 - 8FENTRES 500.00 OPEN BUS 314654 /* 6FENTR_1 230.00 KV OPEN BUS 313889 /* 6FENTRES_STC230.00 KV 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: 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_P1-2: LN 2181	CONTINGENCY 'DVP_P1-2: LN 2181' OPEN BUS 304226 /* ISLAND: 6PA-RMOUNT#4115.00 OPEN BRANCH FROM BUS 304226 TO BUS 314591 CKT 1 /* 6PA-RMOUNT#4230.00 - 6NASH 230.00 OPEN BRANCH FROM BUS 313845 TO BUS 314591 CKT 1 /* 6HATHAWAY 230.00 - 6NASH 230.00 OPEN BUS 314591 /* ISLAND: 6NASH 230.00 END

Contingency Name	Contingency Definition
DVP_P4-2: 56372	CONTINGENCY 'DVP_P4-2: 56372' /* CARSON 500 KV OPEN BRANCH FROM BUS 314902 TO BUS 314914 CKT 1 /* 8CARSON 500.00 - 8MDLTHAN 500.00 OPEN BRANCH FROM BUS 314282 TO BUS 314902 CKT 1 /* 6CARSON 230.00 - 8CARSON 500.00 END
DVP_P4-2: 2110T2128	CONTINGENCY 'DVP_P4-2: 2110T2128' /* THRASHER 230 KV OPEN BRANCH FROM BUS 314480 TO BUS 314508 CKT 1 /* 6HUNTSMN 230.00 - 6THRASHER 230.00 OPEN BRANCH FROM BUS 314480 TO BUS 314537 CKT 1 /* 6HUNTSMN 230.00 - 6SUFFOLK 230.00 OPEN BUS 314480 /* ISLAND: 6HUNTSMN 230.00 OPEN BRANCH FROM BUS 314466 TO BUS 314508 CKT 1 /* 6FENTRES 230.00 - 6THRASHER 230.00 END
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-B	CONTINGENCY 'DVP_P1-2: LN 238-B' OPEN BRANCH FROM BUS 940480 TO BUS 314563 CKT 1 /* AE2-033 TAP 230.00 - 6CLUBHSE 230.00 OPEN BRANCH FROM BUS 314562 TO BUS 314563 CKT 1 /* 3CLUBHSE 115.00 - 6CLUBHSE 230.00 END
DVP_P7-1: LN 25-2034-A	CONTINGENCY 'DVP_P7-1: LN 25-2034-A' OPEN BRANCH FROM BUS 314573 TO BUS 314596 CKT 1 /* 3EVERETS 115.00 - 3POPLR C 115.00 OPEN BRANCH FROM BUS 314596 TO BUS 314614 CKT 1 /* 3POPLR C 115.00 - 3TRWBRDG2 115.00 OPEN BUS 314596 /* ISLAND: 3POPLR C 115.00 OPEN BRANCH FROM BUS 314614 TO BUS 314616 CKT 1 /* 3TRWBRDG2 115.00 - 6TRWBRDG 230.00 OPEN BRANCH FROM BUS 314616 TO BUS 933990 CKT 1 /* 6TRWBRDG 230.00 - AD1-023 TAP 230.00 END
DVP_P1-2: LN 271-B	CONTINGENCY 'DVP_P1-2: LN 271-B' OPEN BRANCH FROM BUS 934060 TO BUS 314481 CKT 1 /* AD1-033 TAP 230.00 - 6LANDSTN 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 313713 TO BUS 314648 CKT 1 /* 6SWAMP 230.00 - 6SUNBURY 230.00 OPEN BRANCH FROM BUS 314537 TO BUS 314648 CKT 1 /* 6SUFFOLK 230.00 - 6SUNBURY 230.00 OPEN BUS 314648 /* ISLAND: 6SUNBURY 230.00 END
DVP_P4-2: 231T2026	CONTINGENCY 'DVP_P4-2: 231T2026' /* LANDSTOWN 230 KV OPEN BRANCH FROM BUS 314481 TO BUS 314502 CKT 1 /* 6LANDSTN 230.00 - 6STUMPY 230.00 OPEN BRANCH FROM BUS 314502 TO BUS 314508 CKT 1 /* 6STUMPY 230.00 - 6THRASHER 230.00 OPEN BUS 314502 /* ISLAND: 6STUMPY 230.00 OPEN BRANCH FROM BUS 314481 TO BUS 314486 CKT 1 /* 6LANDSTN 230.00 - 6LYNHAVN 230.00 END
DVP_P1-2: LN 557	CONTINGENCY 'DVP_P1-2: LN 557' OPEN BRANCH FROM BUS 314214 TO BUS 314903 CKT 1 /* 6CHCKAHM 230.00 - 8CHCKAHM 500.00 OPEN BRANCH FROM BUS 314903 TO BUS 314908 CKT 1 /* 8CHCKAHM 500.00 - 8ELMONT 500.00 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: 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

Contingency Name	Contingency Definition
DVP_P1-2: LN 574	CONTINGENCY 'DVP_P1-2: LN 574' OPEN BRANCH FROM BUS 314908 TO BUS 314911 CKT 1 /* 8ELMONT 500.00 - 8LADYSMITH 500.00 END
DVP_P1-2: LN 576	CONTINGENCY 'DVP_P1-2: LN 576' OPEN BRANCH FROM BUS 314914 TO BUS 314918 CKT 1 /* 8MDLTHAN 500.00 - 8NO ANNA 500.00 END
314620 6CASHIE 230 933990 AD1-023 TAP 230 1	CONTINGENCY '314620 6CASHIE 230 933990 AD1-023 TAP 230 1' OPEN BRANCH FROM BUS 314620 TO BUS 933990 CKT 1 END
DVP_P1-2: LN 2020	CONTINGENCY 'DVP_P1-2: LN 2020' 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 END
314645 6SLIGO L269 230 938530 AE1-072 TAP 230 1	CONTINGENCY '314645 6SLIGO L269 230 938530 AE1-072 TAP 230 1' OPEN BRANCH FROM BUS 314645 TO BUS 938530 CKT 1 END
Base Case	
DVP_P1-2: LN 2144	CONTINGENCY 'DVP_P1-2: LN 2144' OPEN BRANCH FROM BUS 313713 TO BUS 314651 CKT 1 /* 6SWAMP 230.00 - 6WINFALL 230.00 END
DVP_P4-2: 563T576	CONTINGENCY 'DVP_P4-2: 563T576' /* MIDLOTHIAN 500 500 KV OPEN BRANCH FROM BUS 314902 TO BUS 314914 CKT 1 /* 8CARSON 500.00 - 8MDLTHAN 500.00 OPEN BRANCH FROM BUS 314914 TO BUS 314918 CKT 1 /* 8MDLTHAN 500.00 - 8NO ANNA 500.00 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 2128	CONTINGENCY 'DVP_P1-2: LN 2128' OPEN BRANCH FROM BUS 314466 TO BUS 314508 CKT 1 /* 6FENTRES 230.00 - 6THRASHER 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 2034-A	CONTINGENCY 'DVP_P1-2: LN 2034-A' OPEN BRANCH FROM BUS 314614 TO BUS 314616 CKT 1 /* 3TRWBRDG2 115.00 - 6TRWBRDG 230.00 OPEN BRANCH FROM BUS 314616 TO BUS 933990 CKT 1 /* 6TRWBRDG 230.00 - AD1-023 TAP 230.00 END
DVP_P1-2: LN 2034-B	CONTINGENCY 'DVP_P1-2: LN 2034-B' 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_P1-2: LN 579	CONTINGENCY 'DVP_P1-2: LN 579' OPEN BRANCH FROM BUS 314923 TO BUS 314927 CKT 1 /* 8SEPTA 500.00 - 8YADKIN 500.00 END

12 Short Circuit Analysis

Short circuit analysis will be provided in the System Impact Study report.

13 Affected Systems

13.1 TVA

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

13.2 Duke Energy Progress

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

Attachment 1: One Line Diagram