



**Generation Interconnection
Feasibility Study Report
for
Queue Project AG1-235
FENTRESS-SLIGO 230 KV
135 MW Capacity / 225 MW Energy**

January 2021

Table of Contents

1	Introduction.....	5
2	Preface.....	5
3	General	6
4	Point of Interconnection.....	7
4.1	Primary Point of Interconnection	7
4.2	Secondary Point of Interconnection.....	7
5	Cost Summary	7
6	Transmission Owner Scope of Work.....	9
7	Schedule.....	10
8	Transmission Owner Analysis.....	10
8.1	Power Flow Analysis	11
9	Interconnection Customer Requirements.....	11
9.1	System Protection.....	11
9.2	Compliance Issues and Interconnection Customer Requirements	11
9.3	Power Factor Requirements.....	12
10	Revenue Metering and SCADA Requirements	12
10.1	PJM Requirements	12
10.2	Meteorological Data Reporting Requirements	12
10.3	Interconnected Transmission Owner Requirements.....	12
11	Summer Peak - Load Flow Analysis - Primary POI	13
11.1	Generation Deliverability	14
11.2	Multiple Facility Contingency	14
11.3	Contribution to Previously Identified Overloads.....	14
11.4	Potential Congestion due to Local Energy Deliverability.....	16
11.5	System Reinforcements - Summer Peak Load Flow - Primary POI.....	19
11.6	Flow Gate Details - Primary POI	23
11.6.1	Index 1	24
11.6.2	Index 2	26
11.6.3	Index 3	29
11.6.4	Index 4	32
11.6.5	Index 5	37

11.6.6	Index 6	42
11.6.7	Index 7	46
11.6.8	Index 8	49
11.6.9	Index 9	52
11.6.10	Index 10.....	55
11.6.11	Index 11.....	57
11.6.12	Index 12.....	60
11.6.13	Index 13.....	63
11.6.14	Index 14.....	67
11.6.15	Index 15.....	70
11.6.16	Index 16.....	74
11.6.17	Index 17.....	79
11.6.18	Index 18.....	82
11.6.19	Index 19.....	85
11.6.20	Index 20.....	88
11.7	Queue Dependencies	91
11.8	Contingency Descriptions - Primary POI.....	97
12	Short Circuit Analysis - Primary POI.....	101
12.1	System Reinforcements - Short Circuit.....	101
13	Summer Peak - Load Flow Analysis - Secondary POI	102
13.1	Generation Deliverability	103
13.2	Multiple Facility Contingency	103
13.3	Contribution to Previously Identified Overloads.....	103
13.4	Potential Congestion due to Local Energy Deliverability.....	105
13.5	Flow Gate Details - Secondary POI.....	108
13.5.1	Index 1	109
13.5.2	Index 2	111
13.5.3	Index 3	114
13.5.4	Index 4	118
13.5.5	Index 5	122
13.5.6	Index 6	125
13.5.7	Index 7	130
13.5.8	Index 8	136

13.5.9	Index 9	140
13.5.10	Index 10.....	144
13.5.11	Index 11.....	148
13.5.12	Index 12.....	152
13.5.13	Index 13.....	156
13.5.14	Index 14.....	160
13.5.15	Index 15.....	164
13.5.16	Index 16.....	166
13.5.17	Index 17.....	168
13.5.18	Index 18.....	170
13.5.19	Index 19.....	175
13.5.20	Index 20.....	178
13.5.21	Index 21.....	182
13.5.22	Index 22.....	185
13.5.23	Index 23.....	189
13.5.24	Index 24.....	194
13.5.25	Index 25.....	198
13.5.26	Index 26.....	201
13.5.27	Index 27.....	204
13.5.28	Index 28.....	207
13.5.29	Index 29.....	209
13.5.30	Index 30.....	211
13.5.31	Index 31.....	213
13.5.32	Index 32.....	217
13.6	Contingency Descriptions - Secondary POI.....	220
14	Affected Systems	225
14.1	TVA.....	225
14.2	Duke Energy Progress.....	225
15	Attachment 1: One Line Diagram	226

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 City of Chesapeake County, Virginia. The installed facilities will have a total capability of 225 MW with 135 MW of this output being recognized by PJM as Capacity. The proposed in-service date for this project is December 31, 2024. This study does not imply a TO commitment to this in-service date.

Queue Number	AG1-235
Project Name	FENTRESS-SLIGO 230 KV
State	Virginia
County	City of Chesapeake
Transmission Owner	Dominion
MFO	225
MWE	225
MWC	135
Fuel	Solar
Basecase Study Year	2024

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

4 Point of Interconnection

4.1 Primary Point of Interconnection

AG1-235 "Fentress-Sligo 230 kV" will interconnect with the Dominion transmission system. The primary POI will be a newly constructed 230 kV three breaker ring bus located on the line between the Fentress substation and Sligo substation.

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

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

4.2 Secondary Point of Interconnection

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

The secondary POI for AG1-235 is a new tap on the Fentress-Sligo 230 kV line.

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

5 Cost Summary

The AG1-235 project will be responsible for the following costs:

Description	Total Cost
Total Physical Interconnection Costs	\$10,400,000
Total System Network Upgrade Costs	\$1,081,723,000 ¹
Total Costs	\$1,092,123,000

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

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

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

6 Transmission Owner Scope of Work

The required Attachment Facilities, Direct Connection and Non-Direct Connection work for the interconnection of AG1-235 to the Dominion Transmission System is detailed in the following sections. The associated one-line showing the generation project attachment facilities and primary direct and non-direct connection is shown in Attachment 1.

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

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

Description	Total Cost
Attachment Facilities	\$2,100,000
230 kV Three Breaker Ring-Bus Substation	\$6,500,000
Re-arrange line and tie-in new substation	\$1,800,000
Total Physical Interconnection Costs	\$10,400,000

AG1-235 "Fentress-Sligo 230 kV" will interconnect with the Dominion transmission system. The primary POI will be a newly constructed 230 kV three breaker ring bus located on the line between the Fentress substation and Sligo substation.

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

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

7 Schedule

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

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

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

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

8 Transmission Owner Analysis

Dominion assessed the impact of the proposed AG1-235 for compliance with NERC Reliability Criteria on the Dominion Transmission System. The system was assessed using the summer 2024 AG1 case provided to Dominion by PJM.

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

<http://www.dominionenergy.com>.

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

8.1 Power Flow Analysis

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

9 Interconnection Customer Requirements

9.1 System Protection

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

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

9.2 Compliance Issues and Interconnection Customer Requirements

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

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

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

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

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

9.3 Power Factor Requirements

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

10 Revenue Metering and SCADA Requirements

10.1 PJM Requirements

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

10.2 Meteorological Data Reporting Requirements

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

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

10.3 Interconnected Transmission Owner Requirements

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

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

11 Summer Peak - Load Flow Analysis - Primary POI

The Queue Project AG1-235 was evaluated as a 225.0 MW (Capacity 135.0 MW) injection tapping the Fentress to Sligo 230 kV line in the Dominion area. Project AG1-235 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AG1-235 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 PROJE T LOADIN G %	POST PROJE T LOADIN G %	AC D C	MW IMPAC T
168718198	314466	6FENTRESS	230.0	DVP	314508	6THRASHERR	230.0	DVP	1	DVP_P1-2: LN 271-B	single	678.679992676	93.14	101.41	DC	56.14

11.2 Multiple Facility Contingency

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

None

11.3 Contribution to Previously Identified Overloads

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE T LOADIN G %	POST PROJE T LOADIN G %	AC D C	MW IMPAC T
168718079	314209	6SKIFF CREEK	230.0	DVP	314386	6KINGS M	230.0	DVP	1	DVP_P1-2: LN 567	single	441.799987793	159.91	162.41	DC	11.03
168718080	314209	6SKIFF CREEK	230.0	DVP	314386	6KINGS M	230.0	DVP	1	DVP_P1-2: LN 563	single	441.799987793	131.77	133.61	DC	8.15
168718362	314214	6CHCKAH M	230.0	DVP	314258	6ELKO	230.0	DVP	1	DVP_P1-2: LN 557	single	678.679992676	107.08	107.47	DC	7.68
168718240	314218	6ELMONT	230.0	DVP	314908	8ELMONT	500.0	DVP	2	DVP_P1-2: LN 557	single	879.840026855	155.04	155.7	DC	14.92
168718268	314218	6ELMONT	230.0	DVP	314908	8ELMONT	500.0	DVP	1	DVP_P1-2: LN 557	single	920.918029785	148.82	149.45	DC	14.99
168718275	314236	6NRTHEST	230.0	DVP	314218	6ELMONT	230.0	DVP	1	DVP_P1-2: LN 557	single	678.679992676	120.89	121.55	DC	9.81
168718087	314296	6PENNIMAN	230.0	DVP	314415	6WALR209	230.0	DVP	1	DVP_P1-2: LN 567	single	441.799987793	148.0	150.51	DC	11.03
168718088	314296	6PENNIMAN	230.0	DVP	314415	6WALR209	230.0	DVP	1	DVP_P1-2: LN 563	single	441.799987793	119.84	121.68	DC	8.15
168718083	314386	6KINGS M	230.0	DVP	314296	6PENNIMAN	230.0	DVP	1	DVP_P1-2: LN 567	single	441.799987793	151.96	154.47	DC	11.03
168718084	314386	6KINGS M	230.0	DVP	314296	6PENNIMAN	230.0	DVP	1	DVP_P1-2: LN 563	single	441.799987793	123.8	125.64	DC	8.15
168718097	314415	6WALR209	230.0	DVP	314391	6LIGH209	230.0	DVP	1	DVP_P1-2: LN 567	single	441.799987793	131.86	134.37	DC	11.03
168718098	314415	6WALR209	230.0	DVP	314391	6LIGH209	230.0	DVP	1	DVP_P1-2: LN 563	single	441.799987793	103.7	105.54	DC	8.15

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE C T LOADIN G %	POST PROJE C T LOADIN G %	AC D C	MW IMPAC T
16321153 1	31448 1	6LANDSTN	230. 0	DVP	31448 6	6LYNHAVN	230. 0	DVP	1	DVP_P 7-1: LN 147- 2118-A	tower	830.0	117.79	118.99	DC	22.01
16321153 2	31448 1	6LANDSTN	230. 0	DVP	31448 6	6LYNHAVN	230. 0	DVP	1	DVP_P 7-1: LN 78- 2118-A	tower	830.0	113.16	114.36	DC	22.0
16364570 3	31457 4	6EVERETS	230. 0	DVP	30445 1	6GREENVIL ET	230. 0	CPL	1	DVP_P 1-2: LN 2167	single	478.0	111.04	112.49	DC	6.92
16364570 6	31457 4	6EVERETS	230. 0	DVP	30445 1	6GREENVIL ET	230. 0	CPL	1	DVP_P 1-2: LN 2177	single	478.0	105.28	106.72	DC	6.92
16364555 3	31490 2	8CARSON	500. 0	DVP	31491 4	8MDLTHA N	500. 0	DVP	1	DVP_P 4-2: 557T57 4	breake r	3938.0	144.86	145.49	DC	67.97
16364555 4	31490 2	8CARSON	500. 0	DVP	31491 4	8MDLTHA N	500. 0	DVP	1	DVP_P 4-2: H2T557	breake r	3938.0	138.16	138.65	DC	65.86
16364581 1	31490 2	8CARSON	500. 0	DVP	31491 4	8MDLTHA N	500. 0	DVP	1	DVP_P 1-2: LN 557	single	3218.560058 59	129.12	129.53	DC	36.04
16364581 2	31490 2	8CARSON	500. 0	DVP	31491 4	8MDLTHA N	500. 0	DVP	1	DVP_P 1-2: LN 567	single	3218.560058 59	121.02	122.09	DC	36.49
16364554 8	31490 3	8CHCKAH M	500. 0	DVP	31490 8	8ELMONT	500. 0	DVP	1	DVP_P 4-2: 563T72	breake r	3144.0	159.35	159.44	DC	70.92
16364554 9	31490 3	8CHCKAH M	500. 0	DVP	31490 8	8ELMONT	500. 0	DVP	1	DVP_P 4-2: 563T57 6	breake r	3144.0	158.61	158.67	DC	72.14
16364574 3	31490 3	8CHCKAH M	500. 0	DVP	31490 8	8ELMONT	500. 0	DVP	1	DVP_P 1-2: LN 563	single	2442.120117 19	183.31	183.7	DC	41.41
16364574 4	31490 3	8CHCKAH M	500. 0	DVP	31490 8	8ELMONT	500. 0	DVP	1	DVP_P 1-2: LN 576	single	2442.120117 19	179.41	179.75	DC	41.34
16364575 2	31490 3	8CHCKAH M	500. 0	DVP	31490 8	8ELMONT	500. 0	DVP	1	Base Case	single	2442.120117 19	144.22	144.89	DC	33.31
16871811 2	31490 3	8CHCKAH M	500. 0	DVP	31421 4	6CHCKAH M	230. 0	DVP	1	DVP_P 1-2: LN 557	single	934.9239501 95	207.09	208.18	DC	12.61
16364571 0	31490 8	8ELMONT	500. 0	DVP	31491 1	8LADYSMIT H	500. 0	DVP	1	DVP_P 1-2: LN 576	single	2442.120117 19	219.14	219.2	DC	42.04
16364571 3	31490 8	8ELMONT	500. 0	DVP	31491 1	8LADYSMIT H	500. 0	DVP	1	DVP_P 1-2: LN 563	single	2442.120117 19	195.4	195.51	DC	36.18
16364572 0	31490 8	8ELMONT	500. 0	DVP	31491 1	8LADYSMIT H	500. 0	DVP	1	Base Case	single	2442.120117 19	151.11	151.61	DC	27.49
16364577 5	31491 4	8MDLTHA N	500. 0	DVP	31491 8	8NO ANNA	500. 0	DVP	1	DVP_P 1-2: LN 574	single	2442.120117 19	175.84	176.2	DC	37.52
16364577 8	31491 4	8MDLTHA N	500. 0	DVP	31491 8	8NO ANNA	500. 0	DVP	1	DVP_P 1-2: LN 557	single	2442.120117 19	154.68	154.92	DC	35.78
16364578 5	31491 4	8MDLTHA N	500. 0	DVP	31491 8	8NO ANNA	500. 0	DVP	1	Base Case	single	2442.120117 19	127.26	127.7	DC	27.68
16364559 8	31491 8	8NO ANNA	500. 0	DVP	31493 4	8SPOTSYL	500. 0	DVP	1	DVP_P 4-2: 568T57 5	breake r	3938.0	118.51	118.6	DC	39.92

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADIN G %	POST PROJE CT LOADIN G %	AC D C	MW IMPAC T
163645646	314923	8SEPTA	500.0	DVP	314924	8SURRY	500.0	DVP	1	DVP_P 4-2: 56372	breaker	3637.0	102.92	103.38	DC	42.33
163645558	314924	8SURRY	500.0	DVP	314903	8CHCKAH M	500.0	DVP	1	DVP_P 4-2: 56372	breaker	3144.0	131.67	133.98	DC	68.46
163645559	314924	8SURRY	500.0	DVP	314903	8CHCKAH M	500.0	DVP	1	DVP_P 4-2: 562T563	breaker	3144.0	119.11	121.37	DC	70.69
163645842	314924	8SURRY	500.0	DVP	314903	8CHCKAH M	500.0	DVP	1	DVP_P 1-2: LN 563	single	2442.12011719	114.78	116.17	DC	39.24
163645846	314924	8SURRY	500.0	DVP	314903	8CHCKAH M	500.0	DVP	1	DVP_P 1-2: LN 576	single	2442.12011719	103.07	104.23	DC	37.38
163646432	314927	8YADKIN	500.0	DVP	314928	8SUFFOLK	500.0	DVP	1	DVP_P 7-1: LN 579-2110	tower	3637.0	100.62	102.35	DC	147.95

11.4 Potential Congestion due to Local Energy Deliverability

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

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE CT LOADIN G %	POST PROJE CT LOADIN G %	AC D C	MW IMPAC T
168415482	313811	6ELKO L286	230.0	DVP	314253	6TURNER	230.0	DVP	1	DVP_P1-2: LN 557	operation	678.679992676	131.32	132.15	DC	12.78
168415435	313896	6COLONIAL TR	230.0	DVP	314303	6HOPEWL L	230.0	DVP	1	DVP_P1-2: LN 240-A	operation	678.679992676	141.16	142.19	DC	15.46
168718077	314209	6SKIFF CREEK	230.0	DVP	314386	6KINGS M	230.0	DVP	1	DVP_P1-2: LN 567	operation	441.799987793	252.12	254.01	DC	18.39
168718312	314209	6SKIFF CREEK	230.0	DVP	314413	6WALR285	230.0	DVP	1	DVP_P1-2: LN 567	operation	678.679992676	144.12	145.31	DC	17.64
168718361	314214	6CHCKAH M	230.0	DVP	314258	6ELKO	230.0	DVP	1	DVP_P1-2: LN 557	operation	678.679992676	141.73	142.57	DC	12.8
168718496	314214	6CHCKAH M	230.0	DVP	314241	6OLDCHR C	230.0	DVP	1	DVP_P1-2: LN 557	operation	984.179992676	121.39	121.6	DC	17.12
168718522	314214	6CHCKAH M	230.0	DVP	314903	8CHCKAH M	500.0	DVP	1	DVP_P1-2: LN 567	operation	934.923950195	113.26	113.54	DC	23.87
168718239	314218	6ELMONT	230.0	DVP	314908	8ELMONT	500.0	DVP	2	DVP_P1-2: LN 557	operation	879.840026855	168.27	168.46	DC	24.86
168718267	314218	6ELMONT	230.0	DVP	314908	8ELMONT	500.0	DVP	1	DVP_P1-2: LN 557	operation	920.918029785	161.51	161.7	DC	24.98
168718492	314227	6LAKESIDE	230.0	DVP	314218	6ELMONT	230.0	DVP	1	DVP_P1-2: LN 557	operation	740.719970703	122.25	122.5	DC	14.35

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPAC T
168718274	314236	6NRTHEST	230.0	DVP	314218	6ELMONT	230.0	DVP	1	DVP_P1-2: LN 557	operati on	678.679992676	156.54	156.67	DC	16.35
168718436	314241	6OLDCHRC	230.0	DVP	314242	6PEARSON	230.0	DVP	1	DVP_P1-2: LN 557	operati on	898.640014648	132.83	133.06	DC	17.07
168718470	314242	6PEARSON	230.0	DVP	314218	6ELMONT	230.0	DVP	1	DVP_P1-2: LN 557	operati on	898.640014648	126.99	127.22	DC	17.07
168718442	314253	6TURNER	230.0	DVP	314289	6DARBYTN	230.0	DVP	1	DVP_P1-2: LN 557	operati on	678.679992676	128.43	129.27	DC	12.78
168718500	314257	6WHITOA K	230.0	DVP	313811	6ELKO L286	230.0	DVP	1	DVP_P1-2: LN 557	operati on	749.179992676	116.02	116.78	DC	12.8
168718540	314258	6ELKO	230.0	DVP	313869	6PORTUGEE RD	230.0	DVP	1	DVP_P1-2: LN 557	operati on	898.640014648	105.85	106.48	DC	12.8
168718539	314295	6BIRDNECK	230.0	DVP	314490	6VA BCH	230.0	DVP	1	DVP_P1-2: LN 2026	operati on	799.940002441	107.88	108.57	DC	12.14
168718085	314296	6PENNIMAN	230.0	DVP	314415	6WALR209	230.0	DVP	1	DVP_P1-2: LN 567	operati on	441.799987793	240.21	242.11	DC	18.39
168718548	314311	6IRON282	230.0	DVP	314307	6HULL282	230.0	DVP	1	DVP_P1-2: LN 563	operati on	678.679992676	105.42	106.17	DC	11.36
168718523	314339	6SPRUNCE	230.0	DVP	314311	6IRON282	230.0	DVP	1	DVP_P1-2: LN 563	operati on	678.679992676	110.88	111.64	DC	11.36
168718081	314386	6KINGS M	230.0	DVP	314296	6PENNIMAN	230.0	DVP	1	DVP_P1-2: LN 567	operati on	441.799987793	244.17	246.07	DC	18.39
168718444	314390	6LIGH285	230.0	DVP	314214	6CHCKAH M	230.0	DVP	1	DVP_P1-2: LN 567	operati on	678.679992676	124.76	125.95	DC	17.64
168718309	314391	6LIGH209	230.0	DVP	314388	6LANEXA	230.0	DVP	1	DVP_P1-2: LN 567	operati on	663.640014648	141.44	142.7	DC	18.39
168718379	314413	6WALR285	230.0	DVP	314390	6LIGH285	230.0	DVP	1	DVP_P1-2: LN 567	operati on	678.679992676	134.95	136.14	DC	17.64
168718095	314415	6WALR209	230.0	DVP	314391	6LIGH209	230.0	DVP	1	DVP_P1-2: LN 567	operati on	441.799987793	224.07	225.97	DC	18.39
168718195	314466	6FENTRES	230.0	DVP	314508	6THRASHER	230.0	DVP	1	DVP_P1-2: LN 271-B	operati on	678.679992676	160.83	174.62	DC	93.56
168718197	314466	6FENTRES	230.0	DVP	314508	6THRASHER	230.0	DVP	1	Base Case	operati on	678.679992676	99.69	109.96	DC	69.7
168718276	314466	6FENTRES	230.0	DVP	934060	AD1-033 TAP	230.0	DVP	1	DVP_P1-2: LN 2128	operati on	678.679992676	133.24	143.74	DC	71.24
168718418	314481	6LANDSTN	230.0	DVP	314486	6LYNHAV N	230.0	DVP	1	314295 6BIRDNECK 230 941280 AE2-122 TAP 230 1	operati on	678.679992676	132.97	134.36	DC	20.92
168972524	314538	6SURREY	230.0	DVP	313896	6COLONIAL TR	230.0	DVP	1	DVP_P1-2: LN 240-A	operati on	678.679992676	108.42	109.46	DC	15.61
168972411	314550	6HICKORY	230.0	DVP	314466	6FENTRES	230.0	DVP	1	DVP_P1-2: LN 269_1-A	operati on	571.520019531	125.19	149.8	DC	140.63
163645808	314902	8CARSON	500.0	DVP	314914	8MDLTHA N	500.0	DVP	1	DVP_P1-2: LN 567	operati on	3218.56005859	147.15	148.08	DC	60.82
163645817	314902	8CARSON	500.0	DVP	314914	8MDLTHA N	500.0	DVP	1	Base Case	operati on	3218.56005859	121.0	121.31	DC	46.08
163645741	314903	8CHCKAH M	500.0	DVP	314908	8ELMONT	500.0	DVP	1	DVP_P1-2: LN 563	operati on	2442.12011719	197.4	197.49	DC	69.02
163645748	314903	8CHCKAH M	500.0	DVP	314908	8ELMONT	500.0	DVP	1	Base Case	operati on	2442.12011719	159.61	159.74	DC	55.52
168718111	314903	8CHCKAH M	500.0	DVP	314214	6CHCKAH M	230.0	DVP	1	DVP_P1-2: LN 557	operati on	934.923950195	236.13	236.42	DC	21.02
163645774	314914	8MDLTHA N	500.0	DVP	314918	8NO ANNA	500.0	DVP	1	DVP_P1-2: LN 574	operati on	2442.12011719	186.07	186.16	DC	62.54
163645784	314914	8MDLTHA N	500.0	DVP	314918	8NO ANNA	500.0	DVP	1	Base Case	operati on	2442.12011719	137.99	138.24	DC	46.13

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC D C	MW IMPAC T
168718233	314914	8MDLTHAN	500.0	DVP	314322	6MDLTHAN	230.0	DVP	1	DVP_P1-2: LN 576	operation	1058.15795898	170.93	171.19	DC	17.26
163645879	314918	8NOANNA	500.0	DVP	314934	8SPOTSYL	500.0	DVP	1	DVP_P1-2: LN 575-A	operation	3218.56005859	139.56	139.72	DC	37.87
163645904	314923	8SEPTA	500.0	DVP	314924	8SURREY	500.0	DVP	1	DVP_P1-2: LN 563	operation	2442.12011719	127.63	128.34	DC	38.0
163645840	314924	8SURREY	500.0	DVP	314903	8CHCKAHM	500.0	DVP	1	DVP_P1-2: LN 563	operation	2442.12011719	146.53	146.84	DC	65.39
163645847	314924	8SURREY	500.0	DVP	314903	8CHCKAHM	500.0	DVP	1	Base Case	operation	2442.12011719	103.25	103.7	DC	51.62
163645912	314927	8YADKIN	500.0	DVP	314928	8SUFFOLK	500.0	DVP	1	DVP_P1-2: LN 579	operation	2442.12011719	126.66	128.8	DC	124.0
163645960	314928	8SUFFOLK	500.0	DVP	314924	8SURREY	500.0	DVP	1	DVP_P1-2: LN 579	operation	2442.12011719	106.51	108.85	DC	72.61
163645820	314934	8SPOTSYL	500.0	DVP	314916	8MORRSVL	500.0	DVP	1	DVP_P1-2: LN 575-A	operation	3218.56005859	146.76	146.94	DC	36.93
168718257	934060	AD1-033 TAP	230.0	DVP	314481	6LANDSTN	230.0	DVP	1	DVP_P1-2: LN 2128	operation	678.679992676	140.43	150.93	DC	71.24
169639672	941280	AE2-122 TAP	230.0	DVP	314295	6BIRDNECK	230.0	DVP	1	DVP_P1-2: LN 2026	operation	749.179992676	119.02	119.75	DC	12.14
169639751	942550	AE2-270 TAP	230.0	DVP	935160	AD1-151 TAP	230.0	DVP	2	DVP_P1-2: LN 2197	operation	678.679992676	102.7	103.74	DC	15.51
169935085	963820	AG1-235 TAP	230.0	DVP	314466	6FENTRES	230.0	DVP	1	314550 6HICKORY 230 937220 AD2-160 TAP 230 1	operation	571.520019531	121.78	155.13	DC	190.64

11.5 System Reinforcements - Summer Peak Load Flow - Primary POI

ID	Idx	Facility	Upgrade Description	Cost
163211531,163 211532	10	6LANDSTN 230.0 kV - 6LYNHAVN 230.0 kV Ckt 1	<u>DVP</u> dom-116 (1469) : Rebuild 5.88 miles of 230 kV Line 2026 from Landstown to Lynnhaven with 2-636 ACSR. Project Type : FAC Cost : \$14,700,000 Time Estimate : 30-36 Months	\$14,700,000
168718087,168 718088	7	6PENNIMAN 230.0 kV - 6WALR209 230.0 kV Ckt 1	<u>DVP</u> b3057 (1328) : PJM Baseline Upgrade b3057. Rebuild 6.1 miles of Waller-Skiff's 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 #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 Cost : \$0 Time Estimate : N/A Months	\$0
168718084,168 718083	8	6KINGS M 230.0 kV - 6PENNIMAN 230.0 kV Ckt 1		
168718080,168 718079	2	6SKIFF CREEK 230.0 kV - 6KINGS M 230.0 kV Ckt 1	<u>DVP</u> n6443 (1410) : 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
168718198	1	6FENTRESS 230.0 kV - 6THRASHER 230.0 kV Ckt 1	<u>DVP</u> dom-213 (1600) : 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
168718362	3	6CHCKAHM 230.0 kV - 6ELKO 230.0 kV Ckt 1	<u>DVP</u> dom-293 (1680) : Rebuild 3.62 mi miles of 230 kV Line 2091 from Chickahominy to Elko with 2-636 ACSR 150 C. Project Type : FAC Cost : \$9,050,000 Time Estimate : 30-36 Months	\$9,050,000

ID	Idx	Facility	Upgrade Description	Cost
168718112	14	8CHCKAHM 500.0 kV - 6CHCKAHM 230.0 kV Ckt 1	<u>DVP</u> dom-022 (1357) : Add additional 500/230 kV transformer at Chickahominy substation. Project Type : CON Cost : \$22,000,000 Time Estimate : 16-18 Months	\$22,000,000
163645553,163 645811,163645 554,163645812	12	8CARSON 500.0 kV - 8MDLTHAN 500.0 kV Ckt 1	<u>DVP</u> dom-183 (1521) : Build new 500 kV Line from Rawlings to Morrisville Substation 110 miles Project Type : CON Cost : \$400,000,000 Time Estimate : 60-72 Months n6172 (1569) : Rebuild 37.41 miles of 500 kV Line 563 from Carson to Midlothian with 3-1351.5 125C ACSR. Project Type : FAC Cost : \$115,971,000 Time Estimate : 48-60 Months	\$743,667,000
163645549,163 645548,163645 743,163645752, 163645744	13	8CHCKAHM 500.0 kV - 8ELMONT 500.0 kV Ckt 1	n6207 (1579) : 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	
163645558,163 645559,163645 846,163645842	19	8SURRY 500.0 kV - 8CHCKAHM 500.0 kV Ckt 1	n6324 (1378) : Replace Terminal Equipment at Surry and Chickahominy Substations Project Type : FAC Cost : \$4,000,000 Time Estimate : 16-18 Months dom-258 (1645) : Rebuild 44.44 miles of 500 kV Line 567 from Surry to Chickahominy with 3-1351.5 ACSR. Project Type : FAC Cost : \$137,764,000 Time Estimate : 48-60 Months	
163645710,163 645720,163645 713	15	8ELMONT 500.0 kV - 8LADYSMITH 500.0 kV Ckt 1	b3020 (1323) : PJM baseline upgrade b3020: Rebuild 500kV Line #574 Ladysmith to Elmont - 26.2 miles long. The baseline project has an projected in-service date of 12/31/2022. Project Type : FAC Cost : \$0	

ID	Idx	Facility	Upgrade Description	Cost
163645785,163 645775,163645 778	16	8MDLTHAN 500.0 kV - 8NO ANNA 500.0 kV Ckt 1	<u>DVP</u> n5609 (1535) : 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 (1540) : Replace Wave traps at Midlothian and North Anna 500kV substations Project Type : FAC Cost : \$300,000 Time Estimate : 16-18 Months	\$127,803,000
163645706,163 645703	11	6EVERETS 230.0 kV - 6GREENVILE T 230.0 kV Ckt 1	<u>DVP</u> dom-173 (1512) : 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
163646432	20	8YADKIN 500.0 kV - 8SUFFOLK 500.0 kV Ckt 1	<u>DVP</u> dom-182 (1520) : Replace Wave Trap at Suffolk Project Type : FAC Cost : \$300,000 Time Estimate : 43817.0 Months	\$300,000
168718097,168 718098	9	6WALR209 230.0 kV - 6LIGH209 230.0 kV Ckt 1	<u>DVP</u> b3056 (1327) : PJM Baseline Upgrade b3056. Partial Rebuild 230 kV Line #2113 Waller to Lightfoot. The baseline project has an projected in-service date of 12/30/2024. Project Type : FAC Cost : \$0 Time Estimate : N/A Months	\$0
168718268	5	6ELMONT 230.0 kV - 8ELMONT 500.0 kV Ckt 1	<u>DVP</u> n6127 (1547) : Add additional 500/230 kV transformer at Elmont Substation Project Type : CON Cost : \$22,000,000 Time Estimate : 16-18 Months	\$22,000,000
168718240	4	6ELMONT 230.0 kV - 8ELMONT 500.0 kV Ckt 2		
163645646	18	8SEPTA 500.0 kV - 8SURRY 500.0 kV Ckt 1	<u>DVP</u> dom-380 (1767) : Rebuild 11.46 miles of 500 kV Line 578 from Septa to Surry with 3-1351.5 113C ACSR. Replace wave traps at both terminals. Project Type : FAC Cost : \$36,126,000 Time Estimate : 48-60 Months	\$36,126,000

ID	Idx	Facility	Upgrade Description	Cost
168718275	6	6NRTHEST 230.0 kV - 6ELMONT 230.0 kV Ckt 1	<u>DVP</u> dom-156 (1494) : Rebuild 12.98 miles of 230 kV Line 283 from Elmont to Northeast with 2-636 ACSR Project Type : FAC Cost : \$19,470,000 Time Estimate : 30-36 Months	\$19,470,000
163645598	17	8NO ANNA 500.0 kV - 8SPOTSYL 500.0 kV Ckt 1	<u>DVP</u> n6132 (1550) : Rebuild 14.02 miles of 500 kV Line 573 from North Anna to Spotsylvania with 3-1351.5 113C ACSR. Project Type : FAC Cost : \$43,462,000 Time Estimate : 48-60 Months	\$43,462,000
			TOTAL COST	\$1,081,723,000

11.6 Flow Gate Details - Primary POI

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

11.6.1 Index 1

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168718198	314466	6FENTRES	DVP	314508	6THRASHER	DVP	1	DVP_P1-2: LN 271-B	single	678.68	93.14	101.41	DC	56.14

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.5534	80/20	0.5534
314638	6ELIZ CT	0.3235	80/20	0.3235
314639	6TANGLEW	0.5109	80/20	0.5109
314643	3O INLET	0.8183	80/20	0.8183
315292	1DOMTR78	0.4777	80/20	0.4777
315293	1DOMTR9	2.4708	80/20	2.4708
315294	1DOMTR10	3.0280	80/20	3.0280
315603	6AA1-139SOLA	4.6267	80/20	4.6267
315605	6W1-029WIND	0.8351	80/20	0.8351
315611	6Z1-036WIND	0.8556	80/20	0.8556
315614	AA2-178 C	0.8576	80/20	0.8576
933731	AC2-196 C	0.6907	80/20	0.6907
933991	AD1-023 C	4.5353	80/20	4.5353
934061	AD1-033 C	18.3872	80/20	18.3872
934521	AD1-076 C	23.1513	80/20	23.1513
937221	AD2-160 C O1	12.8366	80/20	12.8366
938535	AE1-072 C	34.9500	80/20	34.9500
940491	AE2-034 C	4.0769	80/20	4.0769
941501	AE2-147 C	12.2148	80/20	12.2148
942401	AE2-253 C	13.5019	80/20	13.5019
944581	AF1-123 C O1	37.3885	80/20	37.3885
944591	AF1-124 C O1	37.3885	80/20	37.3885
944601	AF1-125 C O1	37.3885	80/20	37.3885
944871	AF1-152 C	4.0716	80/20	4.0716
945711	AF1-236 C O1	44.6328	80/20	44.6328
957531	AF2-047 C	9.6876	80/20	9.6876
957871	AF2-081 C	20.8673	80/20	20.8673
963821	AG1-235 C O1	56.1384	80/20	56.1384
964951	AG1-359 O1	65.6685	80/20	65.6685
965181	AG1-383 C	6.4980	80/20	6.4980
965631	AG1-431	25.8400	80/20	25.8400
966931	AG1-431A	19.4140	80/20	19.4140
WEC	WEC	0.0454	Confirmed LTF	0.0454
LGEE	LGEE	0.0924	Confirmed LTF	0.0924
CPL	CPL	0.3795	Confirmed LTF	0.3795
CBM-W2	CBM-W2	1.7562	Confirmed LTF	1.7562
NY	NY	0.0083	Confirmed LTF	0.0083
TVA	TVA	0.3164	Confirmed LTF	0.3164
SIGE	SIGE	0.0188	Confirmed LTF	0.0188
CBM-S2	CBM-S2	4.3639	Confirmed LTF	4.3639
CBM-S1	CBM-S1	0.0806	Confirmed LTF	0.0806

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
MEC	MEC	0.2574	Confirmed LTF	0.2574
LAGN	LAGN	0.3955	Confirmed LTF	0.3955
CBM-W1	CBM-W1	1.9488	Confirmed LTF	1.9488

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
168718079	314209	6SKIIF CREEK	DVP	314386	6KINGS M	DVP	1	DVP_P1-2: LN 567	single	441.8	159.91	162.41	DC	11.03

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.1610	80/20	0.1610
314295	6BIRDNECK	0.0194	80/20	0.0194
314421	6WINCHST	0.1065	80/20	0.1065
314491	3PENDLTN	0.1449	80/20	0.1449
314507	3THOMPSN	0.1454	80/20	0.1454
314638	6ELIZ CT	0.0941	80/20	0.0941
314639	6TANGLEW	0.1715	80/20	0.1715
314643	3O INLET	0.1897	80/20	0.1897
315092	1YORKTN3	19.6878	80/20	19.6878
315098	1CHESPKA	0.1923	80/20	0.1923
315099	1CHESPKB (Deactivation : 31/05/2019)	1.3332	80/20	1.3332
315108	1ELIZAR1	1.4176	80/20	1.4176
315109	1ELIZAR2	1.3929	80/20	1.3929
315110	1ELIZAR3	1.4357	80/20	1.4357
315116	1SURRY 1	9.3889	80/20	9.3889
315120	1GRAVEL4	0.9660	80/20	0.9660
315122	1GRAVEL6	0.9649	80/20	0.9649
315233	1SURRY 2	14.2114	80/20	14.2114
315260	1GOSPORTA	0.1535	80/20	0.1535
315261	1GOSPORTB	0.1961	80/20	0.1961
315262	1GOSPORTC	0.1664	80/20	0.1664
315293	1DOMTR9	2.0576	Adder	2.42
315294	1DOMTR10	2.5215	Adder	2.97
315603	6AA1-139SOLA	1.0029	80/20	1.0029
315605	6W1-029WIND	0.4711	80/20	0.4711
315611	6Z1-036WIND	0.4492	80/20	0.4492
316103	AB2-015 C	2.6142	Adder	3.08
316140	AB2-099 C (Suspended)	0.1612	Adder	0.19
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.1324	80/20	0.1324
316258	AE1-162 C	0.1417	80/20	0.1417
925863	AC1-065 C	-5.0524	Adder	-5.94
926661	AC1-147 C	0.1626	80/20	0.1626
926754	AC1-161 C	15.4929	80/20	15.4929
926784	AC1-164 C	-14.7667	Adder	-17.37
932044	AC2-012 C	4.6632	80/20	4.6632
933294	AC2-141 C	15.4929	80/20	15.4929
933731	AC2-196 C	0.1297	80/20	0.1297
933991	AD1-023 C	4.0400	Adder	4.75
934061	AD1-033 C	3.4520	80/20	3.4520
934141	AD1-041 C	-3.3367	Adder	-3.93

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934521	AD1-076 C	17.0999	Adder	20.12
935111	AD1-144 C	0.1311	80/20	0.1311
936401	AD2-051 C O1	2.5103	Adder	2.95
936661	AD2-085 C	0.9742	Adder	1.15
937221	AD2-160 C O1	2.6630	80/20	2.6630
938535	AE1-072 C	7.9537	80/20	7.9537
938771	AE1-103 C	1.1504	Adder	1.35
939414	AE1-173_C1	9.2677	Adder	10.9
939415	AE1-173_C2	7.9438	Adder	9.35
939416	AE1-173_C3	9.2677	Adder	10.9
939431	AE1-175 C	1.2929	80/20	1.2929
940231	AE2-005 C	-0.9186	Adder	-1.08
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	79.4303	80/20	79.4303
940491	AE2-034 C	2.3762	Adder	2.8
940641	AE2-051 C O1	4.5013	Adder	5.3
940891	AE2-078 C	1.0890	80/20	1.0890
940901	AE2-079 C	1.0890	80/20	1.0890
941101	AE2-104 C O1	1.3615	80/20	1.3615
941281	AE2-122 C O1	13.0346	80/20	13.0346
941291	AE2-123 C O1	13.3955	80/20	13.3955
941301	AE2-124 C O1	12.1844	80/20	12.1844
941501	AE2-147 C	6.8913	80/20	6.8913
941591	AE2-156 O1	8.1940	80/20	8.1940
942131	AE2-225 C	0.9659	80/20	0.9659
942171	AE2-229 C	0.7244	80/20	0.7244
942341	AE2-247 C	0.4210	Adder	0.5
942401	AE2-253 C	2.8011	80/20	2.8011
943171	AE2-346 C	0.3868	Adder	0.46
943461	AF1-017 C	0.3809	Adder	0.45
943611	AF1-032 C	0.7888	80/20	0.7888
943621	AF1-033 C	1.0890	80/20	1.0890
944581	AF1-123 C O1	22.4486	80/20	22.4486
944591	AF1-124 C O1	22.4486	80/20	22.4486
944601	AF1-125 C O1	22.4486	80/20	22.4486
944871	AF1-152 C	2.2971	80/20	2.2971
945361	AF1-201 C O1	6.4395	80/20	6.4395
945711	AF1-236 C O1	26.0136	Adder	30.6
957491	AF2-043 C	0.9659	80/20	0.9659
957521	AF2-046 C	4.6173	Adder	5.43
957531	AF2-047 C	5.6463	Adder	6.64
957631	AF2-057	1.6362	80/20	1.6362
957821	AF2-076 C	2.3502	80/20	2.3502
957871	AF2-081 C	4.5231	80/20	4.5231
958161	AF2-110 C	0.5613	80/20	0.5613
959511	AF2-242 C	2.0146	Adder	2.37
961091	AF2-400 C	0.1412	Adder	0.17
961611	AG1-000B C	2.5440	Adder	5.65
961681	AG1-008 C	2.4521	Adder	5.44
961851	AG1-027 C	3.0032	Adder	6.67
961931	AG1-036 C	0.1981	Adder	0.44
961941	AG1-037 C	0.0732	Adder	0.16

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.9900	80/20	0.9900
962331	AG1-082 C	0.2929	Adder	0.65
962341	AG1-083 C	0.2929	Adder	0.65
962351	AG1-084 C	0.2558	Adder	0.57
962361	AG1-085 C	0.2558	Adder	0.57
962961	AG1-145 C	1.1665	80/20	1.1665
963291	AG1-178 C O1	9.0334	Adder	20.05
963351	AG1-184 O1	4.8667	Adder	10.8
963821	AG1-235 C O1	11.0336	80/20	11.0336
964491	AG1-312 C O1	2.8942	Adder	6.42
964801	AG1-343 C	0.8615	Adder	1.91
964951	AG1-359 O1	12.3330	80/20	12.3330
965001	AG1-364 C O1	3.2768	80/20	3.2768
965181	AG1-383 C	1.2629	80/20	1.2629
965291	AG1-394 C	0.2955	Adder	0.66
965631	AG1-431	7.9821	Adder	17.72
965691	AG1-437 C O1	1.6202	Adder	3.6
965701	AG1-438 C O1	1.6202	Adder	3.6
965741	AG1-442 O1	0.9451	Adder	2.1
965751	AG1-443 O1	0.9451	Adder	2.1
966491	AG1-518 O1	4.0245	80/20	4.0245
966611	AG1-531 C	4.0435	80/20	4.0435
966801	AG1-551 C	0.3172	Adder	0.7
966931	AG1-431A	5.9971	Adder	13.31
WEC	WEC	0.1241	Confirmed LTF	0.1241
LGEE	LGEE	0.2582	Confirmed LTF	0.2582
CPL	CPL	1.8905	Confirmed LTF	1.8905
CBM-W2	CBM-W2	6.5139	Confirmed LTF	6.5139
NY	NY	0.3711	Confirmed LTF	0.3711
TVA	TVA	1.2908	Confirmed LTF	1.2908
SIGE	SIGE	0.1260	Confirmed LTF	0.1260
CBM-S2	CBM-S2	21.8196	Confirmed LTF	21.8196
CBM-S1	CBM-S1	0.3150	Confirmed LTF	0.3150
MEC	MEC	0.8088	Confirmed LTF	0.8088
LAGN	LAGN	1.6048	Confirmed LTF	1.6048
CBM-W1	CBM-W1	5.0332	Confirmed LTF	5.0332

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
168718362	314214	6CHCKAHM	DVP	314258	6ELKO	DVP	1	DVP_P1-2: LN 557	single	678.68	107.08	107.47	DC	7.68

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314184	3SHACKLE	0.3733	80/20	0.3733
314190	6WESTMOR	0.1731	80/20	0.1731
314241	6OLDCHRC	0.3007	80/20	0.3007
314243	3PROV 92	0.2184	80/20	0.2184
314375	6CORRCTN	0.3039	80/20	0.3039
314421	6WINCHST	0.0611	80/20	0.0611
315034	1NORNECKC1	0.3948	80/20	0.3948
315035	1NORNECKC2	0.3805	80/20	0.3805
315060	1CHESTF5 (Deactivation : 31/05/2023)	26.3795	80/20	26.3795
315061	1CHESTG7	1.5542	80/20	1.5542
315062	1CHESTS7	0.7135	80/20	0.7135
315063	1CHESTG8	1.5292	80/20	1.5292
315064	1CHESTS8	0.7872	80/20	0.7872
315092	1YORKTN3	11.2578	80/20	11.2578
315108	1ELIZAR1	0.9964	80/20	0.9964
315109	1ELIZAR2	0.9791	80/20	0.9791
315110	1ELIZAR3	1.0092	80/20	1.0092
315233	1SURRY 2	9.9130	80/20	9.9130
316077	AC2-138 C	0.0999	80/20	0.0999
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	32.1346	80/20	32.1346
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	32.1346	80/20	32.1346
316114	AB2-068 ST (Withdrawn : 01/11/2021)	55.6698	80/20	55.6698
316134	AC1-107 G1	60.3429	80/20	60.3429
316135	AC1-107 G2	60.3429	80/20	60.3429
316136	AC1-107 G3	60.3542	80/20	60.3542
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.0900	80/20	0.0900
316156	AD2-030 C	0.2440	80/20	0.2440
925863	AC1-065 C	4.9445	80/20	4.9445
926754	AC1-161 C	10.6925	80/20	10.6925
926784	AC1-164 C	37.9577	80/20	37.9577
932044	AC2-012 C	2.7912	Adder	3.28
932501	AC2-070 C (Withdrawn : 01/22/2021)	0.0988	80/20	0.0988
933294	AC2-141 C	10.6925	80/20	10.6925
934061	AD1-033 C	2.0456	Adder	2.41
934141	AD1-041 C	3.5457	80/20	3.5457
934391	AD1-063 C	0.1866	80/20	0.1866

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
935111	AD1-144 C	0.0891	80/20	0.0891
936581	AD2-073 C	1.2265	80/20	1.2265
936591	AD2-074 C	3.5039	80/20	3.5039
936761	AD2-097 C	-0.8277	Adder	-0.97
937221	AD2-160 C O1	1.5735	Adder	1.85
938961	AE1-124 C	0.1461	80/20	0.1461
939245	AE1-155 C	8.0286	80/20	8.0286
939431	AE1-175 C	1.5883	80/20	1.5883
939611	AE1-191 C	7.0914	80/20	7.0914
940231	AE2-005 C	0.8990	80/20	0.8990
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	47.4724	Adder	55.85
940551	AE2-041	5.2572	80/20	5.2572
940891	AE2-078 C	0.7966	80/20	0.7966
940901	AE2-079 C	0.7966	80/20	0.7966
941281	AE2-122 C O1	7.7500	Adder	9.12
941291	AE2-123 C O1	7.9646	Adder	9.37
941301	AE2-124 C O1	7.2403	Adder	8.52
941581	AE2-155 C	0.0376	80/20	0.0376
941591	AE2-156 O1	4.9028	Adder	5.77
942401	AE2-253 C	1.6551	Adder	1.95
943431	AF1-014 C	0.8517	80/20	0.8517
943471	AF1-018	5.2572	80/20	5.2572
943621	AF1-033 C	0.7966	80/20	0.7966
943741	AF1-042 C	1.8335	80/20	1.8335
944491	AF1-114 C	2.5977	80/20	2.5977
944581	AF1-123 C O1	15.5926	80/20	15.5926
944591	AF1-124 C O1	15.5926	80/20	15.5926
944601	AF1-125 C O1	15.5926	80/20	15.5926
944631	AF1-128 O1	23.1311	80/20	23.1311
945361	AF1-201 C O1	8.9253	80/20	8.9253
945831	AF1-248	0.0333	80/20	0.0333
957601	AF2-054 C	1.4098	80/20	1.4098
957631	AF2-057	0.9794	Adder	1.15
957831	AF2-077 C	1.2436	80/20	1.2436
957871	AF2-081 C	2.6699	Adder	3.14
957971	AF2-091 C	0.8832	80/20	0.8832
958261	AF2-120 C	3.9320	80/20	3.9320
961951	AG1-038 C	2.0265	80/20	2.0265
962131	AG1-057	2.6286	80/20	2.6286
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.7242	80/20	0.7242
962531	AG1-102 C	0.6384	80/20	0.6384
962861	AG1-135 C	3.8279	80/20	3.8279
962961	AG1-145 C	1.4330	80/20	1.4330
962971	AG1-146 C	1.9854	80/20	1.9854
962981	AG1-147 C	4.6326	80/20	4.6326
963611	AG1-210 C	0.4020	80/20	0.4020
963821	AG1-235 C O1	3.4599	Adder	7.68
964021	AG1-256 C	0.7813	80/20	0.7813
964211	AG1-282 C	1.2965	80/20	1.2965
964951	AG1-359 O1	3.8714	Adder	8.59
965001	AG1-364 C O1	1.0392	Adder	2.31

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965181	AG1-383 C	0.3961	Adder	0.88
965231	AG1-388 C	1.2965	80/20	1.2965
966611	AG1-531 C	2.5801	80/20	2.5801
966661	AG1-536 C	3.3805	80/20	3.3805
WEC	WEC	0.0652	Confirmed LTF	0.0652
LGEE	LGEE	0.1345	Confirmed LTF	0.1345
CPLE	CPLE	1.1657	Confirmed LTF	1.1657
CBM-W2	CBM-W2	3.6915	Confirmed LTF	3.6915
NY	NY	0.2052	Confirmed LTF	0.2052
TVA	TVA	0.7448	Confirmed LTF	0.7448
SIGE	SIGE	0.0681	Confirmed LTF	0.0681
CBM-S2	CBM-S2	13.2588	Confirmed LTF	13.2588
CBM-S1	CBM-S1	0.1801	Confirmed LTF	0.1801
MEC	MEC	0.4402	Confirmed LTF	0.4402
LAGN	LAGN	0.9275	Confirmed LTF	0.9275
CBM-W1	CBM-W1	2.6077	Confirmed LTF	2.6077

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
168718240	314218	6ELMONT	DVP	314908	8ELMONT	DVP	2	DVP_P1-2: LN 557	single	879.84	155.04	155.7	DC	14.92

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314229	6MT RD221	0.1393	80/20	0.1393
314236	6NRTHEST	0.1832	80/20	0.1832
314241	6OLDCHRC	0.8548	80/20	0.8548
314250	6ROCKVILLE	0.3145	80/20	0.3145
314309	6IRON208	0.3968	80/20	0.3968
315043	1FOUR RIVERA	3.0873	80/20	3.0873
315044	1FOUR RIVERB	3.0873	80/20	3.0873
315045	1FOUR RIVERC	3.7734	80/20	3.7734
315046	1FOUR RIVERD	3.0873	80/20	3.0873
315047	1FOUR RIVERE	3.0873	80/20	3.0873
315048	1FOUR RIVERF	3.7734	80/20	3.7734
315050	1FOURRIVERG	4.6210	80/20	4.6210
315051	1AA1-145 CT1	4.8597	80/20	4.8597
315052	1AA1-145 CT2	4.8597	80/20	4.8597
315058	1CHESTF3 (Deactivation : 13/12/2018)	16.7010	80/20	16.7010
315059	1CHESTF4 (Deactivation : 13/12/2018)	27.0723	80/20	27.0723
315060	1CHESTF5 (Deactivation : 31/05/2023)	56.0665	80/20	56.0665
315061	1CHESTG7	3.3032	80/20	3.3032
315062	1CHESTS7	1.5164	80/20	1.5164
315063	1CHESTG8	3.2501	80/20	3.2501
315064	1CHESTS8	1.6731	80/20	1.6731
315065	1CHESTF6 (Deactivation : 31/05/2023)	91.6222	Adder	107.79
315067	1DARBY 1	2.4661	80/20	2.4661
315068	1DARBY 2	2.4690	80/20	2.4690
315069	1DARBY 3	2.4776	80/20	2.4776
315070	1DARBY 4	2.4805	80/20	2.4805
315074	1HOPCGN1 (Deactivation : 25/06/2019)	0.0129	Adder	0.02
315075	1HOPCGN2 (Deactivation : 25/06/2019)	0.0129	Adder	0.02
315083	1SPRUNCA (Deactivation : 12/01/2021)	7.8772	Adder	9.27
315084	1SPRUNCB (Deactivation : 12/01/2021)	7.8772	Adder	9.27
316075	AC2-137 C	0.2994	80/20	0.2994
316083	AB2-161 C	2.1134	Adder	2.49
316103	AB2-015 C	4.3635	Adder	5.13
316108	AB2-160 C	3.7946	Adder	4.46

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	31.7658	Adder	37.37
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	31.7658	Adder	37.37
316114	AB2-068 ST (Withdrawn : 01/11/2021)	55.0309	Adder	64.74
316132	AB2-190 C	13.4527	Adder	15.83
316134	AC1-107 G1	59.6504	Adder	70.18
316135	AC1-107 G2	59.6504	Adder	70.18
316136	AC1-107 G3	59.6616	Adder	70.19
925863	AC1-065 C	4.9550	Adder	5.83
926754	AC1-161 C	15.6838	Adder	18.45
926784	AC1-164 C	29.3625	Adder	34.54
927044	AC1-191 C	11.0570	80/20	11.0570
932044	AC2-012 C	5.4501	Adder	6.41
932501	AC2-070 C (Withdrawn : 01/22/2021)	0.2809	80/20	0.2809
932581	AC2-078 C O1	2.5477	Adder	3.0
932591	AC2-079 C O1	3.3547	Adder	3.95
933294	AC2-141 C	15.6838	Adder	18.45
933991	AD1-023 C	6.3205	Adder	7.44
934014	AD1-025 C	11.0985	Adder	13.06
934061	AD1-033 C	3.9598	Adder	4.66
934141	AD1-041 C	3.5032	Adder	4.12
934521	AD1-076 C	26.3163	Adder	30.96
934575	AD1-082 C	4.8163	Adder	5.67
934781	AD1-105 C	7.4723	80/20	7.4723
935164	AD1-151 C	10.8102	Adder	12.72
936041	AD2-007 C	0.5302	Adder	0.62
936051	AD2-008 C	1.9322	Adder	2.27
936151	AD2-021	0.0341	80/20	0.0341
936581	AD2-073 C	1.1747	Adder	1.38
936591	AD2-074 C	3.3545	Adder	3.95
936661	AD2-085 C	1.9427	Adder	2.29
936761	AD2-097 C	1.4939	Adder	1.76
937221	AD2-160 C O1	3.0701	Adder	3.61
938535	AE1-072 C	9.2178	Adder	10.84
938634	AE1-085 C	5.6087	Adder	6.6
938771	AE1-103 C	1.8803	Adder	2.21
939195	AE1-149 C	6.8610	Adder	8.07
939245	AE1-155 C	7.6706	Adder	9.02
939414	AE1-173_C1	14.0087	Adder	16.48
939415	AE1-173_C2	12.0074	Adder	14.13
939416	AE1-173_C3	14.0087	Adder	16.48
939431	AE1-175 C	1.5371	Adder	1.81
939611	AE1-191 C	7.0064	Adder	8.24
939755	AE1-206 C	33.2373	80/20	33.2373
940061	AE2-000BC O1	6.6229	Adder	7.79
940231	AE2-005 C	0.9009	Adder	1.06
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	92.3294	Adder	108.62
940431	AE2-027 C O1	9.4713	Adder	11.14
940481	AE2-033 C	8.3782	Adder	9.86

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940491	AE2-034 C	3.5500	Adder	4.18
940541	AE2-040	1.4982	Adder	1.76
940551	AE2-041	4.7631	Adder	5.6
940651	AE2-052	2.2870	Adder	2.69
940891	AE2-078 C	1.4322	Adder	1.68
940901	AE2-079 C	1.4322	Adder	1.68
941101	AE2-104 C O1	1.8038	Adder	2.12
941281	AE2-122 C O1	15.0624	Adder	17.72
941291	AE2-123 C O1	15.4795	Adder	18.21
941301	AE2-124 C O1	14.0640	Adder	16.55
941501	AE2-147 C	8.1916	Adder	9.64
941581	AE2-155 C	0.1069	80/20	0.1069
941591	AE2-156 O1	9.5557	Adder	11.24
942001	AE2-212 C	1.5155	Adder	1.78
942131	AE2-225 C	1.1264	Adder	1.33
942151	AE2-227 C	2.0256	80/20	2.0256
942161	AE2-228 C	1.5941	Adder	1.88
942171	AE2-229 C	0.8448	Adder	0.99
942191	AE2-231 C O1	2.2128	Adder	2.6
942341	AE2-247 C	0.8426	Adder	0.99
942371	AE2-250 C O1	6.7404	Adder	7.93
942401	AE2-253 C	3.2293	Adder	3.8
942471	AE2-260 C O1	7.1645	Adder	8.43
942551	AE2-270	17.8270	Adder	20.97
943431	AF1-014 C	0.8535	Adder	1.0
943461	AF1-017 C	0.7623	Adder	0.9
943471	AF1-018	4.7631	Adder	5.6
943601	AF1-031 C	9.9823	80/20	9.9823
943611	AF1-032 C	0.9199	Adder	1.08
943621	AF1-033 C	1.4322	Adder	1.68
943741	AF1-042 C	1.7552	Adder	2.06
943991	AF1-067 C	4.9344	80/20	4.9344
944581	AF1-123 C O1	25.0863	Adder	29.51
944591	AF1-124 C O1	25.0863	Adder	29.51
944601	AF1-125 C O1	25.0863	Adder	29.51
944631	AF1-128 O1	49.1623	80/20	49.1623
944641	AF1-129	76.8810	Adder	90.45
944871	AF1-152 C	2.7305	Adder	3.21
945361	AF1-201 C O1	9.8494	Adder	11.59
945711	AF1-236 C O1	38.8641	Adder	45.72
946001	AF1-265	29.1555	80/20	29.1555
946011	AF1-266	7.0132	Adder	8.25
946261	AF1-291 C	1.5947	Adder	1.88
957411	AF2-035 C	4.0233	Adder	4.73
957491	AF2-043 C	1.1264	Adder	1.33
957531	AF2-047 C	8.4355	Adder	9.92
957601	AF2-054 C	1.3669	Adder	1.61
957631	AF2-057	1.9123	Adder	2.25
957711	AF2-065 C	9.0918	Adder	10.7
957821	AF2-076 C	2.7764	Adder	3.27
957831	AF2-077 C	1.3275	Adder	1.56
957871	AF2-081 C	5.2284	Adder	6.15

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957911	AF2-085	2.0584	Adder	2.42
958141	AF2-108	1.1888	Adder	1.4
958161	AF2-110 C	0.7436	Adder	0.87
958261	AF2-120 C	3.7568	Adder	4.42
959641	AF2-255 C	0.5064	80/20	0.5064
959651	AF2-256 C	0.3985	Adder	0.47
959661	AF2-257 C	0.3987	Adder	0.47
959671	AF2-258 C	0.3789	Adder	0.45
959681	AF2-259 C	1.7832	Adder	2.1
960091	AF2-300 C	1.0058	Adder	1.18
961091	AF2-400 C	0.2356	Adder	0.28
961611	AG1-000B C	5.2231	Adder	11.59
961711	AG1-011	9.9910	Adder	22.18
961851	AG1-027 C	4.7644	Adder	10.58
961951	AG1-038 C	1.0282	Adder	2.28
962131	AG1-057	1.2622	Adder	2.8
962191	AG1-064 C	1.4123	80/20	1.4123
962201	AG1-065 C	1.4123	80/20	1.4123
962271	AG1-075 C O1	6.1657	Adder	13.69
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.6901	Adder	1.53
962531	AG1-102 C	0.3612	Adder	0.8
962851	AG1-134 C	9.8688	80/20	9.8688
962861	AG1-135 C	1.9402	Adder	4.31
962961	AG1-145 C	0.7351	Adder	1.63
962971	AG1-146 C	1.0114	Adder	2.25
962981	AG1-147 C	2.3598	Adder	5.24
963221	AG1-171 C	0.7639	Adder	1.7
963231	AG1-172 C	0.7639	Adder	1.7
963241	AG1-173 C	0.7639	Adder	1.7
963251	AG1-174 C	0.7639	Adder	1.7
963261	AG1-175 C	0.7639	Adder	1.7
963291	AG1-178 C O1	8.9012	Adder	19.76
963341	AG1-183 C	1.5779	Adder	3.5
963351	AG1-184 O1	7.5174	Adder	16.69
963381	AG1-187	0.6433	Adder	1.43
963611	AG1-210 C	0.2021	Adder	0.45
963621	AG1-213 C	0.1777	Adder	0.39
963821	AG1-235 C O1	6.7197	Adder	14.92
964021	AG1-256 C	0.3910	Adder	0.87
964211	AG1-282 C	0.6321	Adder	1.4
964801	AG1-343 C	1.5171	Adder	3.37
964951	AG1-359 O1	7.4887	Adder	16.62
965001	AG1-364 C O1	2.0260	Adder	4.5
965181	AG1-383 C	0.7686	Adder	1.71
965231	AG1-388 C	0.6321	Adder	1.4
965291	AG1-394 C	0.5215	Adder	1.16
965631	AG1-431	11.9252	Adder	26.47
966491	AG1-518 O1	2.4874	Adder	5.52
966611	AG1-531 C	2.0603	Adder	4.57
966661	AG1-536 C	1.7118	Adder	3.8
966711	AG1-541 C	1.4216	Adder	3.16

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966731	AG1-544 C	2.3216	Adder	5.15
966741	AG1-545 C	0.7727	Adder	1.72
966871	AG1-558 C	2.4847	80/20	2.4847
966881	AG1-559 C	0.5331	Adder	1.18
966931	AG1-431A	8.9595	Adder	19.89
WEC	WEC	0.0702	Confirmed LTF	0.0702
LGEE	LGEE	0.1502	Confirmed LTF	0.1502
CPLE	CPLE	3.2692	Confirmed LTF	3.2692
CBM-W2	CBM-W2	7.4816	Confirmed LTF	7.4816
NY	NY	0.7001	Confirmed LTF	0.7001
TVA	TVA	1.6660	Confirmed LTF	1.6660
SIGE	SIGE	0.1751	Confirmed LTF	0.1751
CBM-S2	CBM-S2	35.9554	Confirmed LTF	35.9554
CBM-S1	CBM-S1	0.3865	Confirmed LTF	0.3865
MEC	MEC	0.6896	Confirmed LTF	0.6896
LAGN	LAGN	2.0825	Confirmed LTF	2.0825
AA2-074	AA2-074	2.1551	LTF	2.1551
CBM-W1	CBM-W1	2.3133	Confirmed LTF	2.3133

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
168718268	314218	6ELMONT	DVP	314908	8ELMONT	DVP	1	DVP_P1-2: LN 557	single	920.92	148.82	149.45	DC	14.99

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314229	6MT RD221	0.1400	80/20	0.1400
314236	6NRTHEST	0.1840	80/20	0.1840
314241	6OLDCHRC	0.8588	80/20	0.8588
314250	6ROCKVILLE	0.3160	80/20	0.3160
314309	6IRON208	0.3986	80/20	0.3986
315043	1FOUR RIVERA	3.1016	80/20	3.1016
315044	1FOUR RIVERB	3.1016	80/20	3.1016
315045	1FOUR RIVERC	3.7909	80/20	3.7909
315046	1FOUR RIVERD	3.1016	80/20	3.1016
315047	1FOUR RIVERE	3.1016	80/20	3.1016
315048	1FOUR RIVERF	3.7909	80/20	3.7909
315050	1FOURRIVERG	4.6424	80/20	4.6424
315051	1AA1-145 CT1	4.8822	80/20	4.8822
315052	1AA1-145 CT2	4.8822	80/20	4.8822
315058	1CHESTF3 (Deactivation : 13/12/2018)	16.7790	80/20	16.7790
315059	1CHESTF4 (Deactivation : 13/12/2018)	27.1988	80/20	27.1988
315060	1CHESTF5 (Deactivation : 31/05/2023)	56.3255	80/20	56.3255
315061	1CHESTG7	3.3185	80/20	3.3185
315062	1CHESTS7	1.5234	80/20	1.5234
315063	1CHESTG8	3.2651	80/20	3.2651
315064	1CHESTS8	1.6808	80/20	1.6808
315065	1CHESTF6 (Deactivation : 31/05/2023)	92.0429	Adder	108.29
315067	1DARBY 1	2.4776	80/20	2.4776
315068	1DARBY 2	2.4805	80/20	2.4805
315069	1DARBY 3	2.4892	80/20	2.4892
315070	1DARBY 4	2.4921	80/20	2.4921
315074	1HOPCGN1 (Deactivation : 25/06/2019)	0.0130	Adder	0.02
315075	1HOPCGN2 (Deactivation : 25/06/2019)	0.0130	Adder	0.02
315083	1SPRUNCA (Deactivation : 12/01/2021)	7.9136	Adder	9.31
315084	1SPRUNCB (Deactivation : 12/01/2021)	7.9136	Adder	9.31
316075	AC2-137 C	0.3008	80/20	0.3008
316083	AB2-161 C	2.1232	Adder	2.5
316103	AB2-015 C	4.3839	Adder	5.16
316108	AB2-160 C	3.8122	Adder	4.48

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	31.9131	Adder	37.54
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	31.9131	Adder	37.54
316114	AB2-068 ST (Withdrawn : 01/11/2021)	55.2860	Adder	65.04
316132	AB2-190 C	13.5146	Adder	15.9
316134	AC1-107 G1	59.9269	Adder	70.5
316135	AC1-107 G2	59.9269	Adder	70.5
316136	AC1-107 G3	59.9382	Adder	70.52
925863	AC1-065 C	4.9781	Adder	5.86
926754	AC1-161 C	15.7567	Adder	18.54
926784	AC1-164 C	29.4977	Adder	34.7
927044	AC1-191 C	11.1083	80/20	11.1083
932044	AC2-012 C	5.4753	Adder	6.44
932501	AC2-070 C (Withdrawn : 01/22/2021)	0.2822	80/20	0.2822
932581	AC2-078 C O1	2.5595	Adder	3.01
932591	AC2-079 C O1	3.3704	Adder	3.97
933294	AC2-141 C	15.7567	Adder	18.54
933991	AD1-023 C	6.3502	Adder	7.47
934014	AD1-025 C	11.1497	Adder	13.12
934061	AD1-033 C	3.9781	Adder	4.68
934141	AD1-041 C	3.5195	Adder	4.14
934521	AD1-076 C	26.4390	Adder	31.1
934575	AD1-082 C	4.8388	Adder	5.69
934781	AD1-105 C	7.5069	80/20	7.5069
935164	AD1-151 C	10.8599	Adder	12.78
936041	AD2-007 C	0.5326	Adder	0.63
936051	AD2-008 C	1.9411	Adder	2.28
936151	AD2-021	0.0343	80/20	0.0343
936581	AD2-073 C	1.1801	Adder	1.39
936591	AD2-074 C	3.3700	Adder	3.96
936661	AD2-085 C	1.9517	Adder	2.3
936761	AD2-097 C	1.5009	Adder	1.77
937221	AD2-160 C O1	3.0844	Adder	3.63
938535	AE1-072 C	9.2607	Adder	10.89
938634	AE1-085 C	5.6346	Adder	6.63
938771	AE1-103 C	1.8889	Adder	2.22
939195	AE1-149 C	6.8932	Adder	8.11
939245	AE1-155 C	7.7061	Adder	9.07
939414	AE1-173_C1	14.0744	Adder	16.56
939415	AE1-173_C2	12.0637	Adder	14.19
939416	AE1-173_C3	14.0744	Adder	16.56
939431	AE1-175 C	1.5443	Adder	1.82
939611	AE1-191 C	7.0390	Adder	8.28
939755	AE1-206 C	33.3912	80/20	33.3912
940061	AE2-000BC O1	6.6535	Adder	7.83
940231	AE2-005 C	0.9051	Adder	1.06
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	92.7570	Adder	109.13
940431	AE2-027 C O1	9.5148	Adder	11.19
940481	AE2-033 C	8.4168	Adder	9.9

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940491	AE2-034 C	3.5664	Adder	4.2
940541	AE2-040	1.5052	Adder	1.77
940551	AE2-041	4.7852	Adder	5.63
940651	AE2-052	2.2977	Adder	2.7
940891	AE2-078 C	1.4390	Adder	1.69
940901	AE2-079 C	1.4390	Adder	1.69
941101	AE2-104 C O1	1.8121	Adder	2.13
941281	AE2-122 C O1	15.1327	Adder	17.8
941291	AE2-123 C O1	15.5517	Adder	18.3
941301	AE2-124 C O1	14.1296	Adder	16.62
941501	AE2-147 C	8.2299	Adder	9.68
941581	AE2-155 C	0.1074	80/20	0.1074
941591	AE2-156 O1	9.5999	Adder	11.29
942001	AE2-212 C	1.5226	Adder	1.79
942131	AE2-225 C	1.1317	Adder	1.33
942151	AE2-227 C	2.0350	80/20	2.0350
942161	AE2-228 C	1.6015	Adder	1.88
942171	AE2-229 C	0.8488	Adder	1.0
942191	AE2-231 C O1	2.2229	Adder	2.62
942341	AE2-247 C	0.8465	Adder	1.0
942371	AE2-250 C O1	6.7716	Adder	7.97
942401	AE2-253 C	3.2442	Adder	3.82
942471	AE2-260 C O1	7.1975	Adder	8.47
942551	AE2-270	17.9099	Adder	21.07
943431	AF1-014 C	0.8575	Adder	1.01
943461	AF1-017 C	0.7659	Adder	0.9
943471	AF1-018	4.7852	Adder	5.63
943601	AF1-031 C	10.0284	80/20	10.0284
943611	AF1-032 C	0.9242	Adder	1.09
943621	AF1-033 C	1.4390	Adder	1.69
943741	AF1-042 C	1.7634	Adder	2.07
943991	AF1-067 C	4.9572	80/20	4.9572
944581	AF1-123 C O1	25.2045	Adder	29.65
944591	AF1-124 C O1	25.2045	Adder	29.65
944601	AF1-125 C O1	25.2045	Adder	29.65
944631	AF1-128 O1	49.3894	80/20	49.3894
944641	AF1-129	77.2341	Adder	90.86
944871	AF1-152 C	2.7433	Adder	3.23
945361	AF1-201 C O1	9.8953	Adder	11.64
945711	AF1-236 C O1	39.0439	Adder	45.93
946001	AF1-265	29.2905	80/20	29.2905
946011	AF1-266	7.0455	Adder	8.29
946261	AF1-291 C	1.6021	Adder	1.88
957411	AF2-035 C	4.0416	Adder	4.75
957491	AF2-043 C	1.1317	Adder	1.33
957531	AF2-047 C	8.4745	Adder	9.97
957601	AF2-054 C	1.3733	Adder	1.62
957631	AF2-057	1.9212	Adder	2.26
957711	AF2-065 C	9.1341	Adder	10.75
957821	AF2-076 C	2.7894	Adder	3.28
957831	AF2-077 C	1.3337	Adder	1.57
957871	AF2-081 C	5.2522	Adder	6.18

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957911	AF2-085	2.0679	Adder	2.43
958141	AF2-108	1.1942	Adder	1.4
958161	AF2-110 C	0.7471	Adder	0.88
958261	AF2-120 C	3.7742	Adder	4.44
959641	AF2-255 C	0.5087	80/20	0.5087
959651	AF2-256 C	0.4004	Adder	0.47
959661	AF2-257 C	0.4005	Adder	0.47
959671	AF2-258 C	0.3806	Adder	0.45
959681	AF2-259 C	1.7914	Adder	2.11
960091	AF2-300 C	1.0104	Adder	1.19
961091	AF2-400 C	0.2367	Adder	0.28
961611	AG1-000B C	5.2476	Adder	11.65
961711	AG1-011	10.0371	Adder	22.28
961851	AG1-027 C	4.7866	Adder	10.63
961951	AG1-038 C	1.0330	Adder	2.29
962131	AG1-057	1.2681	Adder	2.81
962191	AG1-064 C	1.4189	80/20	1.4189
962201	AG1-065 C	1.4189	80/20	1.4189
962271	AG1-075 C O1	6.1943	Adder	13.75
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.6933	Adder	1.54
962531	AG1-102 C	0.3628	Adder	0.81
962851	AG1-134 C	9.9144	80/20	9.9144
962861	AG1-135 C	1.9491	Adder	4.33
962961	AG1-145 C	0.7385	Adder	1.64
962971	AG1-146 C	1.0161	Adder	2.26
962981	AG1-147 C	2.3708	Adder	5.26
963221	AG1-171 C	0.7674	Adder	1.7
963231	AG1-172 C	0.7674	Adder	1.7
963241	AG1-173 C	0.7674	Adder	1.7
963251	AG1-174 C	0.7674	Adder	1.7
963261	AG1-175 C	0.7674	Adder	1.7
963291	AG1-178 C O1	8.9423	Adder	19.85
963341	AG1-183 C	1.5851	Adder	3.52
963351	AG1-184 O1	7.5521	Adder	16.76
963381	AG1-187	0.6462	Adder	1.43
963611	AG1-210 C	0.2030	Adder	0.45
963621	AG1-213 C	0.1785	Adder	0.4
963821	AG1-235 C O1	6.7507	Adder	14.98
964021	AG1-256 C	0.3928	Adder	0.87
964211	AG1-282 C	0.6351	Adder	1.41
964801	AG1-343 C	1.5242	Adder	3.38
964951	AG1-359 O1	7.5231	Adder	16.7
965001	AG1-364 C O1	2.0355	Adder	4.52
965181	AG1-383 C	0.7721	Adder	1.71
965231	AG1-388 C	0.6351	Adder	1.41
965291	AG1-394 C	0.5238	Adder	1.16
965631	AG1-431	11.9803	Adder	26.59
966491	AG1-518 O1	2.4991	Adder	5.55
966611	AG1-531 C	2.0699	Adder	4.59
966661	AG1-536 C	1.7197	Adder	3.82
966711	AG1-541 C	1.4280	Adder	3.17

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966731	AG1-544 C	2.3324	Adder	5.18
966741	AG1-545 C	0.7762	Adder	1.72
966871	AG1-558 C	2.4962	80/20	2.4962
966881	AG1-559 C	0.5355	Adder	1.19
966931	AG1-431A	9.0010	Adder	19.98
WEC	WEC	0.0706	Confirmed LTF	0.0706
LGEE	LGEE	0.1508	Confirmed LTF	0.1508
CPLE	CPLE	3.2849	Confirmed LTF	3.2849
CBM-W2	CBM-W2	7.5085	Confirmed LTF	7.5085
NY	NY	0.7034	Confirmed LTF	0.7034
TVA	TVA	1.6744	Confirmed LTF	1.6744
SIGE	SIGE	0.1759	Confirmed LTF	0.1759
CBM-S2	CBM-S2	36.1224	Confirmed LTF	36.1224
CBM-S1	CBM-S1	0.3884	Confirmed LTF	0.3884
MEC	MEC	0.6912	Confirmed LTF	0.6912
LAGN	LAGN	2.0913	Confirmed LTF	2.0913
AA2-074	AA2-074	2.1654	LTF	2.1654
CBM-W1	CBM-W1	2.3273	Confirmed LTF	2.3273

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
168718275	314236	6NRTHEST	DVP	314218	6ELMONT	DVP	1	DVP_P1-2: LN 557	single	678.68	120.89	121.55	DC	9.81

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314184	3SHACKLE	0.3039	80/20	0.3039
314236	6NRTHEST	0.3943	80/20	0.3943
314243	3PROV 92	0.2838	80/20	0.2838
314314	3LOCKS	0.1625	80/20	0.1625
314375	6CORRCTN	0.2160	80/20	0.2160
315058	1CHESTF3 (Deactivation : 13/12/2018)	13.0820	80/20	13.0820
315059	1CHESTF4 (Deactivation : 13/12/2018)	21.2059	80/20	21.2059
315060	1CHESTF5 (Deactivation : 31/05/2023)	27.2332	Adder	32.04
315065	1CHESTF6 (Deactivation : 31/05/2023)	72.1431	80/20	72.1431
315067	1DARBY 1	4.8719	80/20	4.8719
315068	1DARBY 2	4.8776	80/20	4.8776
315069	1DARBY 3	4.8947	80/20	4.8947
315070	1DARBY 4	4.9004	80/20	4.9004
315074	1HOPCGN1 (Deactivation : 25/06/2019)	0.0095	80/20	0.0095
315075	1HOPCGN2 (Deactivation : 25/06/2019)	0.0095	80/20	0.0095
315076	1HOPPOLC	0.7985	80/20	0.7985
315077	1HOPHCF1	1.2481	80/20	1.2481
315078	1HOPHCF2	1.2481	80/20	1.2481
315079	1HOPHCF3	1.2481	80/20	1.2481
315080	1HOPHCF4	1.8947	80/20	1.8947
315083	1SPRUNCA (Deactivation : 12/01/2021)	12.1446	80/20	12.1446
315084	1SPRUNCB (Deactivation : 12/01/2021)	12.1446	80/20	12.1446
316075	AC2-137 C	0.3699	80/20	0.3699
316083	AB2-161 C	1.3994	Adder	1.65
316103	AB2-015 C	2.8777	Adder	3.39
316108	AB2-160 C	3.1321	80/20	3.1321
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	21.7960	Adder	25.64
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	21.7960	Adder	25.64
316114	AB2-068 ST (Withdrawn : 01/11/2021)	37.7593	Adder	44.42
316132	AB2-190 C	8.5604	Adder	10.07
316134	AC1-107 G1	40.9289	Adder	48.15

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316135	AC1-107 G2	40.9289	Adder	48.15
316136	AC1-107 G3	40.9366	Adder	48.16
925863	AC1-065 C	4.0262	80/20	4.0262
926754	AC1-161 C	10.3668	Adder	12.2
926784	AC1-164 C	24.4404	80/20	24.4404
932044	AC2-012 C	3.5785	Adder	4.21
932581	AC2-078 C O1	1.6872	Adder	1.98
932591	AC2-079 C O1	2.2167	Adder	2.61
933294	AC2-141 C	10.3668	Adder	12.2
934014	AD1-025 C	7.0878	Adder	8.34
934061	AD1-033 C	2.6032	Adder	3.06
934141	AD1-041 C	2.8263	80/20	2.8263
934391	AD1-063 C	0.1367	80/20	0.1367
934575	AD1-082 C	3.1892	Adder	3.75
935164	AD1-151 C	6.8789	Adder	8.09
936041	AD2-007 C	0.3386	Adder	0.4
936051	AD2-008 C	1.2340	Adder	1.45
936151	AD2-021	0.0422	80/20	0.0422
936591	AD2-074 C	2.1500	Adder	2.53
936661	AD2-085 C	1.2821	Adder	1.51
936761	AD2-097 C	2.3033	80/20	2.3033
937221	AD2-160 C O1	2.0188	Adder	2.38
938535	AE1-072 C	6.0630	Adder	7.13
938634	AE1-085 C	3.7149	Adder	4.37
938771	AE1-103 C	1.2395	Adder	1.46
939195	AE1-149 C	4.5467	Adder	5.35
939245	AE1-155 C	4.8683	Adder	5.73
939431	AE1-175 C	1.2430	80/20	1.2430
939611	AE1-191 C	5.6526	80/20	5.6526
940061	AE2-000BC O1	4.3845	Adder	5.16
940231	AE2-005 C	0.7320	80/20	0.7320
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	60.6400	Adder	71.34
940431	AE2-027 C O1	8.2030	80/20	8.2030
940481	AE2-033 C	5.5436	Adder	6.52
940541	AE2-040	0.9914	Adder	1.17
940551	AE2-041	3.8512	80/20	3.8512
940651	AE2-052	1.5155	Adder	1.78
940891	AE2-078 C	0.9338	Adder	1.1
940901	AE2-079 C	0.9338	Adder	1.1
941101	AE2-104 C O1	1.1883	Adder	1.4
941281	AE2-122 C O1	9.8976	Adder	11.64
941291	AE2-123 C O1	10.1716	Adder	11.97
941301	AE2-124 C O1	9.2422	Adder	10.87
941501	AE2-147 C	5.3925	Adder	6.34
941591	AE2-156 O1	6.2747	Adder	7.38
942001	AE2-212 C	1.1974	80/20	1.1974
942131	AE2-225 C	0.7413	Adder	0.87
942161	AE2-228 C	1.2562	80/20	1.2562
942171	AE2-229 C	0.5560	Adder	0.65
942341	AE2-247 C	0.5561	Adder	0.65
942371	AE2-250 C O1	5.5636	80/20	5.5636

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942401	AE2-253 C	2.1234	Adder	2.5
942471	AE2-260 C O1	4.7386	Adder	5.57
942551	AE2-270	11.3666	Adder	13.37
943431	AF1-014 C	0.6935	80/20	0.6935
943461	AF1-017 C	0.5032	Adder	0.59
943471	AF1-018	3.8512	80/20	3.8512
943611	AF1-032 C	0.6054	Adder	0.71
943621	AF1-033 C	0.9338	Adder	1.1
943741	AF1-042 C	1.1250	Adder	1.32
944581	AF1-123 C O1	16.5029	Adder	19.42
944591	AF1-124 C O1	16.5029	Adder	19.42
944601	AF1-125 C O1	16.5029	Adder	19.42
944631	AF1-128 O1	23.8796	Adder	28.09
944641	AF1-129	60.5359	80/20	60.5359
944871	AF1-152 C	1.7975	Adder	2.11
945361	AF1-201 C O1	6.6479	Adder	7.82
946011	AF1-266	4.6405	Adder	5.46
946261	AF1-291 C	1.2548	80/20	1.2548
957491	AF2-043 C	0.7413	Adder	0.87
957601	AF2-054 C	0.9283	Adder	1.09
957631	AF2-057	1.2556	Adder	1.48
957711	AF2-065 C	5.7970	Adder	6.82
957821	AF2-076 C	1.8278	Adder	2.15
957831	AF2-077 C	0.8974	Adder	1.06
957871	AF2-081 C	3.4381	Adder	4.04
958141	AF2-108	0.9422	80/20	0.9422
958161	AF2-110 C	0.4899	Adder	0.58
958261	AF2-120 C	2.3851	Adder	2.81
959651	AF2-256 C	0.3140	80/20	0.3140
959661	AF2-257 C	0.3137	80/20	0.3137
959671	AF2-258 C	0.2993	80/20	0.2993
959681	AF2-259 C	1.4133	80/20	1.4133
961091	AF2-400 C	0.1554	Adder	0.18
961611	AG1-000B C	3.3764	Adder	7.49
961711	AG1-011	6.3805	Adder	14.16
961851	AG1-027 C	3.1398	Adder	6.97
961951	AG1-038 C	0.6590	Adder	1.46
962131	AG1-057	1.9256	80/20	1.9256
962271	AG1-075 C O1	9.6024	80/20	9.6024
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.4499	Adder	1.0
962531	AG1-102 C	0.2442	Adder	0.54
962861	AG1-135 C	1.2368	Adder	2.75
962961	AG1-145 C	1.1215	80/20	1.1215
962971	AG1-146 C	0.6601	Adder	1.47
962981	AG1-147 C	1.5402	Adder	3.42
963221	AG1-171 C	0.4861	Adder	1.08
963231	AG1-172 C	0.4861	Adder	1.08
963241	AG1-173 C	0.4861	Adder	1.08
963251	AG1-174 C	0.4861	Adder	1.08
963261	AG1-175 C	0.4861	Adder	1.08
963611	AG1-210 C	0.1238	Adder	0.27

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963821	AG1-235 C O1	4.4184	Adder	9.81
964211	AG1-282 C	0.3960	Adder	0.88
964951	AG1-359 O1	4.9235	Adder	10.93
965001	AG1-364 C O1	1.3304	Adder	2.95
965181	AG1-383 C	0.5054	Adder	1.12
965231	AG1-388 C	0.3960	Adder	0.88
966491	AG1-518 O1	1.6371	Adder	3.63
966611	AG1-531 C	1.3594	Adder	3.02
966661	AG1-536 C	1.0864	Adder	2.41
966731	AG1-544 C	1.5377	Adder	3.41
966741	AG1-545 C	0.5117	Adder	1.14
WEC	WEC	0.1191	Confirmed LTF	0.1191
LGEE	LGEE	0.2494	Confirmed LTF	0.2494
CPL	CPL	2.2154	Confirmed LTF	2.2154
CBM-W2	CBM-W2	6.9440	Confirmed LTF	6.9440
NY	NY	0.4606	Confirmed LTF	0.4606
TVA	TVA	1.4112	Confirmed LTF	1.4112
SIGE	SIGE	0.1432	Confirmed LTF	0.1432
CBM-S2	CBM-S2	25.2439	Confirmed LTF	25.2439
CBM-S1	CBM-S1	0.3409	Confirmed LTF	0.3409
MEC	MEC	0.8183	Confirmed LTF	0.8183
LAGN	LAGN	1.7552	Confirmed LTF	1.7552
AA2-074	AA2-074	1.4616	LTF	1.4616
CBM-W1	CBM-W1	4.7107	Confirmed LTF	4.7107

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
168718087	314296	6PENNIMAN	DVP	314415	6WALR209	DVP	1	DVP_P1-2: LN 567	single	441.8	148.0	150.51	DC	11.03

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.1610	80/20	0.1610
314295	6BIRDNECK	0.0194	80/20	0.0194
314421	6WINCHST	0.1065	80/20	0.1065
314491	3PENDLTN	0.1449	80/20	0.1449
314507	3THOMPSN	0.1454	80/20	0.1454
314638	6ELIZ CT	0.0941	80/20	0.0941
314639	6TANGLEW	0.1715	80/20	0.1715
314643	3O INLET	0.1897	80/20	0.1897
315092	1YORKTN3	19.6878	80/20	19.6878
315098	1CHESPKA	0.1923	80/20	0.1923
315099	1CHESPKB (Deactivation : 31/05/2019)	1.3332	80/20	1.3332
315108	1ELIZAR1	1.4176	80/20	1.4176
315109	1ELIZAR2	1.3929	80/20	1.3929
315110	1ELIZAR3	1.4357	80/20	1.4357
315116	1SURRY 1	9.3889	80/20	9.3889
315120	1GRAVEL4	0.9660	80/20	0.9660
315122	1GRAVEL6	0.9649	80/20	0.9649
315233	1SURRY 2	14.2114	80/20	14.2114
315260	1GOSPORTA	0.1535	80/20	0.1535
315261	1GOSPORTB	0.1961	80/20	0.1961
315262	1GOSPORTC	0.1664	80/20	0.1664
315293	1DOMTR9	2.0576	Adder	2.42
315294	1DOMTR10	2.5215	Adder	2.97
315603	6AA1-139SOLA	1.0029	80/20	1.0029
315605	6W1-029WIND	0.4711	80/20	0.4711
315611	6Z1-036WIND	0.4492	80/20	0.4492
316103	AB2-015 C	2.6142	Adder	3.08
316140	AB2-099 C (Suspended)	0.1612	Adder	0.19
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.1324	80/20	0.1324
316258	AE1-162 C	0.1417	80/20	0.1417
925863	AC1-065 C	-5.0524	Adder	-5.94
926661	AC1-147 C	0.1626	80/20	0.1626
926754	AC1-161 C	15.4929	80/20	15.4929
926784	AC1-164 C	-14.7667	Adder	-17.37
932044	AC2-012 C	4.6632	80/20	4.6632
933294	AC2-141 C	15.4929	80/20	15.4929
933731	AC2-196 C	0.1297	80/20	0.1297
933991	AD1-023 C	4.0400	Adder	4.75
934061	AD1-033 C	3.4520	80/20	3.4520
934141	AD1-041 C	-3.3367	Adder	-3.93

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934521	AD1-076 C	17.0999	Adder	20.12
935111	AD1-144 C	0.1311	80/20	0.1311
936401	AD2-051 C O1	2.5103	Adder	2.95
936661	AD2-085 C	0.9742	Adder	1.15
937221	AD2-160 C O1	2.6630	80/20	2.6630
938535	AE1-072 C	7.9537	80/20	7.9537
938771	AE1-103 C	1.1504	Adder	1.35
939414	AE1-173_C1	9.2677	Adder	10.9
939415	AE1-173_C2	7.9438	Adder	9.35
939416	AE1-173_C3	9.2677	Adder	10.9
939431	AE1-175 C	1.2929	80/20	1.2929
940231	AE2-005 C	-0.9186	Adder	-1.08
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	79.4303	80/20	79.4303
940491	AE2-034 C	2.3762	Adder	2.8
940641	AE2-051 C O1	4.5013	Adder	5.3
940891	AE2-078 C	1.0890	80/20	1.0890
940901	AE2-079 C	1.0890	80/20	1.0890
941101	AE2-104 C O1	1.3615	80/20	1.3615
941281	AE2-122 C O1	13.0346	80/20	13.0346
941291	AE2-123 C O1	13.3955	80/20	13.3955
941301	AE2-124 C O1	12.1844	80/20	12.1844
941501	AE2-147 C	6.8913	80/20	6.8913
941591	AE2-156 O1	8.1940	80/20	8.1940
942131	AE2-225 C	0.9659	80/20	0.9659
942171	AE2-229 C	0.7244	80/20	0.7244
942341	AE2-247 C	0.4210	Adder	0.5
942401	AE2-253 C	2.8011	80/20	2.8011
943171	AE2-346 C	0.3868	Adder	0.46
943461	AF1-017 C	0.3809	Adder	0.45
943611	AF1-032 C	0.7888	80/20	0.7888
943621	AF1-033 C	1.0890	80/20	1.0890
944581	AF1-123 C O1	22.4486	80/20	22.4486
944591	AF1-124 C O1	22.4486	80/20	22.4486
944601	AF1-125 C O1	22.4486	80/20	22.4486
944871	AF1-152 C	2.2971	80/20	2.2971
945361	AF1-201 C O1	6.4395	80/20	6.4395
945711	AF1-236 C O1	26.0136	Adder	30.6
957491	AF2-043 C	0.9659	80/20	0.9659
957521	AF2-046 C	4.6173	Adder	5.43
957531	AF2-047 C	5.6463	Adder	6.64
957631	AF2-057	1.6362	80/20	1.6362
957821	AF2-076 C	2.3502	80/20	2.3502
957871	AF2-081 C	4.5231	80/20	4.5231
958161	AF2-110 C	0.5613	80/20	0.5613
959511	AF2-242 C	2.0146	Adder	2.37
961091	AF2-400 C	0.1412	Adder	0.17
961611	AG1-000B C	2.5440	Adder	5.65
961681	AG1-008 C	2.4521	Adder	5.44
961851	AG1-027 C	3.0032	Adder	6.67
961931	AG1-036 C	0.1981	Adder	0.44
961941	AG1-037 C	0.0732	Adder	0.16

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.9900	80/20	0.9900
962331	AG1-082 C	0.2929	Adder	0.65
962341	AG1-083 C	0.2929	Adder	0.65
962351	AG1-084 C	0.2558	Adder	0.57
962361	AG1-085 C	0.2558	Adder	0.57
962961	AG1-145 C	1.1665	80/20	1.1665
963291	AG1-178 C O1	9.0334	Adder	20.05
963351	AG1-184 O1	4.8667	Adder	10.8
963821	AG1-235 C O1	11.0336	80/20	11.0336
964491	AG1-312 C O1	2.8942	Adder	6.42
964801	AG1-343 C	0.8615	Adder	1.91
964951	AG1-359 O1	12.3330	80/20	12.3330
965001	AG1-364 C O1	3.2768	80/20	3.2768
965181	AG1-383 C	1.2629	80/20	1.2629
965291	AG1-394 C	0.2955	Adder	0.66
965631	AG1-431	7.9821	Adder	17.72
965691	AG1-437 C O1	1.6202	Adder	3.6
965701	AG1-438 C O1	1.6202	Adder	3.6
965741	AG1-442 O1	0.9451	Adder	2.1
965751	AG1-443 O1	0.9451	Adder	2.1
966491	AG1-518 O1	4.0245	80/20	4.0245
966611	AG1-531 C	4.0435	80/20	4.0435
966801	AG1-551 C	0.3172	Adder	0.7
966931	AG1-431A	5.9971	Adder	13.31
WEC	WEC	0.1241	Confirmed LTF	0.1241
LGEE	LGEE	0.2582	Confirmed LTF	0.2582
CPL	CPL	1.8905	Confirmed LTF	1.8905
CBM-W2	CBM-W2	6.5139	Confirmed LTF	6.5139
NY	NY	0.3711	Confirmed LTF	0.3711
TVA	TVA	1.2908	Confirmed LTF	1.2908
SIGE	SIGE	0.1260	Confirmed LTF	0.1260
CBM-S2	CBM-S2	21.8196	Confirmed LTF	21.8196
CBM-S1	CBM-S1	0.3150	Confirmed LTF	0.3150
MEC	MEC	0.8088	Confirmed LTF	0.8088
LAGN	LAGN	1.6048	Confirmed LTF	1.6048
CBM-W1	CBM-W1	5.0332	Confirmed LTF	5.0332

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
168718083	314386	6KINGS M	DVP	314296	6PENNIMAN	DVP	1	DVP_P1-2: LN 567	single	441.8	151.96	154.47	DC	11.03

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.1610	80/20	0.1610
314295	6BIRDNECK	0.0194	80/20	0.0194
314421	6WINCHST	0.1065	80/20	0.1065
314491	3PENDLTN	0.1449	80/20	0.1449
314507	3THOMPSN	0.1454	80/20	0.1454
314638	6ELIZ CT	0.0941	80/20	0.0941
314639	6TANGLEW	0.1715	80/20	0.1715
314643	3O INLET	0.1897	80/20	0.1897
315092	1YORKTN3	19.6878	80/20	19.6878
315098	1CHESPKA	0.1923	80/20	0.1923
315099	1CHESPKB (Deactivation : 31/05/2019)	1.3332	80/20	1.3332
315108	1ELIZAR1	1.4176	80/20	1.4176
315109	1ELIZAR2	1.3929	80/20	1.3929
315110	1ELIZAR3	1.4357	80/20	1.4357
315116	1SURRY 1	9.3889	80/20	9.3889
315120	1GRAVEL4	0.9660	80/20	0.9660
315122	1GRAVEL6	0.9649	80/20	0.9649
315233	1SURRY 2	14.2114	80/20	14.2114
315260	1GOSPORTA	0.1535	80/20	0.1535
315261	1GOSPORTB	0.1961	80/20	0.1961
315262	1GOSPORTC	0.1664	80/20	0.1664
315293	1DOMTR9	2.0576	Adder	2.42
315294	1DOMTR10	2.5215	Adder	2.97
315603	6AA1-139SOLA	1.0029	80/20	1.0029
315605	6W1-029WIND	0.4711	80/20	0.4711
315611	6Z1-036WIND	0.4492	80/20	0.4492
316103	AB2-015 C	2.6142	Adder	3.08
316140	AB2-099 C (Suspended)	0.1612	Adder	0.19
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.1324	80/20	0.1324
316258	AE1-162 C	0.1417	80/20	0.1417
925863	AC1-065 C	-5.0524	Adder	-5.94
926661	AC1-147 C	0.1626	80/20	0.1626
926754	AC1-161 C	15.4929	80/20	15.4929
926784	AC1-164 C	-14.7667	Adder	-17.37
932044	AC2-012 C	4.6632	80/20	4.6632
933294	AC2-141 C	15.4929	80/20	15.4929
933731	AC2-196 C	0.1297	80/20	0.1297
933991	AD1-023 C	4.0400	Adder	4.75
934061	AD1-033 C	3.4520	80/20	3.4520
934141	AD1-041 C	-3.3367	Adder	-3.93

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934521	AD1-076 C	17.0999	Adder	20.12
935111	AD1-144 C	0.1311	80/20	0.1311
936401	AD2-051 C O1	2.5103	Adder	2.95
936661	AD2-085 C	0.9742	Adder	1.15
937221	AD2-160 C O1	2.6630	80/20	2.6630
938535	AE1-072 C	7.9537	80/20	7.9537
938771	AE1-103 C	1.1504	Adder	1.35
939414	AE1-173_C1	9.2677	Adder	10.9
939415	AE1-173_C2	7.9438	Adder	9.35
939416	AE1-173_C3	9.2677	Adder	10.9
939431	AE1-175 C	1.2929	80/20	1.2929
940231	AE2-005 C	-0.9186	Adder	-1.08
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	79.4303	80/20	79.4303
940491	AE2-034 C	2.3762	Adder	2.8
940641	AE2-051 C O1	4.5013	Adder	5.3
940891	AE2-078 C	1.0890	80/20	1.0890
940901	AE2-079 C	1.0890	80/20	1.0890
941101	AE2-104 C O1	1.3615	80/20	1.3615
941281	AE2-122 C O1	13.0346	80/20	13.0346
941291	AE2-123 C O1	13.3955	80/20	13.3955
941301	AE2-124 C O1	12.1844	80/20	12.1844
941501	AE2-147 C	6.8913	80/20	6.8913
941591	AE2-156 O1	8.1940	80/20	8.1940
942131	AE2-225 C	0.9659	80/20	0.9659
942171	AE2-229 C	0.7244	80/20	0.7244
942341	AE2-247 C	0.4210	Adder	0.5
942401	AE2-253 C	2.8011	80/20	2.8011
943171	AE2-346 C	0.3868	Adder	0.46
943461	AF1-017 C	0.3809	Adder	0.45
943611	AF1-032 C	0.7888	80/20	0.7888
943621	AF1-033 C	1.0890	80/20	1.0890
944581	AF1-123 C O1	22.4486	80/20	22.4486
944591	AF1-124 C O1	22.4486	80/20	22.4486
944601	AF1-125 C O1	22.4486	80/20	22.4486
944871	AF1-152 C	2.2971	80/20	2.2971
945361	AF1-201 C O1	6.4395	80/20	6.4395
945711	AF1-236 C O1	26.0136	Adder	30.6
957491	AF2-043 C	0.9659	80/20	0.9659
957521	AF2-046 C	4.6173	Adder	5.43
957531	AF2-047 C	5.6463	Adder	6.64
957631	AF2-057	1.6362	80/20	1.6362
957821	AF2-076 C	2.3502	80/20	2.3502
957871	AF2-081 C	4.5231	80/20	4.5231
958161	AF2-110 C	0.5613	80/20	0.5613
959511	AF2-242 C	2.0146	Adder	2.37
961091	AF2-400 C	0.1412	Adder	0.17
961611	AG1-000B C	2.5440	Adder	5.65
961681	AG1-008 C	2.4521	Adder	5.44
961851	AG1-027 C	3.0032	Adder	6.67
961931	AG1-036 C	0.1981	Adder	0.44
961941	AG1-037 C	0.0732	Adder	0.16

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.9900	80/20	0.9900
962331	AG1-082 C	0.2929	Adder	0.65
962341	AG1-083 C	0.2929	Adder	0.65
962351	AG1-084 C	0.2558	Adder	0.57
962361	AG1-085 C	0.2558	Adder	0.57
962961	AG1-145 C	1.1665	80/20	1.1665
963291	AG1-178 C O1	9.0334	Adder	20.05
963351	AG1-184 O1	4.8667	Adder	10.8
963821	AG1-235 C O1	11.0336	80/20	11.0336
964491	AG1-312 C O1	2.8942	Adder	6.42
964801	AG1-343 C	0.8615	Adder	1.91
964951	AG1-359 O1	12.3330	80/20	12.3330
965001	AG1-364 C O1	3.2768	80/20	3.2768
965181	AG1-383 C	1.2629	80/20	1.2629
965291	AG1-394 C	0.2955	Adder	0.66
965631	AG1-431	7.9821	Adder	17.72
965691	AG1-437 C O1	1.6202	Adder	3.6
965701	AG1-438 C O1	1.6202	Adder	3.6
965741	AG1-442 O1	0.9451	Adder	2.1
965751	AG1-443 O1	0.9451	Adder	2.1
966491	AG1-518 O1	4.0245	80/20	4.0245
966611	AG1-531 C	4.0435	80/20	4.0435
966801	AG1-551 C	0.3172	Adder	0.7
966931	AG1-431A	5.9971	Adder	13.31
WEC	WEC	0.1241	Confirmed LTF	0.1241
LGEE	LGEE	0.2582	Confirmed LTF	0.2582
CPL	CPL	1.8905	Confirmed LTF	1.8905
CBM-W2	CBM-W2	6.5139	Confirmed LTF	6.5139
NY	NY	0.3711	Confirmed LTF	0.3711
TVA	TVA	1.2908	Confirmed LTF	1.2908
SIGE	SIGE	0.1260	Confirmed LTF	0.1260
CBM-S2	CBM-S2	21.8196	Confirmed LTF	21.8196
CBM-S1	CBM-S1	0.3150	Confirmed LTF	0.3150
MEC	MEC	0.8088	Confirmed LTF	0.8088
LAGN	LAGN	1.6048	Confirmed LTF	1.6048
CBM-W1	CBM-W1	5.0332	Confirmed LTF	5.0332

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
168718097	314415	6WALR209	DVP	314391	6LIGH209	DVP	1	DVP_P1-2: LN 567	single	441.8	131.86	134.37	DC	11.03

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.1610	80/20	0.1610
314295	6BIRDNECK	0.0194	80/20	0.0194
314421	6WINCHST	0.1065	80/20	0.1065
314491	3PENDLTN	0.1449	80/20	0.1449
314507	3THOMPSN	0.1454	80/20	0.1454
314638	6ELIZ CT	0.0941	80/20	0.0941
314639	6TANGLEW	0.1715	80/20	0.1715
314643	3O INLET	0.1897	80/20	0.1897
315092	1YORKTN3	19.6878	80/20	19.6878
315098	1CHESPKA	0.1923	80/20	0.1923
315099	1CHESPKB (Deactivation : 31/05/2019)	1.3332	80/20	1.3332
315108	1ELIZAR1	1.4176	80/20	1.4176
315109	1ELIZAR2	1.3929	80/20	1.3929
315110	1ELIZAR3	1.4357	80/20	1.4357
315116	1SURRY 1	9.3889	80/20	9.3889
315120	1GRAVEL4	0.9660	80/20	0.9660
315122	1GRAVEL6	0.9649	80/20	0.9649
315233	1SURRY 2	14.2114	80/20	14.2114
315260	1GOSPORTA	0.1535	80/20	0.1535
315261	1GOSPORTB	0.1961	80/20	0.1961
315262	1GOSPORTC	0.1664	80/20	0.1664
315293	1DOMTR9	2.0576	Adder	2.42
315294	1DOMTR10	2.5215	Adder	2.97
315603	6AA1-139SOLA	1.0029	80/20	1.0029
315605	6W1-029WIND	0.4711	80/20	0.4711
315611	6Z1-036WIND	0.4492	80/20	0.4492
316103	AB2-015 C	2.6142	Adder	3.08
316140	AB2-099 C (Suspended)	0.1612	Adder	0.19
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.1324	80/20	0.1324
316258	AE1-162 C	0.1417	80/20	0.1417
925863	AC1-065 C	-5.0524	Adder	-5.94
926661	AC1-147 C	0.1626	80/20	0.1626
926754	AC1-161 C	15.4929	80/20	15.4929
926784	AC1-164 C	-14.7667	Adder	-17.37
932044	AC2-012 C	4.6632	80/20	4.6632
933294	AC2-141 C	15.4929	80/20	15.4929
933731	AC2-196 C	0.1297	80/20	0.1297
933991	AD1-023 C	4.0400	Adder	4.75
934061	AD1-033 C	3.4520	80/20	3.4520
934141	AD1-041 C	-3.3367	Adder	-3.93

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934521	AD1-076 C	17.0999	Adder	20.12
935111	AD1-144 C	0.1311	80/20	0.1311
936401	AD2-051 C O1	2.5103	Adder	2.95
936661	AD2-085 C	0.9742	Adder	1.15
937221	AD2-160 C O1	2.6630	80/20	2.6630
938535	AE1-072 C	7.9537	80/20	7.9537
938771	AE1-103 C	1.1504	Adder	1.35
939414	AE1-173_C1	9.2677	Adder	10.9
939415	AE1-173_C2	7.9438	Adder	9.35
939416	AE1-173_C3	9.2677	Adder	10.9
939431	AE1-175 C	1.2929	80/20	1.2929
940231	AE2-005 C	-0.9186	Adder	-1.08
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	79.4303	80/20	79.4303
940491	AE2-034 C	2.3762	Adder	2.8
940641	AE2-051 C O1	4.5013	Adder	5.3
940891	AE2-078 C	1.0890	80/20	1.0890
940901	AE2-079 C	1.0890	80/20	1.0890
941101	AE2-104 C O1	1.3615	80/20	1.3615
941281	AE2-122 C O1	13.0346	80/20	13.0346
941291	AE2-123 C O1	13.3955	80/20	13.3955
941301	AE2-124 C O1	12.1844	80/20	12.1844
941501	AE2-147 C	6.8913	80/20	6.8913
941591	AE2-156 O1	8.1940	80/20	8.1940
942131	AE2-225 C	0.9659	80/20	0.9659
942171	AE2-229 C	0.7244	80/20	0.7244
942341	AE2-247 C	0.4210	Adder	0.5
942401	AE2-253 C	2.8011	80/20	2.8011
943171	AE2-346 C	0.3868	Adder	0.46
943461	AF1-017 C	0.3809	Adder	0.45
943611	AF1-032 C	0.7888	80/20	0.7888
943621	AF1-033 C	1.0890	80/20	1.0890
944581	AF1-123 C O1	22.4486	80/20	22.4486
944591	AF1-124 C O1	22.4486	80/20	22.4486
944601	AF1-125 C O1	22.4486	80/20	22.4486
944871	AF1-152 C	2.2971	80/20	2.2971
945361	AF1-201 C O1	6.4395	80/20	6.4395
945711	AF1-236 C O1	26.0136	Adder	30.6
957491	AF2-043 C	0.9659	80/20	0.9659
957521	AF2-046 C	4.6173	Adder	5.43
957531	AF2-047 C	5.6463	Adder	6.64
957631	AF2-057	1.6362	80/20	1.6362
957821	AF2-076 C	2.3502	80/20	2.3502
957871	AF2-081 C	4.5231	80/20	4.5231
958161	AF2-110 C	0.5613	80/20	0.5613
959511	AF2-242 C	2.0146	Adder	2.37
961091	AF2-400 C	0.1412	Adder	0.17
961611	AG1-000B C	2.5440	Adder	5.65
961681	AG1-008 C	2.4521	Adder	5.44
961851	AG1-027 C	3.0032	Adder	6.67
961931	AG1-036 C	0.1981	Adder	0.44
961941	AG1-037 C	0.0732	Adder	0.16

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.9900	80/20	0.9900
962331	AG1-082 C	0.2929	Adder	0.65
962341	AG1-083 C	0.2929	Adder	0.65
962351	AG1-084 C	0.2558	Adder	0.57
962361	AG1-085 C	0.2558	Adder	0.57
962961	AG1-145 C	1.1665	80/20	1.1665
963291	AG1-178 C O1	9.0334	Adder	20.05
963351	AG1-184 O1	4.8667	Adder	10.8
963821	AG1-235 C O1	11.0336	80/20	11.0336
964491	AG1-312 C O1	2.8942	Adder	6.42
964801	AG1-343 C	0.8615	Adder	1.91
964951	AG1-359 O1	12.3330	80/20	12.3330
965001	AG1-364 C O1	3.2768	80/20	3.2768
965181	AG1-383 C	1.2629	80/20	1.2629
965291	AG1-394 C	0.2955	Adder	0.66
965631	AG1-431	7.9821	Adder	17.72
965691	AG1-437 C O1	1.6202	Adder	3.6
965701	AG1-438 C O1	1.6202	Adder	3.6
965741	AG1-442 O1	0.9451	Adder	2.1
965751	AG1-443 O1	0.9451	Adder	2.1
966491	AG1-518 O1	4.0245	80/20	4.0245
966611	AG1-531 C	4.0435	80/20	4.0435
966801	AG1-551 C	0.3172	Adder	0.7
966931	AG1-431A	5.9971	Adder	13.31
WEC	WEC	0.1241	Confirmed LTF	0.1241
LGEE	LGEE	0.2582	Confirmed LTF	0.2582
CPL	CPL	1.8905	Confirmed LTF	1.8905
CBM-W2	CBM-W2	6.5139	Confirmed LTF	6.5139
NY	NY	0.3711	Confirmed LTF	0.3711
TVA	TVA	1.2908	Confirmed LTF	1.2908
SIGE	SIGE	0.1260	Confirmed LTF	0.1260
CBM-S2	CBM-S2	21.8196	Confirmed LTF	21.8196
CBM-S1	CBM-S1	0.3150	Confirmed LTF	0.3150
MEC	MEC	0.8088	Confirmed LTF	0.8088
LAGN	LAGN	1.6048	Confirmed LTF	1.6048
CBM-W1	CBM-W1	5.0332	Confirmed LTF	5.0332

11.6.10 Index 10

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163211531	314481	6LANDSTN	DVP	314486	6LYNHAVN	DVP	1	DVP_P7-1: LN 147-2118-A	tower	830.0	117.79	118.99	DC	22.01

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.9093	Adder	1.07
314466	6FENTRES	1.2656	50/50	1.2656
314550	6HICKORY	1.9262	Adder	2.27
314632	6AYDLETOLD	0.8868	Adder	1.04
913392	Y1-086 E	0.7308	Adder	0.86
917122	Z2-027 E	0.3154	Adder	0.37
919152	AA1-139 E	2.7350	Adder	3.22
923832	AB2-022 E	0.4126	Adder	0.49
933731	AC2-196 C	0.1611	50/50	0.1611
933732	AC2-196 E	0.6799	50/50	0.6799
934061	AD1-033 C	5.5910	50/50	5.5910
934062	AD1-033 E	3.7274	50/50	3.7274
937221	AD2-160 C O1	2.5937	Adder	3.05
937222	AD2-160 E O1	1.3601	Adder	1.6
938535	AE1-072 C	7.1999	Adder	8.47
938536	AE1-072 E	3.7090	Adder	4.36
941281	AE2-122 C O1	44.9417	50/50	44.9417
941282	AE2-122 E O1	181.3506	50/50	181.3506
941291	AE2-123 C O1	46.1861	50/50	46.1861
941292	AE2-123 E O1	180.1061	50/50	180.1061
941301	AE2-124 C O1	42.0003	50/50	42.0003
941302	AE2-124 E O1	184.2920	50/50	184.2920
942401	AE2-253 C	2.7281	Adder	3.21
942402	AE2-253 E	1.2257	Adder	1.44
957632	AF2-057 BAT	2.0218	50/50	2.0218
957871	AF2-081 C	4.2545	Adder	5.01
957872	AF2-081 E	1.8234	Adder	2.15
963821	AG1-235 C O1	5.9480	Adder	13.2
963822	AG1-235 E O1	3.9653	Adder	8.8
964951	AG1-359 O1	15.3120	50/50	15.3120
965003	AG1-364 BAT	4.5463	Merchant Transmission	4.5463
965181	AG1-383 C	0.6870	Adder	1.52
965182	AG1-383 E	0.2035	Adder	0.45
WEC	WEC	0.0268	Confirmed LTF	0.0268
LGEE	LGEE	0.0547	Confirmed LTF	0.0547
CPL	CPL	0.2170	Confirmed LTF	0.2170
CBM-W2	CBM-W2	1.0214	Confirmed LTF	1.0214
NY	NY	0.0017	Confirmed LTF	0.0017
TVA	TVA	0.1834	Confirmed LTF	0.1834
O-066	O-066	0.0606	Confirmed LTF	0.0606
SIGE	SIGE	0.0105	Confirmed LTF	0.0105

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-S2	CBM-S2	2.4847	Confirmed LTF	2.4847
CBM-S1	CBM-S1	0.0467	Confirmed LTF	0.0467
G-007	G-007	0.0095	Confirmed LTF	0.0095
MEC	MEC	0.1510	Confirmed LTF	0.1510
LAGN	LAGN	0.2275	Confirmed LTF	0.2275
CBM-W1	CBM-W1	1.1496	Confirmed LTF	1.1496

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
163645703	314574	6EVERETS	DVP	304451	6GREENVILLE	CPL	1	DVP_P1-2: LN 2167	single	478.0	111.04	112.49	DC	6.92

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.1498	80/20	0.1498
314582	3KELFORD	0.2431	80/20	0.2431
314589	3MURPHYS	0.0506	80/20	0.0506
314638	6ELIZ CT	0.0876	80/20	0.0876
314639	6TANGLEW	0.1740	80/20	0.1740
314643	3O INLET	0.1460	80/20	0.1460
315115	1S HAMPT1	0.5904	80/20	0.5904
315126	1ROARAP2	0.4351	80/20	0.4351
315128	1ROARAP4	0.4152	80/20	0.4152
315131	1EDGE CMA (Deactivation : 22/04/2019)	24.3159	80/20	24.3159
315132	1EDGE CMB (Deactivation : 22/04/2019)	24.3159	80/20	24.3159
315139	1GASTONA	0.9477	80/20	0.9477
315141	1GASTONB	0.9477	80/20	0.9477
315292	1DOMTR78	1.8587	80/20	1.8587
315293	1DOMTR9	9.6133	80/20	9.6133
315294	1DOMTR10	11.7810	80/20	11.7810
315601	1CONETOE2SOL	3.5058	80/20	3.5058
315602	1HOLLOMAN SOL	1.5556	80/20	1.5556
315603	6AA1-139SOLA	0.7167	80/20	0.7167
315605	6W1-029WIND	0.5270	80/20	0.5270
315606	3AA2-053SOLA	0.6183	80/20	0.6183
315607	3AA1-063SOLA	0.5115	80/20	0.5115
315608	3AA2-088SOLA	0.4574	80/20	0.4574
315611	6Z1-036WIND	0.6808	80/20	0.6808
315614	AA2-178 C	1.3739	80/20	1.3739
316103	AB2-015 C	3.4420	80/20	3.4420
316140	AB2-099 C (Suspended)	0.4760	80/20	0.4760
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.0810	80/20	0.0810
925121	AB2-169 C	1.8350	80/20	1.8350
926070	AC1-086 C	6.7553	80/20	6.7553
926201	AC1-098 C	1.9695	80/20	1.9695
926211	AC1-099 C	0.6600	80/20	0.6600
927024	AC1-189 C	22.3885	80/20	22.3885
932631	AC2-084 C	2.8076	80/20	2.8076
933991	AD1-023 C	14.1872	80/20	14.1872
934521	AD1-076 C	58.3995	80/20	58.3995
935111	AD1-144 C	0.0802	80/20	0.0802
936401	AD2-051 C O1	9.4540	80/20	9.4540
936661	AD2-085 C	0.9704	80/20	0.9704

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
937221	AD2-160 C O1	1.8017	80/20	1.8017
938221	AE1-035 C	0.3890	80/20	0.3890
938535	AE1-072 C	6.0024	80/20	6.0024
938771	AE1-103 C	1.3698	80/20	1.3698
940491	AE2-034 C	6.5314	80/20	6.5314
941101	AE2-104 C O1	1.0591	80/20	1.0591
941501	AE2-147 C	7.7085	80/20	7.7085
941541	AE2-151 C (Withdrawn : 01/08/2021)	0.1519	80/20	0.1519
942131	AE2-225 C	0.6872	80/20	0.6872
942171	AE2-229 C	0.5154	80/20	0.5154
942401	AE2-253 C	1.8951	80/20	1.8951
943171	AE2-346 C	1.1425	80/20	1.1425
943611	AF1-032 C	0.5612	80/20	0.5612
944871	AF1-152 C	2.5695	80/20	2.5695
945711	AF1-236 C O1	71.5035	80/20	71.5035
957491	AF2-043 C	0.6872	80/20	0.6872
957521	AF2-046 C	10.5968	80/20	10.5968
957531	AF2-047 C	15.5199	80/20	15.5199
957821	AF2-076 C	2.0622	80/20	2.0622
957861	AF2-080 C	20.3341	80/20	20.3341
957871	AF2-081 C	3.2323	80/20	3.2323
958161	AF2-110 C	0.4366	80/20	0.4366
959511	AF2-242 C	15.3045	80/20	15.3045
961091	AF2-400 C	0.1859	80/20	0.1859
961671	AG1-007 C	3.2282	80/20	3.2282
961681	AG1-008 C	10.6180	80/20	10.6180
961851	AG1-027 C	5.7574	80/20	5.7574
961931	AG1-036 C	0.9884	80/20	0.9884
961941	AG1-037 C	0.4080	80/20	0.4080
962331	AG1-082 C	1.6321	80/20	1.6321
962341	AG1-083 C	1.6321	80/20	1.6321
962351	AG1-084 C	1.5548	80/20	1.5548
962361	AG1-085 C	1.5548	80/20	1.5548
962571	AG1-106 C	1.8786	80/20	1.8786
963821	AG1-235 C O1	6.9228	80/20	6.9228
964491	AG1-312 C O1	20.5834	80/20	20.5834
964501	AG1-313 C O1	2.4964	80/20	2.4964
964801	AG1-343 C	2.8371	80/20	2.8371
965181	AG1-383 C	0.7791	80/20	0.7791
965291	AG1-394 C	0.9274	80/20	0.9274
965631	AG1-431	41.3968	80/20	41.3968
965691	AG1-437 C O1	10.9782	80/20	10.9782
965701	AG1-438 C O1	10.9782	80/20	10.9782
965711	AG1-439 C O1	62.8890	80/20	62.8890
965741	AG1-442 O1	6.4040	80/20	6.4040
965751	AG1-443 O1	6.4040	80/20	6.4040
965761	AG1-444 O1	33.5408	80/20	33.5408
966491	AG1-518 O1	2.8635	80/20	2.8635
966801	AG1-551 C	5.2843	80/20	5.2843
966811	AG1-552 C	0.6909	80/20	0.6909
966931	AG1-431A	31.1020	80/20	31.1020

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
G-007A	G-007A	1.0093	Confirmed LTF	1.0093
VFT	VFT	2.6897	Confirmed LTF	2.6897
CALDERWOOD	CALDERWOOD	1.1426	Confirmed LTF	1.1426
PRAIRIE	PRAIRIE	3.8745	Confirmed LTF	3.8745
AC1-131	AC1-131	4.5817	LTF	4.5817
CHEOAH	CHEOAH	1.1717	Confirmed LTF	1.1717
CBM-N	CBM-N	0.4908	Confirmed LTF	0.4908
COTTONWOOD	COTTONWOOD	4.2672	Confirmed LTF	4.2672
HAMLET	HAMLET	2.6704	Confirmed LTF	2.6704
GIBSON	GIBSON	0.6694	Confirmed LTF	0.6694
BLUEG	BLUEG	2.0520	Confirmed LTF	2.0520
TRIMBLE	TRIMBLE	0.6505	Confirmed LTF	0.6505
CATAWBA	CATAWBA	1.2299	Confirmed LTF	1.2299

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
163645553	314902	8CARSON	DVP	314914	8MDLTHAN	DVP	1	DVP_P4-2: 557T574	breaker	3938.0	144.86	145.49	DC	67.97

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314295	6BIRDNECK	0.0713	50/50	0.0713
314466	6FENTRES	3.7577	50/50	3.7577
314491	3PENDLTN	0.5318	50/50	0.5318
314550	6HICKORY	6.9329	50/50	6.9329
315102	1BRUNSWICKG1	15.1790	50/50	15.1790
315103	1BRUNSWICKG2	15.1790	50/50	15.1790
315104	1BRUNSWICKG3	15.1790	50/50	15.1790
315105	1BRUNSWICKS1	31.5343	50/50	31.5343
315108	1ELIZAR1	5.1909	50/50	5.1909
315109	1ELIZAR2	5.1008	50/50	5.1008
315110	1ELIZAR3	5.2574	50/50	5.2574
315233	1SURRY 2	40.9975	50/50	40.9975
315241	1Z1-086 GT1	19.5723	50/50	19.5723
315242	1Z1-086 GT2	19.5723	50/50	19.5723
315243	1Z1-086 GT3	19.5723	50/50	19.5723
315244	1Z1-086 ST	34.0240	50/50	34.0240
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	87.4408	50/50	87.4408
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	87.4408	50/50	87.4408
316114	AB2-068 ST (Withdrawn : 01/11/2021)	151.4819	50/50	151.4819
316134	AC1-107 G1	164.1977	50/50	164.1977
316135	AC1-107 G2	164.1977	50/50	164.1977
316136	AC1-107 G3	164.2285	50/50	164.2285
916192	Z1-068 E	3.1628	50/50	3.1628
925522	AC1-027 E	1.9262	50/50	1.9262
926754	AC1-161 C	54.4278	50/50	54.4278
926755	AC1-161 E	23.2338	50/50	23.2338
933294	AC2-141 C	54.4278	50/50	54.4278
933295	AC2-141 E	23.2338	50/50	23.2338
933731	AC2-196 C	0.4782	50/50	0.4782
933732	AC2-196 E	2.0186	50/50	2.0186
934061	AD1-033 C	12.7189	50/50	12.7189
934062	AD1-033 E	8.4792	50/50	8.4792
937221	AD2-160 C O1	9.8738	50/50	9.8738
937222	AD2-160 E O1	5.1777	50/50	5.1777
938494	AE1-068_C1	58.7247	50/50	58.7247
938497	AE1-068_C2	58.7247	50/50	58.7247
938498	AE1-068_E1	32.4627	50/50	32.4627
938499	AE1-068_E2	32.4627	50/50	32.4627
938504	AE1-069_C1	44.7548	50/50	44.7548

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938507	AE1-069_C2	48.2564	50/50	48.2564
938508	AE1-069_E1	25.4596	50/50	25.4596
938509	AE1-069_E2	27.4292	50/50	27.4292
939414	AE1-173_C1	60.3254	50/50	60.3254
939415	AE1-173_C2	51.7075	50/50	51.7075
939416	AE1-173_C3	60.3254	50/50	60.3254
939423	AE1-173_E1	40.2170	50/50	40.2170
939424	AE1-173_E2	34.4717	50/50	34.4717
939425	AE1-173_E3	40.2170	50/50	40.2170
940471	AE2-031 C	64.0285	50/50	64.0285
940472	AE2-031 E	42.6857	50/50	42.6857
940641	AE2-051 C O1	33.9597	50/50	33.9597
940642	AE2-051 E O1	22.6398	50/50	22.6398
941031	AE2-094 C	77.1779	50/50	77.1779
941032	AE2-094 E	34.5661	50/50	34.5661
941281	AE2-122 C O1	47.8845	50/50	47.8845
941282	AE2-122 E O1	193.2256	50/50	193.2256
941291	AE2-123 C O1	49.2105	50/50	49.2105
941292	AE2-123 E O1	191.8997	50/50	191.8997
941301	AE2-124 C O1	44.7787	50/50	44.7787
941302	AE2-124 E O1	196.4834	50/50	196.4834
942401	AE2-253 C	10.3855	50/50	10.3855
942402	AE2-253 E	4.6660	50/50	4.6660
942931	AE2-313 C	69.2012	50/50	69.2012
942932	AE2-313 E	46.1341	50/50	46.1341
944011	AF1-069 C	25.2169	50/50	25.2169
944012	AF1-069 E	9.7962	50/50	9.7962
944581	AF1-123 C O1	82.7966	50/50	82.7966
944582	AF1-123 E O1	189.5810	50/50	189.5810
944591	AF1-124 C O1	82.7966	50/50	82.7966
944592	AF1-124 E O1	189.5810	50/50	189.5810
944601	AF1-125 C O1	82.7966	50/50	82.7966
944602	AF1-125 E O1	189.5810	50/50	189.5810
945811	AF1-246 C O1	12.7441	50/50	12.7441
945812	AF1-246 E O1	17.5989	50/50	17.5989
957481	AF2-042 C	91.0290	50/50	91.0290
957482	AF2-042 E	60.6860	50/50	60.6860
963041	AG1-153 C	10.6506	50/50	10.6506
963042	AG1-153 E	15.9759	50/50	15.9759
963111	AG1-160 C	10.8189	50/50	10.8189
963112	AG1-160 E	16.2284	50/50	16.2284
963291	AG1-178 C O1	121.1051	50/50	121.1051
963351	AG1-184 O1	65.2449	50/50	65.2449
963821	AG1-235 C O1	40.7848	50/50	40.7848
963822	AG1-235 E O1	27.1899	50/50	27.1899
964931	AG1-357 C	38.7288	50/50	38.7288
964932	AG1-357 E	25.8192	50/50	25.8192
964951	AG1-359 O1	45.4635	50/50	45.4635
965181	AG1-383 C	4.6653	50/50	4.6653
965182	AG1-383 E	1.3817	50/50	1.3817
965811	AG1-449	44.8936	50/50	44.8936
966361	AG1-505 C	30.9942	50/50	30.9942

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966362	AG1-505 E	20.6628	50/50	20.6628
966371	AG1-506 C	30.9942	50/50	30.9942
966372	AG1-506 E	20.6628	50/50	20.6628
WEC	WEC	1.2065	Confirmed LTF	1.2065
LGEE	LGEE	2.5157	Confirmed LTF	2.5157
CPL	CPL	13.0603	Confirmed LTF	13.0603
CBM-W2	CBM-W2	54.7277	Confirmed LTF	54.7277
NY	NY	2.6555	Confirmed LTF	2.6555
TVA	TVA	10.4468	Confirmed LTF	10.4468
O-066	O-066	36.7593	Confirmed LTF	36.7593
SIG	SIG	1.0235	Confirmed LTF	1.0235
CBM-S2	CBM-S2	156.9236	Confirmed LTF	156.9236
CBM-S1	CBM-S1	2.5969	Confirmed LTF	2.5969
G-007	G-007	5.7760	Confirmed LTF	5.7760
MEC	MEC	7.3412	Confirmed LTF	7.3412
LAGN	LAGN	12.9413	Confirmed LTF	12.9413
AA2-074	AA2-074	8.6256	LTF	8.6256
CBM-W1	CBM-W1	49.8832	Confirmed LTF	49.8832

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
163645743	314903	8CHCKAHM	DVP	314908	8ELMONT	DVP	1	DVP_P1-2: LN 563	single	2442.12	183.31	183.7	DC	41.41

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.6083	80/20	0.6083
314295	6BIRDNECK	0.0728	80/20	0.0728
314421	6WINCHST	0.2201	80/20	0.2201
314491	3PENDLTN	0.5432	80/20	0.5432
314507	3THOMPSN	0.5459	80/20	0.5459
314638	6ELIZ CT	0.3556	80/20	0.3556
314639	6TANGLEW	0.6491	80/20	0.6491
314643	3O INLET	0.7144	80/20	0.7144
315092	1YORKTN3	39.1963	80/20	39.1963
315098	1CHESPKA	0.7220	80/20	0.7220
315099	1CHESPKB (Deactivation : 31/05/2019)	5.0053	80/20	5.0053
315108	1ELIZAR1	5.3195	80/20	5.3195
315109	1ELIZAR2	5.2271	80/20	5.2271
315110	1ELIZAR3	5.3876	80/20	5.3876
315116	1SURRY 1	36.1526	80/20	36.1526
315120	1GRAVEL4	3.7197	80/20	3.7197
315233	1SURRY 2	48.5856	80/20	48.5856
315260	1GOSPORTA	0.5763	80/20	0.5763
315261	1GOSPORTB	0.7361	80/20	0.7361
315262	1GOSPORTC	0.6247	80/20	0.6247
315293	1DOMTR9	8.4474	Adder	9.94
315294	1DOMTR10	10.3521	Adder	12.18
315603	6AA1-139SOLA	3.7714	80/20	3.7714
315605	6W1-029WIND	1.7838	80/20	1.7838
315611	6Z1-036WIND	1.7276	80/20	1.7276
316103	AB2-015 C	10.8609	Adder	12.78
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	165.2340	80/20	165.2340
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	165.2340	80/20	165.2340
316114	AB2-068 ST (Withdrawn : 01/11/2021)	286.2505	80/20	286.2505
316132	AB2-190 C	21.8808	Adder	25.74
316134	AC1-107 G1	310.2793	80/20	310.2793
316135	AC1-107 G2	310.2793	80/20	310.2793
316136	AC1-107 G3	310.3375	80/20	310.3375
316140	AB2-099 C (Suspended)	0.6942	Adder	0.82
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.4566	80/20	0.4566
316258	AE1-162 C	0.5400	80/20	0.5400
925863	AC1-065 C	8.9827	Adder	10.57

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
926661	AC1-147 C	0.6105	80/20	0.6105
926754	AC1-161 C	56.7826	80/20	56.7826
926784	AC1-164 C	50.7130	Adder	59.66
932044	AC2-012 C	17.5064	80/20	17.5064
932591	AC2-079 C O1	6.8775	Adder	8.09
933294	AC2-141 C	56.7826	80/20	56.7826
933731	AC2-196 C	0.4864	80/20	0.4864
933991	AD1-023 C	16.4881	Adder	19.4
934014	AD1-025 C	19.0719	Adder	22.44
934061	AD1-033 C	12.9436	80/20	12.9436
934141	AD1-041 C	6.4875	Adder	7.63
934521	AD1-076 C	69.1001	Adder	81.29
934575	AD1-082 C	0.5273	Adder	0.62
935111	AD1-144 C	0.4519	80/20	0.4519
935164	AD1-151 C	17.5828	Adder	20.69
936041	AD2-007 C	0.9111	Adder	1.07
936051	AD2-008 C	3.3204	Adder	3.91
936401	AD2-051 C O1	10.6005	Adder	12.47
936661	AD2-085 C	4.3566	Adder	5.13
937221	AD2-160 C O1	10.0056	80/20	10.0056
938494	AE1-068_C1	34.5957	Adder	40.7
938497	AE1-068_C2	34.5957	Adder	40.7
938504	AE1-069_C1	26.3658	Adder	31.02
938507	AE1-069_C2	28.4286	Adder	33.45
938535	AE1-072 C	29.9356	80/20	29.9356
938771	AE1-103 C	4.7010	Adder	5.53
939414	AE1-173_C1	48.4949	80/20	48.4949
939415	AE1-173_C2	41.5670	80/20	41.5670
939416	AE1-173_C3	48.4949	80/20	48.4949
939431	AE1-175 C	4.0622	80/20	4.0622
939611	AE1-191 C	12.9749	Adder	15.26
940061	AE2-000BC O1	11.4939	Adder	13.52
940231	AE2-005 C	1.6332	Adder	1.92
940251	AE2-007_O1 (Withdrawn : 12/11/2020)	298.0885	80/20	298.0885
940471	AE2-031 C	37.7130	Adder	44.37
940491	AE2-034 C	9.4119	Adder	11.07
940551	AE2-041	8.8624	Adder	10.43
940641	AE2-051 C O1	25.3584	80/20	25.3584
940891	AE2-078 C	3.6585	80/20	3.6585
940901	AE2-079 C	3.6585	80/20	3.6585
941031	AE2-094 C	45.4213	Adder	53.44
941101	AE2-104 C O1	5.3617	80/20	5.3617
941281	AE2-122 C O1	48.8761	80/20	48.8761
941291	AE2-123 C O1	50.2294	80/20	50.2294
941301	AE2-124 C O1	45.6816	80/20	45.6816
941501	AE2-147 C	26.0919	80/20	26.0919
941591	AE2-156_O1	30.7590	80/20	30.7590
942131	AE2-225 C	3.5741	80/20	3.5741
942171	AE2-229 C	2.6806	80/20	2.6806
942341	AE2-247 C	1.8863	Adder	2.22
942401	AE2-253 C	10.5242	80/20	10.5242

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942551	AE2-270	29.8924	Adder	35.17
942931	AE2-313 C	40.7636	Adder	47.96
943171	AE2-346 C	1.6661	Adder	1.96
943431	AF1-014 C	1.5473	Adder	1.82
943461	AF1-017 C	1.7067	Adder	2.01
943471	AF1-018	8.8624	Adder	10.43
943611	AF1-032 C	2.9188	80/20	2.9188
943621	AF1-033 C	3.6585	80/20	3.6585
944011	AF1-069 C	14.8409	Adder	17.46
944581	AF1-123 C O1	84.0753	80/20	84.0753
944591	AF1-124 C O1	84.0753	80/20	84.0753
944601	AF1-125 C O1	84.0753	80/20	84.0753
944871	AF1-152 C	8.6973	80/20	8.6973
945361	AF1-201 C O1	26.6814	80/20	26.6814
945711	AF1-236 C O1	103.0384	Adder	121.22
957491	AF2-043 C	3.5741	80/20	3.5741
957521	AF2-046 C	19.9647	Adder	23.49
957531	AF2-047 C	22.3646	Adder	26.31
957601	AF2-054 C	2.6029	Adder	3.06
957631	AF2-057	6.1426	80/20	6.1426
957711	AF2-065 C	15.2451	Adder	17.94
957821	AF2-076 C	8.7747	80/20	8.7747
957831	AF2-077 C	3.4444	80/20	3.4444
957871	AF2-081 C	17.0094	80/20	17.0094
958161	AF2-110 C	2.2104	80/20	2.2104
959511	AF2-242 C	8.5768	Adder	10.09
961091	AF2-400 C	0.5865	Adder	0.69
961611	AG1-000B C	10.5837	Adder	23.49
961681	AG1-008 C	10.6025	Adder	23.53
961711	AG1-011	17.1687	Adder	38.11
961851	AG1-027 C	26.6172	80/20	26.6172
961931	AG1-036 C	0.8549	Adder	1.9
961941	AG1-037 C	0.3154	Adder	0.7
962131	AG1-057	2.3485	Adder	5.21
962321	AG1-081 C (Withdrawn : 01/15/2021)	3.3259	80/20	3.3259
962331	AG1-082 C	1.2615	Adder	2.8
962341	AG1-083 C	1.2615	Adder	2.8
962351	AG1-084 C	1.1000	Adder	2.44
962361	AG1-085 C	1.1000	Adder	2.44
962531	AG1-102 C	1.7681	80/20	1.7681
962961	AG1-145 C	3.6652	80/20	3.6652
962971	AG1-146 C	1.8384	Adder	4.08
962981	AG1-147 C	4.2896	Adder	9.52
963041	AG1-153 C	3.3297	Adder	7.39
963111	AG1-160 C	3.3798	Adder	7.5
963221	AG1-171 C	1.2425	Adder	2.76
963231	AG1-172 C	1.2425	Adder	2.76
963241	AG1-173 C	1.2425	Adder	2.76
963251	AG1-174 C	1.2425	Adder	2.76
963261	AG1-175 C	1.2425	Adder	2.76
963291	AG1-178 C O1	93.1181	80/20	93.1181

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963351	AG1-184 O1	50.1669	80/20	50.1669
963821	AG1-235 C O1	41.4126	80/20	41.4126
964491	AG1-312 C O1	12.1221	Adder	26.91
964801	AG1-343 C	3.7374	Adder	8.3
964931	AG1-357 C	12.1894	Adder	27.06
964951	AG1-359 O1	46.2435	80/20	46.2435
965001	AG1-364 C O1	12.3004	80/20	12.3004
965181	AG1-383 C	4.7390	80/20	4.7390
965291	AG1-394 C	1.2828	Adder	2.85
965631	AG1-431	31.6165	Adder	70.18
965691	AG1-437 C O1	6.6656	Adder	14.8
965701	AG1-438 C O1	6.6656	Adder	14.8
965741	AG1-442 O1	3.8883	Adder	8.63
965751	AG1-443 O1	3.8883	Adder	8.63
965811	AG1-449	14.0145	Adder	31.11
966361	AG1-505 C	9.7134	Adder	21.56
966371	AG1-506 C	9.7134	Adder	21.56
966491	AG1-518 O1	14.8920	80/20	14.8920
966611	AG1-531 C	10.5001	80/20	10.5001
966931	AG1-431A	23.7540	Adder	52.73
WEC	WEC	0.5714	Confirmed LTF	0.5714
LGEE	LGEE	1.1894	Confirmed LTF	1.1894
CPL	CPL	9.3434	Confirmed LTF	9.3434
CBM-W2	CBM-W2	31.1539	Confirmed LTF	31.1539
NY	NY	1.8006	Confirmed LTF	1.8006
TVA	TVA	6.2356	Confirmed LTF	6.2356
SIGE	SIGE	0.5991	Confirmed LTF	0.5991
CBM-S2	CBM-S2	107.7304	Confirmed LTF	107.7304
CBM-S1	CBM-S1	1.5158	Confirmed LTF	1.5158
MEC	MEC	3.7945	Confirmed LTF	3.7945
LAGN	LAGN	7.7578	Confirmed LTF	7.7578
AA2-074	AA2-074	6.1659	LTF	6.1659
CBM-W1	CBM-W1	22.9648	Confirmed LTF	22.9648

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
168718112	314903	8CHCKAHM	DVP	314214	6CHCKAHM	DVP	1	DVP_P1-2: LN 557	single	934.92	207.09	208.18	DC	12.61

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.1798	80/20	0.1798
314295	6BIRDNECK	0.0219	80/20	0.0219
314491	3PENDLTN	0.1632	80/20	0.1632
314507	3THOMPSN	0.1614	80/20	0.1614
314638	6ELIZ CT	0.1051	80/20	0.1051
314639	6TANGLEW	0.1903	80/20	0.1903
314643	3O INLET	0.2146	80/20	0.2146
315098	1CHESPKA	0.2139	80/20	0.2139
315099	1CHESPKB (Deactivation : 31/05/2019)	1.4832	80/20	1.4832
315108	1ELIZAR1	1.5929	80/20	1.5929
315109	1ELIZAR2	1.5653	80/20	1.5653
315110	1ELIZAR3	1.6133	80/20	1.6133
315115	1S HAMPT1	0.5234	80/20	0.5234
315233	1SURRY 2	19.8580	80/20	19.8580
315242	1Z1-086 GT2	3.1663	80/20	3.1663
315243	1Z1-086 GT3	3.1663	80/20	3.1663
315244	1Z1-086 ST	5.5042	80/20	5.5042
315260	1GOSPORTA	0.1706	80/20	0.1706
315261	1GOSPORTB	0.2180	80/20	0.2180
315262	1GOSPORTC	0.1850	80/20	0.1850
315292	1DOMTR78	0.5064	80/20	0.5064
315293	1DOMTR9	2.6190	80/20	2.6190
315294	1DOMTR10	3.2095	80/20	3.2095
315602	1HOLLOMANSOL	0.5115	80/20	0.5115
315603	6AA1-139SOLA	1.1387	80/20	1.1387
315605	6W1-029WIND	0.5141	80/20	0.5141
315611	6Z1-036WIND	0.4911	80/20	0.4911
315614	AA2-178 C	0.6388	80/20	0.6388
316103	AB2-015 C	3.1900	80/20	3.1900
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	119.3964	80/20	119.3964
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	119.3964	80/20	119.3964
316114	AB2-068 ST (Withdrawn : 01/11/2021)	206.8417	80/20	206.8417
316134	AC1-107 G1	224.2047	80/20	224.2047
316135	AC1-107 G2	224.2047	80/20	224.2047
316136	AC1-107 G3	224.2467	80/20	224.2467
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.1161	80/20	0.1161
316258	AE1-162 C	0.1123	80/20	0.1123

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925121	AB2-169 C	0.3687	80/20	0.3687
925863	AC1-065 C	-2.9120	Adder	-3.43
926661	AC1-147 C	0.1809	80/20	0.1809
926754	AC1-161 C	20.8232	80/20	20.8232
926784	AC1-164 C	-31.4326	Adder	-36.98
932044	AC2-012 C	5.1876	80/20	5.1876
933294	AC2-141 C	20.8232	80/20	20.8232
933731	AC2-196 C	0.1487	80/20	0.1487
933991	AD1-023 C	5.1228	80/20	5.1228
934061	AD1-033 C	3.9488	80/20	3.9488
934141	AD1-041 C	-1.9518	Adder	-2.3
934521	AD1-076 C	21.7595	80/20	21.7595
935111	AD1-144 C	0.1149	80/20	0.1149
936401	AD2-051 C O1	3.1450	80/20	3.1450
937221	AD2-160 C O1	3.0320	80/20	3.0320
938221	AE1-035 C	0.1279	80/20	0.1279
938494	AE1-068_C1	9.4974	80/20	9.4974
938497	AE1-068_C2	9.4974	80/20	9.4974
938504	AE1-069_C1	7.2381	80/20	7.2381
938507	AE1-069_C2	7.8044	80/20	7.8044
938535	AE1-072 C	9.0031	80/20	9.0031
938771	AE1-103 C	1.4009	80/20	1.4009
939414	AE1-173_C1	13.3510	80/20	13.3510
939415	AE1-173_C2	11.4437	80/20	11.4437
939416	AE1-173_C3	13.3510	80/20	13.3510
940231	AE2-005 C	-0.5295	Adder	-0.62
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	89.1450	80/20	89.1450
940471	AE2-031 C	10.3460	80/20	10.3460
940491	AE2-034 C	3.0366	80/20	3.0366
940641	AE2-051 C O1	6.6699	80/20	6.6699
941031	AE2-094 C	12.4755	80/20	12.4755
941101	AE2-104 C O1	1.4033	80/20	1.4033
941281	AE2-122 C O1	14.7284	80/20	14.7284
941291	AE2-123 C O1	15.1363	80/20	15.1363
941301	AE2-124 C O1	13.7882	80/20	13.7882
941501	AE2-147 C	7.5195	80/20	7.5195
941591	AE2-156 O1	9.1500	80/20	9.1500
942131	AE2-225 C	1.0211	80/20	1.0211
942151	AE2-227 C	-0.7842	Adder	-0.92
942171	AE2-229 C	0.7658	80/20	0.7658
942401	AE2-253 C	3.1892	80/20	3.1892
942931	AE2-313 C	11.1815	80/20	11.1815
943611	AF1-032 C	0.8339	80/20	0.8339
944011	AF1-069 C	4.0762	80/20	4.0762
944581	AF1-123 C O1	26.7901	80/20	26.7901
944591	AF1-124 C O1	26.7901	80/20	26.7901
944601	AF1-125 C O1	26.7901	80/20	26.7901
944871	AF1-152 C	2.5065	80/20	2.5065
945711	AF1-236 C O1	33.2435	80/20	33.2435
957491	AF2-043 C	1.0211	80/20	1.0211
957531	AF2-047 C	7.2155	80/20	7.2155

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957631	AF2-057	1.8202	80/20	1.8202
957821	AF2-076 C	2.4858	80/20	2.4858
957871	AF2-081 C	5.1358	80/20	5.1358
958161	AF2-110 C	0.5785	80/20	0.5785
959641	AF2-255 C	-0.1960	Adder	-0.23
961091	AF2-400 C	0.1723	80/20	0.1723
961851	AG1-027 C	6.8827	80/20	6.8827
963291	AG1-178 C O1	25.4753	80/20	25.4753
963351	AG1-184 O1	13.7247	80/20	13.7247
963821	AG1-235 C O1	12.6090	80/20	12.6090
964491	AG1-312 C O1	6.8566	80/20	6.8566
964951	AG1-359 O1	14.1390	80/20	14.1390
965001	AG1-364 C O1	3.6568	80/20	3.6568
965181	AG1-383 C	1.4444	80/20	1.4444
965631	AG1-431	19.2463	80/20	19.2463
965691	AG1-437 C O1	3.8640	80/20	3.8640
965701	AG1-438 C O1	3.8640	80/20	3.8640
965741	AG1-442 O1	2.2540	80/20	2.2540
965751	AG1-443 O1	2.2540	80/20	2.2540
965811	AG1-449	7.2541	80/20	7.2541
966491	AG1-518 O1	4.2545	80/20	4.2545
966931	AG1-431A	14.4600	80/20	14.4600
WEC	WEC	0.1695	Confirmed LTF	0.1695
LGEE	LGEE	0.3493	Confirmed LTF	0.3493
CPL	CPL	2.1983	Confirmed LTF	2.1983
CBM-W2	CBM-W2	8.1894	Confirmed LTF	8.1894
NY	NY	0.3534	Confirmed LTF	0.3534
TVA	TVA	1.5890	Confirmed LTF	1.5890
SIGE	SIGE	0.1392	Confirmed LTF	0.1392
CBM-S2	CBM-S2	25.6720	Confirmed LTF	25.6720
CBM-S1	CBM-S1	0.3914	Confirmed LTF	0.3914
MEC	MEC	1.0615	Confirmed LTF	1.0615
LAGN	LAGN	1.9775	Confirmed LTF	1.9775
AA2-074	AA2-074	1.4512	LTF	1.4512
CBM-W1	CBM-W1	6.9820	Confirmed LTF	6.9820

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
163645710	314908	8ELMONT	DVP	314911	8LADYSMITH	DVP	1	DVP_P1-2: LN 576	single	2442.12	219.14	219.2	DC	42.04

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314229	6MT RD221	0.2111	80/20	0.2111
314236	6NRTHEST	0.3205	80/20	0.3205
314241	6OLDCHRC	1.4851	80/20	1.4851
314250	6ROCKVILLE	0.5532	80/20	0.5532
314309	6IRON208	0.7631	80/20	0.7631
314421	6WINCHST	0.2285	80/20	0.2285
315058	1CHESTF3 (Deactivation : 13/12/2018)	32.0440	80/20	32.0440
315059	1CHESTF4 (Deactivation : 13/12/2018)	51.9433	80/20	51.9433
315060	1CHESTF5 (Deactivation : 31/05/2023)	114.1420	80/20	114.1420
315061	1CHESTG7	6.7247	80/20	6.7247
315062	1CHESTS7	3.0871	80/20	3.0871
315063	1CHESTG8	6.6167	80/20	6.6167
315064	1CHESTS8	3.4061	80/20	3.4061
315065	1CHESTF6 (Deactivation : 31/05/2023)	182.6276	Adder	214.86
315067	1DARBY 1	4.4333	80/20	4.4333
315068	1DARBY 2	4.4384	80/20	4.4384
315069	1DARBY 3	4.4540	80/20	4.4540
315070	1DARBY 4	4.4592	80/20	4.4592
315074	1HOPCGN1 (Deactivation : 25/06/2019)	0.0320	80/20	0.0320
315075	1HOPCGN2 (Deactivation : 25/06/2019)	0.0320	80/20	0.0320
315076	1HOPPOLC	2.6791	80/20	2.6791
315077	1HOPHCF1	4.1877	80/20	4.1877
315078	1HOPHCF2	4.1877	80/20	4.1877
315079	1HOPHCF3	4.1877	80/20	4.1877
315080	1HOPHCF4	6.3573	80/20	6.3573
315083	1SPRUNCA (Deactivation : 12/01/2021)	15.5433	Adder	18.29
315084	1SPRUNCB (Deactivation : 12/01/2021)	15.5433	Adder	18.29
315092	1YORKTN3	40.1074	80/20	40.1074
315233	1SURRY 2	43.8786	80/20	43.8786
316033	AB2-134 C	3.6034	80/20	3.6034
316075	AC2-137 C	0.5978	80/20	0.5978
316083	AB2-161 C	4.9845	Adder	5.86
316103	AB2-015 C	12.2332	Adder	14.39
316108	AB2-160 C	8.0636	Adder	9.49

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	112.2311	80/20	112.2311
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	112.2311	80/20	112.2311
316114	AB2-068 ST (Withdrawn : 01/11/2021)	194.4286	80/20	194.4286
316132	AB2-190 C	35.6664	80/20	35.6664
316134	AC1-107 G1	210.7495	80/20	210.7495
316135	AC1-107 G2	210.7495	80/20	210.7495
316136	AC1-107 G3	210.7890	80/20	210.7890
925863	AC1-065 C	10.6892	Adder	12.58
926754	AC1-161 C	53.7550	80/20	53.7550
926784	AC1-164 C	73.8929	80/20	73.8929
927044	AC1-191 C	14.0019	Adder	16.47
927225	AC1-216 C	2.7506	80/20	2.7506
932044	AC2-012 C	15.1881	Adder	17.87
932501	AC2-070 C (Withdrawn : 01/22/2021)	0.4880	80/20	0.4880
932581	AC2-078 C O1	5.9830	Adder	7.04
932591	AC2-079 C O1	8.4424	Adder	9.93
933294	AC2-141 C	53.7550	80/20	53.7550
934014	AD1-025 C	29.9650	80/20	29.9650
934061	AD1-033 C	11.1488	Adder	13.12
934141	AD1-041 C	7.5903	Adder	8.93
934575	AD1-082 C	11.3595	Adder	13.36
935164	AD1-151 C	28.6605	80/20	28.6605
936041	AD2-007 C	1.4315	80/20	1.4315
936051	AD2-008 C	5.2168	80/20	5.2168
936151	AD2-021	0.0682	80/20	0.0682
936661	AD2-085 C	5.0562	Adder	5.95
936761	AD2-097 C	2.9479	Adder	3.47
937221	AD2-160 C O1	8.6556	Adder	10.18
938535	AE1-072 C	26.0023	Adder	30.59
938634	AE1-085 C	13.1232	Adder	15.44
938771	AE1-103 C	5.2299	Adder	6.15
939195	AE1-149 C	15.7651	Adder	18.55
939414	AE1-173_C1	42.9257	Adder	50.5
939415	AE1-173_C2	36.7934	Adder	43.29
939416	AE1-173_C3	42.9257	Adder	50.5
939431	AE1-175 C	4.3577	80/20	4.3577
939611	AE1-191 C	15.1807	Adder	17.86
940061	AE2-000BC O1	15.7340	Adder	18.51
940231	AE2-005 C	1.9435	Adder	2.29
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	257.8906	Adder	303.4
940431	AE2-027 C O1	19.2994	Adder	22.71
940481	AE2-033 C	21.7350	Adder	25.57
940491	AE2-034 C	10.2123	Adder	12.01
940541	AE2-040	3.8606	Adder	4.54
940551	AE2-041	10.3397	Adder	12.16
940641	AE2-051 C O1	22.6991	Adder	26.7
940651	AE2-052	5.2550	Adder	6.18
940891	AE2-078 C	4.1910	80/20	4.1910

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940901	AE2-079 C	4.1910	80/20	4.1910
941031	AE2-094 C	49.8737	Adder	58.67
941101	AE2-104 C O1	4.9241	Adder	5.79
941281	AE2-122 C O1	42.2321	Adder	49.68
941291	AE2-123 C O1	43.4015	Adder	51.06
941301	AE2-124 C O1	39.4579	Adder	46.42
941501	AE2-147 C	23.1382	Adder	27.22
941581	AE2-155 C	0.1857	80/20	0.1857
941591	AE2-156 O1	26.6526	Adder	31.36
942001	AE2-212 C	3.1840	Adder	3.75
942131	AE2-225 C	3.1468	Adder	3.7
942151	AE2-227 C	3.8953	80/20	3.8953
942161	AE2-228 C	3.2195	Adder	3.79
942171	AE2-229 C	2.3601	Adder	2.78
942341	AE2-247 C	2.1916	Adder	2.58
942371	AE2-250 C O1	14.3236	Adder	16.85
942401	AE2-253 C	9.1042	Adder	10.71
942551	AE2-270	47.7375	80/20	47.7375
943431	AF1-014 C	1.8412	Adder	2.17
943461	AF1-017 C	1.9829	Adder	2.33
943471	AF1-018	10.3397	Adder	12.16
943611	AF1-032 C	2.5699	Adder	3.02
943621	AF1-033 C	4.1910	80/20	4.1910
944011	AF1-069 C	16.2956	Adder	19.17
944581	AF1-123 C O1	71.3344	Adder	83.92
944591	AF1-124 C O1	71.3344	Adder	83.92
944601	AF1-125 C O1	71.3344	Adder	83.92
944631	AF1-128 O1	100.0862	80/20	100.0862
944641	AF1-129	153.2445	Adder	180.29
944871	AF1-152 C	7.7127	Adder	9.07
945361	AF1-201 C O1	23.9575	Adder	28.19
945711	AF1-236 C O1	111.8008	Adder	131.53
946011	AF1-266	18.1939	Adder	21.4
946261	AF1-291 C	3.2203	Adder	3.79
957491	AF2-043 C	3.1468	Adder	3.7
957531	AF2-047 C	24.2665	Adder	28.55
957601	AF2-054 C	2.9790	Adder	3.5
957631	AF2-057	5.3292	Adder	6.27
957711	AF2-065 C	24.3461	80/20	24.3461
957821	AF2-076 C	7.7829	Adder	9.16
957831	AF2-077 C	3.1471	Adder	3.7
957871	AF2-081 C	14.7441	Adder	17.35
957911	AF2-085	5.0310	Adder	5.92
958141	AF2-108	2.6198	Adder	3.08
958161	AF2-110 C	2.0300	Adder	2.39
959641	AF2-255 C	0.9738	80/20	0.9738
959651	AF2-256 C	0.8049	Adder	0.95
959661	AF2-257 C	0.8051	Adder	0.95
959671	AF2-258 C	0.7960	Adder	0.94
959681	AF2-259 C	3.9297	Adder	4.62
961091	AF2-400 C	0.6606	Adder	0.78
961611	AG1-000B C	12.7108	Adder	28.21

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961711	AG1-011	50.8960	80/20	50.8960
961851	AG1-027 C	13.0994	Adder	29.08
962131	AG1-057	2.7400	Adder	6.08
962191	AG1-064 C	2.5838	80/20	2.5838
962201	AG1-065 C	2.5838	80/20	2.5838
962271	AG1-075 C O1	13.1023	Adder	29.08
962321	AG1-081 C (Withdrawn : 01/15/2021)	3.8100	80/20	3.8100
962531	AG1-102 C	0.8562	Adder	1.9
962961	AG1-145 C	3.9318	80/20	3.9318
963221	AG1-171 C	3.8214	80/20	3.8214
963231	AG1-172 C	3.8214	80/20	3.8214
963241	AG1-173 C	3.8214	80/20	3.8214
963251	AG1-174 C	3.8214	80/20	3.8214
963261	AG1-175 C	3.8214	80/20	3.8214
963291	AG1-178 C O1	43.7239	Adder	97.06
963351	AG1-184 O1	23.5560	Adder	52.29
963821	AG1-235 C O1	18.9380	Adder	42.04
964951	AG1-359 O1	21.0983	Adder	46.83
965001	AG1-364 C O1	5.6502	Adder	12.54
965181	AG1-383 C	2.1659	Adder	4.81
965631	AG1-431	34.3052	Adder	76.15
965811	AG1-449	0.7051	Adder	1.57
966491	AG1-518 O1	6.9492	Adder	15.43
966611	AG1-531 C	11.4998	80/20	11.4998
966731	AG1-544 C	5.4321	Adder	12.06
966741	AG1-545 C	1.8110	Adder	4.02
966871	AG1-558 C	1.6676	Adder	3.7
966931	AG1-431A	25.7740	Adder	57.21
WEC	WEC	1.7334	Confirmed LTF	1.7334
LGEE	LGEE	3.6649	Confirmed LTF	3.6649
CPL	CPL	12.6624	Confirmed LTF	12.6624
CBM-W2	CBM-W2	69.0010	Confirmed LTF	69.0010
NY	NY	3.9622	Confirmed LTF	3.9622
TVA	TVA	12.6700	Confirmed LTF	12.6700
SIGE	SIGE	1.5098	Confirmed LTF	1.5098
CBM-S2	CBM-S2	160.4524	Confirmed LTF	160.4524
CBM-S1	CBM-S1	3.2167	Confirmed LTF	3.2167
MEC	MEC	9.9678	Confirmed LTF	9.9678
LAGN	LAGN	15.5628	Confirmed LTF	15.5628
AA2-074	AA2-074	8.3718	LTF	8.3718
CBM-W1	CBM-W1	72.3572	Confirmed LTF	72.3572

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
163645775	314914	8MDLTHAN	DVP	314918	8NO ANNA	DVP	1	DVP_P1-2: LN 574	single	2442.12	175.84	176.2	DC	37.52

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.5622	80/20	0.5622
314295	6BIRDNECK	0.0659	80/20	0.0659
314435	6SAPONY	0.5994	80/20	0.5994
314491	3PENDLTN	0.4916	80/20	0.4916
314507	3THOMPSN	0.4946	80/20	0.4946
314572	3EMPORIA	0.5341	Adder	0.63
314638	6ELIZ CT	0.3286	80/20	0.3286
314639	6TANGLEW	0.6031	80/20	0.6031
314643	3O INLET	0.6534	80/20	0.6534
315065	1CHESTF6 (Deactivation : 31/05/2023)	145.8715	Adder	171.61
315074	1HOPCGN1 (Deactivation : 25/06/2019)	0.0214	Adder	0.03
315075	1HOPCGN2 (Deactivation : 25/06/2019)	0.0214	Adder	0.03
315083	1SPRUNCA (Deactivation : 12/01/2021)	13.1246	Adder	15.44
315084	1SPRUNCB (Deactivation : 12/01/2021)	13.1246	Adder	15.44
315098	1CHESPKA	0.6537	80/20	0.6537
315099	1CHESPKB (Deactivation : 31/05/2019)	4.5315	80/20	4.5315
315102	1BRUNSWICKG1	12.9917	80/20	12.9917
315103	1BRUNSWICKG2	12.9917	80/20	12.9917
315104	1BRUNSWICKG3	12.9917	80/20	12.9917
315105	1BRUNSWICKS1	26.9901	80/20	26.9901
315108	1ELIZAR1	4.8060	80/20	4.8060
315109	1ELIZAR2	4.7226	80/20	4.7226
315110	1ELIZAR3	4.8675	80/20	4.8675
315233	1SURRY 2	35.9591	80/20	35.9591
315241	1Z1-086 GT1	16.6986	80/20	16.6986
315242	1Z1-086 GT2	16.6986	80/20	16.6986
315243	1Z1-086 GT3	16.6986	80/20	16.6986
315244	1Z1-086 ST	29.0284	80/20	29.0284
315260	1GOSPORTA	0.5220	80/20	0.5220
315261	1GOSPORTB	0.6667	80/20	0.6667
315262	1GOSPORTC	0.5658	80/20	0.5658
315293	1DOMTR9	8.7258	Adder	10.27
315294	1DOMTR10	10.6934	Adder	12.58
315603	6AA1-139SOLA	3.4369	80/20	3.4369
315605	6W1-029WIND	1.6716	80/20	1.6716
315611	6Z1-036WIND	1.6481	80/20	1.6481

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316083	AB2-161 C	5.0935	80/20	5.0935
316103	AB2-015 C	11.1329	Adder	13.1
316108	AB2-160 C	6.7143	Adder	7.9
316132	AB2-190 C	24.4835	Adder	28.8
316140	AB2-099 C (Suspended)	0.7462	Adder	0.88
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.4209	80/20	0.4209
316258	AE1-162 C	0.5108	80/20	0.5108
923991	AB2-040 C O1	3.6718	Adder	4.32
926661	AC1-147 C	0.5528	80/20	0.5528
926754	AC1-161 C	47.5821	80/20	47.5821
932044	AC2-012 C	15.8494	80/20	15.8494
932581	AC2-078 C O1	6.1088	80/20	6.1088
932591	AC2-079 C O1	8.7326	80/20	8.7326
933294	AC2-141 C	47.5821	80/20	47.5821
933731	AC2-196 C	0.4394	80/20	0.4394
933991	AD1-023 C	16.8659	Adder	19.84
934014	AD1-025 C	20.7117	Adder	24.37
934061	AD1-033 C	11.6962	80/20	11.6962
934521	AD1-076 C	69.9533	Adder	82.3
934575	AD1-082 C	11.6079	80/20	11.6079
934615	AD1-087 C	9.6681	Adder	11.37
935111	AD1-144 C	0.4166	80/20	0.4166
935164	AD1-151 C	19.6743	Adder	23.15
935171	AD1-152 C O1	10.6194	Adder	12.49
936041	AD2-007 C	0.9894	Adder	1.16
936051	AD2-008 C	3.6059	Adder	4.24
936401	AD2-051 C O1	11.2116	Adder	13.19
936661	AD2-085 C	5.2613	80/20	5.2613
936761	AD2-097 C	2.4892	Adder	2.93
937221	AD2-160 C O1	9.0951	80/20	9.0951
937481	AD2-202 C O1	2.8318	Adder	3.33
938494	AE1-068_C1	49.9889	80/20	49.9889
938497	AE1-068_C2	49.9889	80/20	49.9889
938504	AE1-069_C1	38.0971	80/20	38.0971
938507	AE1-069_C2	41.0778	80/20	41.0778
938535	AE1-072 C	27.3517	80/20	27.3517
938551	AE1-074 C	0.6107	80/20	0.6107
938634	AE1-085 C	13.3895	80/20	13.3895
938771	AE1-103 C	4.7311	Adder	5.57
939195	AE1-149 C	16.0272	80/20	16.0272
939414	AE1-173_C1	51.9170	80/20	51.9170
939415	AE1-173_C2	44.5003	80/20	44.5003
939416	AE1-173_C3	51.9170	80/20	51.9170
940061	AE2-000BC O1	16.1010	80/20	16.1010
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	269.3798	80/20	269.3798
940431	AE2-027 C O1	15.4401	Adder	18.16
940471	AE2-031 C	54.5281	80/20	54.5281
940481	AE2-033 C	24.3299	80/20	24.3299
940491	AE2-034 C	9.3106	Adder	10.95
940541	AE2-040	4.3222	80/20	4.3222
940641	AE2-051 C O1	28.7217	80/20	28.7217

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940651	AE2-052	5.3424	80/20	5.3424
940891	AE2-078 C	2.9568	Adder	3.48
940901	AE2-079 C	2.9568	Adder	3.48
941031	AE2-094 C	65.4234	80/20	65.4234
941101	AE2-104 C O1	5.1652	80/20	5.1652
941281	AE2-122 C O1	44.2187	80/20	44.2187
941291	AE2-123 C O1	45.4431	80/20	45.4431
941301	AE2-124 C O1	41.3261	80/20	41.3261
941501	AE2-147 C	24.4512	80/20	24.4512
941591	AE2-156 O1	27.8230	80/20	27.8230
942001	AE2-212 C	2.6624	Adder	3.13
942131	AE2-225 C	3.3056	80/20	3.3056
942161	AE2-228 C	2.6023	Adder	3.06
942171	AE2-229 C	2.4792	80/20	2.4792
942341	AE2-247 C	2.2803	80/20	2.2803
942371	AE2-250 C O1	11.9267	Adder	14.03
942401	AE2-253 C	9.5665	80/20	9.5665
942471	AE2-260 C O1	18.4328	Adder	21.69
942551	AE2-270	32.8963	Adder	38.7
942931	AE2-313 C	58.9598	80/20	58.9598
943171	AE2-346 C	1.7909	Adder	2.11
943461	AF1-017 C	2.0631	80/20	2.0631
943611	AF1-032 C	2.6996	80/20	2.6996
943621	AF1-033 C	2.9568	Adder	3.48
944011	AF1-069 C	21.3763	80/20	21.3763
944581	AF1-123 C O1	75.0792	80/20	75.0792
944591	AF1-124 C O1	75.0792	80/20	75.0792
944601	AF1-125 C O1	75.0792	80/20	75.0792
944641	AF1-129	122.4021	Adder	144.0
944871	AF1-152 C	8.1504	80/20	8.1504
945711	AF1-236 C O1	101.9285	Adder	119.92
945811	AF1-246 C O1	11.5823	80/20	11.5823
946011	AF1-266	20.3661	80/20	20.3661
946261	AF1-291 C	2.6015	Adder	3.06
946281	AF1-292 C	1.9090	Adder	2.25
957481	AF2-042 C	82.7310	80/20	82.7310
957491	AF2-043 C	3.3056	80/20	3.3056
957521	AF2-046 C	21.4450	Adder	25.23
957531	AF2-047 C	22.1237	Adder	26.03
957631	AF2-057	5.5612	80/20	5.5612
957711	AF2-065 C	16.7771	Adder	19.74
957821	AF2-076 C	8.1999	80/20	8.1999
957871	AF2-081 C	15.5008	80/20	15.5008
957911	AF2-085	6.6022	80/20	6.6022
958141	AF2-108	2.6769	80/20	2.6769
958161	AF2-110 C	2.1294	80/20	2.1294
958501	AF2-144 C	2.2982	Adder	2.7
959531	AF2-244 C (Withdrawn : 01/06/2021)	2.1180	Adder	2.49
959651	AF2-256 C	0.6506	Adder	0.77
959661	AF2-257 C	0.6504	Adder	0.77
959671	AF2-258 C	0.6656	Adder	0.78

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959681	AF2-259 C	4.0154	80/20	4.0154
959751	AF2-266	11.0755	Adder	13.03
960081	AF2-299 C	3.2173	Adder	3.79
961091	AF2-400 C	0.6012	Adder	0.71
961611	AG1-000B C	10.5561	Adder	23.43
961681	AG1-008 C	11.3886	Adder	25.28
961711	AG1-011	18.6449	Adder	41.39
961851	AG1-027 C	26.0714	80/20	26.0714
961931	AG1-036 C	0.9186	Adder	2.04
961941	AG1-037 C	0.3390	Adder	0.75
962271	AG1-075 C O1	10.9098	Adder	24.22
962321	AG1-081 C (Withdrawn : 01/15/2021)	1.4246	Adder	3.16
962331	AG1-082 C	1.3560	Adder	3.01
962341	AG1-083 C	1.3560	Adder	3.01
962351	AG1-084 C	1.1827	Adder	2.63
962361	AG1-085 C	1.1827	Adder	2.63
962491	AG1-098 C O1	8.4219	Adder	18.69
962561	AG1-105 C O1	6.8494	Adder	15.2
963041	AG1-153 C	9.1158	80/20	9.1158
963111	AG1-160 C	9.2304	80/20	9.2304
963221	AG1-171 C	1.3903	Adder	3.09
963231	AG1-172 C	1.3903	Adder	3.09
963241	AG1-173 C	1.3903	Adder	3.09
963251	AG1-174 C	1.3903	Adder	3.09
963261	AG1-175 C	1.3903	Adder	3.09
963291	AG1-178 C O1	102.6810	80/20	102.6810
963351	AG1-184 O1	55.3190	80/20	55.3190
963821	AG1-235 C O1	37.5219	80/20	37.5219
964491	AG1-312 C O1	12.7300	Adder	28.26
964801	AG1-343 C	4.0122	Adder	8.91
964931	AG1-357 C	34.4172	80/20	34.4172
964951	AG1-359 O1	41.7780	80/20	41.7780
965001	AG1-364 C O1	11.1280	80/20	11.1280
965181	AG1-383 C	4.2908	80/20	4.2908
965291	AG1-394 C	1.3770	Adder	3.06
965631	AG1-431	31.2759	Adder	69.42
965691	AG1-437 C O1	6.8756	Adder	15.26
965701	AG1-438 C O1	6.8756	Adder	15.26
965741	AG1-442 O1	4.0108	Adder	8.9
965751	AG1-443 O1	4.0108	Adder	8.9
965811	AG1-449	38.2324	80/20	38.2324
966361	AG1-505 C	26.9271	80/20	26.9271
966371	AG1-506 C	26.9271	80/20	26.9271
966491	AG1-518 O1	13.7735	80/20	13.7735
966611	AG1-531 C	4.2316	Adder	9.39
966621	AG1-532 C	0.9208	Adder	2.04
966731	AG1-544 C	10.4572	80/20	10.4572
966741	AG1-545 C	3.4875	80/20	3.4875
966931	AG1-431A	23.4981	Adder	52.16
WEC	WEC	1.4011	Confirmed LTF	1.4011
LGEE	LGEE	2.9461	Confirmed LTF	2.9461

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CPLE	CPLE	12.4679	Confirmed LTF	12.4679
CBM-W2	CBM-W2	59.3331	Confirmed LTF	59.3331
NY	NY	3.1466	Confirmed LTF	3.1466
TVA	TVA	11.1076	Confirmed LTF	11.1076
SIGE	SIGE	1.2049	Confirmed LTF	1.2049
CBM-S2	CBM-S2	153.5306	Confirmed LTF	153.5306
CBM-S1	CBM-S1	2.7911	Confirmed LTF	2.7911
MEC	MEC	8.2707	Confirmed LTF	8.2707
LAGN	LAGN	13.6973	Confirmed LTF	13.6973
AA2-074	AA2-074	8.2386	LTF	8.2386
CBM-W1	CBM-W1	58.1970	Confirmed LTF	58.1970

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
163645598	314918	8NO ANNA	DVP	314934	8SPOTSYL	DVP	1	DVP_P4-2: 568T575	breaker	3938.0	118.51	118.6	DC	39.92

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314333	6POWHATN	0.4278	50/50	0.4278
314435	6SAPONY	0.3939	50/50	0.3939
314466	6FENTRES	1.8729	Adder	2.2
314550	6HICKORY	3.4594	Adder	4.07
315102	1BRUNSWICKG1	8.8966	50/50	8.8966
315103	1BRUNSWICKG2	8.8966	50/50	8.8966
315104	1BRUNSWICKG3	8.8966	50/50	8.8966
315105	1BRUNSWICKS1	18.4825	50/50	18.4825
315153	1CLOVER1	12.6320	50/50	12.6320
315154	1CLOVER2	12.5061	50/50	12.5061
315177	1S ANNAG1	1.7698	50/50	1.7698
315178	1S ANNAS1	0.9095	50/50	0.9095
315179	1S ANNAG2	1.7698	50/50	1.7698
315180	1S ANNAS2	0.9095	50/50	0.9095
315225	1N ANNA1	90.4135	50/50	90.4135
315226	1N ANNA2	90.4517	50/50	90.4517
315241	1Z1-086 GT1	11.4369	50/50	11.4369
315242	1Z1-086 GT2	11.4369	50/50	11.4369
315243	1Z1-086 GT3	11.4369	50/50	11.4369
315244	1Z1-086 ST	19.8816	50/50	19.8816
923852	AB2-025 E	1.1216	50/50	1.1216
923862	AB2-026 E	1.2183	50/50	1.2183
925021	AB2-158 C	3.3057	50/50	3.3057
925022	AB2-158 E	9.3429	50/50	9.3429
926754	AC1-161 C	25.6817	Adder	30.21
926755	AC1-161 E	10.9628	Adder	12.9
933294	AC2-141 C	25.6817	Adder	30.21
933295	AC2-141 E	10.9628	Adder	12.9
933501	AC2-165 C	10.6943	50/50	10.6943
933502	AC2-165 E	8.0489	50/50	8.0489
933732	AC2-196 E	1.0061	Adder	1.18
934061	AD1-033 C	6.3432	Adder	7.46
934062	AD1-033 E	4.2288	Adder	4.98
934615	AD1-087 C	7.9141	50/50	7.9141
934616	AD1-087 E	3.3866	50/50	3.3866
935171	AD1-152 C O1	8.6928	50/50	8.6928
935172	AD1-152 E O1	5.7952	50/50	5.7952
937481	AD2-202 C O1	2.3181	50/50	2.3181
937482	AD2-202 E O1	1.3039	50/50	1.3039
938494	AE1-068_C1	34.2415	50/50	34.2415
938497	AE1-068_C2	34.2415	50/50	34.2415

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938498	AE1-068_E1	18.9285	50/50	18.9285
938499	AE1-068_E2	18.9285	50/50	18.9285
938504	AE1-069_C1	26.0958	50/50	26.0958
938507	AE1-069_C2	28.1376	50/50	28.1376
938508	AE1-069_E1	14.8451	50/50	14.8451
938509	AE1-069_E2	15.9935	50/50	15.9935
938551	AE1-074_C	0.4051	50/50	0.4051
938552	AE1-074_E	1.2936	50/50	1.2936
938561	AE1-075_C	0.3720	50/50	0.3720
938562	AE1-075_E	1.1594	50/50	1.1594
939231	AE1-154_C	3.4349	50/50	3.4349
939232	AE1-154_E	2.4044	50/50	2.4044
939414	AE1-173_C1	34.7004	50/50	34.7004
939415	AE1-173_C2	29.7432	50/50	29.7432
939416	AE1-173_C3	34.7004	50/50	34.7004
939423	AE1-173_E1	23.1336	50/50	23.1336
939424	AE1-173_E2	19.8288	50/50	19.8288
939425	AE1-173_E3	23.1336	50/50	23.1336
940471	AE2-031_C	37.3926	50/50	37.3926
940472	AE2-031_E	24.9284	50/50	24.9284
940481	AE2-033_C	13.5920	Adder	15.99
940482	AE2-033_E	9.1632	Adder	10.78
940541	AE2-040	2.8401	50/50	2.8401
940641	AE2-051_C O1	19.4481	50/50	19.4481
940642	AE2-051_E O1	12.9654	50/50	12.9654
941031	AE2-094_C	44.8215	50/50	44.8215
941032	AE2-094_E	20.0745	50/50	20.0745
941281	AE2-122_C O1	23.9646	Adder	28.19
941282	AE2-122_E O1	96.7029	Adder	113.77
941291	AE2-123_C O1	24.6282	Adder	28.97
941292	AE2-123_E O1	96.0393	Adder	112.99
941301	AE2-124_C O1	22.3999	Adder	26.35
941302	AE2-124_E O1	98.2880	Adder	115.63
942931	AE2-313_C	40.4325	50/50	40.4325
942932	AE2-313_E	26.9550	50/50	26.9550
944011	AF1-069_C	14.6449	50/50	14.6449
944012	AF1-069_E	5.6892	50/50	5.6892
944111	AF1-079_C	6.5263	50/50	6.5263
944112	AF1-079_E	8.8620	50/50	8.8620
944581	AF1-123_C O1	40.7456	Adder	47.94
944582	AF1-123_E O1	93.2960	Adder	109.76
944591	AF1-124_C O1	40.7456	Adder	47.94
944592	AF1-124_E O1	93.2960	Adder	109.76
944601	AF1-125_C O1	40.7456	Adder	47.94
944602	AF1-125_E O1	93.2960	Adder	109.76
945811	AF1-246_C O1	8.0182	50/50	8.0182
945812	AF1-246_E O1	11.0728	50/50	11.0728
946011	AF1-266	11.3776	Adder	13.39
946371	AF1-301_C	26.6844	50/50	26.6844
946372	AF1-301_E	17.9066	50/50	17.9066
957431	AF2-037_C	23.8617	50/50	23.8617
957432	AF2-037_E	15.9078	50/50	15.9078

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957481	AF2-042 C	57.2730	50/50	57.2730
957482	AF2-042 E	38.1820	50/50	38.1820
957691	AF2-063 C	38.0772	50/50	38.0772
957692	AF2-063 E	25.3848	50/50	25.3848
957911	AF2-085	4.6076	50/50	4.6076
958501	AF2-144 C	2.0043	50/50	2.0043
958502	AF2-144 E	1.3362	50/50	1.3362
959531	AF2-244 C (Withdrawn : 01/06/2021)	1.8471	50/50	1.8471
959532	AF2-244 E (Withdrawn : 01/06/2021)	1.1004	50/50	1.1004
959751	AF2-266	9.0675	50/50	9.0675
961811	AG1-023 C	6.7229	50/50	6.7229
961812	AG1-023 E	26.8914	50/50	26.8914
962841	AG1-133 C O1	54.3753	50/50	54.3753
962842	AG1-133 E O1	36.2502	50/50	36.2502
963041	AG1-153 C	6.2424	50/50	6.2424
963042	AG1-153 E	9.3636	50/50	9.3636
963111	AG1-160 C	6.3219	50/50	6.3219
963112	AG1-160 E	9.4829	50/50	9.4829
963291	AG1-178 C O1	69.1960	50/50	69.1960
963351	AG1-184 O1	37.2790	50/50	37.2790
963821	AG1-235 C O1	7.4435	Adder	16.52
963822	AG1-235 E O1	4.9623	Adder	11.02
964421	AG1-305 C O1	29.9541	50/50	29.9541
964422	AG1-305 E O1	19.9694	50/50	19.9694
964931	AG1-357 C	23.7456	50/50	23.7456
964932	AG1-357 E	15.8304	50/50	15.8304
964951	AG1-359 O1	12.0094	Adder	26.66
965181	AG1-383 C	1.2338	Adder	2.74
965182	AG1-383 E	0.3654	Adder	0.81
965811	AG1-449	26.2178	50/50	26.2178
966361	AG1-505 C	18.5121	50/50	18.5121
966362	AG1-505 E	12.3414	50/50	12.3414
966371	AG1-506 C	18.5121	50/50	18.5121
966372	AG1-506 E	12.3414	50/50	12.3414
WEC	WEC	0.7113	Confirmed LTF	0.7113
LGEE	LGEE	1.5305	Confirmed LTF	1.5305
CPL	CPL	8.2739	Confirmed LTF	8.2739
CBM-W2	CBM-W2	34.2451	Confirmed LTF	34.2451
NY	NY	2.6920	Confirmed LTF	2.6920
TVA	TVA	6.6738	Confirmed LTF	6.6738
O-066	O-066	36.6314	Confirmed LTF	36.6314
SIGE	SIGE	0.8456	Confirmed LTF	0.8456
CBM-S2	CBM-S2	100.2449	Confirmed LTF	100.2449
CBM-S1	CBM-S1	1.6507	Confirmed LTF	1.6507
G-007	G-007	5.7509	Confirmed LTF	5.7509
MEC	MEC	4.4540	Confirmed LTF	4.4540
LAGN	LAGN	8.2023	Confirmed LTF	8.2023
AA2-074	AA2-074	5.4630	LTF	5.4630
CBM-W1	CBM-W1	28.6569	Confirmed LTF	28.6569

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
163645646	314923	8SEPTA	DVP	314924	8SURREY	DVP	1	DVP_P4-2: 56372	breaker	3637.0	102.92	103.38	DC	42.33

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314466	6FENTRES	2.3789	50/50	2.3789
314550	6HICKORY	3.6843	Adder	4.33
315102	1BRUNSWICKG1	12.3217	50/50	12.3217
315103	1BRUNSWICKG2	12.3217	50/50	12.3217
315104	1BRUNSWICKG3	12.3217	50/50	12.3217
315105	1BRUNSWICKS1	25.5982	50/50	25.5982
315110	1ELIZAR3	3.3201	50/50	3.3201
315153	1CLOVER1	15.1542	50/50	15.1542
315154	1CLOVER2	15.0031	50/50	15.0031
315241	1Z1-086 GT1	15.9317	50/50	15.9317
315242	1Z1-086 GT2	15.9317	50/50	15.9317
315243	1Z1-086 GT3	15.9317	50/50	15.9317
315244	1Z1-086 ST	27.6953	50/50	27.6953
926754	AC1-161 C	92.8683	50/50	92.8683
926755	AC1-161 E	39.6429	50/50	39.6429
933294	AC2-141 C	92.8683	50/50	92.8683
933295	AC2-141 E	39.6429	50/50	39.6429
933731	AC2-196 C	0.3027	50/50	0.3027
933732	AC2-196 E	1.2779	50/50	1.2779
934061	AD1-033 C	8.0237	50/50	8.0237
934062	AD1-033 E	5.3491	50/50	5.3491
934615	AD1-087 C	9.4899	50/50	9.4899
934616	AD1-087 E	4.0609	50/50	4.0609
935171	AD1-152 C O1	10.4237	50/50	10.4237
935172	AD1-152 E O1	6.9491	50/50	6.9491
937481	AD2-202 C O1	2.7796	50/50	2.7796
937482	AD2-202 E O1	1.5636	50/50	1.5636
938494	AE1-068_C1	47.8959	50/50	47.8959
938497	AE1-068_C2	47.8959	50/50	47.8959
938498	AE1-068_E1	26.4766	50/50	26.4766
938499	AE1-068_E2	26.4766	50/50	26.4766
938504	AE1-069_C1	36.5020	50/50	36.5020
938507	AE1-069_C2	39.3579	50/50	39.3579
938508	AE1-069_E1	20.7648	50/50	20.7648
938509	AE1-069_E2	22.3712	50/50	22.3712
939414	AE1-173_C1	40.2343	50/50	40.2343
939415	AE1-173_C2	34.4866	50/50	34.4866
939416	AE1-173_C3	40.2343	50/50	40.2343
939423	AE1-173_E1	26.8229	50/50	26.8229
939424	AE1-173_E2	22.9910	50/50	22.9910
939425	AE1-173_E3	26.8229	50/50	26.8229

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	155.7163	Adder	183.2
940471	AE2-031 C	52.3479	50/50	52.3479
940472	AE2-031 E	34.8986	50/50	34.8986
940641	AE2-051 C O1	32.7339	50/50	32.7339
940642	AE2-051 E O1	21.8226	50/50	21.8226
941031	AE2-094 C	63.1691	50/50	63.1691
941032	AE2-094 E	28.2919	50/50	28.2919
941281	AE2-122 C O1	20.6667	Adder	24.31
941282	AE2-122 E O1	83.3951	Adder	98.11
941291	AE2-123 C O1	25.9329	Adder	30.51
941292	AE2-123 E O1	101.1273	Adder	118.97
941301	AE2-124 C O1	23.6041	Adder	27.77
941302	AE2-124 E O1	103.5718	Adder	121.85
941591	AE2-156 O1	15.9180	Adder	18.73
942931	AE2-313 C	56.5614	50/50	56.5614
942932	AE2-313 E	37.7076	50/50	37.7076
944011	AF1-069 C	20.6397	50/50	20.6397
944012	AF1-069 E	8.0181	50/50	8.0181
944581	AF1-123 C O1	58.0876	50/50	58.0876
944582	AF1-123 E O1	133.0044	50/50	133.0044
944591	AF1-124 C O1	58.0876	50/50	58.0876
944592	AF1-124 E O1	133.0044	50/50	133.0044
944601	AF1-125 C O1	58.0876	50/50	58.0876
944602	AF1-125 E O1	133.0044	50/50	133.0044
945811	AF1-246 C O1	10.1527	50/50	10.1527
945812	AF1-246 E O1	14.0203	50/50	14.0203
957481	AF2-042 C	72.5190	50/50	72.5190
957482	AF2-042 E	48.3460	50/50	48.3460
959751	AF2-266	10.8780	50/50	10.8780
962491	AG1-098 C O1	14.4503	50/50	14.4503
962492	AG1-098 E O1	9.6335	50/50	9.6335
962561	AG1-105 C O1	12.5100	50/50	12.5100
962562	AG1-105 E O1	8.3400	50/50	8.3400
963041	AG1-153 C	8.6457	50/50	8.6457
963042	AG1-153 E	12.9686	50/50	12.9686
963111	AG1-160 C	8.8065	50/50	8.8065
963112	AG1-160 E	13.2098	50/50	13.2098
963291	AG1-178 C O1	123.4609	50/50	123.4609
963351	AG1-184 O1	66.5140	50/50	66.5140
963821	AG1-235 C O1	11.4410	Adder	25.4
963822	AG1-235 E O1	7.6273	Adder	16.93
964931	AG1-357 C	31.1196	50/50	31.1196
964932	AG1-357 E	20.7464	50/50	20.7464
964951	AG1-359 O1	28.7820	50/50	28.7820
965001	AG1-364 C O1	3.3685	Adder	7.48
965002	AG1-364 E O1	5.0527	Adder	11.22
965181	AG1-383 C	1.3140	Adder	2.92
965182	AG1-383 E	0.3892	Adder	0.86
965811	AG1-449	36.7037	50/50	36.7037
966361	AG1-505 C	25.1145	50/50	25.1145
966362	AG1-505 E	16.7430	50/50	16.7430

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966371	AG1-506 C	25.1145	50/50	25.1145
966372	AG1-506 E	16.7430	50/50	16.7430
WEC	WEC	0.8448	Confirmed LTF	0.8448
LGEE	LGEE	1.7379	Confirmed LTF	1.7379
CPLE	CPLE	8.8595	Confirmed LTF	8.8595
CBM-W2	CBM-W2	37.6141	Confirmed LTF	37.6141
NY	NY	1.2420	Confirmed LTF	1.2420
TVA	TVA	7.1274	Confirmed LTF	7.1274
O-066	O-066	17.4240	Confirmed LTF	17.4240
SIGE	SIGE	0.5831	Confirmed LTF	0.5831
CBM-S2	CBM-S2	107.2084	Confirmed LTF	107.2084
CBM-S1	CBM-S1	1.7742	Confirmed LTF	1.7742
G-007	G-007	2.7394	Confirmed LTF	2.7394
MEC	MEC	5.0943	Confirmed LTF	5.0943
LAGN	LAGN	8.8620	Confirmed LTF	8.8620
AA2-074	AA2-074	5.8523	LTF	5.8523
CBM-W1	CBM-W1	35.2743	Confirmed LTF	35.2743

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
163645558	314924	8SURRY	DVP	314903	8CHCKAHM	DVP	1	DVP_P4-2: 56372	breaker	3144.0	131.67	133.98	DC	68.46

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	3.1319	Adder	3.68
314295	6BIRDNECK	0.0719	50/50	0.0719
314466	6FENTRES	3.7992	50/50	3.7992
314491	3PENDLTN	0.5360	50/50	0.5360
314525	6KINGFORK	5.6243	Adder	6.62
314550	6HICKORY	6.9891	50/50	6.9891
314632	6AYDLETOLD	3.1340	Adder	3.69
315099	1CHESPKB (Deactivation : 31/05/2019)	4.9116	50/50	4.9116
315108	1ELIZAR1	5.2434	50/50	5.2434
315109	1ELIZAR2	5.1523	50/50	5.1523
315110	1ELIZAR3	5.3105	50/50	5.3105
315233	1SURRY 2	51.9844	50/50	51.9844
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	-11.9140	Adder	-14.02
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	-11.9140	Adder	-14.02
316114	AB2-068 ST (Withdrawn : 01/11/2021)	-20.6397	Adder	-24.28
316151	AD2-215 E (Withdrawn : 01/14/2021)	1.2036	Adder	1.42
901082	W1-029 E	62.1224	Adder	73.09
913392	Y1-086 E	3.0559	Adder	3.6
916042	Z1-036 E (Suspended)	59.7462	Adder	70.29
916192	Z1-068 E	3.1893	50/50	3.1893
917122	Z2-027 E	1.4593	Adder	1.72
919152	AA1-139 E	9.1809	Adder	10.8
923832	AB2-022 E	1.7251	Adder	2.03
925522	AC1-027 E	1.9414	50/50	1.9414
926662	AC1-147 E	1.8957	Adder	2.23
926754	AC1-161 C	60.4629	50/50	60.4629
926755	AC1-161 E	25.8099	50/50	25.8099
932044	AC2-012 C	14.6019	Adder	17.18
932046	AC2-012 E	23.8241	Adder	28.03
933294	AC2-141 C	60.4629	50/50	60.4629
933295	AC2-141 E	25.8099	50/50	25.8099
933731	AC2-196 C	0.4835	50/50	0.4835
933732	AC2-196 E	2.0409	50/50	2.0409
934061	AD1-033 C	12.8537	50/50	12.8537
934062	AD1-033 E	8.5691	50/50	8.5691
935112	AD1-144 E	1.2268	Adder	1.44
937221	AD2-160 C O1	9.9013	50/50	9.9013
937222	AD2-160 E O1	5.1922	50/50	5.1922

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938494	AE1-068_C1	37.9417	Adder	44.64
938497	AE1-068_C2	37.9417	Adder	44.64
938498	AE1-068_E1	20.9740	Adder	24.68
938499	AE1-068_E2	20.9740	Adder	24.68
938504	AE1-069_C1	28.9158	Adder	34.02
938507	AE1-069_C2	31.1781	Adder	36.68
938508	AE1-069_E1	16.4492	Adder	19.35
938509	AE1-069_E2	17.7218	Adder	20.85
938535	AE1-072_C	25.0860	Adder	29.51
938536	AE1-072_E	12.9231	Adder	15.2
939414	AE1-173_C1	51.8297	50/50	51.8297
939415	AE1-173_C2	44.4254	50/50	44.4254
939416	AE1-173_C3	51.8297	50/50	51.8297
939423	AE1-173_E1	34.5531	50/50	34.5531
939424	AE1-173_E2	29.6170	50/50	29.6170
939425	AE1-173_E3	34.5531	50/50	34.5531
940251	AE2-007_O1 (Withdrawn : 12/11/2020)	293.6472	50/50	293.6472
940471	AE2-031_C	41.3957	Adder	48.7
940472	AE2-031_E	27.5972	Adder	32.47
940641	AE2-051_C O1	27.7668	50/50	27.7668
940642	AE2-051_E O1	18.5112	50/50	18.5112
941031	AE2-094_C	49.9159	Adder	58.72
941032	AE2-094_E	22.3562	Adder	26.3
941101	AE2-104_C O1	4.1712	Adder	4.91
941102	AE2-104_E O1	6.6316	Adder	7.8
941281	AE2-122_C O1	48.2881	50/50	48.2881
941282	AE2-122_E O1	194.8543	50/50	194.8543
941291	AE2-123_C O1	49.6252	50/50	49.6252
941292	AE2-123_E O1	193.5171	50/50	193.5171
941301	AE2-124_C O1	45.1633	50/50	45.1633
941302	AE2-124_E O1	198.1711	50/50	198.1711
941501	AE2-147_C	21.4215	Adder	25.2
941502	AE2-147_E	14.2810	Adder	16.8
941591	AE2-156_O1	30.2330	50/50	30.2330
942131	AE2-225_C	2.9306	Adder	3.45
942132	AE2-225_E	1.9537	Adder	2.3
942171	AE2-229_C	2.1979	Adder	2.59
942172	AE2-229_E	1.4653	Adder	1.72
942401	AE2-253_C	10.4145	50/50	10.4145
942402	AE2-253_E	4.6790	50/50	4.6790
942931	AE2-313_C	44.7367	Adder	52.63
942932	AE2-313_E	29.8245	Adder	35.09
943611	AF1-032_C	2.3933	Adder	2.82
943612	AF1-032_E	1.2699	Adder	1.49
944011	AF1-069_C	16.3094	Adder	19.19
944012	AF1-069_E	6.3359	Adder	7.45
944581	AF1-123_C O1	85.1238	50/50	85.1238
944582	AF1-123_E O1	194.9097	50/50	194.9097
944591	AF1-124_C O1	85.1238	50/50	85.1238
944592	AF1-124_E O1	194.9097	50/50	194.9097
944601	AF1-125_C O1	85.1238	50/50	85.1238

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944602	AF1-125 E O1	194.9097	50/50	194.9097
944871	AF1-152 C	7.1405	Adder	8.4
944872	AF1-152 E	4.7603	Adder	5.6
957491	AF2-043 C	2.9306	Adder	3.45
957492	AF2-043 E	1.9537	Adder	2.3
957631	AF2-057	5.1235	Adder	6.03
957821	AF2-076 C	7.1561	Adder	8.42
957822	AF2-076 E	4.7707	Adder	5.61
957871	AF2-081 C	14.2814	Adder	16.8
957872	AF2-081 E	6.1206	Adder	7.2
958161	AF2-110 C	1.7196	Adder	2.02
958162	AF2-110 E	2.6897	Adder	3.16
961851	AG1-027 C	10.8778	Adder	24.15
961852	AG1-027 E	6.0132	Adder	13.35
963041	AG1-153 C	3.6420	Adder	8.08
963042	AG1-153 E	5.4630	Adder	12.13
963111	AG1-160 C	3.7026	Adder	8.22
963112	AG1-160 E	5.5539	Adder	12.33
963291	AG1-178 C O1	101.6770	50/50	101.6770
963351	AG1-184 O1	54.7780	50/50	54.7780
963821	AG1-235 C O1	41.0778	50/50	41.0778
963822	AG1-235 E O1	27.3852	50/50	27.3852
964951	AG1-359 O1	45.9660	50/50	45.9660
965001	AG1-364 C O1	12.0872	50/50	12.0872
965002	AG1-364 E O1	18.1308	50/50	18.1308
965181	AG1-383 C	4.7031	50/50	4.7031
965182	AG1-383 E	1.3929	50/50	1.3929
965811	AG1-449	15.3830	Adder	34.15
966361	AG1-505 C	10.5904	Adder	23.51
966362	AG1-505 E	7.0602	Adder	15.67
966371	AG1-506 C	10.5904	Adder	23.51
966372	AG1-506 E	7.0602	Adder	15.67
966491	AG1-518 O1	6.4717	Adder	14.37
WEC	WEC	0.6817	Confirmed LTF	0.6817
LGEE	LGEE	1.4137	Confirmed LTF	1.4137
CPL	CPL	9.4458	Confirmed LTF	9.4458
CBM-W2	CBM-W2	34.3168	Confirmed LTF	34.3168
NY	NY	1.7204	Confirmed LTF	1.7204
TVA	TVA	6.7340	Confirmed LTF	6.7340
O-066	O-066	23.3666	Confirmed LTF	23.3666
SIGE	SIGE	0.6239	Confirmed LTF	0.6239
CBM-S2	CBM-S2	110.7266	Confirmed LTF	110.7266
CBM-S1	CBM-S1	1.6511	Confirmed LTF	1.6511
G-007	G-007	3.6676	Confirmed LTF	3.6676
MEC	MEC	4.3523	Confirmed LTF	4.3523
LAGN	LAGN	8.3738	Confirmed LTF	8.3738
AA2-074	AA2-074	6.2352	LTF	6.2352
CBM-W1	CBM-W1	27.8157	Confirmed LTF	27.8157

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
163646432	314927	8YADKIN	DVP	314928	8SUFFOLK	DVP	1	DVP_P7-1: LN 579-2110	tower	3637.0	100.62	102.35	DC	147.95

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	6.0036	Adder	7.06
314295	6BIRDNECK	0.1639	50/50	0.1639
314466	6FENTRES	8.5590	50/50	8.5590
314491	3PENDLTN	1.2205	50/50	1.2205
314550	6HICKORY	12.9700	Adder	15.26
314632	6AYDLETOLD	5.8260	Adder	6.85
315099	1CHESPKB (Deactivation : 31/05/2019)	11.2196	50/50	11.2196
315108	1ELIZAR1	12.0960	50/50	12.0960
315109	1ELIZAR2	11.8859	50/50	11.8859
315110	1ELIZAR3	12.2507	50/50	12.2507
316132	AB2-190 C	14.9388	Adder	17.58
901082	W1-029 E	53.2240	Adder	62.62
913392	Y1-086 E	4.6301	Adder	5.45
916042	Z1-036 E (Suspended)	53.6050	Adder	63.06
916192	Z1-068 E	7.2702	50/50	7.2702
917122	Z2-027 E	1.9470	Adder	2.29
919152	AA1-139 E	18.1446	Adder	21.35
920692	AA2-178 E	3.5337	Adder	4.16
923832	AB2-022 E	2.6138	Adder	3.08
924814	AB2-134 E	10.5816	Adder	12.45
925332	AB2-190 E	6.4023	Adder	7.53
925522	AC1-027 E	4.4204	50/50	4.4204
926662	AC1-147 E	4.3304	Adder	5.09
927226	AC1-216 E	6.4598	Adder	7.6
932044	AC2-012 C	33.3554	Adder	39.24
932046	AC2-012 E	54.4220	Adder	64.03
933731	AC2-196 C	1.0892	50/50	1.0892
933732	AC2-196 E	4.5977	50/50	4.5977
934014	AD1-025 C	14.1187	Adder	16.61
934015	AD1-025 E	8.3633	Adder	9.84
934061	AD1-033 C	29.0102	50/50	29.0102
934062	AD1-033 E	19.3402	50/50	19.3402
935164	AD1-151 C	12.0044	Adder	14.12
935165	AD1-151 E	8.0029	Adder	9.42
936041	AD2-007 C	0.6745	Adder	0.79
936042	AD2-007 E	0.4646	Adder	0.55
936051	AD2-008 C	2.4580	Adder	2.89
936052	AD2-008 E	5.3507	Adder	6.29
937221	AD2-160 C O1	17.3124	Adder	20.37
937222	AD2-160 E O1	9.0784	Adder	10.68

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938535	AE1-072 C	47.4328	Adder	55.8
938536	AE1-072 E	24.4351	Adder	28.75
939312	AE1-162 E	2.8705	Adder	3.38
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	676.5943	50/50	676.5943
940491	AE2-034 C	6.1840	Adder	7.28
940492	AE2-034 E	2.6503	Adder	3.12
940891	AE2-078 C	2.5155	Adder	2.96
940892	AE2-078 E	1.2959	Adder	1.52
940901	AE2-079 C	2.5155	Adder	2.96
940902	AE2-079 E	1.2959	Adder	1.52
941281	AE2-122 C O1	110.0303	50/50	110.0303
941282	AE2-122 E O1	443.9989	50/50	443.9989
941291	AE2-123 C O1	113.0771	50/50	113.0771
941292	AE2-123 E O1	440.9521	50/50	440.9521
941301	AE2-124 C O1	102.8407	50/50	102.8407
941302	AE2-124 E O1	451.2525	50/50	451.2525
941501	AE2-147 C	18.3531	Adder	21.59
941502	AE2-147 E	12.2354	Adder	14.39
941591	AE2-156 O1	69.3650	50/50	69.3650
942401	AE2-253 C	18.2097	Adder	21.42
942402	AE2-253 E	8.1811	Adder	9.62
942551	AE2-270	21.3741	Adder	25.15
943621	AF1-033 C	2.5155	Adder	2.96
943622	AF1-033 E	1.2959	Adder	1.52
944581	AF1-123 C O1	205.4106	50/50	205.4106
944582	AF1-123 E O1	470.3326	50/50	470.3326
944591	AF1-124 C O1	205.4106	50/50	205.4106
944592	AF1-124 E O1	470.3326	50/50	470.3326
944601	AF1-125 C O1	205.4106	50/50	205.4106
944602	AF1-125 E O1	470.3326	50/50	470.3326
944871	AF1-152 C	6.1177	Adder	7.2
944872	AF1-152 E	4.0785	Adder	4.8
945711	AF1-236 C O1	67.6996	Adder	79.65
945712	AF1-236 E O1	41.8153	Adder	49.19
957531	AF2-047 C	14.6943	Adder	17.29
957532	AF2-047 E	7.3913	Adder	8.7
957631	AF2-057	11.7036	Adder	13.77
957711	AF2-065 C	10.9008	Adder	12.82
957712	AF2-065 E	10.4733	Adder	12.32
957871	AF2-081 C	28.2249	Adder	33.21
957872	AF2-081 E	12.0964	Adder	14.23
961611	AG1-000B C	9.4747	Adder	21.03
961711	AG1-011	12.7099	Adder	28.21
962321	AG1-081 C (Withdrawn : 01/15/2021)	1.2120	Adder	2.69
962322	AG1-081 E (Withdrawn : 01/15/2021)	0.8080	Adder	1.79
963221	AG1-171 C	0.8483	Adder	1.88
963222	AG1-171 E	0.5655	Adder	1.26
963231	AG1-172 C	0.8483	Adder	1.88
963232	AG1-172 E	0.5655	Adder	1.26
963241	AG1-173 C	0.8483	Adder	1.88

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963242	AG1-173 E	0.5655	Adder	1.26
963251	AG1-174 C	0.8483	Adder	1.88
963252	AG1-174 E	0.5655	Adder	1.26
963261	AG1-175 C	0.8483	Adder	1.88
963262	AG1-175 E	0.5655	Adder	1.26
963821	AG1-235 C O1	39.9905	Adder	88.77
963822	AG1-235 E O1	26.6604	Adder	59.18
964951	AG1-359 O1	103.5525	50/50	103.5525
965001	AG1-364 C O1	27.7120	50/50	27.7120
965002	AG1-364 E O1	41.5680	50/50	41.5680
965181	AG1-383 C	4.6257	Adder	10.27
965182	AG1-383 E	1.3700	Adder	3.04
965631	AG1-431	20.7731	Adder	46.11
966931	AG1-431A	15.6071	Adder	34.64
CALDERWOOD	CALDERWOOD	0.2212	Confirmed LTF	0.2212
NY	NY	0.2284	Confirmed LTF	0.2284
PRAIRIE	PRAIRIE	1.1236	Confirmed LTF	1.1236
O-066	O-066	2.7660	Confirmed LTF	2.7660
CHEOAH	CHEOAH	0.2232	Confirmed LTF	0.2232
COTTONWOOD	COTTONWOOD	0.9219	Confirmed LTF	0.9219
G-007	G-007	0.4316	Confirmed LTF	0.4316
HAMLET	HAMLET	0.2691	Confirmed LTF	0.2691
GIBSON	GIBSON	0.2364	Confirmed LTF	0.2364
BLUEG	BLUEG	0.7500	Confirmed LTF	0.7500
TRIMBLE	TRIMBLE	0.2404	Confirmed LTF	0.2404
CATAWBA	CATAWBA	0.1638	Confirmed LTF	0.1638

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
AA1-139	Hickory-Shawboro 230kV	In Service
AA1-145	Four Rivers 230kV	In Service
AA2-053	Carolina-Jackson 115kV	In Service
AA2-074	CPLP-PJM	Confirmed
AA2-088	Boykins-Handsome 115kV	In Service
AA2-178	Mackeys 230kV	Partially in Service - Under Construction
AB2-015	Franklin 115kV	Engineering and Procurement
AB2-022	Elizabeth City 34.5kV	Engineering and Procurement
AB2-025	Sapony 34.5kV	In Service
AB2-026	Powhatan 34.5kV	In Service
AB2-040	Brink 115kV	Engineering and Procurement
AB2-068	Chickahominy 500kV	Withdrawn
AB2-099	Ahoskie 34.5kV	Suspended
AB2-134	Hopewell-Surry 230kV	In Service
AB2-158	Louisa-South Anna 230kV	Under Construction
AB2-160	Reams 115kV	Engineering and Procurement
AB2-161	Waverly #2 DP 115kV	Engineering and Procurement
AB2-169	Pantago-Five Points 115kV	Partially in Service - Under Construction
AB2-190	Hopewell-Surry 230kV	Engineering and Procurement
AC1-027	Pendleton 34.5kV	In Service
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	Engineering and Procurement
AC1-131	PJM-CPLP	Confirmed
AC1-147	Grassfield 34.5kV	Engineering and Procurement
AC1-161	Septa 500kV	Engineering and Procurement
AC1-164	Chickahominy 230kV	Engineering and Procurement
AC1-189	Chinquapin-Everetts 230kV	Active
AC1-191	Elmont 115kV	Active
AC1-216	Hopewell-Surry 230kV	Partially in Service - Under Construction
AC2-012	Grassfield-Great Bridge 115kV	Active
AC2-070	Old Church 34.5kV	Withdrawn
AC2-078	Disputanta-Waverly 115kV	Engineering and Procurement
AC2-079	Ivor-Oak Ridge 115kV	Engineering and Procurement
AC2-084	Dawson-South Justice 115kV	Active
AC2-137	Elko 34.5kV	Partially in Service - Under Construction

Queue Number	Project Name	Status
AC2-138	Northern Neck 34.5kV	Partially in Service - Under Construction
AC2-141	Septa 500kV	Active
AC2-165	Bremo-Powhatan 230kV	Engineering and Procurement
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	Engineering and Procurement
AD1-041	Harmony Village-Shackleford 115 kV	Engineering and Procurement
AD1-063	Harmony Village 34.5 kV	In Service
AD1-076	Trowbridge 230 kV	Active
AD1-082	Bakers Pond-Ivor 115kV	Engineering and Procurement
AD1-087	Clover-Sedge Hill 230 kV	Active
AD1-105	Kings Dominion DP 115 kV	Active
AD1-144	Kings Fork 34.5 kV	Partially in Service - Under Construction
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	Partially in Service - Under Construction
AD2-030	Wan 34.5 kV	In Service
AD2-051	Earleys – Northampton 230kV	Active
AD2-073	Sanders DP 230 kV	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
AD2-202	Clover-Sedge Hill 230kV	Active
AD2-215	Kings Fork 34.5 kV	Withdrawn
AE1-035	Earleys 230 kV	Partially in Service - Under Construction
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
AE1-149	Disputanta-Poe 115 kV	Active
AE1-154	Louisa-South Anna 230 kV	Engineering and Procurement
AE1-155	Garner-Northern Neck 115 kV	Active
AE1-162	Smithfield 34.5 kV	Engineering and Procurement
AE1-173	Carson-Suffolk 500 kV	Active
AE1-175	Light Foot 34.5 kV	Engineering and Procurement
AE1-191	Harmony Village-Shackleford 115 kV	Active
AE1-206	Four Rivers-Hanover 230 kV	Active
AE2-000B	N/A	N/A
AE2-005	Harmony Village-Shackleford 115 kV	Engineering and Procurement
AE2-007	Chesapeake 230 kV	Withdrawn
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

Queue Number	Project Name	Status
AE2-040	Sapony 34.5 kV	Active
AE2-041	Harmony Village 230 kV	Active
AE2-051	Carson-Septa 500 kV	Active
AE2-052	Disputanta-Poe 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	Withdrawn
AE2-155	Old Church 34.5 kV	Partially in Service - Under Construction
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	Engineering and Procurement
AE2-228	Tyler 34 kV	Engineering and Procurement
AE2-229	Suffolk 34 kV	Engineering and Procurement
AE2-231	St. Johns 115 kV	Active
AE2-247	Myrtle-Windsor 115 kV	Active
AE2-250	Purdy Sw.-Reams 115 kV	Active
AE2-253	Hickory-Moyock 230 kV	Active
AE2-260	Clubhouse 230 kV	Active
AE2-270	Hopewell-Surry 230 kV	Active
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
AF1-031	Kings Dominion DP 115 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
AF1-067	Kings Dominion DP 115 kV	Active
AF1-069	Carson-Rogers Rd 500 kV	Active
AF1-079	Louisa-South Anna 230 kV	Active
AF1-114	Oak Grove-Dahlgren 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
AF1-129	Chesterfield 230 kV	Active
AF1-152	Swamp 230 kV	Active
AF1-201	Hayes-White Marsh 115 kV	Active
AF1-236	Mackeys 230 kV	Active
AF1-246	Clover-Rawlings 500 kV	Active
AF1-248	Northern Neck 34.5 kV	Partially in Service - Under Construction
AF1-265	Four Rivers-Hanover 230 kV	Active
AF1-266	Clubhouse-Sapony 230 kV	Active
AF1-291	Tyler 34.5 kV	Engineering and Procurement

Queue Number	Project Name	Status
AF1-292	Fields 34.5kV	Active
AF1-301	Louisa-South Anna 230 kV	Active
AF2-035	St. Johns 115 kV	Active
AF2-037	Louisa-North Anna 230 kV	Active
AF2-042	Clover-Rawlings 500 kV	Active
AF2-043	Suffolk 34.5 kV	Engineering and Procurement
AF2-046	Tunis-Mapleton 115 kV	Active
AF2-047	Creswell-Riders Creek 115 kV	Active
AF2-054	Wan 34.5 kV	Active
AF2-057	Grassfield 34.5 kV	Active
AF2-063	Louisa-North Anna 230 kV	Active
AF2-065	Surry-Hopewell 230 kV	Active
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	Engineering and Procurement
AF2-091	Oak Grove-Dahlgren 230 kV	Active
AF2-108	Locks 34.5 kV	Active
AF2-110	Suffolk 115 kV	Active
AF2-120	Garner-Northern Neck 115 kV	Active
AF2-144	Powhatan 34.5 kV	Active
AF2-242	Wharton 115 kV	Active
AF2-244	Powhatan 34.5 kV	Withdrawn
AF2-255	Iron Bridge 34.5 kV	Engineering and Procurement
AF2-256	Tyler 34.5 kV	Engineering and Procurement
AF2-257	Tyler 34.5 kV	Active
AF2-258	Harrowgate 34.5 kV	Active
AF2-259	Locks 34.5 kV	Active
AF2-266	Clover 230 kV	Active
AF2-299	Fields 34.5 kV	Active
AF2-300	St. Johns 115 kV	Active
AF2-400	Franklin 13.2 kV	Engineering and Procurement
AG1-000B	N/A	N/A
AG1-007	Tar River 12.5 kV	Active
AG1-008	Tunis-Mapleton 115 kV	Active
AG1-011	Colonial Trial 230 kV	Active
AG1-023	North Anna-Louisa 230 kV	Active
AG1-027	Suffolk-Holland 115 kV	Active
AG1-036	Tunis 34.5 kV	Active
AG1-037	Ahoskie 34.5 kV	Active
AG1-038	Garner DP-Lancaster 115 kV	Active
AG1-057	Harmony Village 230 kV	Active
AG1-064	Plaza 34.5 kV	Active
AG1-065	Plaza 34.5 kV	Active
AG1-075	Purdy-Sapony 115 kV	Active
AG1-081	Poolesville 34.5 kV	Withdrawn
AG1-082	Ahoskie 34.5 kV	Active
AG1-083	Ahoskie 34.5 kV	Active
AG1-084	Earlys 34.5 kV	Active
AG1-085	Earlys 34.5	Active
AG1-098	Briery-Clover 230 kV	Active

Queue Number	Project Name	Status
AG1-102	White Marsh 34.5 kV	Active
AG1-105	Clover-Sedge Hill 230 kV	Active
AG1-106	Thelma 230 kV	Active
AG1-133	North Anna-Ladysmith 500 kV	Active
AG1-134	N/A	N/A
AG1-135	Garner-Lancaster 115 kV	Active
AG1-145	Lightfoot 34.5 kV	Active
AG1-146	Garner DP-Lancaster 115 kV	Active
AG1-147	Garner DP-Lancaster 115 kV	Active
AG1-153	Heritage 500 kV	Active
AG1-160	Rogers Road 500 kV	Active
AG1-171	Hopewell-Surry 230kV	Active
AG1-172	Hopewell-Surry 230 kV	Active
AG1-173	Hopewell-Surry 230 kV	Active
AG1-174	Hopewell-Surry 230 kV	Active
AG1-175	Hopewell-Surry 230 kV	Active
AG1-178	Carson-Septa 500 kV	Active
AG1-183	St. Johns DP-REC 115 kV	Active
AG1-184	Carson-Septa 500 kV	Active
AG1-187	St. Johns DP-REC 115 kV	Active
AG1-210	Northern Neck 34.5 kV	Active
AG1-213	St Johns 13.2 kV	Active
AG1-235	Fentress-Sligo 230 kV	Active
AG1-256	Northern Neck 230 kV	Active
AG1-282	Dunnsville 34.5 kV	Active
AG1-305	Louisa-North Anna 230 kV	Active
AG1-312	Earleys-Cashie 230 kV	Active
AG1-313	Jackson DP-Oconeechee 115 kV	Active
AG1-343	Boykins-Murphy 115 kV	Active
AG1-357	Clover-Rawlings 500 kV	Active
AG1-359	Fentress 230 kV	Active
AG1-364	Deep Creek 115 kV	Active
AG1-383	Hickory 34.5 kV	Active
AG1-388	Dunnsville 34.5 kV	Active
AG1-394	Boykins 34.5 kV	Active
AG1-431	Mackeys 230 kV	Active
AG1-431A	Mackeys 230 kV	Active
AG1-437	Cashie-Earleys 230 kV	Active
AG1-438	Cashie-Earleys 230 kV	Active
AG1-439	Chinquapin 230 kV	Active
AG1-442	Cashie-Earleys 230 kV	Active
AG1-443	Cashie-Earleys 230 kV	Active
AG1-444	Chinquapin 230 kV	Active
AG1-449	Rawlings-Carson 500 kV	Active
AG1-505	Rawlings-Clover 500 kV	Active
AG1-506	Rawlings-Clover 500 kV	Active
AG1-518	Suffolk 230 kV	Active
AG1-531	Poolesville-Winchester 230 kV	Active
AG1-532	Fields 34.5 kV	Active
AG1-536	Garner-Northern Neck 115 kV	Active
AG1-541	St. Johns 115 kV	Active
AG1-544	Bakers Pond DP 115 kV	Active

Queue Number	Project Name	Status
AG1-545	W. Quaker Rd-Disputanta 34.5 kV	Active
AG1-551	Parmelee 12.5 kV	Active
AG1-552	Carolina 13.2 kV	Active
AG1-558	Buckner 34.5 kV	Active
AG1-559	Caroline Pines 22 kV	Active
W1-029	Winfall 230kV	In Service
Y1-086	Morgans Corner	In Service
Z1-036	WinFall-Chowan 230kV	Suspended
Z1-068	Birdneck 34.5kV	In Service
Z1-086	Heritage-Carson	In Service
Z2-027	Pasquotank 34.5kV	In Service

11.8 Contingency Descriptions - Primary POI

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 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_P7-1: LN 147-2118-A	CONTINGENCY 'DVP_P7-1: LN 147-2118-A' /* . OPEN BRANCH FROM BUS 314479 TO BUS 314492 CKT 1 /* 3LANDSTN 115.00 - 3P ANNE 115.00 OPEN BRANCH FROM BUS 314482 TO BUS 314491 CKT 1 /* 3LONDONB 115.00 - 3PEND
DVP_P1-2: LN 2197	CONTINGENCY 'DVP_P1-2: LN 2197' OPEN BRANCH FROM BUS 313896 TO BUS 314303 CKT 1 /* 6COLONIAL TR230.00 - 6HOPEWLL 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
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_P4-2: 568T575	CONTINGENCY 'DVP_P4-2: 568T575' /* LADYSMITH 500 KV OPEN BRANCH FROM BUS 314911 TO BUS 314922 CKT 1 /* 8LADYSMITH 500.00 - 8POSSUM 500.00 OPEN BRANCH FROM BUS 314911 TO BUS 962840 CKT 1 /* 8LADYSMITH 500.00 - AG1-133 TAP 500.00 END
DVP_P1-2: LN 2167	CONTINGENCY 'DVP_P1-2: LN 2167' OPEN BRANCH FROM BUS 313845 TO BUS 314564 CKT 1 /* 6HATHAWAY 230.00 - 6EDGECOM 230.00 END

Contingency Name	Contingency Definition
314295 6BIRDNECK 230 941280 AE2-122 TAP 230 1	CONTINGENCY '314295 6BIRDNECK 230 941280 AE2-122 TAP 230 1' OPEN BRANCH FROM BUS 314295 TO BUS 941280 CKT 1 END
DVP_P7-1: LN 78-2118-A	CONTINGENCY 'DVP_P7-1: LN 78-2118-A' /* . OPEN BRANCH FROM BUS 314491 TO BUS 314511 CKT 1 /* 3PEND
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_P1-2: LN 575-A	CONTINGENCY 'DVP_P1-2: LN 575-A' OPEN BRANCH FROM BUS 314911 TO BUS 962840 CKT 1 /* 8LADYSMITH 500.00 - AG1-133 TAP 500.00 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
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
DVP_P1-2: LN 240-A	CONTINGENCY 'DVP_P1-2: LN 240-A' OPEN BRANCH FROM BUS 314303 TO BUS 935160 CKT 2 /* 6HOPEWLL 230.00 - AD1-151 TAP 230.00 OPEN BUS 316132 /* ISLAND: AB2-190 C 230.00 OPEN BUS 925332 /* ISLAND: AB2-190 E 230.00 OPEN BUS 935160 /* ISLAND: AD1-151 TAP 230.00 OPEN BUS 935161 /* ISLAND: AD1-151 MAIN230.00 OPEN BUS 935162 /* ISLAND: AD1-151 COL 34.500 OPEN BUS 935163 /* ISLAND: AD1-151 GSU 34.500 OPEN BUS 935164 /* ISLAND: AD1-151 C 0.6000 OPEN BUS 935165 /* ISLAND: AD1-151 E 0.6000 END
DVP_P1-2: LN 557	CONTINGENCY 'DVP_P1-2: LN 557' OPEN BRANCH FROM BUS 314903 TO BUS 314908 CKT 1 /* 8CHCKAHM 500.00 - 8ELMONT 500.00 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
DVP_P4-2: 557T574	CONTINGENCY 'DVP_P4-2: 557T574' /* ELMONT 500 KV 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 OPEN BRANCH FROM BUS 314908 TO BUS 314911 CKT 1 /* 8ELMONT 500.00 - 8LADYSMITH 500.00 END
DVP_P1-2: LN 2026	CONTINGENCY 'DVP_P1-2: LN 2026' OPEN BRANCH FROM BUS 314481 TO BUS 314486 CKT 1 /* 6LANDSTN 230.00 - 6LYNHAVN 230.00 END
Base Case	
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
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_P4-2: H2T557	CONTINGENCY 'DVP_P4-2: H2T557' /* ELMONT 500 KV 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 OPEN BRANCH FROM BUS 314218 TO BUS 314908 CKT 2 /* 6ELMONT 230.00 - 8ELMONT 500.00 END

Contingency Name	Contingency Definition
DVP_P1-2: LN 2177	CONTINGENCY 'DVP_P1-2: LN 2177' OPEN BRANCH FROM BUS 313701 TO BUS 314609 CKT 1 /* 6CHINQUAPIN 230.00 - 6TARBORO 230.00 OPEN BRANCH FROM BUS 314608 TO BUS 314609 CKT 2 /* 3TARBORO 115.00 - 6TARBORO 230.00 END
DVP_P7-1: LN 579-2110	CONTINGENCY 'DVP_P7-1: LN 579-2110' /* . OPEN BRANCH FROM BUS 314923 TO BUS 314927 CKT 1 /* 8SEPTA 500.00 - 8YADKIN 500.00 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 END
DVP_P1-2: LN 269_1-A	CONTINGENCY 'DVP_P1-2: LN 269_1-A' OPEN BRANCH FROM BUS 314466 TO BUS 963820 CKT 1 /* 6FENTRES 230.00 - AG1-235 TAP 230.00 END

12 Short Circuit Analysis - Primary POI

The following Breakers are overdutied:

None.

12.1 System Reinforcements - Short Circuit

None.

13 Summer Peak - Load Flow Analysis - Secondary POI

The Queue Project AG1-235 was evaluated as a 225.0 MW (Capacity 135.0 MW) injection tapping the Fentress to Sligo 230 kV line in the Dominion area. Project AG1-235 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AG1-235 was studied with a commercial probability of 53.0 %. Potential network impacts were as follows:

13.1 Generation Deliverability

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE T LOADIN G %	POST PROJE T LOADIN G %	AC D C	MW IMPAC T
168718198	314466	6FENTRESS	230.0	DVP	314508	6THRASHERR	230.0	DVP	1	DVP_P1-2: LN 271-B	single	678.679992676	93.14	101.77	DC	58.59

13.2 Multiple Facility Contingency

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

None

13.3 Contribution to Previously Identified Overloads

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJE T LOADIN G %	POST PROJE T LOADIN G %	AC D C	MW IMPAC T
174226394	313896	6COLONIAL TR	230.0	DVP	314303	6HOPEWELL	230.0	DVP	1	DVP_P4-2: 240T2041	breaker	830.0	121.3	122.15	DC	15.52
168718079	314209	6SKIFF CREEK	230.0	DVP	314386	6KINGS M	230.0	DVP	1	DVP_P1-2: LN 567	single	441.799987793	159.06	161.58	DC	11.09
174226180	314209	6SKIFF CREEK	230.0	DVP	314386	6KINGS M	230.0	DVP	1	DVP_P4-5: L122	breaker	541.0	220.39	221.5	DC	16.51
174419287	314209	6SKIFF CREEK	230.0	DVP	314413	6WALR285	230.0	DVP	1	DVP_P4-5: L122	breaker	830.0	120.83	121.64	DC	15.28
168718362	314214	6CHCKAH M	230.0	DVP	314258	6ELKO	230.0	DVP	1	DVP_P1-2: LN 557	single	678.679992676	107.08	107.48	DC	7.72
168718240	314218	6ELMONT	230.0	DVP	314908	8ELMONT	500.0	DVP	2	DVP_P1-2: LN 557	single	879.840026855	153.77	154.44	DC	14.95
168718268	314218	6ELMONT	230.0	DVP	314908	8ELMONT	500.0	DVP	1	DVP_P1-2: LN 557	single	920.918029785	147.59	148.24	DC	15.02
174419132	314218	6ELMONT	230.0	DVP	314908	8ELMONT	500.0	DVP	1	DVP_P4-2: H2T557	breaker	1050.59997559	207.8	207.87	DC	36.83
168718275	314236	6NRTHEST	230.0	DVP	314218	6ELMONT	230.0	DVP	1	DVP_P1-2: LN 557	single	678.679992676	119.43	120.09	DC	9.83
168718087	314296	6PENNIMAN	230.0	DVP	314415	6WALR209	230.0	DVP	1	DVP_P1-2: LN 567	single	441.799987793	147.15	149.67	DC	11.09
174226186	314296	6PENNIMAN	230.0	DVP	314415	6WALR209	230.0	DVP	1	DVP_P4-5: L122	breaker	541.0	210.67	211.77	DC	16.51
168718083	314386	6KINGS M	230.0	DVP	314296	6PENNIMAN	230.0	DVP	1	DVP_P1-2: LN 567	single	441.799987793	151.11	153.63	DC	11.09
174226185	314386	6KINGS M	230.0	DVP	314296	6PENNIMAN	230.0	DVP	1	DVP_P4-5: L122	breaker	541.0	213.89	214.99	DC	16.51
174419360	314390	6LIGH285	230.0	DVP	314214	6CHCKAH M	230.0	DVP	1	DVP_P4-5: L122	breaker	830.0	104.85	105.64	DC	15.28
174419264	314391	6LIGH209	230.0	DVP	314388	6LANEXA	230.0	DVP	1	DVP_P4-5: L122	breaker	812.0	125.26	126.0	DC	16.51
174419265	314391	6LIGH209	230.0	DVP	314388	6LANEXA	230.0	DVP	1	DVP_P4-2: H2T557	breaker	812.0	122.2	122.96	DC	16.03

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC D C	MW IMPAC T
174419324	314413	6WALR285	230.0	DVP	314390	6LIGH285	230.0	DVP	1	DVP_P4-5: L122	breaker	830.0	113.33	114.14	DC	15.28
168718097	314415	6WALR209	230.0	DVP	314391	6LIGH209	230.0	DVP	1	DVP_P1-2: LN 567	single	441.799987793	131.01	133.53	DC	11.09
168718098	314415	6WALR209	230.0	DVP	314391	6LIGH209	230.0	DVP	1	DVP_P1-2: LN 563	single	441.799987793	101.06	102.89	DC	8.18
174226193	314415	6WALR209	230.0	DVP	314391	6LIGH209	230.0	DVP	1	DVP_P4-5: L122	breaker	541.0	197.47	198.57	DC	16.51
174419135	314415	6WALR209	230.0	DVP	314391	6LIGH209	230.0	DVP	1	DVP_P4-2: H2T557	breaker	541.0	192.88	194.02	DC	16.03
174025816	314466	6FENTRES	230.0	DVP	934060	AD1-033 TAP	230.0	DVP	1	DVP_P4-2: 2110T2128	breaker	830.0	113.46	121.72	DC	68.49
163211531	314481	6LANDSTN	230.0	DVP	314486	6LYNHAVN	230.0	DVP	1	DVP_P7-1: LN 147-2118-A	tower	830.0	117.79	120.54	DC	22.8
163211532	314481	6LANDSTN	230.0	DVP	314486	6LYNHAVN	230.0	DVP	1	DVP_P7-1: LN 78-2118-A	tower	830.0	113.16	115.91	DC	22.79
174226401	314481	6LANDSTN	230.0	DVP	314486	6LYNHAVN	230.0	DVP	1	DVP_P4-2: 231T2128	breaker	830.0	113.05	118.39	DC	44.28
174226472	314486	6LYNHAVN	230.0	DVP	314504	6THALIA	230.0	DVP	1	DVP_P4-2: 231T2128	breaker	906.0	103.29	107.3	DC	36.29
174419335	314525	6KINGFOR K	230.0	DVP	314522	6CHCKTUK	230.0	DVP	1	DVP_P4-2: 531T582	breaker	830.0	101.38	102.2	DC	15.01
163645553	314902	8CARSON	500.0	DVP	314914	8MDLTHA N	500.0	DVP	1	DVP_P4-2: 557T574	breaker	3938.0	144.72	145.31	DC	68.16
163645554	314902	8CARSON	500.0	DVP	314914	8MDLTHA N	500.0	DVP	1	DVP_P4-2: H2T557	breaker	3938.0	138.0	138.45	DC	66.05
163645811	314902	8CARSON	500.0	DVP	314914	8MDLTHA N	500.0	DVP	1	DVP_P1-2: LN 557	single	3218.56005859	129.24	129.65	DC	36.12
163645812	314902	8CARSON	500.0	DVP	314914	8MDLTHA N	500.0	DVP	1	DVP_P1-2: LN 567	single	3218.56005859	120.87	121.95	DC	36.6
163645548	314903	8CHCKAH M	500.0	DVP	314908	8ELMONT	500.0	DVP	1	DVP_P4-2: 56372	breaker	3144.0	159.32	159.49	DC	71.25
163645549	314903	8CHCKAH M	500.0	DVP	314908	8ELMONT	500.0	DVP	1	DVP_P4-2: 563T576	breaker	3144.0	158.48	158.68	DC	72.43
163645743	314903	8CHCKAH M	500.0	DVP	314908	8ELMONT	500.0	DVP	1	DVP_P1-2: LN 563	single	2442.12011719	183.13	183.52	DC	41.58
163645744	314903	8CHCKAH M	500.0	DVP	314908	8ELMONT	500.0	DVP	1	DVP_P1-2: LN 576	single	2442.12011719	179.27	179.61	DC	41.51
163645752	314903	8CHCKAH M	500.0	DVP	314908	8ELMONT	500.0	DVP	1	Base Case	single	2442.12011719	143.99	144.67	DC	33.47
168718112	314903	8CHCKAH M	500.0	DVP	314214	6CHCKAH M	230.0	DVP	1	DVP_P1-2: LN 557	single	934.923950195	206.67	207.76	DC	12.71
163645710	314908	8ELMONT	500.0	DVP	314911	8LADYSMI TH	500.0	DVP	1	DVP_P1-2: LN 576	single	2442.12011719	219.03	219.08	DC	42.13
163645713	314908	8ELMONT	500.0	DVP	314911	8LADYSMI TH	500.0	DVP	1	DVP_P1-2: LN 563	single	2442.12011719	195.3	195.4	DC	36.27
163645720	314908	8ELMONT	500.0	DVP	314911	8LADYSMI TH	500.0	DVP	1	Base Case	single	2442.12011719	150.37	150.88	DC	27.56
163645563	314914	8MDLTHA N	500.0	DVP	314918	8NO ANNA	500.0	DVP	1	DVP_P4-2: 557T574	breaker	3637.0	139.8	139.82	DC	69.56
163645775	314914	8MDLTHA N	500.0	DVP	314918	8NO ANNA	500.0	DVP	1	DVP_P1-2: LN 574	single	2442.12011719	175.88	176.25	DC	37.59

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPACT
163645778	314914	8MDLTHAN	500.0	DVP	314918	8NO ANNA	500.0	DVP	1	DVP_P1-2: LN 557	single	2442.12011719	154.75	155.0	DC	35.85
163645785	314914	8MDLTHAN	500.0	DVP	314918	8NO ANNA	500.0	DVP	1	Base Case	single	2442.12011719	127.32	127.78	DC	27.72
173442083	314918	8NO ANNA	500.0	DVP	962840	AG1-133 TAP	500.0	DVP	1	DVP_P4-2: 568T575	breaker	3938.0	117.52	117.61	DC	39.98
163645646	314923	8SEPTA	500.0	DVP	314924	8SURREY	500.0	DVP	1	DVP_P4-2: 56372	breaker	3637.0	101.46	102.51	DC	43.03
163645558	314924	8SURREY	500.0	DVP	314903	8CHCKAHM	500.0	DVP	1	DVP_P4-2: 56372	breaker	3144.0	127.86	129.62	DC	68.87
163645560	314924	8SURREY	500.0	DVP	314903	8CHCKAHM	500.0	DVP	1	DVP_P4-2: 563T576	breaker	3144.0	117.51	118.96	DC	67.03
163645842	314924	8SURREY	500.0	DVP	314903	8CHCKAHM	500.0	DVP	1	DVP_P1-2: LN 563	single	2442.12011719	114.58	115.98	DC	39.43
163645846	314924	8SURREY	500.0	DVP	314903	8CHCKAHM	500.0	DVP	1	DVP_P1-2: LN 576	single	2442.12011719	102.74	103.9	DC	37.58
163646432	314927	8YADKIN	500.0	DVP	314928	8SUFFOLK	500.0	DVP	1	DVP_P7-1: LN 579-2110	tower	3637.0	100.37	102.15	DC	154.06
174419378	314931	8SKIFF CREEK	500.0	DVP	314209	6SKIFF CREEK	230.0	DVP	1	DVP_P4-5: L122	breaker	1036.40002441	102.29	102.83	DC	12.26
174419379	314931	8SKIFF CREEK	500.0	DVP	314209	6SKIFF CREEK	230.0	DVP	2	DVP_P4-5: L122	breaker	1036.40002441	102.29	102.83	DC	12.26
174025789	934060	AD1-033 TAP	230.0	DVP	314481	6LANDSTN	230.0	DVP	1	DVP_P4-2: 2110T2128	breaker	830.0	119.22	127.47	DC	68.49
173442075	962840	AG1-133 TAP	500.0	DVP	314934	8SPOTSYL	500.0	DVP	1	DVP_P4-2: 568T575	breaker	3938.0	118.67	118.81	DC	39.98
174226271	963820	AG1-235 TAP	230.0	DVP	314466	6FENTRES	230.0	DVP	1	DVP_P4-2: 246T247	breaker	699.0	100.07	130.32	DC	211.45

13.4 Potential Congestion due to Local Energy Deliverability

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

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

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPACT
168415482	313811	6ELKO L286	230.0	DVP	314253	6TURNER	230.0	DVP	1	DVP_P1-2: LN 557	operation	678.679992676	131.0	131.84	DC	12.86

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPAC T
175455538	313896	6COLONIAL TR	230.0	DVP	314303	6HOPEWELL	230.0	DVP	1	314303 6HOPEWELL 230 935160 AD1-151 TAP 230 2	operati on	678.679992676	130.24	131.28	DC	15.59
168718077	314209	6SKIFF CREEK	230.0	DVP	314386	6KINGS M	230.0	DVP	1	DVP_P1-2: LN 567	operati on	441.799987793	251.27	253.18	DC	18.48
168718312	314209	6SKIFF CREEK	230.0	DVP	314413	6WALR285	230.0	DVP	1	DVP_P1-2: LN 567	operati on	678.679992676	143.59	144.79	DC	17.73
168718361	314214	6CHCKAH M	230.0	DVP	314258	6ELKO	230.0	DVP	1	DVP_P1-2: LN 557	operati on	678.679992676	141.73	142.58	DC	12.87
168718496	314214	6CHCKAH M	230.0	DVP	314241	6OLDCHRC	230.0	DVP	1	DVP_P1-2: LN 557	operati on	984.179992676	121.34	121.56	DC	17.2
168718522	314214	6CHCKAH M	230.0	DVP	314903	8CHCKAH M	500.0	DVP	1	DVP_P1-2: LN 567	operati on	934.923950195	113.04	113.34	DC	23.95
168718239	314218	6ELMONT	230.0	DVP	314908	8ELMONT	500.0	DVP	2	DVP_P1-2: LN 557	operati on	879.840026855	168.01	168.19	DC	24.92
168718267	314218	6ELMONT	230.0	DVP	314908	8ELMONT	500.0	DVP	1	DVP_P1-2: LN 557	operati on	920.918029785	161.27	161.43	DC	25.04
168718274	314236	6NRTHEST	230.0	DVP	314218	6ELMONT	230.0	DVP	1	DVP_P1-2: LN 557	operati on	678.679992676	156.33	156.42	DC	16.38
168718436	314241	6OLDCHRC	230.0	DVP	314242	6PEARSON	230.0	DVP	1	DVP_P1-2: LN 557	operati on	898.640014648	132.78	133.02	DC	17.15
168718470	314242	6PEARSON	230.0	DVP	314218	6ELMONT	230.0	DVP	1	DVP_P1-2: LN 557	operati on	898.640014648	126.95	127.18	DC	17.15
168718442	314253	6TURNER	230.0	DVP	314289	6DARBYTN	230.0	DVP	1	DVP_P1-2: LN 557	operati on	678.679992676	128.11	128.96	DC	12.86
168718500	314257	6WHITOA K	230.0	DVP	313811	6ELKO L286	230.0	DVP	1	DVP_P1-2: LN 557	operati on	749.179992676	116.02	116.79	DC	12.87
168718540	314258	6ELKO	230.0	DVP	313869	6PORTUGEE RD	230.0	DVP	1	DVP_P1-2: LN 557	operati on	898.640014648	105.85	106.49	DC	12.87
168718085	314296	6PENNIMAN	230.0	DVP	314415	6WALR209	230.0	DVP	1	DVP_P1-2: LN 567	operati on	441.799987793	239.37	241.27	DC	18.48
168718548	314311	6IRON282	230.0	DVP	314307	6HULL282	230.0	DVP	1	DVP_P1-2: LN 563	operati on	678.679992676	104.79	105.54	DC	11.38
168718523	314339	6SPRUNCE	230.0	DVP	314311	6IRON282	230.0	DVP	1	DVP_P1-2: LN 563	operati on	678.679992676	110.25	111.01	DC	11.38
168718081	314386	6KINGS M	230.0	DVP	314296	6PENNIMAN	230.0	DVP	1	DVP_P1-2: LN 567	operati on	441.799987793	243.33	245.23	DC	18.48
168718444	314390	6LIGH285	230.0	DVP	314214	6CHCKAH M	230.0	DVP	1	DVP_P1-2: LN 567	operati on	678.679992676	124.23	125.42	DC	17.73
168718309	314391	6LIGH209	230.0	DVP	314388	6LANEXA	230.0	DVP	1	DVP_P1-2: LN 567	operati on	663.640014648	140.88	142.15	DC	18.48
168718379	314413	6WALR285	230.0	DVP	314390	6LIGH285	230.0	DVP	1	DVP_P1-2: LN 567	operati on	678.679992676	134.43	135.62	DC	17.73
168718095	314415	6WALR209	230.0	DVP	314391	6LIGH209	230.0	DVP	1	DVP_P1-2: LN 567	operati on	441.799987793	223.23	225.13	DC	18.48
168718195	314466	6FENTRES	230.0	DVP	314508	6THRASHERR	230.0	DVP	1	DVP_P1-2: LN 271-B	operati on	678.679992676	160.83	175.22	DC	97.65
168718197	314466	6FENTRES	230.0	DVP	314508	6THRASHERR	230.0	DVP	1	Base Case	operati on	678.679992676	99.69	110.42	DC	72.8
168718276	314466	6FENTRES	230.0	DVP	934060	AD1-033 TAP	230.0	DVP	1	DVP_P1-2: LN 2128	operati on	678.679992676	133.24	144.19	DC	74.31
168718418	314481	6LANDSTN	230.0	DVP	314486	6LYNHAVN	230.0	DVP	1	314295 6BIRDNECK 230 941280 AE2-122 TAP 230 1	operati on	678.679992676	132.97	134.41	DC	21.68
175858568	314538	6SURREY	230.0	DVP	313896	6COLONIAL TR	230.0	DVP	1	DVP_P1-2: LN 240-C	operati on	678.679992676	102.17	103.22	DC	15.74

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CK T ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADIN G %	POST PROJECT LOADIN G %	AC/D C	MW IMPAC T
1689724 11	31455 0	6HICKORY	230. 0	DVP	31446 6	6FENTRES	230. 0	DVP	1	DVP_P1-2: LN 269_1-A	operati on	571.5200195 31	125.19	149.8	DC	140.63
1636458 08	31490 2	8CARSON	500. 0	DVP	31491 4	8MDLTHA N	500. 0	DVP	1	DVP_P1-2: LN 567	operati on	3218.560058 59	147.42	148.41	DC	60.99
1636458 17	31490 2	8CARSON	500. 0	DVP	31491 4	8MDLTHA N	500. 0	DVP	1	Base Case	operati on	3218.560058 59	121.08	121.4	DC	46.16
1636457 41	31490 3	8CHCKAH M	500. 0	DVP	31490 8	8ELMONT	500. 0	DVP	1	DVP_P1-2: LN 563	operati on	2442.120117 19	197.21	197.48	DC	69.31
1636457 48	31490 3	8CHCKAH M	500. 0	DVP	31490 8	8ELMONT	500. 0	DVP	1	Base Case	operati on	2442.120117 19	159.57	159.71	DC	55.78
1687181 11	31490 3	8CHCKAH M	500. 0	DVP	31421 4	6CHCKAH M	230. 0	DVP	1	DVP_P1-2: LN 557	operati on	934.9239501 95	235.61	235.98	DC	21.18
1636457 74	31491 4	8MDLTHA N	500. 0	DVP	31491 8	8NO ANNA	500. 0	DVP	1	DVP_P1-2: LN 574	operati on	2442.120117 19	186.06	186.25	DC	62.64
1636457 84	31491 4	8MDLTHA N	500. 0	DVP	31491 8	8NO ANNA	500. 0	DVP	1	Base Case	operati on	2442.120117 19	138.1	138.35	DC	46.2
1687182 33	31491 4	8MDLTHA N	500. 0	DVP	31432 2	6MDLTHA N	230. 0	DVP	1	DVP_P1-2: LN 576	operati on	1058.157958 98	171.15	171.42	DC	17.3
1734423 67	31491 8	8NO ANNA	500. 0	DVP	96284 0	AG1-133 TAP	500. 0	DVP	1	DVP_P1-2: LN 575	operati on	3218.560058 59	138.27	138.38	DC	37.93
1636459 04	31492 3	8SEPTA	500. 0	DVP	31492 4	8SURREY	500. 0	DVP	1	DVP_P1-2: LN 563	operati on	2442.120117 19	125.52	127.14	DC	38.6
1636458 40	31492 4	8SURREY	500. 0	DVP	31490 3	8CHCKAH M	500. 0	DVP	1	DVP_P1-2: LN 563	operati on	2442.120117 19	146.48	146.77	DC	65.72
1636458 47	31492 4	8SURREY	500. 0	DVP	31490 3	8CHCKAH M	500. 0	DVP	1	Base Case	operati on	2442.120117 19	102.96	103.46	DC	51.93
1636459 12	31492 7	8YADKIN	500. 0	DVP	31492 8	8SUFFOLK	500. 0	DVP	1	DVP_P1-2: LN 579	operati on	2442.120117 19	126.38	128.76	DC	128.47
1636459 60	31492 8	8SUFFOLK	500. 0	DVP	31492 4	8SURREY	500. 0	DVP	1	DVP_P1-2: LN 579	operati on	2442.120117 19	106.31	108.76	DC	73.22
1734422 90	31493 4	8SPOTSYL	500. 0	DVP	31491 6	8MORRSV L	500. 0	DVP	1	DVP_P1-2: LN 575	operati on	3218.560058 59	146.87	147.05	DC	36.98
1687182 57	93406 0	AD1-033 TAP	230. 0	DVP	31448 1	6LANDSTN	230. 0	DVP	1	DVP_P1-2: LN 2128	operati on	678.6799926 76	140.43	151.38	DC	74.31
1696397 51	94255 0	AE2-270 TAP	230. 0	DVP	93516 0	AD1-151 TAP	230. 0	DVP	2	DVP_P1-2: LN 2197	operati on	678.6799926 76	99.49	100.54	DC	15.64
1734423 47	96284 0	AG1-133 TAP	500. 0	DVP	31493 4	8SPOTSYL	500. 0	DVP	1	DVP_P1-2: LN 575	operati on	3218.560058 59	139.71	139.88	DC	37.93
1734424 70	96329 0	AG1-178 TAP	500. 0	DVP	31490 2	8CARSON	500. 0	DVP	1	DVP_P1-2: LN 562-A	operati on	2686.520019 53	99.03	101.06	DC	71.57
1699350 85	96382 0	AG1-235 TAP	230. 0	DVP	31446 6	6FENTRES	230. 0	DVP	1	314550 6HICKOR Y 230 937220 AD2-160 TAP 230 1	operati on	571.5200195 31	121.78	157.48	DC	204.07

13.5 Flow Gate Details - Secondary POI

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

13.5.1 Index 1

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168718198	314466	6FENTRES	DVP	314508	6THRASHER	DVP	1	DVP_P1-2: LN 271-B	single	678.68	93.14	101.77	DC	58.59

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.5534	80/20	0.5534
314638	6ELIZ CT	0.3235	80/20	0.3235
314639	6TANGLEW	0.5109	80/20	0.5109
314643	3O INLET	0.8183	80/20	0.8183
315292	1DOMTR78	0.4777	80/20	0.4777
315293	1DOMTR9	2.4708	80/20	2.4708
315294	1DOMTR10	3.0280	80/20	3.0280
315603	6AA1-139SOLA	4.6267	80/20	4.6267
315605	6W1-029WIND	0.8351	80/20	0.8351
315611	6Z1-036WIND	0.8556	80/20	0.8556
315614	AA2-178 C	0.8576	80/20	0.8576
933731	AC2-196 C	0.6907	80/20	0.6907
933991	AD1-023 C	4.5353	80/20	4.5353
934061	AD1-033 C	18.3872	80/20	18.3872
934521	AD1-076 C	23.1513	80/20	23.1513
937221	AD2-160 C O1	12.8366	80/20	12.8366
938535	AE1-072 C	34.9500	80/20	34.9500
940491	AE2-034 C	4.0769	80/20	4.0769
941501	AE2-147 C	12.2148	80/20	12.2148
942401	AE2-253 C	13.5019	80/20	13.5019
944581	AF1-123 C O1	37.3885	80/20	37.3885
944591	AF1-124 C O1	37.3885	80/20	37.3885
944601	AF1-125 C O1	37.3885	80/20	37.3885
944871	AF1-152 C	4.0716	80/20	4.0716
945711	AF1-236 C O1	44.6328	80/20	44.6328
957531	AF2-047 C	9.6876	80/20	9.6876
957871	AF2-081 C	20.8673	80/20	20.8673
963821	AG1-235 C O2	58.5913	80/20	58.5913
964951	AG1-359 O1	65.6685	80/20	65.6685
965181	AG1-383 C	6.4980	80/20	6.4980
965631	AG1-431	25.8400	80/20	25.8400
966931	AG1-431A	19.4140	80/20	19.4140
WEC	WEC	0.0454	Confirmed LTF	0.0454
LGEE	LGEE	0.0924	Confirmed LTF	0.0924
CPL	CPL	0.3795	Confirmed LTF	0.3795
CBM-W2	CBM-W2	1.7562	Confirmed LTF	1.7562
NY	NY	0.0083	Confirmed LTF	0.0083
TVA	TVA	0.3164	Confirmed LTF	0.3164
SIGE	SIGE	0.0188	Confirmed LTF	0.0188
CBM-S2	CBM-S2	4.3639	Confirmed LTF	4.3639
CBM-S1	CBM-S1	0.0806	Confirmed LTF	0.0806

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
MEC	MEC	0.2574	Confirmed LTF	0.2574
LAGN	LAGN	0.3955	Confirmed LTF	0.3955
CBM-W1	CBM-W1	1.9488	Confirmed LTF	1.9488

13.5.2 Index 2

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174226394	313896	6COLONIAL TR	DVP	314303	6HOPEWLL	DVP	1	DVP_P4-2: 240T2041	breaker	830.0	121.3	122.15	DC	15.52

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.6976	Adder	0.82
314466	6FENTRES	0.7284	Adder	0.86
314525	6KINGFORK	1.8145	Adder	2.13
314550	6HICKORY	1.3365	Adder	1.57
314632	6AYDLETOLD	0.6966	Adder	0.82
315073	1STONECA	-4.9407	Adder	-5.81
315116	1SURRY 1	29.9910	50/50	29.9910
315117	1GRAVELC	1.0511	50/50	1.0511
315119	1GRAVEL3	3.0467	50/50	3.0467
315120	1GRAVEL4	3.0857	50/50	3.0857
315121	1GRAVEL5	3.0467	50/50	3.0467
315122	1GRAVEL6	3.0822	50/50	3.0822
316033	AB2-134 C	5.7217	50/50	5.7217
316151	AD2-215 E (Withdrawn : 01/14/2021)	0.3883	Adder	0.46
316258	AE1-162 C	0.3229	50/50	0.3229
901082	W1-029 E	13.4197	Adder	15.79
913392	Y1-086 E	0.6704	Adder	0.79
916192	Z1-068 E	0.6682	Adder	0.79
917122	Z2-027 E	0.3180	Adder	0.37
919152	AA1-139 E	2.0496	Adder	2.41
923832	AB2-022 E	0.3785	Adder	0.45
924814	AB2-134 E	35.6601	50/50	35.6601
925522	AC1-027 E	0.4110	Adder	0.48
926662	AC1-147 E	0.5168	Adder	0.61
927225	AC1-216 C	4.3675	50/50	4.3675
927226	AC1-216 E	21.7698	50/50	21.7698
932044	AC2-012 C	3.9811	Adder	4.68
932046	AC2-012 E	6.4955	Adder	7.64
933732	AC2-196 E	0.3913	Adder	0.46
934014	AD1-025 C	47.5804	50/50	47.5804
934015	AD1-025 E	28.1846	50/50	28.1846
934061	AD1-033 C	2.4951	Adder	2.94
934062	AD1-033 E	1.6634	Adder	1.96
935112	AD1-144 E	0.3958	Adder	0.47
936041	AD2-007 C	2.2730	50/50	2.2730
936042	AD2-007 E	1.5658	50/50	1.5658
936051	AD2-008 C	8.2836	50/50	8.2836
936052	AD2-008 E	18.0321	50/50	18.0321
937221	AD2-160 C O1	1.8847	Adder	2.22
937222	AD2-160 E O1	0.9883	Adder	1.16
938535	AE1-072 C	5.5825	Adder	6.57

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938536	AE1-072 E	2.8758	Adder	3.38
939312	AE1-162 E	1.3645	50/50	1.3645
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	65.6652	Adder	77.25
940891	AE2-078 C	2.6799	50/50	2.6799
940892	AE2-078 E	1.3805	50/50	1.3805
940901	AE2-079 C	2.6799	50/50	2.6799
940902	AE2-079 E	1.3805	50/50	1.3805
941281	AE2-122 C O1	10.0448	Adder	11.82
941282	AE2-122 E O1	40.5331	Adder	47.69
941291	AE2-123 C O1	10.3229	Adder	12.14
941292	AE2-123 E O1	40.2550	Adder	47.36
941301	AE2-124 C O1	9.2889	Adder	10.93
941302	AE2-124 E O1	40.7586	Adder	47.95
941501	AE2-147 C	4.6275	Adder	5.44
941502	AE2-147 E	3.0850	Adder	3.63
941591	AE2-156 O1	6.9165	Adder	8.14
942131	AE2-225 C	0.6556	Adder	0.77
942132	AE2-225 E	0.4370	Adder	0.51
942161	AE2-228 C	-0.6966	Adder	-0.82
942171	AE2-229 C	0.4917	Adder	0.58
942172	AE2-229 E	0.3278	Adder	0.39
942401	AE2-253 C	1.9824	Adder	2.33
942402	AE2-253 E	0.8906	Adder	1.05
942551	AE2-270	33.7590	50/50	33.7590
943611	AF1-032 C	0.5354	Adder	0.63
943612	AF1-032 E	0.2841	Adder	0.33
943621	AF1-033 C	2.6799	50/50	2.6799
943622	AF1-033 E	1.3805	50/50	1.3805
944581	AF1-123 C O1	13.9404	Adder	16.4
944582	AF1-123 E O1	31.9195	Adder	37.55
944591	AF1-124 C O1	13.9404	Adder	16.4
944592	AF1-124 E O1	31.9195	Adder	37.55
944601	AF1-125 C O1	13.9404	Adder	16.4
944602	AF1-125 E O1	31.9195	Adder	37.55
944871	AF1-152 C	1.5425	Adder	1.81
944872	AF1-152 E	1.0283	Adder	1.21
946261	AF1-291 C	-0.6996	Adder	-0.82
957491	AF2-043 C	0.6556	Adder	0.77
957492	AF2-043 E	0.4370	Adder	0.51
957631	AF2-057	1.3969	Adder	1.64
957711	AF2-065 C	17.2171	50/50	17.2171
957712	AF2-065 E	16.5419	50/50	16.5419
957821	AF2-076 C	1.5718	Adder	1.85
957822	AF2-076 E	1.0479	Adder	1.23
957871	AF2-081 C	3.1882	Adder	3.75
957872	AF2-081 E	1.3664	Adder	1.61
959651	AF2-256 C	-0.1741	Adder	-0.2
961711	AG1-011	80.8160	50/50	80.8160
962321	AG1-081 C (Withdrawn : 01/15/2021)	2.4362	50/50	2.4362
962322	AG1-081 E (Withdrawn : 01/15/2021)	1.6242	50/50	1.6242

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963821	AG1-235 C O2	4.1958	Adder	9.31
963822	AG1-235 E O2	2.7972	Adder	6.21
964951	AG1-359 O1	4.6708	Adder	10.37
965001	AG1-364 C O2	1.5357	Adder	3.41
965002	AG1-364 E O2	2.3035	Adder	5.11
965181	AG1-383 C	0.4766	Adder	1.06
965182	AG1-383 E	0.1412	Adder	0.31
966491	AG1-518 O2	1.4414	Adder	3.2
966611	AG1-531 C	5.3428	50/50	5.3428
966612	AG1-531 E	3.5618	50/50	3.5618
WEC	WEC	0.0016	Confirmed LTF	0.0016
LGEE	LGEE	0.0069	Confirmed LTF	0.0069
CPL	CPL	0.6709	Confirmed LTF	0.6709
CBM-W2	CBM-W2	1.2275	Confirmed LTF	1.2275
NY	NY	0.2234	Confirmed LTF	0.2234
TVA	TVA	0.3010	Confirmed LTF	0.3010
O-066	O-066	2.9074	Confirmed LTF	2.9074
SIGE	SIGE	0.0484	Confirmed LTF	0.0484
CBM-S2	CBM-S2	7.1932	Confirmed LTF	7.1932
CBM-S1	CBM-S1	0.0676	Confirmed LTF	0.0676
G-007	G-007	0.4557	Confirmed LTF	0.4557
MEC	MEC	0.0810	Confirmed LTF	0.0810
LAGN	LAGN	0.3745	Confirmed LTF	0.3745

13.5.3 Index 3

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174226180	314209	6SKIFF CREEK	DVP	314386	6KINGS M	DVP	1	DVP_P4-5: L122	breaker	541.0	220.39	221.5	DC	16.51

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.7534	Adder	0.89
314177	3HAYES89	0.0182	Adder	0.02
314189	6PAPERMILL	-6.8228	Adder	-8.03
314421	6WINCHST	0.0980	50/50	0.0980
314466	6FENTRES	0.7744	Adder	0.91
314525	6KINGFORK	1.5778	Adder	1.86
314539	3UNCAMP	1.6395	Adder	1.93
314541	3WATKINS	0.1800	Adder	0.21
314550	6HICKORY	1.4253	Adder	1.68
314594	6PLYMOTH	0.0255	Adder	0.03
314632	6AYDLETOLD	0.7543	Adder	0.89
315092	1YORKTN3	18.1519	50/50	18.1519
316103	AB2-015 C	2.2886	Adder	2.69
316104	AB2-015 E	1.8767	Adder	2.21
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	23.5027	Adder	27.65
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	23.5027	Adder	27.65
316114	AB2-068 ST (Withdrawn : 01/11/2021)	40.7160	Adder	47.9
316134	AC1-107 G1	44.1338	Adder	51.92
316135	AC1-107 G2	44.1338	Adder	51.92
316136	AC1-107 G3	44.1421	Adder	51.93
316151	AD2-215 E (Withdrawn : 01/14/2021)	0.3376	Adder	0.4
901082	W1-029 E	15.1324	Adder	17.8
913392	Y1-086 E	0.7379	Adder	0.87
916042	Z1-036 E (Suspended)	14.4191	Adder	16.96
916192	Z1-068 E	0.6534	Adder	0.77
917122	Z2-027 E	0.3530	Adder	0.42
919152	AA1-139 E	2.2072	Adder	2.6
920692	AA2-178 E	1.2026	Adder	1.41
923832	AB2-022 E	0.4166	Adder	0.49
925522	AC1-027 E	0.3980	Adder	0.47
925863	AC1-065 C	-5.6418	Adder	-6.64
926662	AC1-147 E	0.4587	Adder	0.54
926754	AC1-161 C	11.9237	Adder	14.03
926755	AC1-161 E	5.0899	Adder	5.99
926784	AC1-164 C	-18.9163	Adder	-22.25
932044	AC2-012 C	3.5330	Adder	4.16
932046	AC2-012 E	5.7643	Adder	6.78
933294	AC2-141 C	11.9237	Adder	14.03

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933295	AC2-141 E	5.0899	Adder	5.99
933732	AC2-196 E	0.4160	Adder	0.49
933991	AD1-023 C	3.5638	Adder	4.19
933992	AD1-023 E	1.9401	Adder	2.28
934061	AD1-033 C	2.6218	Adder	3.08
934062	AD1-033 E	1.7479	Adder	2.06
934141	AD1-041 C	-3.7541	Adder	-4.42
934521	AD1-076 C	15.1072	Adder	17.77
934522	AD1-076 E	7.6926	Adder	9.05
935112	AD1-144 E	0.3441	Adder	0.4
937221	AD2-160 C O1	2.0219	Adder	2.38
937222	AD2-160 E O1	1.0602	Adder	1.25
938535	AE1-072 C	6.0361	Adder	7.1
938536	AE1-072 E	3.1095	Adder	3.66
938771	AE1-103 C	1.0089	Adder	1.19
938772	AE1-103 E	1.3932	Adder	1.64
939312	AE1-162 E	0.4427	Adder	0.52
939414	AE1-173_C1	8.2296	Adder	9.68
939415	AE1-173_C2	7.0539	Adder	8.3
939416	AE1-173_C3	8.2296	Adder	9.68
939423	AE1-173_E1	5.4864	Adder	6.45
939424	AE1-173_E2	4.7026	Adder	5.53
939425	AE1-173_E3	5.4864	Adder	6.45
939431	AE1-175 C	0.9221	Adder	1.08
939432	AE1-175 E	0.4576	Adder	0.54
940231	AE2-005 C	-1.0258	Adder	-1.21
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	60.2123	Adder	70.84
940491	AE2-034 C	2.1045	Adder	2.48
940492	AE2-034 E	0.9019	Adder	1.06
940552	AE2-041 BAT	7.5760	50/50	7.5760
940891	AE2-078 C	0.8073	Adder	0.95
940892	AE2-078 E	0.4159	Adder	0.49
940901	AE2-079 C	0.8073	Adder	0.95
940902	AE2-079 E	0.4159	Adder	0.49
941101	AE2-104 C O1	1.0191	Adder	1.2
941102	AE2-104 E O1	1.6202	Adder	1.91
941281	AE2-122 C O1	9.8908	Adder	11.64
941282	AE2-122 E O1	39.9118	Adder	46.96
941291	AE2-123 C O1	10.1647	Adder	11.96
941292	AE2-123 E O1	39.6379	Adder	46.63
941301	AE2-124 C O1	9.2472	Adder	10.88
941302	AE2-124 E O1	40.5758	Adder	47.74
941501	AE2-147 C	5.2181	Adder	6.14
941502	AE2-147 E	3.4787	Adder	4.09
941591	AE2-156 O1	6.2092	Adder	7.3
942131	AE2-225 C	0.7322	Adder	0.86
942132	AE2-225 E	0.4881	Adder	0.57
942171	AE2-229 C	0.5491	Adder	0.65
942172	AE2-229 E	0.3661	Adder	0.43
942401	AE2-253 C	2.1266	Adder	2.5
942402	AE2-253 E	0.9555	Adder	1.12

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
943472	AF1-018 BAT	7.5760	50/50	7.5760
943611	AF1-032 C	0.5979	Adder	0.7
943612	AF1-032 E	0.3173	Adder	0.37
943621	AF1-033 C	0.8073	Adder	0.95
943622	AF1-033 E	0.4159	Adder	0.49
944581	AF1-123 C O1	17.1031	Adder	20.12
944582	AF1-123 E O1	39.1614	Adder	46.07
944591	AF1-124 C O1	17.1031	Adder	20.12
944592	AF1-124 E O1	39.1614	Adder	46.07
944601	AF1-125 C O1	17.1031	Adder	20.12
944602	AF1-125 E O1	39.1614	Adder	46.07
944871	AF1-152 C	1.7394	Adder	2.05
944872	AF1-152 E	1.1596	Adder	1.36
945361	AF1-201 C O1	4.4393	Adder	5.22
945362	AF1-201 E O1	2.9595	Adder	3.48
945711	AF1-236 C O1	23.0394	Adder	27.11
945712	AF1-236 E O1	14.2305	Adder	16.74
957192	AF2-013 BAT	8.5350	Merchant Transmission	8.5350
957491	AF2-043 C	0.7322	Adder	0.86
957492	AF2-043 E	0.4881	Adder	0.57
957531	AF2-047 C	5.0007	Adder	5.88
957532	AF2-047 E	2.5154	Adder	2.96
957631	AF2-057	1.2396	Adder	1.46
957821	AF2-076 C	1.7799	Adder	2.09
957822	AF2-076 E	1.1866	Adder	1.4
957871	AF2-081 C	3.4334	Adder	4.04
957872	AF2-081 E	1.4715	Adder	1.73
958161	AF2-110 C	0.4201	Adder	0.49
958162	AF2-110 E	0.6571	Adder	0.77
961091	AF2-400 C	0.1236	Adder	0.15
961092	AF2-400 E	0.2028	Adder	0.24
961782	AG1-019 BAT	4.5235	Merchant Transmission	4.5235
961851	AG1-027 C	2.6411	Adder	5.86
961852	AG1-027 E	1.4600	Adder	3.24
962132	AG1-057 BAT	3.7880	50/50	3.7880
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.3890	Adder	0.86
962322	AG1-081 E (Withdrawn : 01/15/2021)	0.2593	Adder	0.58
962961	AG1-145 C	0.4410	Adder	0.98
962962	AG1-145 E	0.2940	Adder	0.65
963613	AG1-210 BAT	1.5858	50/50	1.5858
963821	AG1-235 C O2	4.4640	Adder	9.91
963822	AG1-235 E O2	2.9760	Adder	6.61
964023	AG1-256 BAT	3.2568	50/50	3.2568
964592	AG1-322 BAT	2.1763	Merchant Transmission	2.1763
964951	AG1-359 O1	4.9654	Adder	11.02
965001	AG1-364 C O2	1.3093	Adder	2.91
965002	AG1-364 E O2	1.9640	Adder	4.36
965181	AG1-383 C	0.5083	Adder	1.13
965182	AG1-383 E	0.1506	Adder	0.33
965631	AG1-431	7.0695	Adder	15.69
965701	AG1-438 C O1	1.3765	Adder	3.06

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965702	AG1-438 E O1	0.9177	Adder	2.04
965741	AG1-442 O1	0.8325	Adder	1.85
965751	AG1-443 O1	0.8325	Adder	1.85
966491	AG1-518 O2	1.6110	Adder	3.58
966611	AG1-531 C	3.6396	50/50	3.6396
966612	AG1-531 E	2.4264	50/50	2.4264
966663	AG1-536 BAT	11.3130	50/50	11.3130
966931	AG1-431A	5.3114	Adder	11.79
WEC	WEC	0.1166	Confirmed LTF	0.1166
LGEE	LGEE	0.2419	Confirmed LTF	0.2419
CPL	CPL	1.6571	Confirmed LTF	1.6571
CBM-W2	CBM-W2	5.9046	Confirmed LTF	5.9046
NY	NY	0.3213	Confirmed LTF	0.3213
TVA	TVA	1.1606	Confirmed LTF	1.1606
O-066	O-066	4.3678	Confirmed LTF	4.3678
SIG	SIG	0.1126	Confirmed LTF	0.1126
CBM-S2	CBM-S2	19.2200	Confirmed LTF	19.2200
CBM-S1	CBM-S1	0.2846	Confirmed LTF	0.2846
G-007	G-007	0.6856	Confirmed LTF	0.6856
MEC	MEC	0.7468	Confirmed LTF	0.7468
LAGN	LAGN	1.4437	Confirmed LTF	1.4437
CBM-W1	CBM-W1	4.7388	Confirmed LTF	4.7388

13.5.4 Index 4

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174419287	314209	6SKIFF CREEK	DVP	314413	6WALR285	DVP	1	DVP_P4-5: L122	breaker	830.0	120.83	121.64	DC	15.28

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.6968	Adder	0.82
314177	3HAYES89	0.0310	50/50	0.0310
314421	6WINCHST	0.0939	50/50	0.0939
314466	6FENTRES	0.7165	Adder	0.84
314525	6KINGFORK	1.4652	Adder	1.72
314539	3UNCAMP	0.3301	Adder	0.39
314550	6HICKORY	1.3189	Adder	1.55
314594	6PLYMOTH	0.0234	Adder	0.03
314632	6AYDLETOLD	0.6975	Adder	0.82
315092	1YORKTN3	17.6092	50/50	17.6092
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	22.0664	Adder	25.96
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	22.0664	Adder	25.96
316114	AB2-068 ST (Withdrawn : 01/11/2021)	38.2277	Adder	44.97
316134	AC1-107 G1	41.4366	Adder	48.75
316135	AC1-107 G2	41.4366	Adder	48.75
316136	AC1-107 G3	41.4444	Adder	48.76
316151	AD2-215 E (Withdrawn : 01/14/2021)	0.3136	Adder	0.37
901082	W1-029 E	13.9743	Adder	16.44
913392	Y1-086 E	0.6818	Adder	0.8
916042	Z1-036 E (Suspended)	13.2885	Adder	15.63
916192	Z1-068 E	0.6041	Adder	0.71
917122	Z2-027 E	0.3261	Adder	0.38
919152	AA1-139 E	2.0413	Adder	2.4
920692	AA2-178 E	1.1040	Adder	1.3
923832	AB2-022 E	0.3849	Adder	0.45
925522	AC1-027 E	0.3679	Adder	0.43
926662	AC1-147 E	0.4236	Adder	0.5
926754	AC1-161 C	11.1316	Adder	13.1
926755	AC1-161 E	4.7518	Adder	5.59
926784	AC1-164 C	-23.0490	Adder	-27.12
932044	AC2-012 C	3.2626	Adder	3.84
932046	AC2-012 E	5.3232	Adder	6.26
933294	AC2-141 C	11.1316	Adder	13.1
933295	AC2-141 E	4.7518	Adder	5.59
933732	AC2-196 E	0.3849	Adder	0.45
934061	AD1-033 C	2.4258	Adder	2.85
934062	AD1-033 E	1.6172	Adder	1.9
934521	AD1-076 C	13.8315	Adder	16.27

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934522	AD1-076 E	7.0430	Adder	8.29
935112	AD1-144 E	0.3196	Adder	0.38
937221	AD2-160 C O1	1.8702	Adder	2.2
937222	AD2-160 E O1	0.9807	Adder	1.15
938535	AE1-072 C	5.5817	Adder	6.57
938536	AE1-072 E	2.8754	Adder	3.38
938771	AE1-103 C	0.9202	Adder	1.08
938772	AE1-103 E	1.2707	Adder	1.49
939312	AE1-162 E	0.4013	Adder	0.47
939414	AE1-173_C1	7.5541	Adder	8.89
939415	AE1-173_C2	6.4750	Adder	7.62
939416	AE1-173_C3	7.5541	Adder	8.89
939423	AE1-173_E1	5.0361	Adder	5.92
939424	AE1-173_E2	4.3166	Adder	5.08
939425	AE1-173_E3	5.0361	Adder	5.92
939431	AE1-175 C	-6.9313	Adder	-8.15
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	55.6312	Adder	65.45
940491	AE2-034 C	1.9321	Adder	2.27
940492	AE2-034 E	0.8280	Adder	0.97
940891	AE2-078 C	0.7365	Adder	0.87
940892	AE2-078 E	0.3794	Adder	0.45
940901	AE2-079 C	0.7365	Adder	0.87
940902	AE2-079 E	0.3794	Adder	0.45
941101	AE2-104 C O1	0.9340	Adder	1.1
941102	AE2-104 E O1	1.4850	Adder	1.75
941281	AE2-122 C O1	9.1453	Adder	10.76
941282	AE2-122 E O1	36.9033	Adder	43.42
941291	AE2-123 C O1	9.3985	Adder	11.06
941292	AE2-123 E O1	36.6501	Adder	43.12
941301	AE2-124 C O1	8.5505	Adder	10.06
941302	AE2-124 E O1	37.5185	Adder	44.14
941501	AE2-147 C	4.8187	Adder	5.67
941502	AE2-147 E	3.2125	Adder	3.78
941591	AE2-156 O1	5.7358	Adder	6.75
942131	AE2-225 C	0.6777	Adder	0.8
942132	AE2-225 E	0.4518	Adder	0.53
942151	AE2-227 C	-0.5496	Adder	-0.65
942171	AE2-229 C	0.5083	Adder	0.6
942172	AE2-229 E	0.3388	Adder	0.4
942401	AE2-253 C	1.9671	Adder	2.31
942402	AE2-253 E	0.8838	Adder	1.04
943611	AF1-032 C	0.5534	Adder	0.65
943612	AF1-032 E	0.2937	Adder	0.35
943621	AF1-033 C	0.7365	Adder	0.87
943622	AF1-033 E	0.3794	Adder	0.45
944581	AF1-123 C O1	15.8571	Adder	18.66
944582	AF1-123 E O1	36.3084	Adder	42.72
944591	AF1-124 C O1	15.8571	Adder	18.66
944592	AF1-124 E O1	36.3084	Adder	42.72
944601	AF1-125 C O1	15.8571	Adder	18.66
944602	AF1-125 E O1	36.3084	Adder	42.72

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944871	AF1-152 C	1.6062	Adder	1.89
944872	AF1-152 E	1.0708	Adder	1.26
945361	AF1-201 C O1	7.1948	Adder	8.46
945362	AF1-201 E O1	4.7966	Adder	5.64
945711	AF1-236 C O1	21.1517	Adder	24.88
945712	AF1-236 E O1	13.0646	Adder	15.37
957491	AF2-043 C	0.6777	Adder	0.8
957492	AF2-043 E	0.4518	Adder	0.53
957531	AF2-047 C	4.5910	Adder	5.4
957532	AF2-047 E	2.3093	Adder	2.72
957631	AF2-057	1.1448	Adder	1.35
957821	AF2-076 C	1.6455	Adder	1.94
957822	AF2-076 E	1.0970	Adder	1.29
957831	AF2-077 C	0.7122	Adder	0.84
957832	AF2-077 E	0.4748	Adder	0.56
957871	AF2-081 C	3.1754	Adder	3.74
957872	AF2-081 E	1.3609	Adder	1.6
958161	AF2-110 C	0.3851	Adder	0.45
958162	AF2-110 E	0.6023	Adder	0.71
959641	AF2-255 C	-0.1374	Adder	-0.16
961851	AG1-027 C	2.4161	Adder	5.36
961852	AG1-027 E	1.3356	Adder	2.96
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.3548	Adder	0.79
962322	AG1-081 E (Withdrawn : 01/15/2021)	0.2366	Adder	0.53
962531	AG1-102 C	0.1938	Adder	0.43
962532	AG1-102 E	0.4039	Adder	0.9
962533	AG1-102 BAT	0.0031	Adder	0.01
963821	AG1-235 C O2	4.1307	Adder	9.17
963822	AG1-235 E O2	2.7538	Adder	6.11
964951	AG1-359 O1	4.5944	Adder	10.2
965001	AG1-364 C O2	1.2084	Adder	2.68
965002	AG1-364 E O2	1.8126	Adder	4.02
965181	AG1-383 C	0.4704	Adder	1.04
965182	AG1-383 E	0.1393	Adder	0.31
965631	AG1-431	6.4902	Adder	14.41
966491	AG1-518 O2	1.4907	Adder	3.31
966611	AG1-531 C	1.5409	Adder	3.42
966612	AG1-531 E	1.0272	Adder	2.28
966931	AG1-431A	4.8762	Adder	10.82
WEC	WEC	0.0954	Confirmed LTF	0.0954
LGEE	LGEE	0.1979	Confirmed LTF	0.1979
CPL	CPL	1.4756	Confirmed LTF	1.4756
CBM-W2	CBM-W2	5.0266	Confirmed LTF	5.0266
NY	NY	0.2765	Confirmed LTF	0.2765
TVA	TVA	0.9982	Confirmed LTF	0.9982
O-066	O-066	3.7284	Confirmed LTF	3.7284
SIGE	SIGE	0.0949	Confirmed LTF	0.0949
CBM-S2	CBM-S2	16.9963	Confirmed LTF	16.9963
CBM-S1	CBM-S1	0.2436	Confirmed LTF	0.2436
G-007	G-007	0.5849	Confirmed LTF	0.5849
MEC	MEC	0.6229	Confirmed LTF	0.6229

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
LAGN	LAGN	1.2425	Confirmed LTF	1.2425
CBM-W1	CBM-W1	3.8555	Confirmed LTF	3.8555

13.5.5 Index 5

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC/DC	MW IMPACT
168718362	314214	6CHCKAHM	DVP	314258	6ELKO	DVP	1	DVP_P1-2: LN 557	single	678.68	107.08	107.48	DC	7.72

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314184	3SHACKLE	0.3733	80/20	0.3733
314190	6WESTMOR	0.1731	80/20	0.1731
314241	6OLDCHRC	0.3007	80/20	0.3007
314243	3PROV 92	0.2184	80/20	0.2184
314375	6CORRCTN	0.3039	80/20	0.3039
314421	6WINCHST	0.0611	80/20	0.0611
315034	1NORNECKC1	0.3948	80/20	0.3948
315035	1NORNECKC2	0.3805	80/20	0.3805
315060	1CHESTF5 (Deactivation : 31/05/2023)	26.3795	80/20	26.3795
315061	1CHESTG7	1.5542	80/20	1.5542
315062	1CHESTS7	0.7135	80/20	0.7135
315063	1CHESTG8	1.5292	80/20	1.5292
315064	1CHESTS8	0.7872	80/20	0.7872
315092	1YORKTN3	11.2578	80/20	11.2578
315108	1ELIZAR1	0.9964	80/20	0.9964
315109	1ELIZAR2	0.9791	80/20	0.9791
315110	1ELIZAR3	1.0092	80/20	1.0092
315233	1SURRY 2	9.9130	80/20	9.9130
316077	AC2-138 C	0.0999	80/20	0.0999
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	32.1346	80/20	32.1346
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	32.1346	80/20	32.1346
316114	AB2-068 ST (Withdrawn : 01/11/2021)	55.6698	80/20	55.6698
316134	AC1-107 G1	60.3429	80/20	60.3429
316135	AC1-107 G2	60.3429	80/20	60.3429
316136	AC1-107 G3	60.3542	80/20	60.3542
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.0900	80/20	0.0900
316156	AD2-030 C	0.2440	80/20	0.2440
925863	AC1-065 C	4.9445	80/20	4.9445
926754	AC1-161 C	10.6925	80/20	10.6925
926784	AC1-164 C	37.9577	80/20	37.9577
932044	AC2-012 C	2.7912	Adder	3.28
932501	AC2-070 C (Withdrawn : 01/22/2021)	0.0988	80/20	0.0988
933294	AC2-141 C	10.6925	80/20	10.6925
934061	AD1-033 C	2.0456	Adder	2.41
934141	AD1-041 C	3.5457	80/20	3.5457
934391	AD1-063 C	0.1866	80/20	0.1866

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
935111	AD1-144 C	0.0891	80/20	0.0891
936581	AD2-073 C	1.2265	80/20	1.2265
936591	AD2-074 C	3.5039	80/20	3.5039
936761	AD2-097 C	-0.8277	Adder	-0.97
937221	AD2-160 C O1	1.5735	Adder	1.85
938961	AE1-124 C	0.1461	80/20	0.1461
939245	AE1-155 C	8.0286	80/20	8.0286
939431	AE1-175 C	1.5883	80/20	1.5883
939611	AE1-191 C	7.0914	80/20	7.0914
940231	AE2-005 C	0.8990	80/20	0.8990
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	47.4724	Adder	55.85
940551	AE2-041	5.2572	80/20	5.2572
940891	AE2-078 C	0.7966	80/20	0.7966
940901	AE2-079 C	0.7966	80/20	0.7966
941281	AE2-122 C O1	7.7500	Adder	9.12
941291	AE2-123 C O1	7.9646	Adder	9.37
941301	AE2-124 C O1	7.2403	Adder	8.52
941581	AE2-155 C	0.0376	80/20	0.0376
941591	AE2-156 O1	4.9028	Adder	5.77
942401	AE2-253 C	1.6551	Adder	1.95
943431	AF1-014 C	0.8517	80/20	0.8517
943471	AF1-018	5.2572	80/20	5.2572
943621	AF1-033 C	0.7966	80/20	0.7966
943741	AF1-042 C	1.8335	80/20	1.8335
944491	AF1-114 C	2.5977	80/20	2.5977
944581	AF1-123 C O1	15.5926	80/20	15.5926
944591	AF1-124 C O1	15.5926	80/20	15.5926
944601	AF1-125 C O1	15.5926	80/20	15.5926
944631	AF1-128 O1	23.1311	80/20	23.1311
945361	AF1-201 C O1	8.9262	80/20	8.9262
945831	AF1-248	0.0333	80/20	0.0333
957601	AF2-054 C	1.4098	80/20	1.4098
957631	AF2-057	0.9794	Adder	1.15
957831	AF2-077 C	1.2436	80/20	1.2436
957871	AF2-081 C	2.6699	Adder	3.14
957971	AF2-091 C	0.8832	80/20	0.8832
958261	AF2-120 C	3.9320	80/20	3.9320
961951	AG1-038 C	2.0265	80/20	2.0265
962131	AG1-057	2.6286	80/20	2.6286
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.7242	80/20	0.7242
962531	AG1-102 C	0.6384	80/20	0.6384
962861	AG1-135 C	3.8279	80/20	3.8279
962961	AG1-145 C	1.4330	80/20	1.4330
962971	AG1-146 C	1.9854	80/20	1.9854
962981	AG1-147 C	4.6326	80/20	4.6326
963611	AG1-210 C	0.4020	80/20	0.4020
963821	AG1-235 C O2	3.4800	Adder	7.72
964021	AG1-256 C	0.7813	80/20	0.7813
964211	AG1-282 C	1.2965	80/20	1.2965
964951	AG1-359 O1	3.8714	Adder	8.59
965001	AG1-364 C O2	1.0376	Adder	2.3

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965181	AG1-383 C	0.3961	Adder	0.88
965231	AG1-388 C	1.2965	80/20	1.2965
966611	AG1-531 C	2.5801	80/20	2.5801
966661	AG1-536 C	3.3805	80/20	3.3805
WEC	WEC	0.0652	Confirmed LTF	0.0652
LGEE	LGEE	0.1345	Confirmed LTF	0.1345
CPLE	CPLE	1.1657	Confirmed LTF	1.1657
CBM-W2	CBM-W2	3.6915	Confirmed LTF	3.6915
NY	NY	0.2052	Confirmed LTF	0.2052
TVA	TVA	0.7448	Confirmed LTF	0.7448
SIGE	SIGE	0.0681	Confirmed LTF	0.0681
CBM-S2	CBM-S2	13.2588	Confirmed LTF	13.2588
CBM-S1	CBM-S1	0.1801	Confirmed LTF	0.1801
MEC	MEC	0.4402	Confirmed LTF	0.4402
LAGN	LAGN	0.9275	Confirmed LTF	0.9275
CBM-W1	CBM-W1	2.6077	Confirmed LTF	2.6077

13.5.6 Index 6

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168718240	314218	6ELMONT	DVP	314908	8ELMONT	DVP	2	DVP_P1-2: LN 557	single	879.84	153.77	154.44	DC	14.95

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314229	6MT RD221	0.1393	80/20	0.1393
314236	6NRTHEST	0.1832	80/20	0.1832
314241	6OLDCHRC	0.8548	80/20	0.8548
314250	6ROCKVILLE	0.3145	80/20	0.3145
314309	6IRON208	0.3968	80/20	0.3968
315043	1FOUR RIVERA	3.0873	80/20	3.0873
315044	1FOUR RIVERB	3.0873	80/20	3.0873
315045	1FOUR RIVERC	3.7734	80/20	3.7734
315046	1FOUR RIVERD	3.0873	80/20	3.0873
315047	1FOUR RIVERE	3.0873	80/20	3.0873
315048	1FOUR RIVERF	3.7734	80/20	3.7734
315050	1FOURRIVERG	4.6210	80/20	4.6210
315051	1AA1-145 CT1	4.8597	80/20	4.8597
315052	1AA1-145 CT2	4.8597	80/20	4.8597
315058	1CHESTF3 (Deactivation : 13/12/2018)	16.7010	80/20	16.7010
315059	1CHESTF4 (Deactivation : 13/12/2018)	27.0723	80/20	27.0723
315060	1CHESTF5 (Deactivation : 31/05/2023)	56.0665	80/20	56.0665
315061	1CHESTG7	3.3032	80/20	3.3032
315062	1CHESTS7	1.5164	80/20	1.5164
315063	1CHESTG8	3.2501	80/20	3.2501
315064	1CHESTS8	1.6731	80/20	1.6731
315065	1CHESTF6 (Deactivation : 31/05/2023)	91.6222	Adder	107.79
315067	1DARBY 1	2.4661	80/20	2.4661
315068	1DARBY 2	2.4690	80/20	2.4690
315069	1DARBY 3	2.4776	80/20	2.4776
315070	1DARBY 4	2.4805	80/20	2.4805
315074	1HOPCGN1 (Deactivation : 25/06/2019)	0.0129	Adder	0.02
315075	1HOPCGN2 (Deactivation : 25/06/2019)	0.0129	Adder	0.02
315083	1SPRUNCA (Deactivation : 12/01/2021)	7.8772	Adder	9.27
315084	1SPRUNCB (Deactivation : 12/01/2021)	7.8772	Adder	9.27
316075	AC2-137 C	0.2994	80/20	0.2994
316083	AB2-161 C	2.1134	Adder	2.49
316103	AB2-015 C	4.3635	Adder	5.13
316108	AB2-160 C	3.7946	Adder	4.46

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	31.7658	Adder	37.37
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	31.7658	Adder	37.37
316114	AB2-068 ST (Withdrawn : 01/11/2021)	55.0309	Adder	64.74
316132	AB2-190 C	13.4527	Adder	15.83
316134	AC1-107 G1	59.6504	Adder	70.18
316135	AC1-107 G2	59.6504	Adder	70.18
316136	AC1-107 G3	59.6616	Adder	70.19
925863	AC1-065 C	4.9550	Adder	5.83
926754	AC1-161 C	15.6838	Adder	18.45
926784	AC1-164 C	29.3625	Adder	34.54
927044	AC1-191 C	11.0575	80/20	11.0575
932044	AC2-012 C	5.4501	Adder	6.41
932501	AC2-070 C (Withdrawn : 01/22/2021)	0.2809	80/20	0.2809
932581	AC2-078 C O1	2.5477	Adder	3.0
932591	AC2-079 C O1	3.3547	Adder	3.95
933294	AC2-141 C	15.6838	Adder	18.45
933991	AD1-023 C	6.3205	Adder	7.44
934014	AD1-025 C	11.0985	Adder	13.06
934061	AD1-033 C	3.9598	Adder	4.66
934141	AD1-041 C	3.5032	Adder	4.12
934521	AD1-076 C	26.3163	Adder	30.96
934575	AD1-082 C	4.8163	Adder	5.67
934781	AD1-105 C	7.4723	80/20	7.4723
935164	AD1-151 C	10.8102	Adder	12.72
936041	AD2-007 C	0.5302	Adder	0.62
936051	AD2-008 C	1.9322	Adder	2.27
936151	AD2-021	0.0341	80/20	0.0341
936581	AD2-073 C	1.1747	Adder	1.38
936591	AD2-074 C	3.3545	Adder	3.95
936661	AD2-085 C	1.9427	Adder	2.29
936761	AD2-097 C	1.4939	Adder	1.76
937221	AD2-160 C O1	3.0701	Adder	3.61
938535	AE1-072 C	9.2178	Adder	10.84
938634	AE1-085 C	5.6087	Adder	6.6
938771	AE1-103 C	1.8803	Adder	2.21
939195	AE1-149 C	6.8610	Adder	8.07
939245	AE1-155 C	7.6706	Adder	9.02
939414	AE1-173_C1	14.0087	Adder	16.48
939415	AE1-173_C2	12.0074	Adder	14.13
939416	AE1-173_C3	14.0087	Adder	16.48
939431	AE1-175 C	1.5371	Adder	1.81
939611	AE1-191 C	7.0064	Adder	8.24
939755	AE1-206 C	33.2373	80/20	33.2373
940061	AE2-000BC O1	6.6229	Adder	7.79
940231	AE2-005 C	0.9009	Adder	1.06
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	92.3294	Adder	108.62
940431	AE2-027 C O1	9.4713	Adder	11.14
940481	AE2-033 C	8.3782	Adder	9.86

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940491	AE2-034 C	3.5500	Adder	4.18
940541	AE2-040	1.4982	Adder	1.76
940551	AE2-041	4.7631	Adder	5.6
940651	AE2-052	2.2870	Adder	2.69
940891	AE2-078 C	1.4322	Adder	1.68
940901	AE2-079 C	1.4322	Adder	1.68
941101	AE2-104 C O1	1.8038	Adder	2.12
941281	AE2-122 C O1	15.0624	Adder	17.72
941291	AE2-123 C O1	15.4795	Adder	18.21
941301	AE2-124 C O1	14.0640	Adder	16.55
941501	AE2-147 C	8.1916	Adder	9.64
941581	AE2-155 C	0.1069	80/20	0.1069
941591	AE2-156 O1	9.5557	Adder	11.24
942001	AE2-212 C	1.5155	Adder	1.78
942131	AE2-225 C	1.1264	Adder	1.33
942151	AE2-227 C	2.0256	80/20	2.0256
942161	AE2-228 C	1.5941	Adder	1.88
942171	AE2-229 C	0.8448	Adder	0.99
942191	AE2-231 C O1	2.2128	Adder	2.6
942341	AE2-247 C	0.8426	Adder	0.99
942371	AE2-250 C O1	6.7404	Adder	7.93
942401	AE2-253 C	3.2293	Adder	3.8
942471	AE2-260 C O1	7.1645	Adder	8.43
942551	AE2-270	17.8283	Adder	20.97
943431	AF1-014 C	0.8535	Adder	1.0
943461	AF1-017 C	0.7623	Adder	0.9
943471	AF1-018	4.7631	Adder	5.6
943601	AF1-031 C	9.9823	80/20	9.9823
943611	AF1-032 C	0.9199	Adder	1.08
943621	AF1-033 C	1.4322	Adder	1.68
943741	AF1-042 C	1.7552	Adder	2.06
943991	AF1-067 C	4.9344	80/20	4.9344
944581	AF1-123 C O1	25.0863	Adder	29.51
944591	AF1-124 C O1	25.0863	Adder	29.51
944601	AF1-125 C O1	25.0863	Adder	29.51
944631	AF1-128 O1	49.1623	80/20	49.1623
944641	AF1-129	76.8810	Adder	90.45
944871	AF1-152 C	2.7305	Adder	3.21
945361	AF1-201 C O1	9.8494	Adder	11.59
945711	AF1-236 C O1	38.8641	Adder	45.72
946001	AF1-265	29.1555	80/20	29.1555
946011	AF1-266	7.0132	Adder	8.25
946261	AF1-291 C	1.5947	Adder	1.88
957411	AF2-035 C	4.0233	Adder	4.73
957491	AF2-043 C	1.1264	Adder	1.33
957521	AF2-046 C	7.7350	Adder	9.1
957531	AF2-047 C	8.4355	Adder	9.92
957601	AF2-054 C	1.3669	Adder	1.61
957631	AF2-057	1.9123	Adder	2.25
957711	AF2-065 C	9.0924	Adder	10.7
957821	AF2-076 C	2.7764	Adder	3.27
957831	AF2-077 C	1.3275	Adder	1.56

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957871	AF2-081 C	5.2279	Adder	6.15
957911	AF2-085	2.0584	Adder	2.42
958141	AF2-108	1.1888	Adder	1.4
958161	AF2-110 C	0.7436	Adder	0.87
958261	AF2-120 C	3.7568	Adder	4.42
959641	AF2-255 C	0.5064	80/20	0.5064
959651	AF2-256 C	0.3985	Adder	0.47
959661	AF2-257 C	0.3987	Adder	0.47
959671	AF2-258 C	0.3789	Adder	0.45
959681	AF2-259 C	1.7832	Adder	2.1
960091	AF2-300 C	1.0058	Adder	1.18
961091	AF2-400 C	0.2356	Adder	0.28
961681	AG1-008 C	4.2653	Adder	9.47
961711	AG1-011	9.9910	Adder	22.18
961851	AG1-027 C	4.7644	Adder	10.58
961951	AG1-038 C	1.0282	Adder	2.28
962131	AG1-057	1.2622	Adder	2.8
962191	AG1-064 C	1.4123	80/20	1.4123
962201	AG1-065 C	1.4123	80/20	1.4123
962271	AG1-075 C O2	4.6500	Adder	10.32
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.6901	Adder	1.53
962531	AG1-102 C	0.3612	Adder	0.8
962851	AG1-134 C	9.8688	80/20	9.8688
962861	AG1-135 C	1.9402	Adder	4.31
962961	AG1-145 C	0.7351	Adder	1.63
962971	AG1-146 C	1.0114	Adder	2.25
962981	AG1-147 C	2.3598	Adder	5.24
963221	AG1-171 C	0.7639	Adder	1.7
963231	AG1-172 C	0.7639	Adder	1.7
963241	AG1-173 C	0.7639	Adder	1.7
963251	AG1-174 C	0.7639	Adder	1.7
963261	AG1-175 C	0.7639	Adder	1.7
963341	AG1-183 C	1.5779	Adder	3.5
963381	AG1-187	0.6433	Adder	1.43
963611	AG1-210 C	0.2021	Adder	0.45
963621	AG1-213 C	0.1777	Adder	0.39
963821	AG1-235 C O2	6.7361	Adder	14.95
964021	AG1-256 C	0.3910	Adder	0.87
964211	AG1-282 C	0.6321	Adder	1.4
964801	AG1-343 C	1.5171	Adder	3.37
964951	AG1-359 O1	7.4887	Adder	16.62
965001	AG1-364 C O2	2.0330	Adder	4.51
965181	AG1-383 C	0.7685	Adder	1.71
965231	AG1-388 C	0.6321	Adder	1.4
965291	AG1-394 C	0.5215	Adder	1.16
965631	AG1-431	11.9252	Adder	26.47
965691	AG1-437 C O1	2.5689	Adder	5.7
965701	AG1-438 C O1	2.5689	Adder	5.7
965741	AG1-442 O1	1.4985	Adder	3.33
965751	AG1-443 O1	1.4985	Adder	3.33
966491	AG1-518 O2	2.4818	Adder	5.51

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966611	AG1-531 C	2.0603	Adder	4.57
966661	AG1-536 C	1.7118	Adder	3.8
966711	AG1-541 C	1.4216	Adder	3.16
966731	AG1-544 C	2.3216	Adder	5.15
966741	AG1-545 C	0.7727	Adder	1.72
966871	AG1-558 C	2.4848	80/20	2.4848
966881	AG1-559 C	0.5331	Adder	1.18
966931	AG1-431A	8.9595	Adder	19.89
WEC	WEC	0.0702	Confirmed LTF	0.0702
LGEE	LGEE	0.1502	Confirmed LTF	0.1502
CPL	CPL	3.2692	Confirmed LTF	3.2692
CBM-W2	CBM-W2	7.4816	Confirmed LTF	7.4816
NY	NY	0.7001	Confirmed LTF	0.7001
TVA	TVA	1.6660	Confirmed LTF	1.6660
SIGE	SIGE	0.1751	Confirmed LTF	0.1751
CBM-S2	CBM-S2	35.9554	Confirmed LTF	35.9554
CBM-S1	CBM-S1	0.3865	Confirmed LTF	0.3865
MEC	MEC	0.6896	Confirmed LTF	0.6896
LAGN	LAGN	2.0825	Confirmed LTF	2.0825
AA2-074	AA2-074	2.1551	LTF	2.1551
CBM-W1	CBM-W1	2.3133	Confirmed LTF	2.3133

13.5.7 Index 7

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174419132	314218	6ELMONT	DVP	314908	8ELMONT	DVP	1	DVP_P4-2: H2T557	breaker	1050.6	207.8	207.87	DC	36.83

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314177	3HAYES89	0.0523	Adder	0.06
314189	6PAPERMILL	7.2970	Adder	8.58
314229	6MT RD221	0.2202	50/50	0.2202
314236	6NRTHEST	0.2917	50/50	0.2917
314241	6OLDCHRC	1.3771	50/50	1.3771
314331	6POE	2.1924	Adder	2.58
314466	6FENTRES	1.7255	Adder	2.03
314525	6KINGFORK	3.5337	Adder	4.16
315045	1FOUR RIVERC	5.9659	50/50	5.9659
315047	1FOUR RIVERE	4.8812	50/50	4.8812
315048	1FOUR RIVERF	5.9659	50/50	5.9659
315051	1AA1-145 CT1	7.6834	50/50	7.6834
315052	1AA1-145 CT2	7.6834	50/50	7.6834
315058	1CHESTF3 (Deactivation : 13/12/2018)	22.6151	Adder	26.61
315059	1CHESTF4 (Deactivation : 13/12/2018)	36.6591	Adder	43.13
315060	1CHESTF5 (Deactivation : 31/05/2023)	76.8324	Adder	90.39
315065	1CHESTF6 (Deactivation : 31/05/2023)	144.2692	Adder	169.73
315067	1DARBY 1	3.9475	50/50	3.9475
315068	1DARBY 2	3.9521	50/50	3.9521
315069	1DARBY 3	3.9660	50/50	3.9660
315070	1DARBY 4	3.9706	50/50	3.9706
315073	1STONECA	7.8267	Adder	9.21
315074	1HOPCGN1 (Deactivation : 25/06/2019)	0.0204	Adder	0.02
315075	1HOPCGN2 (Deactivation : 25/06/2019)	0.0204	Adder	0.02
315083	1SPRUNCA (Deactivation : 12/01/2021)	12.4754	Adder	14.68
315084	1SPRUNCB (Deactivation : 12/01/2021)	12.4754	Adder	14.68
316076	AC2-137 E	1.7109	Adder	2.01
316078	AC2-138 E	0.8670	Adder	1.02
316083	AB2-161 C	3.2639	Adder	3.84
316084	AB2-161 E	5.3253	Adder	6.27
316108	AB2-160 C	5.9613	Adder	7.01
316109	AB2-160 E	9.7263	Adder	11.44
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	39.9445	Adder	46.99

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	39.9445	Adder	46.99
316114	AB2-068 ST (Withdrawn : 01/11/2021)	69.1996	Adder	81.41
316132	AB2-190 C	20.9840	Adder	24.69
316134	AC1-107 G1	75.0084	Adder	88.25
316135	AC1-107 G2	75.0084	Adder	88.25
316136	AC1-107 G3	75.0224	Adder	88.26
316151	AD2-215 E (Withdrawn : 01/14/2021)	0.7562	Adder	0.89
316157	AD2-030 E	1.2318	Adder	1.45
916192	Z1-068 E	1.4734	Adder	1.73
923842	AB2-024 E	1.2299	Adder	1.45
923852	AB2-025 E	0.9087	Adder	1.07
924814	AB2-134 E	12.9256	Adder	15.21
925332	AB2-190 E	8.9931	Adder	10.58
925522	AC1-027 E	0.8989	Adder	1.06
925863	AC1-065 C	7.9911	Adder	9.4
925865	AC1-065 E	5.9264	Adder	6.97
926412	AC1-112 E	1.9016	50/50	1.9016
926662	AC1-147 E	1.0483	Adder	1.23
926784	AC1-164 C	48.6842	Adder	57.28
926785	AC1-164 E	21.8726	Adder	25.73
927044	AC1-191 C	17.4832	50/50	17.4832
927045	AC1-191 E	8.7088	50/50	8.7088
927226	AC1-216 E	7.8908	Adder	9.28
930122	AB1-027 E	1.8704	50/50	1.8704
932044	AC2-012 C	8.0747	Adder	9.5
932046	AC2-012 E	13.1745	Adder	15.5
932501	AC2-070 C (Withdrawn : 01/22/2021)	0.4525	50/50	0.4525
932502	AC2-070 E (Withdrawn : 01/22/2021)	1.1846	50/50	1.1846
932581	AC2-078 C O1	3.9380	Adder	4.63
932582	AC2-078 E O1	6.4252	Adder	7.56
932591	AC2-079 C O1	5.1110	Adder	6.01
932592	AC2-079 E O1	8.3390	Adder	9.81
933732	AC2-196 E	0.9269	Adder	1.09
934014	AD1-025 C	17.2463	Adder	20.29
934015	AD1-025 E	10.2159	Adder	12.02
934061	AD1-033 C	5.8523	Adder	6.89
934062	AD1-033 E	3.9015	Adder	4.59
934141	AD1-041 C	5.6398	Adder	6.64
934142	AD1-041 E	3.7599	Adder	4.42
934392	AD1-063 E	1.1572	Adder	1.36
934575	AD1-082 C	7.4383	Adder	8.75
934576	AD1-082 E	4.2431	Adder	4.99
934781	AD1-105 C	10.0593	Adder	11.83
934782	AD1-105 E	6.9904	Adder	8.22
935112	AD1-144 E	0.7708	Adder	0.91
935164	AD1-151 C	16.8621	Adder	19.84
935165	AD1-151 E	11.2414	Adder	13.23
936041	AD2-007 C	0.8239	Adder	0.97

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
936042	AD2-007 E	0.5676	Adder	0.67
936051	AD2-008 C	3.0025	Adder	3.53
936052	AD2-008 E	6.5360	Adder	7.69
936581	AD2-073 C	1.9130	Adder	2.25
936582	AD2-073 E	0.9479	Adder	1.12
936591	AD2-074 C	5.4228	Adder	6.38
936592	AD2-074 E	8.8478	Adder	10.41
936661	AD2-085 C	2.9376	Adder	3.46
936662	AD2-085 E	4.7930	Adder	5.64
936761	AD2-097 C	2.3660	Adder	2.78
936762	AD2-097 E	11.8301	Adder	13.92
938552	AE1-074 E	1.3210	Adder	1.55
938634	AE1-085 C	8.6759	Adder	10.21
938635	AE1-085 E	4.3380	Adder	5.1
939195	AE1-149 C	10.6508	Adder	12.53
939196	AE1-149 E	7.1006	Adder	8.35
939245	AE1-155 C	12.4135	Adder	14.6
939246	AE1-155 E	8.3301	Adder	9.8
939312	AE1-162 E	1.2547	Adder	1.48
939431	AE1-175 C	2.4146	Adder	2.84
939432	AE1-175 E	1.1982	Adder	1.41
939611	AE1-191 C	11.2797	Adder	13.27
939612	AE1-191 E	7.5198	Adder	8.85
939755	AE1-206 C	52.5244	50/50	52.5244
939756	AE1-206 E	35.0162	50/50	35.0162
940061	AE2-000BC O1	10.2128	Adder	12.02
940062	AE2-000BE O1	6.8085	Adder	8.01
940231	AE2-005 C	1.4529	Adder	1.71
940232	AE2-005 E	2.3706	Adder	2.79
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	136.6928	Adder	160.82
940431	AE2-027 C O1	14.9677	Adder	17.61
940432	AE2-027 E O1	9.9785	Adder	11.74
940481	AE2-033 C	12.8560	Adder	15.12
940482	AE2-033 E	8.6669	Adder	10.2
940541	AE2-040	2.3011	Adder	2.71
940551	AE2-041	7.7149	Adder	9.08
940651	AE2-052	3.5503	Adder	4.18
940891	AE2-078 C	2.1879	Adder	2.57
940892	AE2-078 E	1.1271	Adder	1.33
940901	AE2-079 C	2.1879	Adder	2.57
940902	AE2-079 E	1.1271	Adder	1.33
941101	AE2-104 C O1	2.6973	Adder	3.17
941102	AE2-104 E O1	4.2883	Adder	5.05
941281	AE2-122 C O1	22.2830	Adder	26.22
941282	AE2-122 E O1	89.9174	Adder	105.79
941291	AE2-123 C O1	22.9000	Adder	26.94
941292	AE2-123 E O1	89.3004	Adder	105.06
941301	AE2-124 C O1	20.8031	Adder	24.47
941302	AE2-124 E O1	91.2817	Adder	107.39
941581	AE2-155 C	0.1722	50/50	0.1722
941582	AE2-155 E	0.4676	50/50	0.4676

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
941591	AE2-156 O1	14.1525	Adder	16.65
942001	AE2-212 C	2.3765	Adder	2.8
942002	AE2-212 E	1.5843	Adder	1.86
942131	AE2-225 C	1.6729	Adder	1.97
942132	AE2-225 E	1.1153	Adder	1.31
942151	AE2-227 C	2.7553	Adder	3.24
942152	AE2-227 E	1.8369	Adder	2.16
942161	AE2-228 C	2.5076	Adder	2.95
942162	AE2-228 E	1.6717	Adder	1.97
942171	AE2-229 C	1.2547	Adder	1.48
942172	AE2-229 E	0.8365	Adder	0.98
942341	AE2-247 C	1.2743	Adder	1.5
942342	AE2-247 E	1.7598	Adder	2.07
942371	AE2-250 C O1	10.5891	Adder	12.46
942372	AE2-250 E O1	5.5887	Adder	6.57
942551	AE2-270	27.7504	Adder	32.65
943431	AF1-014 C	1.3764	Adder	1.62
943432	AF1-014 E	2.4279	Adder	2.86
943461	AF1-017 C	1.1530	Adder	1.36
943462	AF1-017 E	1.8812	Adder	2.21
943471	AF1-018	7.7149	Adder	9.08
943601	AF1-031 C	13.4383	Adder	15.81
943602	AF1-031 E	7.2650	Adder	8.55
943611	AF1-032 C	1.3662	Adder	1.61
943612	AF1-032 E	0.7249	Adder	0.85
943621	AF1-033 C	2.1879	Adder	2.57
943622	AF1-033 E	1.1271	Adder	1.33
943741	AF1-042 C	2.8375	Adder	3.34
943742	AF1-042 E	4.6296	Adder	5.45
943991	AF1-067 C	6.6428	Adder	7.82
943992	AF1-067 E	4.4285	Adder	5.21
944631	AF1-128 O1	67.3710	Adder	79.26
944641	AF1-129	121.0576	Adder	142.42
945361	AF1-201 C O1	15.2640	Adder	17.96
945362	AF1-201 E O1	10.1760	Adder	11.97
946001	AF1-265	46.0740	50/50	46.0740
946011	AF1-266	10.7615	Adder	12.66
946261	AF1-291 C	2.5083	Adder	2.95
946262	AF1-291 E	1.6722	Adder	1.97
957491	AF2-043 C	1.6729	Adder	1.97
957492	AF2-043 E	1.1153	Adder	1.31
957601	AF2-054 C	2.1952	Adder	2.58
957602	AF2-054 E	1.4635	Adder	1.72
957631	AF2-057	2.8332	Adder	3.33
957711	AF2-065 C	14.1527	Adder	16.65
957712	AF2-065 E	13.5977	Adder	16.0
957831	AF2-077 C	2.0755	Adder	2.44
957832	AF2-077 E	1.3837	Adder	1.63
957911	AF2-085	3.2365	Adder	3.81
958141	AF2-108	1.8567	Adder	2.18
958161	AF2-110 C	1.1120	Adder	1.31
958162	AF2-110 E	1.7393	Adder	2.05

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
958261	AF2-120 C	6.0793	Adder	7.15
958262	AF2-120 E	4.0528	Adder	4.77
959641	AF2-255 C	0.6888	Adder	0.81
959642	AF2-255 E	0.4592	Adder	0.54
959651	AF2-256 C	0.6269	Adder	0.74
959652	AF2-256 E	0.4179	Adder	0.49
959661	AF2-257 C	0.6271	Adder	0.74
959662	AF2-257 E	0.4180	Adder	0.49
959671	AF2-258 C	0.5941	Adder	0.7
959672	AF2-258 E	0.3961	Adder	0.47
959681	AF2-259 C	2.7850	Adder	3.28
959682	AF2-259 E	1.8567	Adder	2.18
961711	AG1-011	15.5253	Adder	34.46
961851	AG1-027 C	7.1296	Adder	15.83
961852	AG1-027 E	3.9412	Adder	8.75
961951	AG1-038 C	1.6622	Adder	3.69
961952	AG1-038 E	2.2954	Adder	5.1
962131	AG1-057	2.0445	Adder	4.54
962191	AG1-064 C	1.0116	Adder	2.25
962192	AG1-064 E	1.4036	Adder	3.12
962201	AG1-065 C	1.0116	Adder	2.25
962202	AG1-065 E	1.4036	Adder	3.12
962271	AG1-075 C O2	7.1352	Adder	15.84
962272	AG1-075 E O2	4.3485	Adder	9.65
962321	AG1-081 C (Withdrawn : 01/15/2021)	1.0542	Adder	2.34
962322	AG1-081 E (Withdrawn : 01/15/2021)	0.7028	Adder	1.56
962531	AG1-102 C	0.5647	Adder	1.25
962532	AG1-102 E	1.1770	Adder	2.61
962533	AG1-102 BAT	0.0092	Adder	0.02
962851	AG1-134 C	7.0413	Adder	15.63
962852	AG1-134 E	4.6942	Adder	10.42
962861	AG1-135 C	3.1382	Adder	6.97
962862	AG1-135 E	2.0921	Adder	4.64
962961	AG1-145 C	1.1547	Adder	2.56
962962	AG1-145 E	0.7698	Adder	1.71
962971	AG1-146 C	1.6316	Adder	3.62
962972	AG1-146 E	1.0877	Adder	2.41
962981	AG1-147 C	3.8071	Adder	8.45
962982	AG1-147 E	2.5381	Adder	5.63
963221	AG1-171 C	1.1916	Adder	2.65
963222	AG1-171 E	0.7944	Adder	1.76
963231	AG1-172 C	1.1916	Adder	2.65
963232	AG1-172 E	0.7944	Adder	1.76
963241	AG1-173 C	1.1916	Adder	2.65
963242	AG1-173 E	0.7944	Adder	1.76
963251	AG1-174 C	1.1916	Adder	2.65
963252	AG1-174 E	0.7944	Adder	1.76
963261	AG1-175 C	1.1916	Adder	2.65
963262	AG1-175 E	0.7944	Adder	1.76
963611	AG1-210 C	0.3282	Adder	0.73
963612	AG1-210 E	0.4924	Adder	1.09

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963821	AG1-235 C O2	2.4724	Adder	5.49
963822	AG1-235 E O2	1.6483	Adder	3.66
964021	AG1-256 C	0.6366	Adder	1.41
964022	AG1-256 E	0.9549	Adder	2.12
964211	AG1-282 C	1.0295	Adder	2.29
964212	AG1-282 E	0.6863	Adder	1.52
964951	AG1-359 O1	11.0647	Adder	24.56
965001	AG1-364 C O2	3.0142	Adder	6.69
965002	AG1-364 E O2	4.5213	Adder	10.04
965231	AG1-388 C	1.0295	Adder	2.29
965232	AG1-388 E	0.6863	Adder	1.52
966611	AG1-531 C	3.1424	Adder	6.98
966612	AG1-531 E	2.0949	Adder	4.65
966661	AG1-536 C	2.7702	Adder	6.15
966662	AG1-536 E	3.7224	Adder	8.26
966731	AG1-544 C	3.5912	Adder	7.97
966732	AG1-544 E	1.9267	Adder	4.28
966741	AG1-545 C	1.1948	Adder	2.65
966742	AG1-545 E	0.6405	Adder	1.42
966871	AG1-558 C	3.9288	50/50	3.9288
966872	AG1-558 E	2.6192	50/50	2.6192
WEC	WEC	0.0936	Confirmed LTF	0.0936
LGEE	LGEE	0.2011	Confirmed LTF	0.2011
CPL	CPL	4.8853	Confirmed LTF	4.8853
CBM-W2	CBM-W2	10.8774	Confirmed LTF	10.8774
NY	NY	1.0573	Confirmed LTF	1.0573
TVA	TVA	2.4458	Confirmed LTF	2.4458
O-066	O-066	13.6215	Confirmed LTF	13.6215
SIGE	SIGE	0.2597	Confirmed LTF	0.2597
CBM-S2	CBM-S2	53.5885	Confirmed LTF	53.5885
CBM-S1	CBM-S1	0.5654	Confirmed LTF	0.5654
G-007	G-007	2.1315	Confirmed LTF	2.1315
MEC	MEC	0.9725	Confirmed LTF	0.9725
LAGN	LAGN	3.0573	Confirmed LTF	3.0573
AA2-074	AA2-074	3.2207	LTF	3.2207
CBM-W1	CBM-W1	2.9442	Confirmed LTF	2.9442

13.5.8 Index 8

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168718275	314236	6NRTHEST	DVP	314218	6ELMONT	DVP	1	DVP_P1-2: LN 557	single	678.68	119.43	120.09	DC	9.83

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314184	3SHACKLE	0.3039	80/20	0.3039
314236	6NRTHEST	0.3943	80/20	0.3943
314243	3PROV 92	0.2838	80/20	0.2838
314314	3LOCKS	0.1625	80/20	0.1625
314375	6CORRCTN	0.2160	80/20	0.2160
315058	1CHESTF3 (Deactivation : 13/12/2018)	13.0820	80/20	13.0820
315059	1CHESTF4 (Deactivation : 13/12/2018)	21.2059	80/20	21.2059
315060	1CHESTF5 (Deactivation : 31/05/2023)	27.2332	Adder	32.04
315065	1CHESTF6 (Deactivation : 31/05/2023)	72.1431	80/20	72.1431
315067	1DARBY 1	4.8719	80/20	4.8719
315068	1DARBY 2	4.8776	80/20	4.8776
315069	1DARBY 3	4.8947	80/20	4.8947
315070	1DARBY 4	4.9004	80/20	4.9004
315074	1HOPCGN1 (Deactivation : 25/06/2019)	0.0095	80/20	0.0095
315075	1HOPCGN2 (Deactivation : 25/06/2019)	0.0095	80/20	0.0095
315076	1HOPPOLC	0.7985	80/20	0.7985
315077	1HOPHCF1	1.2481	80/20	1.2481
315078	1HOPHCF2	1.2481	80/20	1.2481
315079	1HOPHCF3	1.2481	80/20	1.2481
315080	1HOPHCF4	1.8947	80/20	1.8947
315083	1SPRUNCA (Deactivation : 12/01/2021)	12.1446	80/20	12.1446
315084	1SPRUNCB (Deactivation : 12/01/2021)	12.1446	80/20	12.1446
316075	AC2-137 C	0.3699	80/20	0.3699
316083	AB2-161 C	1.3994	Adder	1.65
316103	AB2-015 C	2.8777	Adder	3.39
316108	AB2-160 C	3.1321	80/20	3.1321
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	21.7960	Adder	25.64
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	21.7960	Adder	25.64
316114	AB2-068 ST (Withdrawn : 01/11/2021)	37.7593	Adder	44.42
316132	AB2-190 C	8.5604	Adder	10.07
316134	AC1-107 G1	40.9289	Adder	48.15

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316135	AC1-107 G2	40.9289	Adder	48.15
316136	AC1-107 G3	40.9366	Adder	48.16
925863	AC1-065 C	4.0262	80/20	4.0262
926754	AC1-161 C	10.3668	Adder	12.2
926784	AC1-164 C	24.4404	80/20	24.4404
932044	AC2-012 C	3.5785	Adder	4.21
932581	AC2-078 C O1	1.6872	Adder	1.98
932591	AC2-079 C O1	2.2167	Adder	2.61
933294	AC2-141 C	10.3668	Adder	12.2
934014	AD1-025 C	7.0878	Adder	8.34
934061	AD1-033 C	2.6032	Adder	3.06
934141	AD1-041 C	2.8263	80/20	2.8263
934391	AD1-063 C	0.1367	80/20	0.1367
934575	AD1-082 C	3.1892	Adder	3.75
935164	AD1-151 C	6.8789	Adder	8.09
936041	AD2-007 C	0.3386	Adder	0.4
936051	AD2-008 C	1.2340	Adder	1.45
936151	AD2-021	0.0422	80/20	0.0422
936591	AD2-074 C	2.1500	Adder	2.53
936661	AD2-085 C	1.2821	Adder	1.51
936761	AD2-097 C	2.3033	80/20	2.3033
937221	AD2-160 C O1	2.0188	Adder	2.38
938535	AE1-072 C	6.0622	Adder	7.13
938634	AE1-085 C	3.7149	Adder	4.37
938771	AE1-103 C	1.2395	Adder	1.46
939195	AE1-149 C	4.5467	Adder	5.35
939245	AE1-155 C	4.8683	Adder	5.73
939431	AE1-175 C	1.2430	80/20	1.2430
939611	AE1-191 C	5.6526	80/20	5.6526
940061	AE2-000BC O1	4.3845	Adder	5.16
940231	AE2-005 C	0.7320	80/20	0.7320
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	60.6400	Adder	71.34
940431	AE2-027 C O1	8.2030	80/20	8.2030
940481	AE2-033 C	5.5436	Adder	6.52
940541	AE2-040	0.9914	Adder	1.17
940551	AE2-041	3.8512	80/20	3.8512
940651	AE2-052	1.5155	Adder	1.78
940891	AE2-078 C	0.9337	Adder	1.1
940901	AE2-079 C	0.9337	Adder	1.1
941101	AE2-104 C O1	1.1883	Adder	1.4
941281	AE2-122 C O1	9.8976	Adder	11.64
941291	AE2-123 C O1	10.1716	Adder	11.97
941301	AE2-124 C O1	9.2422	Adder	10.87
941501	AE2-147 C	5.3925	Adder	6.34
941591	AE2-156 O1	6.2747	Adder	7.38
942001	AE2-212 C	1.1974	80/20	1.1974
942131	AE2-225 C	0.7413	Adder	0.87
942161	AE2-228 C	1.2563	80/20	1.2563
942171	AE2-229 C	0.5560	Adder	0.65
942341	AE2-247 C	0.5561	Adder	0.65
942371	AE2-250 C O1	5.5636	80/20	5.5636

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942401	AE2-253 C	2.1234	Adder	2.5
942471	AE2-260 C O1	4.7386	Adder	5.57
942551	AE2-270	11.3666	Adder	13.37
943431	AF1-014 C	0.6935	80/20	0.6935
943461	AF1-017 C	0.5032	Adder	0.59
943471	AF1-018	3.8512	80/20	3.8512
943611	AF1-032 C	0.6054	Adder	0.71
943621	AF1-033 C	0.9337	Adder	1.1
943741	AF1-042 C	1.1250	Adder	1.32
944581	AF1-123 C O1	16.5029	Adder	19.42
944591	AF1-124 C O1	16.5029	Adder	19.42
944601	AF1-125 C O1	16.5029	Adder	19.42
944631	AF1-128 O1	23.8796	Adder	28.09
944641	AF1-129	60.5359	80/20	60.5359
944871	AF1-152 C	1.7975	Adder	2.11
945361	AF1-201 C O1	6.6479	Adder	7.82
946011	AF1-266	4.6405	Adder	5.46
946261	AF1-291 C	1.2548	80/20	1.2548
957491	AF2-043 C	0.7413	Adder	0.87
957601	AF2-054 C	0.9283	Adder	1.09
957631	AF2-057	1.2556	Adder	1.48
957711	AF2-065 C	5.7970	Adder	6.82
957821	AF2-076 C	1.8278	Adder	2.15
957831	AF2-077 C	0.8974	Adder	1.06
957871	AF2-081 C	3.4381	Adder	4.04
958141	AF2-108	0.9422	80/20	0.9422
958161	AF2-110 C	0.4899	Adder	0.58
958261	AF2-120 C	2.3851	Adder	2.81
959651	AF2-256 C	0.3141	80/20	0.3141
959661	AF2-257 C	0.3137	80/20	0.3137
959671	AF2-258 C	0.2993	80/20	0.2993
959681	AF2-259 C	1.4133	80/20	1.4133
961091	AF2-400 C	0.1554	Adder	0.18
961711	AG1-011	6.3805	Adder	14.16
961851	AG1-027 C	3.1398	Adder	6.97
961951	AG1-038 C	0.6590	Adder	1.46
962131	AG1-057	1.9256	80/20	1.9256
962271	AG1-075 C O2	3.0768	Adder	6.83
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.4499	Adder	1.0
962531	AG1-102 C	0.2442	Adder	0.54
962861	AG1-135 C	1.2368	Adder	2.75
962961	AG1-145 C	1.1215	80/20	1.1215
962971	AG1-146 C	0.6601	Adder	1.47
962981	AG1-147 C	1.5402	Adder	3.42
963221	AG1-171 C	0.4861	Adder	1.08
963231	AG1-172 C	0.4861	Adder	1.08
963241	AG1-173 C	0.4861	Adder	1.08
963251	AG1-174 C	0.4861	Adder	1.08
963261	AG1-175 C	0.4861	Adder	1.08
963611	AG1-210 C	0.1238	Adder	0.27
963821	AG1-235 C O2	4.4287	Adder	9.83

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
964211	AG1-282 C	0.3960	Adder	0.88
964951	AG1-359 O1	4.9228	Adder	10.93
965001	AG1-364 C O2	1.3346	Adder	2.96
965181	AG1-383 C	0.5054	Adder	1.12
965231	AG1-388 C	0.3960	Adder	0.88
966491	AG1-518 O2	1.6333	Adder	3.63
966611	AG1-531 C	1.3594	Adder	3.02
966661	AG1-536 C	1.0864	Adder	2.41
966731	AG1-544 C	1.5377	Adder	3.41
966741	AG1-545 C	0.5117	Adder	1.14
WEC	WEC	0.1191	Confirmed LTF	0.1191
LGEE	LGEE	0.2494	Confirmed LTF	0.2494
CPL	CPL	2.2154	Confirmed LTF	2.2154
CBM-W2	CBM-W2	6.9440	Confirmed LTF	6.9440
NY	NY	0.4606	Confirmed LTF	0.4606
TVA	TVA	1.4112	Confirmed LTF	1.4112
SIGE	SIGE	0.1432	Confirmed LTF	0.1432
CBM-S2	CBM-S2	25.2439	Confirmed LTF	25.2439
CBM-S1	CBM-S1	0.3409	Confirmed LTF	0.3409
MEC	MEC	0.8183	Confirmed LTF	0.8183
LAGN	LAGN	1.7552	Confirmed LTF	1.7552
AA2-074	AA2-074	1.4616	LTF	1.4616
CBM-W1	CBM-W1	4.7107	Confirmed LTF	4.7107

13.5.9 Index 9

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC/DC	MW IMPACT
174226186	314296	6PENNIMAN	DVP	314415	6WALR209	DVP	1	DVP_P4-5: L122	breaker	541.0	210.67	211.77	DC	16.51

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.7534	Adder	0.89
314177	3HAYES89	0.0182	Adder	0.02
314189	6PAPERMILL	-6.8228	Adder	-8.03
314421	6WINCHST	0.0980	50/50	0.0980
314466	6FENTRES	0.7744	Adder	0.91
314525	6KINGFORK	1.5778	Adder	1.86
314539	3UNCAMP	1.6395	Adder	1.93
314541	3WATKINS	0.1800	Adder	0.21
314550	6HICKORY	1.4253	Adder	1.68
314594	6PLYMOTH	0.0255	Adder	0.03
314632	6AYDLETOLD	0.7543	Adder	0.89
315092	1YORKTN3	18.1519	50/50	18.1519
316103	AB2-015 C	2.2886	Adder	2.69
316104	AB2-015 E	1.8767	Adder	2.21
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	23.5027	Adder	27.65
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	23.5027	Adder	27.65
316114	AB2-068 ST (Withdrawn : 01/11/2021)	40.7160	Adder	47.9
316134	AC1-107 G1	44.1338	Adder	51.92
316135	AC1-107 G2	44.1338	Adder	51.92
316136	AC1-107 G3	44.1421	Adder	51.93
316151	AD2-215 E (Withdrawn : 01/14/2021)	0.3376	Adder	0.4
901082	W1-029 E	15.1324	Adder	17.8
913392	Y1-086 E	0.7379	Adder	0.87
916042	Z1-036 E (Suspended)	14.4191	Adder	16.96
916192	Z1-068 E	0.6534	Adder	0.77
917122	Z2-027 E	0.3530	Adder	0.42
919152	AA1-139 E	2.2072	Adder	2.6
920692	AA2-178 E	1.2026	Adder	1.41
923832	AB2-022 E	0.4166	Adder	0.49
925522	AC1-027 E	0.3980	Adder	0.47
925863	AC1-065 C	-5.6418	Adder	-6.64
926662	AC1-147 E	0.4587	Adder	0.54
926754	AC1-161 C	11.9237	Adder	14.03
926755	AC1-161 E	5.0899	Adder	5.99
926784	AC1-164 C	-18.9163	Adder	-22.25
932044	AC2-012 C	3.5330	Adder	4.16
932046	AC2-012 E	5.7643	Adder	6.78
933294	AC2-141 C	11.9237	Adder	14.03

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933295	AC2-141 E	5.0899	Adder	5.99
933732	AC2-196 E	0.4160	Adder	0.49
933991	AD1-023 C	3.5638	Adder	4.19
933992	AD1-023 E	1.9401	Adder	2.28
934061	AD1-033 C	2.6218	Adder	3.08
934062	AD1-033 E	1.7479	Adder	2.06
934141	AD1-041 C	-3.7541	Adder	-4.42
934521	AD1-076 C	15.1072	Adder	17.77
934522	AD1-076 E	7.6926	Adder	9.05
935112	AD1-144 E	0.3441	Adder	0.4
937221	AD2-160 C O1	2.0219	Adder	2.38
937222	AD2-160 E O1	1.0602	Adder	1.25
938535	AE1-072 C	6.0361	Adder	7.1
938536	AE1-072 E	3.1095	Adder	3.66
938771	AE1-103 C	1.0089	Adder	1.19
938772	AE1-103 E	1.3932	Adder	1.64
939312	AE1-162 E	0.4427	Adder	0.52
939414	AE1-173_C1	8.2296	Adder	9.68
939415	AE1-173_C2	7.0539	Adder	8.3
939416	AE1-173_C3	8.2296	Adder	9.68
939423	AE1-173_E1	5.4864	Adder	6.45
939424	AE1-173_E2	4.7026	Adder	5.53
939425	AE1-173_E3	5.4864	Adder	6.45
939431	AE1-175 C	0.9221	Adder	1.08
939432	AE1-175 E	0.4576	Adder	0.54
940231	AE2-005 C	-1.0258	Adder	-1.21
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	60.2123	Adder	70.84
940491	AE2-034 C	2.1045	Adder	2.48
940492	AE2-034 E	0.9019	Adder	1.06
940552	AE2-041 BAT	7.5760	50/50	7.5760
940891	AE2-078 C	0.8073	Adder	0.95
940892	AE2-078 E	0.4159	Adder	0.49
940901	AE2-079 C	0.8073	Adder	0.95
940902	AE2-079 E	0.4159	Adder	0.49
941101	AE2-104 C O1	1.0191	Adder	1.2
941102	AE2-104 E O1	1.6202	Adder	1.91
941281	AE2-122 C O1	9.8908	Adder	11.64
941282	AE2-122 E O1	39.9118	Adder	46.96
941291	AE2-123 C O1	10.1647	Adder	11.96
941292	AE2-123 E O1	39.6379	Adder	46.63
941301	AE2-124 C O1	9.2472	Adder	10.88
941302	AE2-124 E O1	40.5758	Adder	47.74
941501	AE2-147 C	5.2181	Adder	6.14
941502	AE2-147 E	3.4787	Adder	4.09
941591	AE2-156 O1	6.2092	Adder	7.3
942131	AE2-225 C	0.7322	Adder	0.86
942132	AE2-225 E	0.4881	Adder	0.57
942171	AE2-229 C	0.5491	Adder	0.65
942172	AE2-229 E	0.3661	Adder	0.43
942401	AE2-253 C	2.1266	Adder	2.5
942402	AE2-253 E	0.9555	Adder	1.12

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
943472	AF1-018 BAT	7.5760	50/50	7.5760
943611	AF1-032 C	0.5979	Adder	0.7
943612	AF1-032 E	0.3173	Adder	0.37
943621	AF1-033 C	0.8073	Adder	0.95
943622	AF1-033 E	0.4159	Adder	0.49
944581	AF1-123 C O1	17.1031	Adder	20.12
944582	AF1-123 E O1	39.1614	Adder	46.07
944591	AF1-124 C O1	17.1031	Adder	20.12
944592	AF1-124 E O1	39.1614	Adder	46.07
944601	AF1-125 C O1	17.1031	Adder	20.12
944602	AF1-125 E O1	39.1614	Adder	46.07
944871	AF1-152 C	1.7394	Adder	2.05
944872	AF1-152 E	1.1596	Adder	1.36
945361	AF1-201 C O1	4.4393	Adder	5.22
945362	AF1-201 E O1	2.9595	Adder	3.48
945711	AF1-236 C O1	23.0394	Adder	27.11
945712	AF1-236 E O1	14.2305	Adder	16.74
957192	AF2-013 BAT	8.5350	Merchant Transmission	8.5350
957491	AF2-043 C	0.7322	Adder	0.86
957492	AF2-043 E	0.4881	Adder	0.57
957531	AF2-047 C	5.0007	Adder	5.88
957532	AF2-047 E	2.5154	Adder	2.96
957631	AF2-057	1.2396	Adder	1.46
957821	AF2-076 C	1.7799	Adder	2.09
957822	AF2-076 E	1.1866	Adder	1.4
957871	AF2-081 C	3.4334	Adder	4.04
957872	AF2-081 E	1.4715	Adder	1.73
958161	AF2-110 C	0.4201	Adder	0.49
958162	AF2-110 E	0.6571	Adder	0.77
961091	AF2-400 C	0.1236	Adder	0.15
961092	AF2-400 E	0.2028	Adder	0.24
961782	AG1-019 BAT	4.5235	Merchant Transmission	4.5235
961851	AG1-027 C	2.6411	Adder	5.86
961852	AG1-027 E	1.4600	Adder	3.24
962132	AG1-057 BAT	3.7880	50/50	3.7880
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.3890	Adder	0.86
962322	AG1-081 E (Withdrawn : 01/15/2021)	0.2593	Adder	0.58
962961	AG1-145 C	0.4410	Adder	0.98
962962	AG1-145 E	0.2940	Adder	0.65
963613	AG1-210 BAT	1.5858	50/50	1.5858
963821	AG1-235 C O2	4.4640	Adder	9.91
963822	AG1-235 E O2	2.9760	Adder	6.61
964023	AG1-256 BAT	3.2568	50/50	3.2568
964592	AG1-322 BAT	2.1763	Merchant Transmission	2.1763
964951	AG1-359 O1	4.9654	Adder	11.02
965001	AG1-364 C O2	1.3093	Adder	2.91
965002	AG1-364 E O2	1.9640	Adder	4.36
965181	AG1-383 C	0.5083	Adder	1.13
965182	AG1-383 E	0.1506	Adder	0.33
965631	AG1-431	7.0695	Adder	15.69
965701	AG1-438 C O1	1.3765	Adder	3.06

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965702	AG1-438 E O1	0.9177	Adder	2.04
965741	AG1-442 O1	0.8325	Adder	1.85
965751	AG1-443 O1	0.8325	Adder	1.85
966491	AG1-518 O2	1.6110	Adder	3.58
966611	AG1-531 C	3.6396	50/50	3.6396
966612	AG1-531 E	2.4264	50/50	2.4264
966663	AG1-536 BAT	11.3130	50/50	11.3130
966931	AG1-431A	5.3114	Adder	11.79
WEC	WEC	0.1166	Confirmed LTF	0.1166
LGEE	LGEE	0.2419	Confirmed LTF	0.2419
CPL	CPL	1.6571	Confirmed LTF	1.6571
CBM-W2	CBM-W2	5.9046	Confirmed LTF	5.9046
NY	NY	0.3213	Confirmed LTF	0.3213
TVA	TVA	1.1606	Confirmed LTF	1.1606
O-066	O-066	4.3678	Confirmed LTF	4.3678
SIGE	SIGE	0.1126	Confirmed LTF	0.1126
CBM-S2	CBM-S2	19.2200	Confirmed LTF	19.2200
CBM-S1	CBM-S1	0.2846	Confirmed LTF	0.2846
G-007	G-007	0.6856	Confirmed LTF	0.6856
MEC	MEC	0.7468	Confirmed LTF	0.7468
LAGN	LAGN	1.4437	Confirmed LTF	1.4437
CBM-W1	CBM-W1	4.7388	Confirmed LTF	4.7388

13.5.10 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
174226185	314386	6KINGS M	DVP	314296	6PENNINGMAN	DVP	1	DVP_P4-5: L122	breaker	541.0	213.89	214.99	DC	16.51

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.7534	Adder	0.89
314177	3HAYES89	0.0182	Adder	0.02
314189	6PAPERMILL	-6.8228	Adder	-8.03
314421	6WINCHST	0.0980	50/50	0.0980
314466	6FENTRES	0.7744	Adder	0.91
314525	6KINGFORK	1.5778	Adder	1.86
314539	3UNCAMP	1.6395	Adder	1.93
314541	3WATKINS	0.1800	Adder	0.21
314550	6HICKORY	1.4253	Adder	1.68
314594	6PLYMOTH	0.0255	Adder	0.03
314632	6AYDLETOLD	0.7543	Adder	0.89
315092	1YORKTN3	18.1519	50/50	18.1519
316103	AB2-015 C	2.2886	Adder	2.69
316104	AB2-015 E	1.8767	Adder	2.21
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	23.5027	Adder	27.65
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	23.5027	Adder	27.65
316114	AB2-068 ST (Withdrawn : 01/11/2021)	40.7160	Adder	47.9
316134	AC1-107 G1	44.1338	Adder	51.92
316135	AC1-107 G2	44.1338	Adder	51.92
316136	AC1-107 G3	44.1421	Adder	51.93
316151	AD2-215 E (Withdrawn : 01/14/2021)	0.3376	Adder	0.4
901082	W1-029 E	15.1324	Adder	17.8
913392	Y1-086 E	0.7379	Adder	0.87
916042	Z1-036 E (Suspended)	14.4191	Adder	16.96
916192	Z1-068 E	0.6534	Adder	0.77
917122	Z2-027 E	0.3530	Adder	0.42
919152	AA1-139 E	2.2072	Adder	2.6
920692	AA2-178 E	1.2026	Adder	1.41
923832	AB2-022 E	0.4166	Adder	0.49
925522	AC1-027 E	0.3980	Adder	0.47
925863	AC1-065 C	-5.6418	Adder	-6.64
926662	AC1-147 E	0.4587	Adder	0.54
926754	AC1-161 C	11.9237	Adder	14.03
926755	AC1-161 E	5.0899	Adder	5.99
926784	AC1-164 C	-18.9163	Adder	-22.25
932044	AC2-012 C	3.5330	Adder	4.16
932046	AC2-012 E	5.7643	Adder	6.78
933294	AC2-141 C	11.9237	Adder	14.03

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933295	AC2-141 E	5.0899	Adder	5.99
933732	AC2-196 E	0.4160	Adder	0.49
933991	AD1-023 C	3.5638	Adder	4.19
933992	AD1-023 E	1.9401	Adder	2.28
934061	AD1-033 C	2.6218	Adder	3.08
934062	AD1-033 E	1.7479	Adder	2.06
934141	AD1-041 C	-3.7541	Adder	-4.42
934521	AD1-076 C	15.1072	Adder	17.77
934522	AD1-076 E	7.6926	Adder	9.05
935112	AD1-144 E	0.3441	Adder	0.4
937221	AD2-160 C O1	2.0219	Adder	2.38
937222	AD2-160 E O1	1.0602	Adder	1.25
938535	AE1-072 C	6.0361	Adder	7.1
938536	AE1-072 E	3.1095	Adder	3.66
938771	AE1-103 C	1.0089	Adder	1.19
938772	AE1-103 E	1.3932	Adder	1.64
939312	AE1-162 E	0.4427	Adder	0.52
939414	AE1-173_C1	8.2296	Adder	9.68
939415	AE1-173_C2	7.0539	Adder	8.3
939416	AE1-173_C3	8.2296	Adder	9.68
939423	AE1-173_E1	5.4864	Adder	6.45
939424	AE1-173_E2	4.7026	Adder	5.53
939425	AE1-173_E3	5.4864	Adder	6.45
939431	AE1-175 C	0.9221	Adder	1.08
939432	AE1-175 E	0.4576	Adder	0.54
940231	AE2-005 C	-1.0258	Adder	-1.21
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	60.2123	Adder	70.84
940491	AE2-034 C	2.1045	Adder	2.48
940492	AE2-034 E	0.9019	Adder	1.06
940552	AE2-041 BAT	7.5760	50/50	7.5760
940891	AE2-078 C	0.8073	Adder	0.95
940892	AE2-078 E	0.4159	Adder	0.49
940901	AE2-079 C	0.8073	Adder	0.95
940902	AE2-079 E	0.4159	Adder	0.49
941101	AE2-104 C O1	1.0191	Adder	1.2
941102	AE2-104 E O1	1.6202	Adder	1.91
941281	AE2-122 C O1	9.8908	Adder	11.64
941282	AE2-122 E O1	39.9118	Adder	46.96
941291	AE2-123 C O1	10.1647	Adder	11.96
941292	AE2-123 E O1	39.6379	Adder	46.63
941301	AE2-124 C O1	9.2472	Adder	10.88
941302	AE2-124 E O1	40.5758	Adder	47.74
941501	AE2-147 C	5.2181	Adder	6.14
941502	AE2-147 E	3.4787	Adder	4.09
941591	AE2-156 O1	6.2092	Adder	7.3
942131	AE2-225 C	0.7322	Adder	0.86
942132	AE2-225 E	0.4881	Adder	0.57
942171	AE2-229 C	0.5491	Adder	0.65
942172	AE2-229 E	0.3661	Adder	0.43
942401	AE2-253 C	2.1266	Adder	2.5
942402	AE2-253 E	0.9555	Adder	1.12

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
943472	AF1-018 BAT	7.5760	50/50	7.5760
943611	AF1-032 C	0.5979	Adder	0.7
943612	AF1-032 E	0.3173	Adder	0.37
943621	AF1-033 C	0.8073	Adder	0.95
943622	AF1-033 E	0.4159	Adder	0.49
944581	AF1-123 C O1	17.1031	Adder	20.12
944582	AF1-123 E O1	39.1614	Adder	46.07
944591	AF1-124 C O1	17.1031	Adder	20.12
944592	AF1-124 E O1	39.1614	Adder	46.07
944601	AF1-125 C O1	17.1031	Adder	20.12
944602	AF1-125 E O1	39.1614	Adder	46.07
944871	AF1-152 C	1.7394	Adder	2.05
944872	AF1-152 E	1.1596	Adder	1.36
945361	AF1-201 C O1	4.4393	Adder	5.22
945362	AF1-201 E O1	2.9595	Adder	3.48
945711	AF1-236 C O1	23.0394	Adder	27.11
945712	AF1-236 E O1	14.2305	Adder	16.74
957192	AF2-013 BAT	8.5350	Merchant Transmission	8.5350
957491	AF2-043 C	0.7322	Adder	0.86
957492	AF2-043 E	0.4881	Adder	0.57
957531	AF2-047 C	5.0007	Adder	5.88
957532	AF2-047 E	2.5154	Adder	2.96
957631	AF2-057	1.2396	Adder	1.46
957821	AF2-076 C	1.7799	Adder	2.09
957822	AF2-076 E	1.1866	Adder	1.4
957871	AF2-081 C	3.4334	Adder	4.04
957872	AF2-081 E	1.4715	Adder	1.73
958161	AF2-110 C	0.4201	Adder	0.49
958162	AF2-110 E	0.6571	Adder	0.77
961091	AF2-400 C	0.1236	Adder	0.15
961092	AF2-400 E	0.2028	Adder	0.24
961782	AG1-019 BAT	4.5235	Merchant Transmission	4.5235
961851	AG1-027 C	2.6411	Adder	5.86
961852	AG1-027 E	1.4600	Adder	3.24
962132	AG1-057 BAT	3.7880	50/50	3.7880
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.3890	Adder	0.86
962322	AG1-081 E (Withdrawn : 01/15/2021)	0.2593	Adder	0.58
962961	AG1-145 C	0.4410	Adder	0.98
962962	AG1-145 E	0.2940	Adder	0.65
963613	AG1-210 BAT	1.5858	50/50	1.5858
963821	AG1-235 C O2	4.4640	Adder	9.91
963822	AG1-235 E O2	2.9760	Adder	6.61
964023	AG1-256 BAT	3.2568	50/50	3.2568
964592	AG1-322 BAT	2.1763	Merchant Transmission	2.1763
964951	AG1-359 O1	4.9654	Adder	11.02
965001	AG1-364 C O2	1.3093	Adder	2.91
965002	AG1-364 E O2	1.9640	Adder	4.36
965181	AG1-383 C	0.5083	Adder	1.13
965182	AG1-383 E	0.1506	Adder	0.33
965631	AG1-431	7.0695	Adder	15.69
965701	AG1-438 C O1	1.3765	Adder	3.06

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965702	AG1-438 E O1	0.9177	Adder	2.04
965741	AG1-442 O1	0.8325	Adder	1.85
965751	AG1-443 O1	0.8325	Adder	1.85
966491	AG1-518 O2	1.6110	Adder	3.58
966611	AG1-531 C	3.6396	50/50	3.6396
966612	AG1-531 E	2.4264	50/50	2.4264
966663	AG1-536 BAT	11.3130	50/50	11.3130
966931	AG1-431A	5.3114	Adder	11.79
WEC	WEC	0.1166	Confirmed LTF	0.1166
LGEE	LGEE	0.2419	Confirmed LTF	0.2419
CPL	CPL	1.6571	Confirmed LTF	1.6571
CBM-W2	CBM-W2	5.9046	Confirmed LTF	5.9046
NY	NY	0.3213	Confirmed LTF	0.3213
TVA	TVA	1.1606	Confirmed LTF	1.1606
O-066	O-066	4.3678	Confirmed LTF	4.3678
SIG	SIG	0.1126	Confirmed LTF	0.1126
CBM-S2	CBM-S2	19.2200	Confirmed LTF	19.2200
CBM-S1	CBM-S1	0.2846	Confirmed LTF	0.2846
G-007	G-007	0.6856	Confirmed LTF	0.6856
MEC	MEC	0.7468	Confirmed LTF	0.7468
LAGN	LAGN	1.4437	Confirmed LTF	1.4437
CBM-W1	CBM-W1	4.7388	Confirmed LTF	4.7388

13.5.11 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
174419360	314390	6LIGH285	DVP	314214	6CHCKAHM	DVP	1	DVP_P4-5: L122	breaker	830.0	104.85	105.64	DC	15.28

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.6968	Adder	0.82
314177	3HAYES89	0.0310	50/50	0.0310
314421	6WINCHST	0.0939	50/50	0.0939
314466	6FENTRES	0.7165	Adder	0.84
314525	6KINGFORK	1.4652	Adder	1.72
314550	6HICKORY	1.3189	Adder	1.55
314594	6PLYMOTH	0.0234	Adder	0.03
314632	6AYDLETOLD	0.6975	Adder	0.82
315092	1YORKTN3	17.6092	50/50	17.6092
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	22.0664	Adder	25.96
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	22.0664	Adder	25.96
316114	AB2-068 ST (Withdrawn : 01/11/2021)	38.2277	Adder	44.97
316134	AC1-107 G1	41.4366	Adder	48.75
316135	AC1-107 G2	41.4366	Adder	48.75
316136	AC1-107 G3	41.4444	Adder	48.76
316151	AD2-215 E (Withdrawn : 01/14/2021)	0.3136	Adder	0.37
901082	W1-029 E	13.9743	Adder	16.44
913392	Y1-086 E	0.6818	Adder	0.8
916042	Z1-036 E (Suspended)	13.2885	Adder	15.63
916192	Z1-068 E	0.6041	Adder	0.71
917122	Z2-027 E	0.3261	Adder	0.38
919152	AA1-139 E	2.0413	Adder	2.4
920692	AA2-178 E	1.1040	Adder	1.3
923832	AB2-022 E	0.3849	Adder	0.45
925522	AC1-027 E	0.3679	Adder	0.43
926662	AC1-147 E	0.4236	Adder	0.5
926754	AC1-161 C	11.1316	Adder	13.1
926755	AC1-161 E	4.7518	Adder	5.59
926784	AC1-164 C	-23.0490	Adder	-27.12
932044	AC2-012 C	3.2626	Adder	3.84
932046	AC2-012 E	5.3232	Adder	6.26
933294	AC2-141 C	11.1316	Adder	13.1
933295	AC2-141 E	4.7518	Adder	5.59
933732	AC2-196 E	0.3849	Adder	0.45
934061	AD1-033 C	2.4258	Adder	2.85
934062	AD1-033 E	1.6172	Adder	1.9
934521	AD1-076 C	13.0912	Adder	15.4
934522	AD1-076 E	6.6660	Adder	7.84

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
935112	AD1-144 E	0.3196	Adder	0.38
937221	AD2-160 C O1	1.8702	Adder	2.2
937222	AD2-160 E O1	0.9807	Adder	1.15
938535	AE1-072 C	5.5817	Adder	6.57
938536	AE1-072 E	2.8754	Adder	3.38
938771	AE1-103 C	0.9202	Adder	1.08
938772	AE1-103 E	1.2707	Adder	1.49
939312	AE1-162 E	0.4013	Adder	0.47
939414	AE1-173_C1	7.5541	Adder	8.89
939415	AE1-173_C2	6.4750	Adder	7.62
939416	AE1-173_C3	7.5541	Adder	8.89
939423	AE1-173_E1	5.0361	Adder	5.92
939424	AE1-173_E2	4.3166	Adder	5.08
939425	AE1-173_E3	5.0361	Adder	5.92
939431	AE1-175 C	5.1455	50/50	5.1455
939432	AE1-175 E	2.5534	50/50	2.5534
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	55.6312	Adder	65.45
940491	AE2-034 C	1.9321	Adder	2.27
940492	AE2-034 E	0.8280	Adder	0.97
940891	AE2-078 C	0.7365	Adder	0.87
940892	AE2-078 E	0.3794	Adder	0.45
940901	AE2-079 C	0.7365	Adder	0.87
940902	AE2-079 E	0.3794	Adder	0.45
941101	AE2-104 C O1	0.9340	Adder	1.1
941102	AE2-104 E O1	1.4850	Adder	1.75
941281	AE2-122 C O1	9.1453	Adder	10.76
941282	AE2-122 E O1	36.9033	Adder	43.42
941291	AE2-123 C O1	9.3985	Adder	11.06
941292	AE2-123 E O1	36.6501	Adder	43.12
941301	AE2-124 C O1	8.5505	Adder	10.06
941302	AE2-124 E O1	37.5185	Adder	44.14
941501	AE2-147 C	4.8187	Adder	5.67
941502	AE2-147 E	3.2125	Adder	3.78
941591	AE2-156 O1	5.7358	Adder	6.75
942131	AE2-225 C	0.6777	Adder	0.8
942132	AE2-225 E	0.4518	Adder	0.53
942151	AE2-227 C	-0.5496	Adder	-0.65
942171	AE2-229 C	0.5083	Adder	0.6
942172	AE2-229 E	0.3388	Adder	0.4
942401	AE2-253 C	1.9671	Adder	2.31
942402	AE2-253 E	0.8838	Adder	1.04
943611	AF1-032 C	0.5534	Adder	0.65
943612	AF1-032 E	0.2937	Adder	0.35
943621	AF1-033 C	0.7365	Adder	0.87
943622	AF1-033 E	0.3794	Adder	0.45
944581	AF1-123 C O1	15.8571	Adder	18.66
944582	AF1-123 E O1	36.3084	Adder	42.72
944591	AF1-124 C O1	15.8571	Adder	18.66
944592	AF1-124 E O1	36.3084	Adder	42.72
944601	AF1-125 C O1	15.8571	Adder	18.66
944602	AF1-125 E O1	36.3084	Adder	42.72

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944871	AF1-152 C	1.6062	Adder	1.89
944872	AF1-152 E	1.0708	Adder	1.26
945361	AF1-201 C O1	7.1948	Adder	8.46
945362	AF1-201 E O1	4.7966	Adder	5.64
945711	AF1-236 C O1	21.1517	Adder	24.88
945712	AF1-236 E O1	13.0646	Adder	15.37
957491	AF2-043 C	0.6777	Adder	0.8
957492	AF2-043 E	0.4518	Adder	0.53
957531	AF2-047 C	4.5910	Adder	5.4
957532	AF2-047 E	2.3093	Adder	2.72
957631	AF2-057	1.1448	Adder	1.35
957821	AF2-076 C	1.6455	Adder	1.94
957822	AF2-076 E	1.0970	Adder	1.29
957831	AF2-077 C	0.7122	Adder	0.84
957832	AF2-077 E	0.4748	Adder	0.56
957871	AF2-081 C	3.1754	Adder	3.74
957872	AF2-081 E	1.3609	Adder	1.6
958161	AF2-110 C	0.3851	Adder	0.45
958162	AF2-110 E	0.6023	Adder	0.71
959641	AF2-255 C	-0.1374	Adder	-0.16
961851	AG1-027 C	2.4161	Adder	5.36
961852	AG1-027 E	1.3356	Adder	2.96
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.3548	Adder	0.79
962322	AG1-081 E (Withdrawn : 01/15/2021)	0.2366	Adder	0.53
962531	AG1-102 C	0.1938	Adder	0.43
962532	AG1-102 E	0.4039	Adder	0.9
962533	AG1-102 BAT	0.0031	Adder	0.01
962961	AG1-145 C	4.6426	50/50	4.6426
962962	AG1-145 E	3.0950	50/50	3.0950
963821	AG1-235 C O2	4.1307	Adder	9.17
963822	AG1-235 E O2	2.7538	Adder	6.11
964951	AG1-359 O1	4.5944	Adder	10.2
965001	AG1-364 C O2	1.2084	Adder	2.68
965002	AG1-364 E O2	1.8126	Adder	4.02
965181	AG1-383 C	0.4704	Adder	1.04
965182	AG1-383 E	0.1393	Adder	0.31
965631	AG1-431	6.4902	Adder	14.41
966491	AG1-518 O2	1.4907	Adder	3.31
966611	AG1-531 C	1.5409	Adder	3.42
966612	AG1-531 E	1.0272	Adder	2.28
966931	AG1-431A	4.8762	Adder	10.82
WEC	WEC	0.0954	Confirmed LTF	0.0954
LGEE	LGEE	0.1979	Confirmed LTF	0.1979
CPL	CPL	1.4756	Confirmed LTF	1.4756
CBM-W2	CBM-W2	5.0266	Confirmed LTF	5.0266
NY	NY	0.2765	Confirmed LTF	0.2765
TVA	TVA	0.9982	Confirmed LTF	0.9982
O-066	O-066	3.7284	Confirmed LTF	3.7284
SIGE	SIGE	0.0949	Confirmed LTF	0.0949
CBM-S2	CBM-S2	16.9963	Confirmed LTF	16.9963
CBM-S1	CBM-S1	0.2436	Confirmed LTF	0.2436

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
G-007	G-007	0.5849	Confirmed LTF	0.5849
MEC	MEC	0.6229	Confirmed LTF	0.6229
LAGN	LAGN	1.2425	Confirmed LTF	1.2425
CBM-W1	CBM-W1	3.8555	Confirmed LTF	3.8555

13.5.12 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
174419264	314391	6LIGH209	DVP	314388	6LANEXA	DVP	1	DVP_P4-5: L122	breaker	812.0	125.26	126.0	DC	16.51

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.7534	Adder	0.89
314177	3HAYES89	0.0182	Adder	0.02
314189	6PAPERMILL	-6.8228	Adder	-8.03
314421	6WINCHST	0.0980	50/50	0.0980
314466	6FENTRES	0.7744	Adder	0.91
314525	6KINGFORK	1.5778	Adder	1.86
314539	3UNCAMP	1.6395	Adder	1.93
314541	3WATKINS	0.1800	Adder	0.21
314550	6HICKORY	1.4253	Adder	1.68
314594	6PLYMOTH	0.0255	Adder	0.03
314632	6AYDLETOLD	0.7543	Adder	0.89
315092	1YORKTN3	18.1519	50/50	18.1519
316103	AB2-015 C	2.2886	Adder	2.69
316104	AB2-015 E	1.8767	Adder	2.21
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	23.5027	Adder	27.65
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	23.5027	Adder	27.65
316114	AB2-068 ST (Withdrawn : 01/11/2021)	40.7160	Adder	47.9
316134	AC1-107 G1	44.1338	Adder	51.92
316135	AC1-107 G2	44.1338	Adder	51.92
316136	AC1-107 G3	44.1421	Adder	51.93
316151	AD2-215 E (Withdrawn : 01/14/2021)	0.3376	Adder	0.4
901082	W1-029 E	15.1324	Adder	17.8
913392	Y1-086 E	0.7379	Adder	0.87
916042	Z1-036 E (Suspended)	14.4191	Adder	16.96
916192	Z1-068 E	0.6534	Adder	0.77
917122	Z2-027 E	0.3530	Adder	0.42
919152	AA1-139 E	2.2072	Adder	2.6
920692	AA2-178 E	1.2026	Adder	1.41
923832	AB2-022 E	0.4166	Adder	0.49
925522	AC1-027 E	0.3980	Adder	0.47
925863	AC1-065 C	-5.6418	Adder	-6.64
926662	AC1-147 E	0.4587	Adder	0.54
926754	AC1-161 C	11.9237	Adder	14.03
926755	AC1-161 E	5.0899	Adder	5.99
926784	AC1-164 C	-18.9163	Adder	-22.25
932044	AC2-012 C	3.5330	Adder	4.16
932046	AC2-012 E	5.7643	Adder	6.78
933294	AC2-141 C	11.9237	Adder	14.03

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933295	AC2-141 E	5.0899	Adder	5.99
933732	AC2-196 E	0.4160	Adder	0.49
933991	AD1-023 C	3.5638	Adder	4.19
933992	AD1-023 E	1.9401	Adder	2.28
934061	AD1-033 C	2.6218	Adder	3.08
934062	AD1-033 E	1.7479	Adder	2.06
934141	AD1-041 C	-3.7541	Adder	-4.42
934521	AD1-076 C	15.1072	Adder	17.77
934522	AD1-076 E	7.6926	Adder	9.05
935112	AD1-144 E	0.3441	Adder	0.4
937221	AD2-160 C O1	2.0219	Adder	2.38
937222	AD2-160 E O1	1.0602	Adder	1.25
938535	AE1-072 C	6.0361	Adder	7.1
938536	AE1-072 E	3.1095	Adder	3.66
938771	AE1-103 C	1.0089	Adder	1.19
938772	AE1-103 E	1.3932	Adder	1.64
939312	AE1-162 E	0.4427	Adder	0.52
939414	AE1-173_C1	8.2296	Adder	9.68
939415	AE1-173_C2	7.0539	Adder	8.3
939416	AE1-173_C3	8.2296	Adder	9.68
939423	AE1-173_E1	5.4864	Adder	6.45
939424	AE1-173_E2	4.7026	Adder	5.53
939425	AE1-173_E3	5.4864	Adder	6.45
939431	AE1-175 C	0.9221	Adder	1.08
939432	AE1-175 E	0.4576	Adder	0.54
940231	AE2-005 C	-1.0258	Adder	-1.21
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	60.2123	Adder	70.84
940491	AE2-034 C	2.1045	Adder	2.48
940492	AE2-034 E	0.9019	Adder	1.06
940552	AE2-041 BAT	7.5760	50/50	7.5760
940891	AE2-078 C	0.8073	Adder	0.95
940892	AE2-078 E	0.4159	Adder	0.49
940901	AE2-079 C	0.8073	Adder	0.95
940902	AE2-079 E	0.4159	Adder	0.49
941101	AE2-104 C O1	1.0191	Adder	1.2
941102	AE2-104 E O1	1.6202	Adder	1.91
941281	AE2-122 C O1	9.8908	Adder	11.64
941282	AE2-122 E O1	39.9118	Adder	46.96
941291	AE2-123 C O1	10.1647	Adder	11.96
941292	AE2-123 E O1	39.6379	Adder	46.63
941301	AE2-124 C O1	9.2472	Adder	10.88
941302	AE2-124 E O1	40.5758	Adder	47.74
941501	AE2-147 C	5.2181	Adder	6.14
941502	AE2-147 E	3.4787	Adder	4.09
941591	AE2-156 O1	6.2092	Adder	7.3
942131	AE2-225 C	0.7322	Adder	0.86
942132	AE2-225 E	0.4881	Adder	0.57
942171	AE2-229 C	0.5491	Adder	0.65
942172	AE2-229 E	0.3661	Adder	0.43
942401	AE2-253 C	2.1266	Adder	2.5
942402	AE2-253 E	0.9555	Adder	1.12

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
943472	AF1-018 BAT	7.5760	50/50	7.5760
943611	AF1-032 C	0.5979	Adder	0.7
943612	AF1-032 E	0.3173	Adder	0.37
943621	AF1-033 C	0.8073	Adder	0.95
943622	AF1-033 E	0.4159	Adder	0.49
944581	AF1-123 C O1	17.1031	Adder	20.12
944582	AF1-123 E O1	39.1614	Adder	46.07
944591	AF1-124 C O1	17.1031	Adder	20.12
944592	AF1-124 E O1	39.1614	Adder	46.07
944601	AF1-125 C O1	17.1031	Adder	20.12
944602	AF1-125 E O1	39.1614	Adder	46.07
944871	AF1-152 C	1.7394	Adder	2.05
944872	AF1-152 E	1.1596	Adder	1.36
945361	AF1-201 C O1	4.4393	Adder	5.22
945362	AF1-201 E O1	2.9595	Adder	3.48
945711	AF1-236 C O1	23.0394	Adder	27.11
945712	AF1-236 E O1	14.2305	Adder	16.74
957192	AF2-013 BAT	8.5350	Merchant Transmission	8.5350
957491	AF2-043 C	0.7322	Adder	0.86
957492	AF2-043 E	0.4881	Adder	0.57
957531	AF2-047 C	5.0007	Adder	5.88
957532	AF2-047 E	2.5154	Adder	2.96
957631	AF2-057	1.2396	Adder	1.46
957821	AF2-076 C	1.7799	Adder	2.09
957822	AF2-076 E	1.1866	Adder	1.4
957871	AF2-081 C	3.4334	Adder	4.04
957872	AF2-081 E	1.4715	Adder	1.73
958161	AF2-110 C	0.4201	Adder	0.49
958162	AF2-110 E	0.6571	Adder	0.77
961091	AF2-400 C	0.1236	Adder	0.15
961092	AF2-400 E	0.2028	Adder	0.24
961782	AG1-019 BAT	4.5235	Merchant Transmission	4.5235
961851	AG1-027 C	2.6411	Adder	5.86
961852	AG1-027 E	1.4600	Adder	3.24
962132	AG1-057 BAT	3.7880	50/50	3.7880
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.3890	Adder	0.86
962322	AG1-081 E (Withdrawn : 01/15/2021)	0.2593	Adder	0.58
962961	AG1-145 C	0.4410	Adder	0.98
962962	AG1-145 E	0.2940	Adder	0.65
963613	AG1-210 BAT	1.5858	50/50	1.5858
963821	AG1-235 C O2	4.4640	Adder	9.91
963822	AG1-235 E O2	2.9760	Adder	6.61
964023	AG1-256 BAT	3.2568	50/50	3.2568
964592	AG1-322 BAT	2.1763	Merchant Transmission	2.1763
964951	AG1-359 O1	4.9654	Adder	11.02
965001	AG1-364 C O2	1.3093	Adder	2.91
965002	AG1-364 E O2	1.9640	Adder	4.36
965181	AG1-383 C	0.5083	Adder	1.13
965182	AG1-383 E	0.1506	Adder	0.33
965631	AG1-431	7.0695	Adder	15.69
965701	AG1-438 C O1	1.3765	Adder	3.06

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965702	AG1-438 E O1	0.9177	Adder	2.04
965741	AG1-442 O1	0.8325	Adder	1.85
965751	AG1-443 O1	0.8325	Adder	1.85
966491	AG1-518 O2	1.6110	Adder	3.58
966611	AG1-531 C	3.6396	50/50	3.6396
966612	AG1-531 E	2.4264	50/50	2.4264
966663	AG1-536 BAT	11.3130	50/50	11.3130
966931	AG1-431A	5.3114	Adder	11.79
WEC	WEC	0.1166	Confirmed LTF	0.1166
LGEE	LGEE	0.2419	Confirmed LTF	0.2419
CPL	CPL	1.6571	Confirmed LTF	1.6571
CBM-W2	CBM-W2	5.9046	Confirmed LTF	5.9046
NY	NY	0.3213	Confirmed LTF	0.3213
TVA	TVA	1.1606	Confirmed LTF	1.1606
O-066	O-066	4.3678	Confirmed LTF	4.3678
SIGE	SIGE	0.1126	Confirmed LTF	0.1126
CBM-S2	CBM-S2	19.2200	Confirmed LTF	19.2200
CBM-S1	CBM-S1	0.2846	Confirmed LTF	0.2846
G-007	G-007	0.6856	Confirmed LTF	0.6856
MEC	MEC	0.7468	Confirmed LTF	0.7468
LAGN	LAGN	1.4437	Confirmed LTF	1.4437
CBM-W1	CBM-W1	4.7388	Confirmed LTF	4.7388

13.5.13 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
174419324	314413	6WALR285	DVP	314390	6LIGH285	DVP	1	DVP_P4-5: L122	breaker	830.0	113.33	114.14	DC	15.28

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.6968	Adder	0.82
314177	3HAYES89	0.0310	50/50	0.0310
314421	6WINCHST	0.0939	50/50	0.0939
314466	6FENTRES	0.7165	Adder	0.84
314525	6KINGFORK	1.4652	Adder	1.72
314539	3UNCAMP	0.3301	Adder	0.39
314550	6HICKORY	1.3189	Adder	1.55
314594	6PLYMOTH	0.0234	Adder	0.03
314632	6AYDLETOLD	0.6975	Adder	0.82
315092	1YORKTN3	17.6092	50/50	17.6092
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	22.0664	Adder	25.96
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	22.0664	Adder	25.96
316114	AB2-068 ST (Withdrawn : 01/11/2021)	38.2277	Adder	44.97
316134	AC1-107 G1	41.4366	Adder	48.75
316135	AC1-107 G2	41.4366	Adder	48.75
316136	AC1-107 G3	41.4444	Adder	48.76
316151	AD2-215 E (Withdrawn : 01/14/2021)	0.3136	Adder	0.37
901082	W1-029 E	13.9743	Adder	16.44
913392	Y1-086 E	0.6818	Adder	0.8
916042	Z1-036 E (Suspended)	13.2885	Adder	15.63
916192	Z1-068 E	0.6041	Adder	0.71
917122	Z2-027 E	0.3261	Adder	0.38
919152	AA1-139 E	2.0413	Adder	2.4
920692	AA2-178 E	1.1040	Adder	1.3
923832	AB2-022 E	0.3849	Adder	0.45
925522	AC1-027 E	0.3679	Adder	0.43
926662	AC1-147 E	0.4236	Adder	0.5
926754	AC1-161 C	11.1316	Adder	13.1
926755	AC1-161 E	4.7518	Adder	5.59
926784	AC1-164 C	-23.0490	Adder	-27.12
932044	AC2-012 C	3.2626	Adder	3.84
932046	AC2-012 E	5.3232	Adder	6.26
933294	AC2-141 C	11.1316	Adder	13.1
933295	AC2-141 E	4.7518	Adder	5.59
933732	AC2-196 E	0.3849	Adder	0.45
934061	AD1-033 C	2.4258	Adder	2.85
934062	AD1-033 E	1.6172	Adder	1.9
934521	AD1-076 C	13.8315	Adder	16.27

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
934522	AD1-076 E	7.0430	Adder	8.29
935112	AD1-144 E	0.3196	Adder	0.38
937221	AD2-160 C O1	1.8702	Adder	2.2
937222	AD2-160 E O1	0.9807	Adder	1.15
938535	AE1-072 C	5.5817	Adder	6.57
938536	AE1-072 E	2.8754	Adder	3.38
938771	AE1-103 C	0.9202	Adder	1.08
938772	AE1-103 E	1.2707	Adder	1.49
939312	AE1-162 E	0.4013	Adder	0.47
939414	AE1-173_C1	7.5541	Adder	8.89
939415	AE1-173_C2	6.4750	Adder	7.62
939416	AE1-173_C3	7.5541	Adder	8.89
939423	AE1-173_E1	5.0361	Adder	5.92
939424	AE1-173_E2	4.3166	Adder	5.08
939425	AE1-173_E3	5.0361	Adder	5.92
939431	AE1-175 C	-6.9313	Adder	-8.15
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	55.6312	Adder	65.45
940491	AE2-034 C	1.9321	Adder	2.27
940492	AE2-034 E	0.8280	Adder	0.97
940891	AE2-078 C	0.7365	Adder	0.87
940892	AE2-078 E	0.3794	Adder	0.45
940901	AE2-079 C	0.7365	Adder	0.87
940902	AE2-079 E	0.3794	Adder	0.45
941101	AE2-104 C O1	0.9340	Adder	1.1
941102	AE2-104 E O1	1.4850	Adder	1.75
941281	AE2-122 C O1	9.1453	Adder	10.76
941282	AE2-122 E O1	36.9033	Adder	43.42
941291	AE2-123 C O1	9.3985	Adder	11.06
941292	AE2-123 E O1	36.6501	Adder	43.12
941301	AE2-124 C O1	8.5505	Adder	10.06
941302	AE2-124 E O1	37.5185	Adder	44.14
941501	AE2-147 C	4.8187	Adder	5.67
941502	AE2-147 E	3.2125	Adder	3.78
941591	AE2-156 O1	5.7358	Adder	6.75
942131	AE2-225 C	0.6777	Adder	0.8
942132	AE2-225 E	0.4518	Adder	0.53
942151	AE2-227 C	-0.5496	Adder	-0.65
942171	AE2-229 C	0.5083	Adder	0.6
942172	AE2-229 E	0.3388	Adder	0.4
942401	AE2-253 C	1.9671	Adder	2.31
942402	AE2-253 E	0.8838	Adder	1.04
943611	AF1-032 C	0.5534	Adder	0.65
943612	AF1-032 E	0.2937	Adder	0.35
943621	AF1-033 C	0.7365	Adder	0.87
943622	AF1-033 E	0.3794	Adder	0.45
944581	AF1-123 C O1	15.8571	Adder	18.66
944582	AF1-123 E O1	36.3084	Adder	42.72
944591	AF1-124 C O1	15.8571	Adder	18.66
944592	AF1-124 E O1	36.3084	Adder	42.72
944601	AF1-125 C O1	15.8571	Adder	18.66
944602	AF1-125 E O1	36.3084	Adder	42.72

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944871	AF1-152 C	1.6062	Adder	1.89
944872	AF1-152 E	1.0708	Adder	1.26
945361	AF1-201 C O1	7.1948	Adder	8.46
945362	AF1-201 E O1	4.7966	Adder	5.64
945711	AF1-236 C O1	21.1517	Adder	24.88
945712	AF1-236 E O1	13.0646	Adder	15.37
957491	AF2-043 C	0.6777	Adder	0.8
957492	AF2-043 E	0.4518	Adder	0.53
957531	AF2-047 C	4.5910	Adder	5.4
957532	AF2-047 E	2.3093	Adder	2.72
957631	AF2-057	1.1448	Adder	1.35
957821	AF2-076 C	1.6455	Adder	1.94
957822	AF2-076 E	1.0970	Adder	1.29
957831	AF2-077 C	0.7122	Adder	0.84
957832	AF2-077 E	0.4748	Adder	0.56
957871	AF2-081 C	3.1754	Adder	3.74
957872	AF2-081 E	1.3609	Adder	1.6
958161	AF2-110 C	0.3851	Adder	0.45
958162	AF2-110 E	0.6023	Adder	0.71
959641	AF2-255 C	-0.1374	Adder	-0.16
961851	AG1-027 C	2.4161	Adder	5.36
961852	AG1-027 E	1.3356	Adder	2.96
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.3548	Adder	0.79
962322	AG1-081 E (Withdrawn : 01/15/2021)	0.2366	Adder	0.53
962531	AG1-102 C	0.1938	Adder	0.43
962532	AG1-102 E	0.4039	Adder	0.9
962533	AG1-102 BAT	0.0031	Adder	0.01
963821	AG1-235 C O2	4.1307	Adder	9.17
963822	AG1-235 E O2	2.7538	Adder	6.11
964951	AG1-359 O1	4.5944	Adder	10.2
965001	AG1-364 C O2	1.2084	Adder	2.68
965002	AG1-364 E O2	1.8126	Adder	4.02
965181	AG1-383 C	0.4704	Adder	1.04
965182	AG1-383 E	0.1393	Adder	0.31
965631	AG1-431	6.4902	Adder	14.41
966491	AG1-518 O2	1.4907	Adder	3.31
966611	AG1-531 C	1.5409	Adder	3.42
966612	AG1-531 E	1.0272	Adder	2.28
966931	AG1-431A	4.8762	Adder	10.82
WEC	WEC	0.0954	Confirmed LTF	0.0954
LGEE	LGEE	0.1979	Confirmed LTF	0.1979
CPL	CPL	1.4756	Confirmed LTF	1.4756
CBM-W2	CBM-W2	5.0266	Confirmed LTF	5.0266
NY	NY	0.2765	Confirmed LTF	0.2765
TVA	TVA	0.9982	Confirmed LTF	0.9982
O-066	O-066	3.7284	Confirmed LTF	3.7284
SIGE	SIGE	0.0949	Confirmed LTF	0.0949
CBM-S2	CBM-S2	16.9963	Confirmed LTF	16.9963
CBM-S1	CBM-S1	0.2436	Confirmed LTF	0.2436
G-007	G-007	0.5849	Confirmed LTF	0.5849
MEC	MEC	0.6229	Confirmed LTF	0.6229

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
LAGN	LAGN	1.2425	Confirmed LTF	1.2425
CBM-W1	CBM-W1	3.8555	Confirmed LTF	3.8555

13.5.14 Index 14

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC/DC	MW IMPACT
174226193	314415	6WALR209	DVP	314391	6LIGH209	DVP	1	DVP_P4-5: L122	breaker	541.0	197.47	198.57	DC	16.51

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.7534	Adder	0.89
314177	3HAYES89	0.0182	Adder	0.02
314189	6PAPERMILL	-6.8228	Adder	-8.03
314421	6WINCHST	0.0980	50/50	0.0980
314466	6FENTRES	0.7744	Adder	0.91
314525	6KINGFORK	1.5778	Adder	1.86
314539	3UNCAMP	1.6395	Adder	1.93
314541	3WATKINS	0.1800	Adder	0.21
314550	6HICKORY	1.4253	Adder	1.68
314594	6PLYMOTH	0.0255	Adder	0.03
314632	6AYDLETOLD	0.7543	Adder	0.89
315092	1YORKTN3	18.1519	50/50	18.1519
316103	AB2-015 C	2.2886	Adder	2.69
316104	AB2-015 E	1.8767	Adder	2.21
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	23.5027	Adder	27.65
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	23.5027	Adder	27.65
316114	AB2-068 ST (Withdrawn : 01/11/2021)	40.7160	Adder	47.9
316134	AC1-107 G1	44.1338	Adder	51.92
316135	AC1-107 G2	44.1338	Adder	51.92
316136	AC1-107 G3	44.1421	Adder	51.93
316151	AD2-215 E (Withdrawn : 01/14/2021)	0.3376	Adder	0.4
901082	W1-029 E	15.1324	Adder	17.8
913392	Y1-086 E	0.7379	Adder	0.87
916042	Z1-036 E (Suspended)	14.4191	Adder	16.96
916192	Z1-068 E	0.6534	Adder	0.77
917122	Z2-027 E	0.3530	Adder	0.42
919152	AA1-139 E	2.2072	Adder	2.6
920692	AA2-178 E	1.2026	Adder	1.41
923832	AB2-022 E	0.4166	Adder	0.49
925522	AC1-027 E	0.3980	Adder	0.47
925863	AC1-065 C	-5.6418	Adder	-6.64
926662	AC1-147 E	0.4587	Adder	0.54
926754	AC1-161 C	11.9237	Adder	14.03
926755	AC1-161 E	5.0899	Adder	5.99
926784	AC1-164 C	-18.9163	Adder	-22.25
932044	AC2-012 C	3.5330	Adder	4.16
932046	AC2-012 E	5.7643	Adder	6.78
933294	AC2-141 C	11.9237	Adder	14.03

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
933295	AC2-141 E	5.0899	Adder	5.99
933732	AC2-196 E	0.4160	Adder	0.49
933991	AD1-023 C	3.5638	Adder	4.19
933992	AD1-023 E	1.9401	Adder	2.28
934061	AD1-033 C	2.6218	Adder	3.08
934062	AD1-033 E	1.7479	Adder	2.06
934141	AD1-041 C	-3.7541	Adder	-4.42
934521	AD1-076 C	15.1072	Adder	17.77
934522	AD1-076 E	7.6926	Adder	9.05
935112	AD1-144 E	0.3441	Adder	0.4
937221	AD2-160 C O1	2.0219	Adder	2.38
937222	AD2-160 E O1	1.0602	Adder	1.25
938535	AE1-072 C	6.0361	Adder	7.1
938536	AE1-072 E	3.1095	Adder	3.66
938771	AE1-103 C	1.0089	Adder	1.19
938772	AE1-103 E	1.3932	Adder	1.64
939312	AE1-162 E	0.4427	Adder	0.52
939414	AE1-173_C1	8.2296	Adder	9.68
939415	AE1-173_C2	7.0539	Adder	8.3
939416	AE1-173_C3	8.2296	Adder	9.68
939423	AE1-173_E1	5.4864	Adder	6.45
939424	AE1-173_E2	4.7026	Adder	5.53
939425	AE1-173_E3	5.4864	Adder	6.45
939431	AE1-175 C	0.9221	Adder	1.08
939432	AE1-175 E	0.4576	Adder	0.54
940231	AE2-005 C	-1.0258	Adder	-1.21
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	60.2123	Adder	70.84
940491	AE2-034 C	2.1045	Adder	2.48
940492	AE2-034 E	0.9019	Adder	1.06
940552	AE2-041 BAT	7.5760	50/50	7.5760
940891	AE2-078 C	0.8073	Adder	0.95
940892	AE2-078 E	0.4159	Adder	0.49
940901	AE2-079 C	0.8073	Adder	0.95
940902	AE2-079 E	0.4159	Adder	0.49
941101	AE2-104 C O1	1.0191	Adder	1.2
941102	AE2-104 E O1	1.6202	Adder	1.91
941281	AE2-122 C O1	9.8908	Adder	11.64
941282	AE2-122 E O1	39.9118	Adder	46.96
941291	AE2-123 C O1	10.1647	Adder	11.96
941292	AE2-123 E O1	39.6379	Adder	46.63
941301	AE2-124 C O1	9.2472	Adder	10.88
941302	AE2-124 E O1	40.5758	Adder	47.74
941501	AE2-147 C	5.2181	Adder	6.14
941502	AE2-147 E	3.4787	Adder	4.09
941591	AE2-156 O1	6.2092	Adder	7.3
942131	AE2-225 C	0.7322	Adder	0.86
942132	AE2-225 E	0.4881	Adder	0.57
942171	AE2-229 C	0.5491	Adder	0.65
942172	AE2-229 E	0.3661	Adder	0.43
942401	AE2-253 C	2.1266	Adder	2.5
942402	AE2-253 E	0.9555	Adder	1.12

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
943472	AF1-018 BAT	7.5760	50/50	7.5760
943611	AF1-032 C	0.5979	Adder	0.7
943612	AF1-032 E	0.3173	Adder	0.37
943621	AF1-033 C	0.8073	Adder	0.95
943622	AF1-033 E	0.4159	Adder	0.49
944581	AF1-123 C O1	17.1031	Adder	20.12
944582	AF1-123 E O1	39.1614	Adder	46.07
944591	AF1-124 C O1	17.1031	Adder	20.12
944592	AF1-124 E O1	39.1614	Adder	46.07
944601	AF1-125 C O1	17.1031	Adder	20.12
944602	AF1-125 E O1	39.1614	Adder	46.07
944871	AF1-152 C	1.7394	Adder	2.05
944872	AF1-152 E	1.1596	Adder	1.36
945361	AF1-201 C O1	4.4393	Adder	5.22
945362	AF1-201 E O1	2.9595	Adder	3.48
945711	AF1-236 C O1	23.0394	Adder	27.11
945712	AF1-236 E O1	14.2305	Adder	16.74
957192	AF2-013 BAT	8.5350	Merchant Transmission	8.5350
957491	AF2-043 C	0.7322	Adder	0.86
957492	AF2-043 E	0.4881	Adder	0.57
957531	AF2-047 C	5.0007	Adder	5.88
957532	AF2-047 E	2.5154	Adder	2.96
957631	AF2-057	1.2396	Adder	1.46
957821	AF2-076 C	1.7799	Adder	2.09
957822	AF2-076 E	1.1866	Adder	1.4
957871	AF2-081 C	3.4334	Adder	4.04
957872	AF2-081 E	1.4715	Adder	1.73
958161	AF2-110 C	0.4201	Adder	0.49
958162	AF2-110 E	0.6571	Adder	0.77
961091	AF2-400 C	0.1236	Adder	0.15
961092	AF2-400 E	0.2028	Adder	0.24
961782	AG1-019 BAT	4.5235	Merchant Transmission	4.5235
961851	AG1-027 C	2.6411	Adder	5.86
961852	AG1-027 E	1.4600	Adder	3.24
962132	AG1-057 BAT	3.7880	50/50	3.7880
962321	AG1-081 C (Withdrawn : 01/15/2021)	0.3890	Adder	0.86
962322	AG1-081 E (Withdrawn : 01/15/2021)	0.2593	Adder	0.58
962961	AG1-145 C	0.4410	Adder	0.98
962962	AG1-145 E	0.2940	Adder	0.65
963613	AG1-210 BAT	1.5858	50/50	1.5858
963821	AG1-235 C O2	4.4640	Adder	9.91
963822	AG1-235 E O2	2.9760	Adder	6.61
964023	AG1-256 BAT	3.2568	50/50	3.2568
964592	AG1-322 BAT	2.1763	Merchant Transmission	2.1763
964951	AG1-359 O1	4.9654	Adder	11.02
965001	AG1-364 C O2	1.3093	Adder	2.91
965002	AG1-364 E O2	1.9640	Adder	4.36
965181	AG1-383 C	0.5083	Adder	1.13
965182	AG1-383 E	0.1506	Adder	0.33
965631	AG1-431	7.0695	Adder	15.69
965701	AG1-438 C O1	1.3765	Adder	3.06

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
965702	AG1-438 E O1	0.9177	Adder	2.04
965741	AG1-442 O1	0.8325	Adder	1.85
965751	AG1-443 O1	0.8325	Adder	1.85
966491	AG1-518 O2	1.6110	Adder	3.58
966611	AG1-531 C	3.6396	50/50	3.6396
966612	AG1-531 E	2.4264	50/50	2.4264
966663	AG1-536 BAT	11.3130	50/50	11.3130
966931	AG1-431A	5.3114	Adder	11.79
WEC	WEC	0.1166	Confirmed LTF	0.1166
LGEE	LGEE	0.2419	Confirmed LTF	0.2419
CPL	CPL	1.6571	Confirmed LTF	1.6571
CBM-W2	CBM-W2	5.9046	Confirmed LTF	5.9046
NY	NY	0.3213	Confirmed LTF	0.3213
TVA	TVA	1.1606	Confirmed LTF	1.1606
O-066	O-066	4.3678	Confirmed LTF	4.3678
SIG	SIG	0.1126	Confirmed LTF	0.1126
CBM-S2	CBM-S2	19.2200	Confirmed LTF	19.2200
CBM-S1	CBM-S1	0.2846	Confirmed LTF	0.2846
G-007	G-007	0.6856	Confirmed LTF	0.6856
MEC	MEC	0.7468	Confirmed LTF	0.7468
LAGN	LAGN	1.4437	Confirmed LTF	1.4437
CBM-W1	CBM-W1	4.7388	Confirmed LTF	4.7388

13.5.15 Index 15

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174025816	314466	6FENTRES	DVP	934060	AD1-033 TAP	DVP	1	DVP_P4-2: 2110T2128	breaker	830.0	113.46	121.72	DC	68.49

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.4124	50/50	0.4124
313717	6SLIGO L2192	3.1727	50/50	3.1727
314466	6FENTRES	3.8037	50/50	3.8037
314550	6HICKORY	6.7944	50/50	6.7944
314594	6PLYMOTH	0.0329	Adder	0.04
314632	6AYDLETOLD	3.0857	50/50	3.0857
314638	6ELIZ CT	0.2411	50/50	0.2411
314639	6TANGLEW	0.3906	50/50	0.3906
314643	3O INLET	0.5890	50/50	0.5890
315293	1DOMTR9	2.0801	Adder	2.45
315294	1DOMTR10	2.5492	Adder	3.0
315603	6AA1-139SOLA	3.3000	50/50	3.3000
315605	6W1-029WIND	0.7221	50/50	0.7221
315611	6Z1-036WIND	0.7206	50/50	0.7206
901082	W1-029 E	30.6310	50/50	30.6310
913392	Y1-086 E	2.4934	50/50	2.4934
916042	Z1-036 E (Suspended)	30.6008	50/50	30.6008
917122	Z2-027 E	1.0611	50/50	1.0611
919152	AA1-139 E	9.5681	50/50	9.5681
920692	AA2-178 E	1.7770	Adder	2.09
923832	AB2-022 E	1.4076	50/50	1.4076
933731	AC2-196 C	0.4840	50/50	0.4840
933732	AC2-196 E	2.0433	50/50	2.0433
933991	AD1-023 C	3.9515	Adder	4.65
933992	AD1-023 E	2.1512	Adder	2.53
934061	AD1-033 C	-22.9094	Adder	-26.95
934521	AD1-076 C	18.9017	Adder	22.24
934522	AD1-076 E	9.6247	Adder	11.32
937221	AD2-160 C O1	9.1043	50/50	9.1043
937222	AD2-160 E O1	4.7742	50/50	4.7742
938535	AE1-072 C	25.0916	50/50	25.0916
938536	AE1-072 E	12.9260	50/50	12.9260
940491	AE2-034 C	3.1098	Adder	3.66
940492	AE2-034 E	1.3328	Adder	1.57
941501	AE2-147 C	10.5624	50/50	10.5624
941502	AE2-147 E	7.0416	50/50	7.0416
942401	AE2-253 C	9.5762	50/50	9.5762
942402	AE2-253 E	4.3023	50/50	4.3023
944581	AF1-123 C O1	20.0499	Adder	23.59
944582	AF1-123 E O1	45.9087	Adder	54.01
944591	AF1-124 C O1	20.0499	Adder	23.59
944592	AF1-124 E O1	45.9087	Adder	54.01

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944601	AF1-125 C O1	20.0499	Adder	23.59
944602	AF1-125 E O1	45.9087	Adder	54.01
944871	AF1-152 C	3.5208	50/50	3.5208
944872	AF1-152 E	2.3472	50/50	2.3472
945711	AF1-236 C O1	34.0452	Adder	40.05
945712	AF1-236 E O1	21.0284	Adder	24.74
957531	AF2-047 C	7.3895	Adder	8.69
957532	AF2-047 E	3.7170	Adder	4.37
957632	AF2-057 BAT	3.5502	50/50	3.5502
957871	AF2-081 C	14.8837	50/50	14.8837
957872	AF2-081 E	6.3787	50/50	6.3787
963821	AG1-235 C O2	41.0954	50/50	41.0954
963822	AG1-235 E O2	27.3969	50/50	27.3969
964951	AG1-359 O1	46.0200	50/50	46.0200
965003	AG1-364 BAT	17.2080	50/50	17.2080
965181	AG1-383 C	4.5721	50/50	4.5721
965182	AG1-383 E	1.3541	50/50	1.3541
965631	AG1-431	10.4465	Adder	23.19
966931	AG1-431A	7.8486	Adder	17.42
WEC	WEC	0.0564	Confirmed LTF	0.0564
LGEE	LGEE	0.1144	Confirmed LTF	0.1144
CPL	CPL	0.4887	Confirmed LTF	0.4887
CBM-W2	CBM-W2	2.1952	Confirmed LTF	2.1952
NY	NY	0.0133	Confirmed LTF	0.0133
TVA	TVA	0.3962	Confirmed LTF	0.3962
O-066	O-066	0.2557	Confirmed LTF	0.2557
SIGE	SIGE	0.0240	Confirmed LTF	0.0240
CBM-S2	CBM-S2	5.5436	Confirmed LTF	5.5436
CBM-S1	CBM-S1	0.1007	Confirmed LTF	0.1007
G-007	G-007	0.0410	Confirmed LTF	0.0410
MEC	MEC	0.3210	Confirmed LTF	0.3210
LAGN	LAGN	0.4952	Confirmed LTF	0.4952
CBM-W1	CBM-W1	2.4114	Confirmed LTF	2.4114

13.5.16 Index 16

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163211531	314481	6LANDSTN	DVP	314486	6LYNHAVN	DVP	1	DVP_P7-1: LN 147-2118-A	tower	830.0	117.79	120.54	DC	22.8

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.9093	Adder	1.07
314466	6FENTRES	1.2656	50/50	1.2656
314550	6HICKORY	1.9262	Adder	2.27
314632	6AYDLETOLD	0.8868	Adder	1.04
913392	Y1-086 E	0.7308	Adder	0.86
917122	Z2-027 E	0.3154	Adder	0.37
919152	AA1-139 E	2.7350	Adder	3.22
923832	AB2-022 E	0.4126	Adder	0.49
933731	AC2-196 C	0.1611	50/50	0.1611
933732	AC2-196 E	0.6799	50/50	0.6799
934061	AD1-033 C	5.5910	50/50	5.5910
934062	AD1-033 E	3.7274	50/50	3.7274
937221	AD2-160 C O1	2.5937	Adder	3.05
937222	AD2-160 E O1	1.3601	Adder	1.6
938535	AE1-072 C	7.1999	Adder	8.47
938536	AE1-072 E	3.7090	Adder	4.36
941281	AE2-122 C O1	44.9417	50/50	44.9417
941282	AE2-122 E O1	181.3506	50/50	181.3506
941291	AE2-123 C O1	46.1861	50/50	46.1861
941292	AE2-123 E O1	180.1061	50/50	180.1061
941301	AE2-124 C O1	42.0003	50/50	42.0003
941302	AE2-124 E O1	184.2920	50/50	184.2920
942401	AE2-253 C	2.7281	Adder	3.21
942402	AE2-253 E	1.2257	Adder	1.44
957632	AF2-057 BAT	2.0218	50/50	2.0218
957871	AF2-081 C	4.2545	Adder	5.01
957872	AF2-081 E	1.8234	Adder	2.15
963821	AG1-235 C O2	13.6809	50/50	13.6809
963822	AG1-235 E O2	9.1206	50/50	9.1206
964951	AG1-359 O1	15.3120	50/50	15.3120
965003	AG1-364 BAT	5.1325	Merchant Transmission	5.1325
965181	AG1-383 C	0.6870	Adder	1.52
965182	AG1-383 E	0.2035	Adder	0.45
WEC	WEC	0.0268	Confirmed LTF	0.0268
LGEE	LGEE	0.0547	Confirmed LTF	0.0547
CPL	CPL	0.2170	Confirmed LTF	0.2170
CBM-W2	CBM-W2	1.0214	Confirmed LTF	1.0214
NY	NY	0.0017	Confirmed LTF	0.0017
TVA	TVA	0.1834	Confirmed LTF	0.1834
O-066	O-066	0.0606	Confirmed LTF	0.0606
SIGE	SIGE	0.0105	Confirmed LTF	0.0105

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-S2	CBM-S2	2.4847	Confirmed LTF	2.4847
CBM-S1	CBM-S1	0.0467	Confirmed LTF	0.0467
G-007	G-007	0.0095	Confirmed LTF	0.0095
MEC	MEC	0.1510	Confirmed LTF	0.1510
LAGN	LAGN	0.2275	Confirmed LTF	0.2275
CBM-W1	CBM-W1	1.1496	Confirmed LTF	1.1496

13.5.17 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
174226472	314486	6LYNHAVN	DVP	314504	6THALIA	DVP	1	DVP_P4-2: 231T2128	breaker	906.0	103.29	107.3	DC	36.29

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.2096	50/50	0.2096
313717	6SLIGO L2192	1.6564	50/50	1.6564
314295	6BIRDNECK	0.0837	50/50	0.0837
314466	6FENTRES	2.0163	50/50	2.0163
314491	3PENDLTN	0.5149	50/50	0.5149
314550	6HICKORY	3.5915	50/50	3.5915
314632	6AYDLETOLD	1.6058	50/50	1.6058
314638	6ELIZ CT	0.1225	50/50	0.1225
314643	3O INLET	0.3065	50/50	0.3065
315603	6AA1-139SOLA	1.7281	50/50	1.7281
901082	W1-029 E	11.9932	Adder	14.11
913392	Y1-086 E	1.2672	50/50	1.2672
916042	Z1-036 E (Suspended)	12.1869	Adder	14.34
916192	Z1-068 E	3.7145	50/50	3.7145
917122	Z2-027 E	0.4505	Adder	0.53
919152	AA1-139 E	5.0105	50/50	5.0105
923832	AB2-022 E	0.7153	50/50	0.7153
925522	AC1-027 E	1.8649	50/50	1.8649
933731	AC2-196 C	0.2566	50/50	0.2566
933732	AC2-196 E	1.0831	50/50	1.0831
934061	AD1-033 C	7.9603	50/50	7.9603
934062	AD1-033 E	5.3068	50/50	5.3068
937221	AD2-160 C O1	4.7862	50/50	4.7862
937222	AD2-160 E O1	2.5098	50/50	2.5098
938535	AE1-072 C	13.0809	50/50	13.0809
938536	AE1-072 E	6.7386	50/50	6.7386
941281	AE2-122 C O1	54.0768	50/50	54.0768
941282	AE2-122 E O1	218.2132	50/50	218.2132
941291	AE2-123 C O1	55.5743	50/50	55.5743
941292	AE2-123 E O1	216.7158	50/50	216.7158
941301	AE2-124 C O1	47.4175	50/50	47.4175
941302	AE2-124 E O1	208.0624	50/50	208.0624
941501	AE2-147 C	4.1356	Adder	4.87
941502	AE2-147 E	2.7571	Adder	3.24
942401	AE2-253 C	5.0342	50/50	5.0342
942402	AE2-253 E	2.2618	50/50	2.2618
944581	AF1-123 C O1	11.3960	Adder	13.41
944582	AF1-123 E O1	26.0937	Adder	30.7
944591	AF1-124 C O1	11.3960	Adder	13.41
944592	AF1-124 E O1	26.0937	Adder	30.7
944601	AF1-125 C O1	11.3960	Adder	13.41

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944602	AF1-125 E O1	26.0937	Adder	30.7
944871	AF1-152 C	1.3785	Adder	1.62
944872	AF1-152 E	0.9190	Adder	1.08
957632	AF2-057 BAT	1.3980	Merchant Transmission	1.3980
957871	AF2-081 C	7.7941	50/50	7.7941
957872	AF2-081 E	3.3403	50/50	3.3403
963821	AG1-235 C O2	21.7714	50/50	21.7714
963822	AG1-235 E O2	14.5143	50/50	14.5143
964951	AG1-359 O1	24.3945	50/50	24.3945
965003	AG1-364 BAT	3.5690	Merchant Transmission	3.5690
965181	AG1-383 C	2.4168	50/50	2.4168
965182	AG1-383 E	0.7158	50/50	0.7158
WEC	WEC	0.0205	Confirmed LTF	0.0205
LGEE	LGEE	0.0415	Confirmed LTF	0.0415
CPL	CPL	0.1754	Confirmed LTF	0.1754
CBM-W2	CBM-W2	0.7974	Confirmed LTF	0.7974
NY	NY	0.0050	Confirmed LTF	0.0050
TVA	TVA	0.1428	Confirmed LTF	0.1428
O-066	O-066	0.0942	Confirmed LTF	0.0942
SIGE	SIGE	0.0087	Confirmed LTF	0.0087
CBM-S2	CBM-S2	2.0045	Confirmed LTF	2.0045
CBM-S1	CBM-S1	0.0365	Confirmed LTF	0.0365
G-007	G-007	0.0147	Confirmed LTF	0.0147
MEC	MEC	0.1160	Confirmed LTF	0.1160
LAGN	LAGN	0.1785	Confirmed LTF	0.1785
CBM-W1	CBM-W1	0.8692	Confirmed LTF	0.8692

13.5.18 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
174419335	314525	6KINGFORK	DVP	314522	6CHCKTUK	DVP	1	DVP_P4-2: 531T582	breaker	830.0	101.38	102.2	DC	15.01

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.8311	Adder	0.98
314189	6PAPERMILL	-2.8044	Adder	-3.3
314466	6FENTRES	0.6963	Adder	0.82
314525	6KINGFORK	7.7448	50/50	7.7448
314539	3UNCAMP	4.0905	50/50	4.0905
314541	3WATKINS	0.4390	50/50	0.4390
314550	6HICKORY	1.3421	Adder	1.58
314594	6PLYMOTH	0.0446	Adder	0.05
314632	6AYDLETOLD	0.8586	Adder	1.01
314639	6TANGLEW	0.2223	50/50	0.2223
315073	1STONECA	-2.3119	Adder	-2.72
315115	1S HAMPT1	0.9106	50/50	0.9106
315293	1DOMTR9	3.1538	Adder	3.71
315294	1DOMTR10	3.8649	Adder	4.55
315605	6W1-029WIND	0.7347	50/50	0.7347
315611	6Z1-036WIND	0.6720	50/50	0.6720
315614	AA2-178 C	0.8979	50/50	0.8979
316103	AB2-015 C	5.6355	50/50	5.6355
316104	AB2-015 E	4.6211	50/50	4.6211
316132	AB2-190 C	-11.2222	Adder	-13.2
316140	AB2-099 C (Suspended)	0.2608	Adder	0.31
316141	AB2-099 E (Suspended)	0.1118	Adder	0.13
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.4928	50/50	0.4928
316151	AD2-215 E (Withdrawn : 01/14/2021)	1.6574	50/50	1.6574
900672	V4-068 E	0.1360	Adder	0.16
901082	W1-029 E	31.1660	50/50	31.1660
913392	Y1-086 E	0.9927	Adder	1.17
916042	Z1-036 E (Suspended)	28.5366	50/50	28.5366
917122	Z2-027 E	0.6038	50/50	0.6038
917332	Z2-043 E	0.4288	Adder	0.5
917512	Z2-088 E OP1	2.5102	Adder	2.95
918492	AA1-063AE OP	1.4637	Adder	1.72
918512	AA1-065 E OP	1.8982	Adder	2.23
918532	AA1-067 E	0.2664	Adder	0.31
919152	AA1-139 E	2.3556	Adder	2.77
919692	AA2-053 E OP	1.2158	Adder	1.43
920042	AA2-088 E OP	4.9796	Adder	5.86
920692	AA2-178 E	2.4391	50/50	2.4391
923832	AB2-022 E	0.5604	Adder	0.66
925122	AB2-169 E	2.4895	Adder	2.93

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925863	AC1-065 C	-3.4546	Adder	-4.06
926201	AC1-098 C	2.0755	Adder	2.44
926202	AC1-098 E	1.2365	Adder	1.45
926211	AC1-099 C	0.6955	Adder	0.82
926212	AC1-099 E	0.4085	Adder	0.48
926784	AC1-164 C	-11.7319	Adder	-13.8
927024	AC1-189 C	2.8519	Adder	3.36
927025	AC1-189 E	1.4206	Adder	1.67
927145	AC1-208 C	2.7863	Adder	3.28
927146	AC1-208 E	1.2322	Adder	1.45
932591	AC2-079 C O1	2.3271	Adder	2.74
932592	AC2-079 E O1	3.7968	Adder	4.47
932631	AC2-084 C	2.9587	Adder	3.48
932632	AC2-084 E	1.4573	Adder	1.71
933732	AC2-196 E	0.3740	Adder	0.44
933991	AD1-023 C	6.3449	Adder	7.46
933992	AD1-023 E	3.4542	Adder	4.06
934061	AD1-033 C	2.3259	Adder	2.74
934062	AD1-033 E	1.5506	Adder	1.82
934141	AD1-041 C	-2.5974	Adder	-3.06
934521	AD1-076 C	26.4799	Adder	31.15
934522	AD1-076 E	13.4835	Adder	15.86
935111	AD1-144 C	0.4878	50/50	0.4878
935112	AD1-144 E	1.6893	50/50	1.6893
936401	AD2-051 C O1	4.0968	Adder	4.82
936402	AD2-051 E O1	1.7591	Adder	2.07
936661	AD2-085 C	2.1318	50/50	2.1318
936662	AD2-085 E	3.4782	50/50	3.4782
937221	AD2-160 C O1	2.0587	Adder	2.42
937222	AD2-160 E O1	1.0795	Adder	1.27
938222	AE1-035 E	0.5220	Adder	0.61
938535	AE1-072 C	6.7539	Adder	7.95
938536	AE1-072 E	3.4793	Adder	4.09
938771	AE1-103 C	2.5526	50/50	2.5526
938772	AE1-103 E	3.5250	50/50	3.5250
939431	AE1-175 C	-1.6036	Adder	-1.89
940231	AE2-005 C	-0.6281	Adder	-0.74
940491	AE2-034 C	4.2685	50/50	4.2685
940492	AE2-034 E	1.8293	50/50	1.8293
940552	AE2-041 BAT	3.8100	Merchant Transmission	3.8100
940891	AE2-078 C	-2.0407	Adder	-2.4
940901	AE2-079 C	-2.0407	Adder	-2.4
941101	AE2-104 C O1	2.7283	50/50	2.7283
941102	AE2-104 E O1	4.3375	50/50	4.3375
941281	AE2-122 C O1	7.9634	Adder	9.37
941282	AE2-122 E O1	32.1344	Adder	37.81
941291	AE2-123 C O1	8.1839	Adder	9.63
941292	AE2-123 E O1	31.9139	Adder	37.55
941301	AE2-124 C O1	7.6631	Adder	9.02
941302	AE2-124 E O1	33.6248	Adder	39.56
941501	AE2-147 C	10.7469	50/50	10.7469
941502	AE2-147 E	7.1646	50/50	7.1646

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.2581	Adder	0.3
942131	AE2-225 C	2.0101	50/50	2.0101
942132	AE2-225 E	1.3401	50/50	1.3401
942171	AE2-229 C	1.5076	50/50	1.5076
942172	AE2-229 E	1.0051	50/50	1.0051
942341	AE2-247 C	0.9199	50/50	0.9199
942342	AE2-247 E	1.2703	50/50	1.2703
942401	AE2-253 C	2.1654	Adder	2.55
942402	AE2-253 E	0.9728	Adder	1.14
942552	AE2-270 BAT	18.6900	50/50	18.6900
943171	AE2-346 C	0.6260	Adder	0.74
943172	AE2-346 E	0.2683	Adder	0.32
943461	AF1-017 C	0.8323	50/50	0.8323
943462	AF1-017 E	1.3579	50/50	1.3579
943472	AF1-018 BAT	3.8100	Merchant Transmission	3.8100
943611	AF1-032 C	1.6416	50/50	1.6416
943612	AF1-032 E	0.8711	50/50	0.8711
943621	AF1-033 C	-2.0407	Adder	-2.4
944581	AF1-123 C O1	14.1473	Adder	16.64
944582	AF1-123 E O1	32.3933	Adder	38.11
944591	AF1-124 C O1	14.1473	Adder	16.64
944592	AF1-124 E O1	32.3933	Adder	38.11
944601	AF1-125 C O1	14.1473	Adder	16.64
944602	AF1-125 E O1	32.3933	Adder	38.11
944871	AF1-152 C	3.5823	50/50	3.5823
944872	AF1-152 E	2.3882	50/50	2.3882
945363	AF1-201 BAT	3.5272	50/50	3.5272
945711	AF1-236 C O1	46.7295	50/50	46.7295
945712	AF1-236 E O1	28.8629	50/50	28.8629
957491	AF2-043 C	2.0101	50/50	2.0101
957492	AF2-043 E	1.3401	50/50	1.3401
957521	AF2-046 C	7.6262	Adder	8.97
957522	AF2-046 E	3.8360	Adder	4.51
957531	AF2-047 C	10.1427	50/50	10.1427
957532	AF2-047 E	5.1018	50/50	5.1018
957821	AF2-076 C	4.8231	50/50	4.8231
957822	AF2-076 E	3.2154	50/50	3.2154
957861	AF2-080 C	2.5902	Adder	3.05
957862	AF2-080 E	1.1482	Adder	1.35
957871	AF2-081 C	3.6642	Adder	4.31
957872	AF2-081 E	1.5704	Adder	1.85
958161	AF2-110 C	1.1248	50/50	1.1248
958162	AF2-110 E	1.7592	50/50	1.7592
959511	AF2-242 C	3.0152	Adder	3.55
959512	AF2-242 E	2.3452	Adder	2.76
961091	AF2-400 C	0.3043	50/50	0.3043
961092	AF2-400 E	0.4993	50/50	0.4993
961612	AG1-000B BAT	9.7567	50/50	9.7567
961681	AG1-008 C	4.0500	Adder	8.99
961682	AG1-008 E	2.0250	Adder	4.5
961691	AG1-009 BAT	7.8054	50/50	7.8054

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961712	AG1-011 BAT	20.8144	50/50	20.8144
961851	AG1-027 C	13.0729	50/50	13.0729
961852	AG1-027 E	7.2266	50/50	7.2266
961931	AG1-036 C	0.3237	Adder	0.72
961932	AG1-036 E	0.2158	Adder	0.48
961941	AG1-037 C	0.1185	Adder	0.26
961942	AG1-037 E	0.0790	Adder	0.18
962132	AG1-057 BAT	1.0096	Merchant Transmission	1.0096
962331	AG1-082 C	0.4739	Adder	1.05
962332	AG1-082 E	0.3160	Adder	0.7
962341	AG1-083 C	0.4739	Adder	1.05
962342	AG1-083 E	0.3160	Adder	0.7
962351	AG1-084 C	0.4104	Adder	0.91
962352	AG1-084 E	0.2736	Adder	0.61
962361	AG1-085 C	0.4104	Adder	0.91
962362	AG1-085 E	0.2736	Adder	0.61
963613	AG1-210 BAT	0.3898	Merchant Transmission	0.3898
963821	AG1-235 C O2	4.0565	Adder	9.0
963822	AG1-235 E O2	2.7044	Adder	6.0
964023	AG1-256 BAT	0.7207	Merchant Transmission	0.7207
964491	AG1-312 C O1	4.7151	Adder	10.47
964492	AG1-312 E O1	1.1788	Adder	2.62
964501	AG1-313 C O2	0.8712	Adder	1.93
964502	AG1-313 E O2	0.5808	Adder	1.29
964801	AG1-343 C	1.4471	Adder	3.21
964802	AG1-343 E	1.1370	Adder	2.52
964951	AG1-359 O1	4.4647	Adder	9.91
965181	AG1-383 C	0.4787	Adder	1.06
965182	AG1-383 E	0.1418	Adder	0.31
965291	AG1-394 C	0.4977	Adder	1.1
965292	AG1-394 E	0.3318	Adder	0.74
965631	AG1-431	27.0539	50/50	27.0539
965691	AG1-437 C O1	2.5738	Adder	5.71
965692	AG1-437 E O1	1.7159	Adder	3.81
965701	AG1-438 C O1	2.5738	Adder	5.71
965702	AG1-438 E O1	1.7159	Adder	3.81
965711	AG1-439 C O1	4.0234	Adder	8.93
965712	AG1-439 E O1	2.6823	Adder	5.95
965741	AG1-442 O1	1.5014	Adder	3.33
965751	AG1-443 O1	1.5014	Adder	3.33
965761	AG1-444 O1	2.1458	Adder	4.76
966491	AG1-518 O2	8.1975	50/50	8.1975
966663	AG1-536 BAT	3.3231	Merchant Transmission	3.3231
966801	AG1-551 C	0.4699	Adder	1.04
966802	AG1-551 E	0.2014	Adder	0.45
966931	AG1-431A	20.3260	50/50	20.3260
WEC	WEC	0.2205	Confirmed LTF	0.2205
LGEE	LGEE	0.4480	Confirmed LTF	0.4480
CPL	CPL	1.8878	Confirmed LTF	1.8878
CBM-W2	CBM-W2	8.7270	Confirmed LTF	8.7270
NY	NY	0.0935	Confirmed LTF	0.0935
TVA	TVA	1.5876	Confirmed LTF	1.5876

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
O-066	O-066	1.5412	Confirmed LTF	1.5412
SIGE	SIGE	0.1028	Confirmed LTF	0.1028
CBM-S2	CBM-S2	22.1746	Confirmed LTF	22.1746
CBM-S1	CBM-S1	0.4020	Confirmed LTF	0.4020
G-007	G-007	0.2447	Confirmed LTF	0.2447
MEC	MEC	1.2617	Confirmed LTF	1.2617
LAGN	LAGN	1.9792	Confirmed LTF	1.9792
CBM-W1	CBM-W1	9.3934	Confirmed LTF	9.3934

13.5.19 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
163645553	314902	8CARSON	DVP	314914	8MDLTHAN	DVP	1	DVP_P4-2: 557T574	breaker	3938.0	144.72	145.31	DC	68.16

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314295	6BIRDNECK	0.0713	50/50	0.0713
314466	6FENTRES	3.7577	50/50	3.7577
314491	3PENDLTN	0.5318	50/50	0.5318
314550	6HICKORY	6.9329	50/50	6.9329
315102	1BRUNSWICKG1	15.1790	50/50	15.1790
315103	1BRUNSWICKG2	15.1790	50/50	15.1790
315104	1BRUNSWICKG3	15.1790	50/50	15.1790
315105	1BRUNSWICKS1	31.5343	50/50	31.5343
315108	1ELIZAR1	5.1909	50/50	5.1909
315109	1ELIZAR2	5.1008	50/50	5.1008
315110	1ELIZAR3	5.2574	50/50	5.2574
315233	1SURRY 2	40.9975	50/50	40.9975
315241	1Z1-086 GT1	19.5723	50/50	19.5723
315242	1Z1-086 GT2	19.5723	50/50	19.5723
315243	1Z1-086 GT3	19.5723	50/50	19.5723
315244	1Z1-086 ST	34.0240	50/50	34.0240
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	87.4436	50/50	87.4436
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	87.4436	50/50	87.4436
316114	AB2-068 ST (Withdrawn : 01/11/2021)	151.4868	50/50	151.4868
316134	AC1-107 G1	164.2031	50/50	164.2031
316135	AC1-107 G2	164.2031	50/50	164.2031
316136	AC1-107 G3	164.2339	50/50	164.2339
916192	Z1-068 E	3.1628	50/50	3.1628
925522	AC1-027 E	1.9262	50/50	1.9262
926754	AC1-161 C	54.4278	50/50	54.4278
926755	AC1-161 E	23.2338	50/50	23.2338
933294	AC2-141 C	54.4278	50/50	54.4278
933295	AC2-141 E	23.2338	50/50	23.2338
933731	AC2-196 C	0.4782	50/50	0.4782
933732	AC2-196 E	2.0186	50/50	2.0186
934061	AD1-033 C	12.7189	50/50	12.7189
934062	AD1-033 E	8.4792	50/50	8.4792
937221	AD2-160 C O1	9.8738	50/50	9.8738
937222	AD2-160 E O1	5.1777	50/50	5.1777
938494	AE1-068_C1	58.7247	50/50	58.7247
938497	AE1-068_C2	58.7247	50/50	58.7247
938498	AE1-068_E1	32.4627	50/50	32.4627
938499	AE1-068_E2	32.4627	50/50	32.4627
938504	AE1-069_C1	44.7548	50/50	44.7548

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938507	AE1-069_C2	48.2564	50/50	48.2564
938508	AE1-069_E1	25.4596	50/50	25.4596
938509	AE1-069_E2	27.4292	50/50	27.4292
939414	AE1-173_C1	60.3254	50/50	60.3254
939415	AE1-173_C2	51.7075	50/50	51.7075
939416	AE1-173_C3	60.3254	50/50	60.3254
939423	AE1-173_E1	40.2170	50/50	40.2170
939424	AE1-173_E2	34.4717	50/50	34.4717
939425	AE1-173_E3	40.2170	50/50	40.2170
940471	AE2-031 C	64.0285	50/50	64.0285
940472	AE2-031 E	42.6857	50/50	42.6857
940641	AE2-051 C O1	33.9597	50/50	33.9597
940642	AE2-051 E O1	22.6398	50/50	22.6398
941031	AE2-094 C	77.1779	50/50	77.1779
941032	AE2-094 E	34.5661	50/50	34.5661
941281	AE2-122 C O1	47.8845	50/50	47.8845
941282	AE2-122 E O1	193.2256	50/50	193.2256
941291	AE2-123 C O1	49.2105	50/50	49.2105
941292	AE2-123 E O1	191.8997	50/50	191.8997
941301	AE2-124 C O1	44.7802	50/50	44.7802
941302	AE2-124 E O1	196.4900	50/50	196.4900
942401	AE2-253 C	10.3855	50/50	10.3855
942402	AE2-253 E	4.6660	50/50	4.6660
942931	AE2-313 C	69.2012	50/50	69.2012
942932	AE2-313 E	46.1341	50/50	46.1341
944011	AF1-069 C	25.2169	50/50	25.2169
944012	AF1-069 E	9.7962	50/50	9.7962
944581	AF1-123 C O1	82.7966	50/50	82.7966
944582	AF1-123 E O1	189.5810	50/50	189.5810
944591	AF1-124 C O1	82.7966	50/50	82.7966
944592	AF1-124 E O1	189.5810	50/50	189.5810
944601	AF1-125 C O1	82.7966	50/50	82.7966
944602	AF1-125 E O1	189.5810	50/50	189.5810
945811	AF1-246 C O1	12.7441	50/50	12.7441
945812	AF1-246 E O1	17.5989	50/50	17.5989
957481	AF2-042 C	91.0290	50/50	91.0290
957482	AF2-042 E	60.6860	50/50	60.6860
963041	AG1-153 C	10.6506	50/50	10.6506
963042	AG1-153 E	15.9759	50/50	15.9759
963111	AG1-160 C	10.8189	50/50	10.8189
963112	AG1-160 E	16.2284	50/50	16.2284
963291	AG1-178 C O2	122.8013	50/50	122.8013
963351	AG1-184 O2	66.1587	50/50	66.1587
963821	AG1-235 C O2	40.8955	50/50	40.8955
963822	AG1-235 E O2	27.2637	50/50	27.2637
964241	AG1-285 C O2	23.1900	50/50	23.1900
964242	AG1-285 E O2	15.4600	50/50	15.4600
964951	AG1-359 O1	45.4635	50/50	45.4635
965181	AG1-383 C	4.6653	50/50	4.6653
965182	AG1-383 E	1.3817	50/50	1.3817
965811	AG1-449	44.8936	50/50	44.8936
966361	AG1-505 C	30.9933	50/50	30.9933

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
966362	AG1-505 E	20.6622	50/50	20.6622
966371	AG1-506 C	30.9933	50/50	30.9933
966372	AG1-506 E	20.6622	50/50	20.6622
WEC	WEC	1.2065	Confirmed LTF	1.2065
LGEE	LGEE	2.5157	Confirmed LTF	2.5157
CPL	CPL	13.0603	Confirmed LTF	13.0603
CBM-W2	CBM-W2	54.7277	Confirmed LTF	54.7277
NY	NY	2.6555	Confirmed LTF	2.6555
TVA	TVA	10.4468	Confirmed LTF	10.4468
O-066	O-066	36.7593	Confirmed LTF	36.7593
SIG	SIG	1.0235	Confirmed LTF	1.0235
CBM-S2	CBM-S2	156.9236	Confirmed LTF	156.9236
CBM-S1	CBM-S1	2.5969	Confirmed LTF	2.5969
G-007	G-007	5.7760	Confirmed LTF	5.7760
MEC	MEC	7.3412	Confirmed LTF	7.3412
LAGN	LAGN	12.9413	Confirmed LTF	12.9413
AA2-074	AA2-074	8.6256	LTF	8.6256
CBM-W1	CBM-W1	49.8832	Confirmed LTF	49.8832

13.5.20 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
163645743	314903	8CHCKAHM	DVP	314908	8ELMONT	DVP	1	DVP_P1-2: LN 563	single	2442.12	183.13	183.52	DC	41.58

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.6083	80/20	0.6083
314295	6BIRDNECK	0.0728	80/20	0.0728
314421	6WINCHST	0.2201	80/20	0.2201
314491	3PENDLTN	0.5432	80/20	0.5432
314507	3THOMPSN	0.5459	80/20	0.5459
314638	6ELIZ CT	0.3556	80/20	0.3556
314639	6TANGLEW	0.6491	80/20	0.6491
314643	3O INLET	0.7144	80/20	0.7144
315092	1YORKTN3	39.1963	80/20	39.1963
315098	1CHESPKA	0.7220	80/20	0.7220
315099	1CHESPKB (Deactivation : 31/05/2019)	5.0053	80/20	5.0053
315108	1ELIZAR1	5.3195	80/20	5.3195
315109	1ELIZAR2	5.2271	80/20	5.2271
315110	1ELIZAR3	5.3876	80/20	5.3876
315116	1SURRY 1	36.1539	80/20	36.1539
315120	1GRAVEL4	3.7198	80/20	3.7198
315233	1SURRY 2	48.5856	80/20	48.5856
315260	1GOSPORTA	0.5763	80/20	0.5763
315261	1GOSPORTB	0.7361	80/20	0.7361
315262	1GOSPORTC	0.6247	80/20	0.6247
315293	1DOMTR9	8.4474	Adder	9.94
315294	1DOMTR10	10.3521	Adder	12.18
315603	6AA1-139SOLA	3.7715	80/20	3.7715
315605	6W1-029WIND	1.7839	80/20	1.7839
315611	6Z1-036WIND	1.7276	80/20	1.7276
316083	AB2-161 C	3.5863	Adder	4.22
316103	AB2-015 C	10.8609	Adder	12.78
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	165.2340	80/20	165.2340
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	165.2340	80/20	165.2340
316114	AB2-068 ST (Withdrawn : 01/11/2021)	286.2505	80/20	286.2505
316132	AB2-190 C	21.8789	Adder	25.74
316134	AC1-107 G1	310.2793	80/20	310.2793
316135	AC1-107 G2	310.2793	80/20	310.2793
316136	AC1-107 G3	310.3375	80/20	310.3375
316140	AB2-099 C (Suspended)	0.6942	Adder	0.82
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.4566	80/20	0.4566
316258	AE1-162 C	0.5400	80/20	0.5400

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925863	AC1-065 C	8.9827	Adder	10.57
926661	AC1-147 C	0.6105	80/20	0.6105
926754	AC1-161 C	56.7826	80/20	56.7826
926784	AC1-164 C	50.7130	Adder	59.66
932044	AC2-012 C	17.5064	80/20	17.5064
932581	AC2-078 C O1	4.2655	Adder	5.02
932591	AC2-079 C O1	6.8775	Adder	8.09
933294	AC2-141 C	56.7826	80/20	56.7826
933731	AC2-196 C	0.4864	80/20	0.4864
933991	AD1-023 C	16.4881	Adder	19.4
934014	AD1-025 C	19.0719	Adder	22.44
934061	AD1-033 C	12.9436	80/20	12.9436
934141	AD1-041 C	6.4875	Adder	7.63
934521	AD1-076 C	69.1001	Adder	81.29
934575	AD1-082 C	8.1729	Adder	9.62
935111	AD1-144 C	0.4520	80/20	0.4520
935164	AD1-151 C	17.5812	Adder	20.68
936041	AD2-007 C	0.9111	Adder	1.07
936051	AD2-008 C	3.3204	Adder	3.91
936401	AD2-051 C O1	10.6005	Adder	12.47
936661	AD2-085 C	4.3566	Adder	5.13
937221	AD2-160 C O1	10.0056	80/20	10.0056
938494	AE1-068_C1	34.5957	Adder	40.7
938497	AE1-068_C2	34.5957	Adder	40.7
938504	AE1-069_C1	26.3658	Adder	31.02
938507	AE1-069_C2	28.4286	Adder	33.45
938535	AE1-072 C	29.9356	80/20	29.9356
938634	AE1-085 C	0.1609	Adder	0.19
938771	AE1-103 C	4.7010	Adder	5.53
939414	AE1-173_C1	48.4949	80/20	48.4949
939415	AE1-173_C2	41.5670	80/20	41.5670
939416	AE1-173_C3	48.4949	80/20	48.4949
939431	AE1-175 C	4.0622	80/20	4.0622
939611	AE1-191 C	12.9749	Adder	15.26
940061	AE2-000BC O1	11.4934	Adder	13.52
940231	AE2-005 C	1.6332	Adder	1.92
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	298.0885	80/20	298.0885
940471	AE2-031 C	37.7130	Adder	44.37
940491	AE2-034 C	9.4119	Adder	11.07
940551	AE2-041	8.8624	Adder	10.43
940641	AE2-051 C O1	25.3584	80/20	25.3584
940891	AE2-078 C	3.6586	80/20	3.6586
940901	AE2-079 C	3.6586	80/20	3.6586
941031	AE2-094 C	45.4213	Adder	53.44
941101	AE2-104 C O1	5.3617	80/20	5.3617
941281	AE2-122 C O1	48.8761	80/20	48.8761
941291	AE2-123 C O1	50.2294	80/20	50.2294
941301	AE2-124 C O1	45.6831	80/20	45.6831
941501	AE2-147 C	26.0928	80/20	26.0928
941591	AE2-156 O1	30.7590	80/20	30.7590
942131	AE2-225 C	3.5742	80/20	3.5742

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
942171	AE2-229 C	2.6807	80/20	2.6807
942341	AE2-247 C	1.8863	Adder	2.22
942401	AE2-253 C	10.5242	80/20	10.5242
942551	AE2-270	29.8898	Adder	35.16
942931	AE2-313 C	40.7652	Adder	47.96
943171	AE2-346 C	1.6661	Adder	1.96
943431	AF1-014 C	1.5473	Adder	1.82
943461	AF1-017 C	1.7067	Adder	2.01
943471	AF1-018	8.8624	Adder	10.43
943611	AF1-032 C	2.9189	80/20	2.9189
943621	AF1-033 C	3.6586	80/20	3.6586
944011	AF1-069 C	14.8409	Adder	17.46
944581	AF1-123 C O1	84.0753	80/20	84.0753
944591	AF1-124 C O1	84.0753	80/20	84.0753
944601	AF1-125 C O1	84.0753	80/20	84.0753
944871	AF1-152 C	8.6976	80/20	8.6976
945361	AF1-201 C O1	26.6814	80/20	26.6814
945711	AF1-236 C O1	103.0384	Adder	121.22
957491	AF2-043 C	3.5742	80/20	3.5742
957521	AF2-046 C	19.9647	Adder	23.49
957531	AF2-047 C	22.3646	Adder	26.31
957601	AF2-054 C	2.6029	Adder	3.06
957631	AF2-057	6.1426	80/20	6.1426
957711	AF2-065 C	15.2438	Adder	17.93
957821	AF2-076 C	8.7750	80/20	8.7750
957831	AF2-077 C	3.4444	80/20	3.4444
957871	AF2-081 C	17.0100	80/20	17.0100
958161	AF2-110 C	2.2104	80/20	2.2104
959511	AF2-242 C	8.5768	Adder	10.09
961091	AF2-400 C	0.5865	Adder	0.69
961681	AG1-008 C	10.6025	Adder	23.53
961711	AG1-011	17.1687	Adder	38.11
961851	AG1-027 C	26.6172	80/20	26.6172
961931	AG1-036 C	0.8549	Adder	1.9
961941	AG1-037 C	0.3154	Adder	0.7
962131	AG1-057	2.3485	Adder	5.21
962321	AG1-081 C (Withdrawn : 01/15/2021)	3.3260	80/20	3.3260
962331	AG1-082 C	1.2615	Adder	2.8
962341	AG1-083 C	1.2615	Adder	2.8
962351	AG1-084 C	1.1000	Adder	2.44
962361	AG1-085 C	1.1000	Adder	2.44
962531	AG1-102 C	1.7681	80/20	1.7681
962961	AG1-145 C	3.6652	80/20	3.6652
962971	AG1-146 C	1.8384	Adder	4.08
962981	AG1-147 C	4.2896	Adder	9.52
963041	AG1-153 C	3.3297	Adder	7.39
963111	AG1-160 C	3.3798	Adder	7.5
963221	AG1-171 C	1.2424	Adder	2.76
963231	AG1-172 C	1.2424	Adder	2.76
963241	AG1-173 C	1.2424	Adder	2.76
963251	AG1-174 C	1.2424	Adder	2.76

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963261	AG1-175 C	1.2424	Adder	2.76
963291	AG1-178 C O2	89.8654	80/20	89.8654
963351	AG1-184 O2	48.4146	80/20	48.4146
963821	AG1-235 C O2	41.5841	80/20	41.5841
964491	AG1-312 C O1	12.1221	Adder	26.91
964801	AG1-343 C	3.7375	Adder	8.3
964951	AG1-359 O1	46.2435	80/20	46.2435
965001	AG1-364 C O2	12.2564	80/20	12.2564
965181	AG1-383 C	4.7390	80/20	4.7390
965291	AG1-394 C	1.2828	Adder	2.85
965631	AG1-431	31.6165	Adder	70.18
965691	AG1-437 C O1	6.6656	Adder	14.8
965701	AG1-438 C O1	6.6656	Adder	14.8
965741	AG1-442 O1	3.8883	Adder	8.63
965751	AG1-443 O1	3.8883	Adder	8.63
965811	AG1-449	14.0145	Adder	31.11
966361	AG1-505 C	9.7134	Adder	21.56
966371	AG1-506 C	9.7134	Adder	21.56
966491	AG1-518 O2	14.8630	80/20	14.8630
966611	AG1-531 C	10.5001	80/20	10.5001
966731	AG1-544 C	3.8426	Adder	8.53
966741	AG1-545 C	1.2858	Adder	2.85
966931	AG1-431A	23.7540	Adder	52.73
WEC	WEC	0.5714	Confirmed LTF	0.5714
LGEE	LGEE	1.1894	Confirmed LTF	1.1894
CPL	CPL	9.3434	Confirmed LTF	9.3434
CBM-W2	CBM-W2	31.1539	Confirmed LTF	31.1539
NY	NY	1.8006	Confirmed LTF	1.8006
TVA	TVA	6.2356	Confirmed LTF	6.2356
SIGE	SIGE	0.5991	Confirmed LTF	0.5991
CBM-S2	CBM-S2	107.7304	Confirmed LTF	107.7304
CBM-S1	CBM-S1	1.5158	Confirmed LTF	1.5158
MEC	MEC	3.7945	Confirmed LTF	3.7945
LAGN	LAGN	7.7578	Confirmed LTF	7.7578
AA2-074	AA2-074	6.1659	LTF	6.1659
CBM-W1	CBM-W1	22.9648	Confirmed LTF	22.9648

13.5.21 Index 21

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
168718112	314903	8CHCKAHM	DVP	314214	6CHCKAHM	DVP	1	DVP_P1-2: LN 557	single	934.92	206.67	207.76	DC	12.71

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.1798	80/20	0.1798
314295	6BIRDNECK	0.0219	80/20	0.0219
314491	3PENDLTN	0.1632	80/20	0.1632
314507	3THOMPSN	0.1614	80/20	0.1614
314638	6ELIZ CT	0.1051	80/20	0.1051
314639	6TANGLEW	0.1904	80/20	0.1904
314643	3O INLET	0.2146	80/20	0.2146
315098	1CHESPKA	0.2139	80/20	0.2139
315099	1CHESPKB (Deactivation : 31/05/2019)	1.4832	80/20	1.4832
315108	1ELIZAR1	1.5929	80/20	1.5929
315109	1ELIZAR2	1.5653	80/20	1.5653
315110	1ELIZAR3	1.6133	80/20	1.6133
315115	1S HAMPT1	0.5234	80/20	0.5234
315233	1SURRY 2	19.8580	80/20	19.8580
315242	1Z1-086 GT2	3.1663	80/20	3.1663
315243	1Z1-086 GT3	3.1663	80/20	3.1663
315244	1Z1-086 ST	5.5042	80/20	5.5042
315260	1GOSPORTA	0.1706	80/20	0.1706
315261	1GOSPORTB	0.2180	80/20	0.2180
315262	1GOSPORTC	0.1850	80/20	0.1850
315292	1DOMTR78	0.5064	80/20	0.5064
315293	1DOMTR9	2.6190	80/20	2.6190
315294	1DOMTR10	3.2095	80/20	3.2095
315602	1HOLLOMANSOL	0.5115	80/20	0.5115
315603	6AA1-139SOLA	1.1387	80/20	1.1387
315605	6W1-029WIND	0.5141	80/20	0.5141
315611	6Z1-036WIND	0.4911	80/20	0.4911
315614	AA2-178 C	0.6388	80/20	0.6388
316103	AB2-015 C	3.1900	80/20	3.1900
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	119.3964	80/20	119.3964
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	119.3964	80/20	119.3964
316114	AB2-068 ST (Withdrawn : 01/11/2021)	206.8417	80/20	206.8417
316134	AC1-107 G1	224.2047	80/20	224.2047
316135	AC1-107 G2	224.2047	80/20	224.2047
316136	AC1-107 G3	224.2467	80/20	224.2467
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.1161	80/20	0.1161
316258	AE1-162 C	0.1123	80/20	0.1123

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
925121	AB2-169 C	0.3687	80/20	0.3687
925863	AC1-065 C	-2.9120	Adder	-3.43
926661	AC1-147 C	0.1809	80/20	0.1809
926754	AC1-161 C	20.8232	80/20	20.8232
926784	AC1-164 C	-31.4326	Adder	-36.98
932044	AC2-012 C	5.1876	80/20	5.1876
933294	AC2-141 C	20.8232	80/20	20.8232
933731	AC2-196 C	0.1487	80/20	0.1487
933991	AD1-023 C	5.1228	80/20	5.1228
934061	AD1-033 C	3.9488	80/20	3.9488
934141	AD1-041 C	-1.9518	Adder	-2.3
934521	AD1-076 C	21.7595	80/20	21.7595
935111	AD1-144 C	0.1149	80/20	0.1149
936401	AD2-051 C O1	3.1450	80/20	3.1450
937221	AD2-160 C O1	3.0324	80/20	3.0324
938221	AE1-035 C	0.1279	80/20	0.1279
938494	AE1-068_C1	9.4974	80/20	9.4974
938497	AE1-068_C2	9.4974	80/20	9.4974
938504	AE1-069_C1	7.2381	80/20	7.2381
938507	AE1-069_C2	7.8044	80/20	7.8044
938535	AE1-072 C	9.0031	80/20	9.0031
938771	AE1-103 C	1.4009	80/20	1.4009
939414	AE1-173_C1	13.3526	80/20	13.3526
939415	AE1-173_C2	11.4451	80/20	11.4451
939416	AE1-173_C3	13.3526	80/20	13.3526
940231	AE2-005 C	-0.5295	Adder	-0.62
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	89.1450	80/20	89.1450
940471	AE2-031 C	10.3460	80/20	10.3460
940491	AE2-034 C	3.0366	80/20	3.0366
940641	AE2-051 C O1	6.6708	80/20	6.6708
941031	AE2-094 C	12.4755	80/20	12.4755
941101	AE2-104 C O1	1.4033	80/20	1.4033
941281	AE2-122 C O1	14.7284	80/20	14.7284
941291	AE2-123 C O1	15.1363	80/20	15.1363
941301	AE2-124 C O1	13.7882	80/20	13.7882
941501	AE2-147 C	7.5195	80/20	7.5195
941591	AE2-156 O1	9.1500	80/20	9.1500
942131	AE2-225 C	1.0211	80/20	1.0211
942151	AE2-227 C	-0.7843	Adder	-0.92
942171	AE2-229 C	0.7658	80/20	0.7658
942401	AE2-253 C	3.1895	80/20	3.1895
942931	AE2-313 C	11.1815	80/20	11.1815
943611	AF1-032 C	0.8339	80/20	0.8339
944011	AF1-069 C	4.0762	80/20	4.0762
944581	AF1-123 C O1	26.7901	80/20	26.7901
944591	AF1-124 C O1	26.7901	80/20	26.7901
944601	AF1-125 C O1	26.7901	80/20	26.7901
944871	AF1-152 C	2.5065	80/20	2.5065
945711	AF1-236 C O1	33.2435	80/20	33.2435
957491	AF2-043 C	1.0211	80/20	1.0211
957531	AF2-047 C	7.2155	80/20	7.2155

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957631	AF2-057	1.8202	80/20	1.8202
957821	AF2-076 C	2.4858	80/20	2.4858
957871	AF2-081 C	5.1358	80/20	5.1358
958161	AF2-110 C	0.5785	80/20	0.5785
959641	AF2-255 C	-0.1961	Adder	-0.23
961091	AF2-400 C	0.1723	80/20	0.1723
961851	AG1-027 C	6.8827	80/20	6.8827
963291	AG1-178 C O2	22.4826	80/20	22.4826
963351	AG1-184 O2	12.1124	80/20	12.1124
963821	AG1-235 C O2	12.7062	80/20	12.7062
964491	AG1-312 C O1	6.8578	80/20	6.8578
964951	AG1-359 O1	14.1390	80/20	14.1390
965001	AG1-364 C O2	3.5976	80/20	3.5976
965181	AG1-383 C	1.4444	80/20	1.4444
965631	AG1-431	19.2463	80/20	19.2463
965691	AG1-437 C O1	3.8640	80/20	3.8640
965701	AG1-438 C O1	3.8640	80/20	3.8640
965741	AG1-442 O1	2.2540	80/20	2.2540
965751	AG1-443 O1	2.2540	80/20	2.2540
965811	AG1-449	7.2541	80/20	7.2541
966491	AG1-518 O2	4.2490	80/20	4.2490
966931	AG1-431A	14.4600	80/20	14.4600
WEC	WEC	0.1695	Confirmed LTF	0.1695
LGEE	LGEE	0.3493	Confirmed LTF	0.3493
CPL	CPL	2.1983	Confirmed LTF	2.1983
CBM-W2	CBM-W2	8.1894	Confirmed LTF	8.1894
NY	NY	0.3534	Confirmed LTF	0.3534
TVA	TVA	1.5890	Confirmed LTF	1.5890
SIGE	SIGE	0.1392	Confirmed LTF	0.1392
CBM-S2	CBM-S2	25.6720	Confirmed LTF	25.6720
CBM-S1	CBM-S1	0.3914	Confirmed LTF	0.3914
MEC	MEC	1.0615	Confirmed LTF	1.0615
LAGN	LAGN	1.9775	Confirmed LTF	1.9775
AA2-074	AA2-074	1.4512	LTF	1.4512
CBM-W1	CBM-W1	6.9820	Confirmed LTF	6.9820

13.5.22 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
163645710	314908	8ELMONT	DVP	314911	8LADYSMITH	DVP	1	DVP_P1-2: LN 576	single	2442.12	219.03	219.08	DC	42.13

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314229	6MT RD221	0.2111	80/20	0.2111
314236	6NRTHEST	0.3205	80/20	0.3205
314241	6OLDCHRC	1.4851	80/20	1.4851
314250	6ROCKVILLE	0.5532	80/20	0.5532
314309	6IRON208	0.7631	80/20	0.7631
314421	6WINCHST	0.2285	80/20	0.2285
315058	1CHESTF3 (Deactivation : 13/12/2018)	32.0440	80/20	32.0440
315059	1CHESTF4 (Deactivation : 13/12/2018)	51.9433	80/20	51.9433
315060	1CHESTF5 (Deactivation : 31/05/2023)	114.1420	80/20	114.1420
315061	1CHESTG7	6.7247	80/20	6.7247
315062	1CHESTS7	3.0871	80/20	3.0871
315063	1CHESTG8	6.6167	80/20	6.6167
315064	1CHESTS8	3.4061	80/20	3.4061
315065	1CHESTF6 (Deactivation : 31/05/2023)	182.6276	Adder	214.86
315067	1DARBY 1	4.4333	80/20	4.4333
315068	1DARBY 2	4.4384	80/20	4.4384
315069	1DARBY 3	4.4540	80/20	4.4540
315070	1DARBY 4	4.4592	80/20	4.4592
315074	1HOPCGN1 (Deactivation : 25/06/2019)	0.0320	80/20	0.0320
315075	1HOPCGN2 (Deactivation : 25/06/2019)	0.0320	80/20	0.0320
315076	1HOPPOLC	2.6791	80/20	2.6791
315077	1HOPHCF1	4.1877	80/20	4.1877
315078	1HOPHCF2	4.1877	80/20	4.1877
315079	1HOPHCF3	4.1877	80/20	4.1877
315080	1HOPHCF4	6.3573	80/20	6.3573
315083	1SPRUNCA (Deactivation : 12/01/2021)	15.5433	Adder	18.29
315084	1SPRUNCB (Deactivation : 12/01/2021)	15.5433	Adder	18.29
315092	1YORKTN3	40.1074	80/20	40.1074
315233	1SURRY 2	43.8786	80/20	43.8786
316033	AB2-134 C	3.6034	80/20	3.6034
316075	AC2-137 C	0.5978	80/20	0.5978
316083	AB2-161 C	4.9845	Adder	5.86
316103	AB2-015 C	12.2332	Adder	14.39
316108	AB2-160 C	8.0636	Adder	9.49

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	112.2311	80/20	112.2311
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	112.2311	80/20	112.2311
316114	AB2-068 ST (Withdrawn : 01/11/2021)	194.4286	80/20	194.4286
316132	AB2-190 C	35.6664	80/20	35.6664
316134	AC1-107 G1	210.7495	80/20	210.7495
316135	AC1-107 G2	210.7495	80/20	210.7495
316136	AC1-107 G3	210.7890	80/20	210.7890
925863	AC1-065 C	10.6888	Adder	12.58
926754	AC1-161 C	53.7550	80/20	53.7550
926784	AC1-164 C	73.8929	80/20	73.8929
927044	AC1-191 C	14.0019	Adder	16.47
927225	AC1-216 C	2.7506	80/20	2.7506
932044	AC2-012 C	15.1881	Adder	17.87
932501	AC2-070 C (Withdrawn : 01/22/2021)	0.4880	80/20	0.4880
932581	AC2-078 C O1	5.9830	Adder	7.04
932591	AC2-079 C O1	8.4424	Adder	9.93
933294	AC2-141 C	53.7550	80/20	53.7550
934014	AD1-025 C	29.9650	80/20	29.9650
934061	AD1-033 C	11.1488	Adder	13.12
934141	AD1-041 C	7.5903	Adder	8.93
934575	AD1-082 C	11.3595	Adder	13.36
935164	AD1-151 C	28.6605	80/20	28.6605
936041	AD2-007 C	1.4315	80/20	1.4315
936051	AD2-008 C	5.2168	80/20	5.2168
936151	AD2-021	0.0682	80/20	0.0682
936661	AD2-085 C	5.0562	Adder	5.95
936761	AD2-097 C	2.9479	Adder	3.47
937221	AD2-160 C O1	8.6556	Adder	10.18
938535	AE1-072 C	26.0023	Adder	30.59
938634	AE1-085 C	13.1232	Adder	15.44
938771	AE1-103 C	5.2299	Adder	6.15
939195	AE1-149 C	15.7651	Adder	18.55
939414	AE1-173_C1	42.9257	Adder	50.5
939415	AE1-173_C2	36.7934	Adder	43.29
939416	AE1-173_C3	42.9257	Adder	50.5
939431	AE1-175 C	4.3577	80/20	4.3577
939611	AE1-191 C	15.1807	Adder	17.86
940061	AE2-000BC O1	15.7340	Adder	18.51
940231	AE2-005 C	1.9434	Adder	2.29
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	257.8906	Adder	303.4
940431	AE2-027 C O1	19.2994	Adder	22.71
940481	AE2-033 C	21.7350	Adder	25.57
940491	AE2-034 C	10.2123	Adder	12.01
940541	AE2-040	3.8606	Adder	4.54
940551	AE2-041	10.3397	Adder	12.16
940641	AE2-051 C O1	22.6991	Adder	26.7
940651	AE2-052	5.2550	Adder	6.18
940891	AE2-078 C	4.1909	80/20	4.1909

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940901	AE2-079 C	4.1909	80/20	4.1909
941031	AE2-094 C	49.8737	Adder	58.67
941101	AE2-104 C O1	4.9240	Adder	5.79
941281	AE2-122 C O1	42.2321	Adder	49.68
941291	AE2-123 C O1	43.4015	Adder	51.06
941301	AE2-124 C O1	39.4579	Adder	46.42
941501	AE2-147 C	23.1382	Adder	27.22
941581	AE2-155 C	0.1857	80/20	0.1857
941591	AE2-156 O1	26.6526	Adder	31.36
942001	AE2-212 C	3.1839	Adder	3.75
942131	AE2-225 C	3.1468	Adder	3.7
942151	AE2-227 C	3.8953	80/20	3.8953
942161	AE2-228 C	3.2195	Adder	3.79
942171	AE2-229 C	2.3601	Adder	2.78
942341	AE2-247 C	2.1916	Adder	2.58
942371	AE2-250 C O1	14.3236	Adder	16.85
942401	AE2-253 C	9.1042	Adder	10.71
942551	AE2-270	47.7375	80/20	47.7375
943431	AF1-014 C	1.8411	Adder	2.17
943461	AF1-017 C	1.9829	Adder	2.33
943471	AF1-018	10.3397	Adder	12.16
943611	AF1-032 C	2.5699	Adder	3.02
943621	AF1-033 C	4.1909	80/20	4.1909
944011	AF1-069 C	16.2956	Adder	19.17
944581	AF1-123 C O1	71.3344	Adder	83.92
944591	AF1-124 C O1	71.3344	Adder	83.92
944601	AF1-125 C O1	71.3344	Adder	83.92
944631	AF1-128 O1	100.0862	80/20	100.0862
944641	AF1-129	153.2445	Adder	180.29
944871	AF1-152 C	7.7127	Adder	9.07
945361	AF1-201 C O1	23.9575	Adder	28.19
945711	AF1-236 C O1	111.8008	Adder	131.53
946011	AF1-266	18.1939	Adder	21.4
946261	AF1-291 C	3.2203	Adder	3.79
957491	AF2-043 C	3.1468	Adder	3.7
957531	AF2-047 C	24.2665	Adder	28.55
957601	AF2-054 C	2.9790	Adder	3.5
957631	AF2-057	5.3292	Adder	6.27
957711	AF2-065 C	24.3461	80/20	24.3461
957821	AF2-076 C	7.7829	Adder	9.16
957831	AF2-077 C	3.1471	Adder	3.7
957871	AF2-081 C	14.7441	Adder	17.35
957911	AF2-085	5.0310	Adder	5.92
958141	AF2-108	2.6198	Adder	3.08
958161	AF2-110 C	2.0300	Adder	2.39
959641	AF2-255 C	0.9738	80/20	0.9738
959651	AF2-256 C	0.8049	Adder	0.95
959661	AF2-257 C	0.8051	Adder	0.95
959671	AF2-258 C	0.7960	Adder	0.94
959681	AF2-259 C	3.9297	Adder	4.62
961091	AF2-400 C	0.6606	Adder	0.78
961711	AG1-011	50.8960	80/20	50.8960

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
961851	AG1-027 C	13.0994	Adder	29.08
962131	AG1-057	2.7400	Adder	6.08
962191	AG1-064 C	2.5838	80/20	2.5838
962201	AG1-065 C	2.5838	80/20	2.5838
962271	AG1-075 C O2	12.0632	Adder	26.78
962321	AG1-081 C (Withdrawn : 01/15/2021)	3.8099	80/20	3.8099
962531	AG1-102 C	0.8562	Adder	1.9
962961	AG1-145 C	3.9318	80/20	3.9318
963221	AG1-171 C	3.8214	80/20	3.8214
963231	AG1-172 C	3.8214	80/20	3.8214
963241	AG1-173 C	3.8214	80/20	3.8214
963251	AG1-174 C	3.8214	80/20	3.8214
963261	AG1-175 C	3.8214	80/20	3.8214
963291	AG1-178 C O2	43.1822	Adder	95.85
963351	AG1-184 O2	23.2642	Adder	51.64
963821	AG1-235 C O2	18.9799	Adder	42.13
964951	AG1-359 O1	21.0983	Adder	46.83
965001	AG1-364 C O2	5.6504	Adder	12.54
965181	AG1-383 C	2.1659	Adder	4.81
965631	AG1-431	34.3052	Adder	76.15
965811	AG1-449	11.9929	Adder	26.62
966491	AG1-518 O2	6.9393	Adder	15.4
966611	AG1-531 C	11.4995	80/20	11.4995
966731	AG1-544 C	5.4321	Adder	12.06
966741	AG1-545 C	1.8110	Adder	4.02
966871	AG1-558 C	1.6676	Adder	3.7
966931	AG1-431A	25.7740	Adder	57.21
WEC	WEC	1.7338	Confirmed LTF	1.7338
LGEE	LGEE	3.6649	Confirmed LTF	3.6649
CPL	CPL	12.6624	Confirmed LTF	12.6624
CBM-W2	CBM-W2	69.0010	Confirmed LTF	69.0010
NY	NY	3.9628	Confirmed LTF	3.9628
TVA	TVA	12.6700	Confirmed LTF	12.6700
SIGE	SIGE	1.5098	Confirmed LTF	1.5098
CBM-S2	CBM-S2	160.4524	Confirmed LTF	160.4524
CBM-S1	CBM-S1	3.2167	Confirmed LTF	3.2167
MEC	MEC	9.9678	Confirmed LTF	9.9678
LAGN	LAGN	15.5628	Confirmed LTF	15.5628
AA2-074	AA2-074	8.3718	LTF	8.3718
CBM-W1	CBM-W1	72.3572	Confirmed LTF	72.3572

13.5.23 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
163645775	314914	8MDLTHAN	DVP	314918	8NO ANNA	DVP	1	DVP_P1-2: LN 574	single	2442.12	175.88	176.25	DC	37.59

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313506	AB1-173 C OP	8.5459	Adder	10.05
313526	AB2-022 C	0.5622	80/20	0.5622
314295	6BIRDNECK	0.0659	80/20	0.0659
314435	6SAPONY	0.5994	80/20	0.5994
314491	3PENDLTN	0.4916	80/20	0.4916
314507	3THOMPSN	0.4946	80/20	0.4946
314572	3EMPORIA	0.5341	Adder	0.63
314638	6ELIZ CT	0.3286	80/20	0.3286
314639	6TANGLEW	0.6031	80/20	0.6031
314643	3O INLET	0.6534	80/20	0.6534
315065	1CHESTF6 (Deactivation : 31/05/2023)	145.8715	Adder	171.61
315074	1HOPCGN1 (Deactivation : 25/06/2019)	0.0214	Adder	0.03
315075	1HOPCGN2 (Deactivation : 25/06/2019)	0.0214	Adder	0.03
315083	1SPRUNCA (Deactivation : 12/01/2021)	13.1246	Adder	15.44
315084	1SPRUNCB (Deactivation : 12/01/2021)	13.1246	Adder	15.44
315098	1CHESPKA	0.6537	80/20	0.6537
315099	1CHESPKB (Deactivation : 31/05/2019)	4.5317	80/20	4.5317
315102	1BRUNSWICKG1	12.9917	80/20	12.9917
315103	1BRUNSWICKG2	12.9917	80/20	12.9917
315104	1BRUNSWICKG3	12.9917	80/20	12.9917
315105	1BRUNSWICKS1	26.9901	80/20	26.9901
315108	1ELIZAR1	4.8060	80/20	4.8060
315109	1ELIZAR2	4.7226	80/20	4.7226
315110	1ELIZAR3	4.8675	80/20	4.8675
315233	1SURRY 2	35.9591	80/20	35.9591
315241	1Z1-086 GT1	16.6986	80/20	16.6986
315242	1Z1-086 GT2	16.6986	80/20	16.6986
315243	1Z1-086 GT3	16.6986	80/20	16.6986
315244	1Z1-086 ST	29.0284	80/20	29.0284
315260	1GOSPORTA	0.5220	80/20	0.5220
315261	1GOSPORTB	0.6667	80/20	0.6667
315262	1GOSPORTC	0.5658	80/20	0.5658
315293	1DOMTR9	8.7258	Adder	10.27
315294	1DOMTR10	10.6934	Adder	12.58
315603	6AA1-139SOLA	3.4369	80/20	3.4369
315605	6W1-029WIND	1.6716	80/20	1.6716

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
315611	6Z1-036WIND	1.6481	80/20	1.6481
316083	AB2-161 C	5.0935	80/20	5.0935
316103	AB2-015 C	11.1329	Adder	13.1
316108	AB2-160 C	6.7143	Adder	7.9
316132	AB2-190 C	24.4835	Adder	28.8
316140	AB2-099 C (Suspended)	0.7462	Adder	0.88
316150	AD2-215 C (Withdrawn : 01/14/2021)	0.4209	80/20	0.4209
316258	AE1-162 C	0.5108	80/20	0.5108
923991	AB2-040 C O1	9.3074	Adder	10.95
926070	AC1-086 C	5.5202	Adder	6.49
926661	AC1-147 C	0.5528	80/20	0.5528
926754	AC1-161 C	47.5821	80/20	47.5821
932044	AC2-012 C	15.8500	80/20	15.8500
932581	AC2-078 C O1	6.1088	80/20	6.1088
932591	AC2-079 C O1	8.7326	80/20	8.7326
933294	AC2-141 C	47.5821	80/20	47.5821
933731	AC2-196 C	0.4394	80/20	0.4394
933991	AD1-023 C	16.8659	Adder	19.84
934014	AD1-025 C	20.7125	Adder	24.37
934061	AD1-033 C	11.6962	80/20	11.6962
934521	AD1-076 C	69.9533	Adder	82.3
934575	AD1-082 C	11.6079	80/20	11.6079
934615	AD1-087 C	9.6681	Adder	11.37
935111	AD1-144 C	0.4166	80/20	0.4166
935164	AD1-151 C	19.6743	Adder	23.15
935171	AD1-152 C O1	10.6194	Adder	12.49
936041	AD2-007 C	0.9895	Adder	1.16
936051	AD2-008 C	3.6060	Adder	4.24
936401	AD2-051 C O1	11.2116	Adder	13.19
936661	AD2-085 C	5.2613	80/20	5.2613
936761	AD2-097 C	2.4892	Adder	2.93
937221	AD2-160 C O1	9.0951	80/20	9.0951
937481	AD2-202 C O1	2.8318	Adder	3.33
938494	AE1-068_C1	49.9889	80/20	49.9889
938497	AE1-068_C2	49.9889	80/20	49.9889
938504	AE1-069_C1	38.0971	80/20	38.0971
938507	AE1-069_C2	41.0778	80/20	41.0778
938535	AE1-072 C	27.3517	80/20	27.3517
938551	AE1-074 C	0.6107	80/20	0.6107
938634	AE1-085 C	13.3895	80/20	13.3895
938771	AE1-103 C	4.7311	Adder	5.57
939195	AE1-149 C	16.0272	80/20	16.0272
939414	AE1-173_C1	51.9170	80/20	51.9170
939415	AE1-173_C2	44.5003	80/20	44.5003
939416	AE1-173_C3	51.9170	80/20	51.9170
940061	AE2-000BC O1	16.1010	80/20	16.1010
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	269.3798	80/20	269.3798
940431	AE2-027 C O1	15.4401	Adder	18.16
940471	AE2-031 C	54.5281	80/20	54.5281
940481	AE2-033 C	24.3299	80/20	24.3299
940491	AE2-034 C	9.3106	Adder	10.95

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940541	AE2-040	4.3222	80/20	4.3222
940641	AE2-051 C O1	28.7217	80/20	28.7217
940651	AE2-052	5.3424	80/20	5.3424
940891	AE2-078 C	2.9568	Adder	3.48
940901	AE2-079 C	2.9568	Adder	3.48
941031	AE2-094 C	65.4234	80/20	65.4234
941101	AE2-104 C O1	5.1652	80/20	5.1652
941281	AE2-122 C O1	44.2187	80/20	44.2187
941291	AE2-123 C O1	45.4431	80/20	45.4431
941301	AE2-124 C O1	41.3261	80/20	41.3261
941501	AE2-147 C	24.4512	80/20	24.4512
941591	AE2-156 O1	27.8230	80/20	27.8230
942001	AE2-212 C	2.6624	Adder	3.13
942131	AE2-225 C	3.3058	80/20	3.3058
942161	AE2-228 C	2.6023	Adder	3.06
942171	AE2-229 C	2.4793	80/20	2.4793
942341	AE2-247 C	2.2803	80/20	2.2803
942371	AE2-250 C O1	11.9267	Adder	14.03
942401	AE2-253 C	9.5665	80/20	9.5665
942471	AE2-260 C O1	18.4328	Adder	21.69
942551	AE2-270	32.8950	Adder	38.7
942931	AE2-313 C	58.9598	80/20	58.9598
943171	AE2-346 C	1.7909	Adder	2.11
943461	AF1-017 C	2.0631	80/20	2.0631
943611	AF1-032 C	2.6997	80/20	2.6997
943621	AF1-033 C	2.9568	Adder	3.48
944011	AF1-069 C	21.3763	80/20	21.3763
944581	AF1-123 C O1	75.0792	80/20	75.0792
944591	AF1-124 C O1	75.0792	80/20	75.0792
944601	AF1-125 C O1	75.0792	80/20	75.0792
944641	AF1-129	122.4021	Adder	144.0
944871	AF1-152 C	8.1504	80/20	8.1504
945711	AF1-236 C O1	101.9285	Adder	119.92
945811	AF1-246 C O1	11.5823	80/20	11.5823
946011	AF1-266	20.3661	80/20	20.3661
946261	AF1-291 C	2.6015	Adder	3.06
946281	AF1-292 C	1.9090	Adder	2.25
957481	AF2-042 C	82.7310	80/20	82.7310
957491	AF2-043 C	3.3058	80/20	3.3058
957521	AF2-046 C	21.4450	Adder	25.23
957531	AF2-047 C	22.1237	Adder	26.03
957631	AF2-057	5.5614	80/20	5.5614
957711	AF2-065 C	16.7764	Adder	19.74
957821	AF2-076 C	8.1999	80/20	8.1999
957871	AF2-081 C	15.5008	80/20	15.5008
957911	AF2-085	6.6022	80/20	6.6022
958141	AF2-108	2.6769	80/20	2.6769
958161	AF2-110 C	2.1294	80/20	2.1294
958501	AF2-144 C	2.2982	Adder	2.7
959531	AF2-244 C (Withdrawn : 01/06/2021)	2.1180	Adder	2.49
959651	AF2-256 C	0.6506	Adder	0.77

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
959661	AF2-257 C	0.6504	Adder	0.77
959671	AF2-258 C	0.6656	Adder	0.78
959681	AF2-259 C	4.0154	80/20	4.0154
959751	AF2-266	11.0759	Adder	13.03
960081	AF2-299 C	3.2173	Adder	3.79
961091	AF2-400 C	0.6012	Adder	0.71
961681	AG1-008 C	11.3886	Adder	25.28
961711	AG1-011	18.6457	Adder	41.39
961851	AG1-027 C	26.0714	80/20	26.0714
961931	AG1-036 C	0.9186	Adder	2.04
961941	AG1-037 C	0.3390	Adder	0.75
962271	AG1-075 C O2	25.4781	80/20	25.4781
962321	AG1-081 C (Withdrawn : 01/15/2021)	1.4246	Adder	3.16
962331	AG1-082 C	1.3560	Adder	3.01
962341	AG1-083 C	1.3560	Adder	3.01
962351	AG1-084 C	1.1827	Adder	2.63
962361	AG1-085 C	1.1827	Adder	2.63
962571	AG1-106 C	3.8507	Adder	8.55
963041	AG1-153 C	9.1158	80/20	9.1158
963111	AG1-160 C	9.2304	80/20	9.2304
963221	AG1-171 C	1.3903	Adder	3.09
963231	AG1-172 C	1.3903	Adder	3.09
963241	AG1-173 C	1.3903	Adder	3.09
963251	AG1-174 C	1.3903	Adder	3.09
963261	AG1-175 C	1.3903	Adder	3.09
963291	AG1-178 C O2	104.1010	80/20	104.1010
963351	AG1-184 O2	56.0840	80/20	56.0840
963821	AG1-235 C O2	37.5867	80/20	37.5867
964241	AG1-285 C O2	20.9302	80/20	20.9302
964491	AG1-312 C O1	12.7300	Adder	28.26
964801	AG1-343 C	4.0122	Adder	8.91
964951	AG1-359 O1	41.7780	80/20	41.7780
965001	AG1-364 C O2	11.1116	80/20	11.1116
965181	AG1-383 C	4.2908	80/20	4.2908
965291	AG1-394 C	1.3770	Adder	3.06
965631	AG1-431	31.2759	Adder	69.42
965691	AG1-437 C O1	6.8756	Adder	15.26
965701	AG1-438 C O1	6.8756	Adder	15.26
965741	AG1-442 O1	4.0108	Adder	8.9
965751	AG1-443 O1	4.0108	Adder	8.9
965811	AG1-449	38.2324	80/20	38.2324
966361	AG1-505 C	26.9271	80/20	26.9271
966371	AG1-506 C	26.9271	80/20	26.9271
966491	AG1-518 O2	13.7595	80/20	13.7595
966611	AG1-531 C	4.2316	Adder	9.39
966621	AG1-532 C	0.9208	Adder	2.04
966731	AG1-544 C	10.4572	80/20	10.4572
966741	AG1-545 C	3.4875	80/20	3.4875
966931	AG1-431A	23.4981	Adder	52.16
WEC	WEC	1.4011	Confirmed LTF	1.4011
LGEE	LGEE	2.9461	Confirmed LTF	2.9461

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CPL	CPL	12.4679	Confirmed LTF	12.4679
CBM-W2	CBM-W2	59.3331	Confirmed LTF	59.3331
NY	NY	3.1466	Confirmed LTF	3.1466
TVA	TVA	11.1076	Confirmed LTF	11.1076
SIG	SIG	1.2049	Confirmed LTF	1.2049
CBM-S2	CBM-S2	153.5306	Confirmed LTF	153.5306
CBM-S1	CBM-S1	2.7911	Confirmed LTF	2.7911
MEC	MEC	8.2707	Confirmed LTF	8.2707
LAGN	LAGN	13.6973	Confirmed LTF	13.6973
AA2-074	AA2-074	8.2386	LTF	8.2386
CBM-W1	CBM-W1	58.1970	Confirmed LTF	58.1970

13.5.24 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
173442083	314918	8NO ANNA	DVP	962840	AG1-133 TAP	DVP	1	DVP_P4-2: 568T575	breaker	3938.0	117.52	117.61	DC	39.98

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314333	6POWHATN	0.4278	50/50	0.4278
314435	6SAPONY	0.3939	50/50	0.3939
314466	6FENTRES	1.8729	Adder	2.2
314550	6HICKORY	3.4594	Adder	4.07
315102	1BRUNSWICKG1	8.8966	50/50	8.8966
315103	1BRUNSWICKG2	8.8966	50/50	8.8966
315104	1BRUNSWICKG3	8.8966	50/50	8.8966
315105	1BRUNSWICKS1	18.4825	50/50	18.4825
315153	1CLOVER1	12.6320	50/50	12.6320
315154	1CLOVER2	12.5061	50/50	12.5061
315177	1S ANNAG1	1.7698	50/50	1.7698
315178	1S ANNAS1	0.9095	50/50	0.9095
315179	1S ANNAG2	1.7698	50/50	1.7698
315180	1S ANNAS2	0.9095	50/50	0.9095
315225	1N ANNA1	90.4135	50/50	90.4135
315226	1N ANNA2	90.4517	50/50	90.4517
315241	1Z1-086 GT1	11.4369	50/50	11.4369
315242	1Z1-086 GT2	11.4369	50/50	11.4369
315243	1Z1-086 GT3	11.4369	50/50	11.4369
315244	1Z1-086 ST	19.8816	50/50	19.8816
916192	Z1-068 E	1.5834	Adder	1.86
923852	AB2-025 E	1.1216	50/50	1.1216
923862	AB2-026 E	1.2182	50/50	1.2182
925021	AB2-158 C	3.3057	50/50	3.3057
925022	AB2-158 E	9.3429	50/50	9.3429
926754	AC1-161 C	25.6831	Adder	30.22
926755	AC1-161 E	10.9634	Adder	12.9
933294	AC2-141 C	25.6831	Adder	30.22
933295	AC2-141 E	10.9634	Adder	12.9
933501	AC2-165 C	10.6943	50/50	10.6943
933502	AC2-165 E	8.0489	50/50	8.0489
933732	AC2-196 E	1.0061	Adder	1.18
934061	AD1-033 C	6.3432	Adder	7.46
934062	AD1-033 E	4.2288	Adder	4.98
934615	AD1-087 C	7.9141	50/50	7.9141
934616	AD1-087 E	3.3866	50/50	3.3866
935171	AD1-152 C O1	8.6928	50/50	8.6928
935172	AD1-152 E O1	5.7952	50/50	5.7952
937481	AD2-202 C O1	2.3181	50/50	2.3181
937482	AD2-202 E O1	1.3039	50/50	1.3039
938494	AE1-068_C1	34.2399	50/50	34.2399

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938497	AE1-068_C2	34.2399	50/50	34.2399
938498	AE1-068_E1	18.9276	50/50	18.9276
938499	AE1-068_E2	18.9276	50/50	18.9276
938504	AE1-069_C1	26.0946	50/50	26.0946
938507	AE1-069_C2	28.1362	50/50	28.1362
938508	AE1-069_E1	14.8444	50/50	14.8444
938509	AE1-069_E2	15.9928	50/50	15.9928
938551	AE1-074_C	0.4051	50/50	0.4051
938552	AE1-074_E	1.2936	50/50	1.2936
938561	AE1-075_C	0.3720	50/50	0.3720
938562	AE1-075_E	1.1593	50/50	1.1593
939231	AE1-154_C	3.4349	50/50	3.4349
939232	AE1-154_E	2.4044	50/50	2.4044
939414	AE1-173_C1	34.6987	50/50	34.6987
939415	AE1-173_C2	29.7418	50/50	29.7418
939416	AE1-173_C3	34.6987	50/50	34.6987
939423	AE1-173_E1	23.1325	50/50	23.1325
939424	AE1-173_E2	19.8278	50/50	19.8278
939425	AE1-173_E3	23.1325	50/50	23.1325
940251	AE2-007_O1 (Withdrawn : 12/11/2020)	20.7626	Adder	24.43
940471	AE2-031_C	37.3926	50/50	37.3926
940472	AE2-031_E	24.9284	50/50	24.9284
940481	AE2-033_C	13.5920	Adder	15.99
940482	AE2-033_E	9.1632	Adder	10.78
940541	AE2-040	2.8401	50/50	2.8401
940641	AE2-051_C_O1	19.4481	50/50	19.4481
940642	AE2-051_E_O1	12.9654	50/50	12.9654
941031	AE2-094_C	44.8215	50/50	44.8215
941032	AE2-094_E	20.0745	50/50	20.0745
941281	AE2-122_C_O1	23.9646	Adder	28.19
941282	AE2-122_E_O1	96.7029	Adder	113.77
941291	AE2-123_C_O1	24.6282	Adder	28.97
941292	AE2-123_E_O1	96.0393	Adder	112.99
941301	AE2-124_C_O1	22.4012	Adder	26.35
941302	AE2-124_E_O1	98.2935	Adder	115.64
942931	AE2-313_C	40.4325	50/50	40.4325
942932	AE2-313_E	26.9550	50/50	26.9550
944011	AF1-069_C	14.6449	50/50	14.6449
944012	AF1-069_E	5.6892	50/50	5.6892
944111	AF1-079_C	6.5263	50/50	6.5263
944112	AF1-079_E	8.8620	50/50	8.8620
944581	AF1-123_C_O1	40.7456	Adder	47.94
944582	AF1-123_E_O1	93.2960	Adder	109.76
944591	AF1-124_C_O1	40.7456	Adder	47.94
944592	AF1-124_E_O1	93.2960	Adder	109.76
944601	AF1-125_C_O1	40.7456	Adder	47.94
944602	AF1-125_E_O1	93.2960	Adder	109.76
945811	AF1-246_C_O1	8.0182	50/50	8.0182
945812	AF1-246_E_O1	11.0728	50/50	11.0728
946011	AF1-266	11.3776	Adder	13.39
946371	AF1-301_C	26.6844	50/50	26.6844

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
946372	AF1-301 E	17.9066	50/50	17.9066
957431	AF2-037 C	23.8617	50/50	23.8617
957432	AF2-037 E	15.9078	50/50	15.9078
957481	AF2-042 C	57.2730	50/50	57.2730
957482	AF2-042 E	38.1820	50/50	38.1820
957691	AF2-063 C	38.0772	50/50	38.0772
957692	AF2-063 E	25.3848	50/50	25.3848
957911	AF2-085	4.6076	50/50	4.6076
958501	AF2-144 C	2.0042	50/50	2.0042
958502	AF2-144 E	1.3361	50/50	1.3361
959531	AF2-244 C (Withdrawn : 01/06/2021)	1.8470	50/50	1.8470
959532	AF2-244 E (Withdrawn : 01/06/2021)	1.1003	50/50	1.1003
959751	AF2-266	9.0675	50/50	9.0675
961811	AG1-023 C	6.7229	50/50	6.7229
961812	AG1-023 E	26.8914	50/50	26.8914
962271	AG1-075 C O2	7.5437	Adder	16.75
962272	AG1-075 E O2	4.5975	Adder	10.21
963041	AG1-153 C	6.2424	50/50	6.2424
963042	AG1-153 E	9.3636	50/50	9.3636
963111	AG1-160 C	6.3219	50/50	6.3219
963112	AG1-160 E	9.4829	50/50	9.4829
963291	AG1-178 C O2	70.6972	50/50	70.6972
963351	AG1-184 O2	38.0878	50/50	38.0878
963821	AG1-235 C O2	10.8054	Adder	23.99
963822	AG1-235 E O2	7.2036	Adder	15.99
964241	AG1-285 C O2	14.4743	50/50	14.4743
964242	AG1-285 E O2	9.6495	50/50	9.6495
964421	AG1-305 C O2	30.3229	50/50	30.3229
964422	AG1-305 E O2	20.2153	50/50	20.2153
964951	AG1-359 O1	12.0094	Adder	26.66
965181	AG1-383 C	1.2338	Adder	2.74
965182	AG1-383 E	0.3654	Adder	0.81
965811	AG1-449	26.2178	50/50	26.2178
966361	AG1-505 C	18.5121	50/50	18.5121
966362	AG1-505 E	12.3414	50/50	12.3414
966371	AG1-506 C	18.5121	50/50	18.5121
966372	AG1-506 E	12.3414	50/50	12.3414
WEC	WEC	0.7113	Confirmed LTF	0.7113
LGEE	LGEE	1.5305	Confirmed LTF	1.5305
CPL	CPL	8.2739	Confirmed LTF	8.2739
CBM-W2	CBM-W2	34.2451	Confirmed LTF	34.2451
NY	NY	2.6926	Confirmed LTF	2.6926
TVA	TVA	6.6738	Confirmed LTF	6.6738
O-066	O-066	36.6314	Confirmed LTF	36.6314
SIGE	SIGE	0.8456	Confirmed LTF	0.8456
CBM-S2	CBM-S2	100.2449	Confirmed LTF	100.2449
CBM-S1	CBM-S1	1.6507	Confirmed LTF	1.6507
G-007	G-007	5.7509	Confirmed LTF	5.7509
MEC	MEC	4.4540	Confirmed LTF	4.4540
LAGN	LAGN	8.2023	Confirmed LTF	8.2023
AA2-074	AA2-074	5.4630	LTF	5.4630

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-W1	CBM-W1	28.6569	Confirmed LTF	28.6569

13.5.25 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
163645646	314923	8SEPTA	DVP	314924	8SURREY	DVP	1	DVP_P4-2: 56372	breaker	3637.0	101.46	102.51	DC	43.03

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314466	6FENTRES	2.3789	50/50	2.3789
314550	6HICKORY	3.6843	Adder	4.33
315102	1BRUNSWICKG1	12.3217	50/50	12.3217
315103	1BRUNSWICKG2	12.3217	50/50	12.3217
315104	1BRUNSWICKG3	12.3217	50/50	12.3217
315105	1BRUNSWICKS1	25.5982	50/50	25.5982
315110	1ELIZAR3	3.3201	50/50	3.3201
315153	1CLOVER1	15.1542	50/50	15.1542
315154	1CLOVER2	15.0031	50/50	15.0031
315241	1Z1-086 GT1	15.9317	50/50	15.9317
315242	1Z1-086 GT2	15.9317	50/50	15.9317
315243	1Z1-086 GT3	15.9317	50/50	15.9317
315244	1Z1-086 ST	27.6953	50/50	27.6953
926754	AC1-161 C	92.8683	50/50	92.8683
926755	AC1-161 E	39.6429	50/50	39.6429
933294	AC2-141 C	92.8683	50/50	92.8683
933295	AC2-141 E	39.6429	50/50	39.6429
933731	AC2-196 C	0.3027	50/50	0.3027
933732	AC2-196 E	1.2779	50/50	1.2779
934061	AD1-033 C	8.0241	50/50	8.0241
934062	AD1-033 E	5.3494	50/50	5.3494
934615	AD1-087 C	9.4899	50/50	9.4899
934616	AD1-087 E	4.0609	50/50	4.0609
935171	AD1-152 C O1	10.4237	50/50	10.4237
935172	AD1-152 E O1	6.9491	50/50	6.9491
937481	AD2-202 C O1	2.7796	50/50	2.7796
937482	AD2-202 E O1	1.5636	50/50	1.5636
938494	AE1-068_C1	47.8959	50/50	47.8959
938497	AE1-068_C2	47.8959	50/50	47.8959
938498	AE1-068_E1	26.4766	50/50	26.4766
938499	AE1-068_E2	26.4766	50/50	26.4766
938504	AE1-069_C1	36.5020	50/50	36.5020
938507	AE1-069_C2	39.3579	50/50	39.3579
938508	AE1-069_E1	20.7648	50/50	20.7648
938509	AE1-069_E2	22.3712	50/50	22.3712
939414	AE1-173_C1	40.2343	50/50	40.2343
939415	AE1-173_C2	34.4866	50/50	34.4866
939416	AE1-173_C3	40.2343	50/50	40.2343
939423	AE1-173_E1	26.8229	50/50	26.8229
939424	AE1-173_E2	22.9910	50/50	22.9910
939425	AE1-173_E3	26.8229	50/50	26.8229

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	155.7163	Adder	183.2
940471	AE2-031 C	52.3479	50/50	52.3479
940472	AE2-031 E	34.8986	50/50	34.8986
940641	AE2-051 C O1	32.7339	50/50	32.7339
940642	AE2-051 E O1	21.8226	50/50	21.8226
941031	AE2-094 C	63.1691	50/50	63.1691
941032	AE2-094 E	28.2919	50/50	28.2919
941281	AE2-122 C O1	24.4296	Adder	28.74
941282	AE2-122 E O1	98.5792	Adder	115.98
941291	AE2-123 C O1	25.9329	Adder	30.51
941292	AE2-123 E O1	101.1273	Adder	118.97
941301	AE2-124 C O1	23.6041	Adder	27.77
941302	AE2-124 E O1	103.5718	Adder	121.85
941591	AE2-156 O1	15.9180	Adder	18.73
942931	AE2-313 C	56.5614	50/50	56.5614
942932	AE2-313 E	37.7076	50/50	37.7076
944011	AF1-069 C	20.6397	50/50	20.6397
944012	AF1-069 E	8.0181	50/50	8.0181
944581	AF1-123 C O1	58.0876	50/50	58.0876
944582	AF1-123 E O1	133.0044	50/50	133.0044
944591	AF1-124 C O1	58.0876	50/50	58.0876
944592	AF1-124 E O1	133.0044	50/50	133.0044
944601	AF1-125 C O1	58.0876	50/50	58.0876
944602	AF1-125 E O1	133.0044	50/50	133.0044
945811	AF1-246 C O1	10.1527	50/50	10.1527
945812	AF1-246 E O1	14.0203	50/50	14.0203
957481	AF2-042 C	72.5190	50/50	72.5190
957482	AF2-042 E	48.3460	50/50	48.3460
959751	AF2-266	10.8780	50/50	10.8780
962441	AG1-093 C O2	18.0486	50/50	18.0486
962442	AG1-093 E O2	5.4930	50/50	5.4930
963041	AG1-153 C	8.6457	50/50	8.6457
963042	AG1-153 E	12.9686	50/50	12.9686
963111	AG1-160 C	8.8065	50/50	8.8065
963112	AG1-160 E	13.2098	50/50	13.2098
963291	AG1-178 C O2	94.2586	50/50	94.2586
963351	AG1-184 O2	50.7814	50/50	50.7814
963821	AG1-235 C O2	25.8174	50/50	25.8174
963822	AG1-235 E O2	17.2116	50/50	17.2116
964241	AG1-285 C O2	18.5242	50/50	18.5242
964242	AG1-285 E O2	12.3495	50/50	12.3495
964951	AG1-359 O1	28.7820	50/50	28.7820
965181	AG1-383 C	1.3140	Adder	2.92
965182	AG1-383 E	0.3892	Adder	0.86
965811	AG1-449	36.7037	50/50	36.7037
966361	AG1-505 C	25.1154	50/50	25.1154
966362	AG1-505 E	16.7436	50/50	16.7436
966371	AG1-506 C	25.1154	50/50	25.1154
966372	AG1-506 E	16.7436	50/50	16.7436
WEC	WEC	0.8448	Confirmed LTF	0.8448
LGEE	LGEE	1.7379	Confirmed LTF	1.7379

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CPLE	CPLE	8.8595	Confirmed LTF	8.8595
CBM-W2	CBM-W2	37.6141	Confirmed LTF	37.6141
NY	NY	1.2420	Confirmed LTF	1.2420
TVA	TVA	7.1274	Confirmed LTF	7.1274
O-066	O-066	17.4240	Confirmed LTF	17.4240
SIGE	SIGE	0.5831	Confirmed LTF	0.5831
CBM-S2	CBM-S2	107.2084	Confirmed LTF	107.2084
CBM-S1	CBM-S1	1.7742	Confirmed LTF	1.7742
G-007	G-007	2.7394	Confirmed LTF	2.7394
MEC	MEC	5.0943	Confirmed LTF	5.0943
LAGN	LAGN	8.8620	Confirmed LTF	8.8620
AA2-074	AA2-074	5.8523	LTF	5.8523
CBM-W1	CBM-W1	35.2743	Confirmed LTF	35.2743

13.5.26 Index 26

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163645558	314924	8SURRY	DVP	314903	8CHCKAHM	DVP	1	DVP_P4-2: 56372	breaker	3144.0	127.86	129.62	DC	68.87

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	3.1320	Adder	3.68
314295	6BIRDNECK	0.0719	50/50	0.0719
314466	6FENTRES	3.7992	50/50	3.7992
314491	3PENDLTN	0.5360	50/50	0.5360
314525	6KINGFORK	5.6245	Adder	6.62
314550	6HICKORY	6.9893	50/50	6.9893
314632	6AYDLETOLD	3.1341	Adder	3.69
315099	1CHESPKB (Deactivation : 31/05/2019)	4.9117	50/50	4.9117
315108	1ELIZAR1	5.2434	50/50	5.2434
315109	1ELIZAR2	5.1523	50/50	5.1523
315110	1ELIZAR3	5.3105	50/50	5.3105
315233	1SURRY 2	51.9844	50/50	51.9844
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	-33.9297	Adder	-39.92
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	-33.9297	Adder	-39.92
316114	AB2-068 ST (Withdrawn : 01/11/2021)	-58.7796	Adder	-69.15
316151	AD2-215 E (Withdrawn : 01/14/2021)	1.2037	Adder	1.42
901082	W1-029 E	62.1224	Adder	73.09
913392	Y1-086 E	3.0559	Adder	3.6
916042	Z1-036 E (Suspended)	59.7462	Adder	70.29
916192	Z1-068 E	3.1893	50/50	3.1893
917122	Z2-027 E	1.4594	Adder	1.72
919152	AA1-139 E	9.1812	Adder	10.8
923832	AB2-022 E	1.7251	Adder	2.03
925522	AC1-027 E	1.9415	50/50	1.9415
926662	AC1-147 E	1.8957	Adder	2.23
926754	AC1-161 C	60.4629	50/50	60.4629
926755	AC1-161 E	25.8099	50/50	25.8099
932044	AC2-012 C	14.6023	Adder	17.18
932046	AC2-012 E	23.8249	Adder	28.03
933294	AC2-141 C	60.4629	50/50	60.4629
933295	AC2-141 E	25.8099	50/50	25.8099
933731	AC2-196 C	0.4835	50/50	0.4835
933732	AC2-196 E	2.0409	50/50	2.0409
934061	AD1-033 C	12.8541	50/50	12.8541
934062	AD1-033 E	8.5694	50/50	8.5694
935112	AD1-144 E	1.2268	Adder	1.44
937221	AD2-160 C O1	9.9017	50/50	9.9017
937222	AD2-160 E O1	5.1923	50/50	5.1923

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938494	AE1-068_C1	37.9430	Adder	44.64
938497	AE1-068_C2	37.9430	Adder	44.64
938498	AE1-068_E1	20.9747	Adder	24.68
938499	AE1-068_E2	20.9747	Adder	24.68
938504	AE1-069_C1	28.9168	Adder	34.02
938507	AE1-069_C2	31.1793	Adder	36.68
938508	AE1-069_E1	16.4498	Adder	19.35
938509	AE1-069_E2	17.7225	Adder	20.85
938535	AE1-072_C	25.0860	Adder	29.51
938536	AE1-072_E	12.9231	Adder	15.2
939414	AE1-173_C1	51.8297	50/50	51.8297
939415	AE1-173_C2	44.4254	50/50	44.4254
939416	AE1-173_C3	51.8297	50/50	51.8297
939423	AE1-173_E1	34.5531	50/50	34.5531
939424	AE1-173_E2	29.6170	50/50	29.6170
939425	AE1-173_E3	34.5531	50/50	34.5531
940251	AE2-007_O1 (Withdrawn : 12/11/2020)	293.6569	50/50	293.6569
940471	AE2-031_C	41.3957	Adder	48.7
940472	AE2-031_E	27.5972	Adder	32.47
940641	AE2-051_C_O1	27.7668	50/50	27.7668
940642	AE2-051_E_O1	18.5112	50/50	18.5112
941031	AE2-094_C	49.9177	Adder	58.73
941032	AE2-094_E	22.3570	Adder	26.3
941101	AE2-104_C_O1	4.1712	Adder	4.91
941102	AE2-104_E_O1	6.6316	Adder	7.8
941281	AE2-122_C_O1	48.2897	50/50	48.2897
941282	AE2-122_E_O1	194.8607	50/50	194.8607
941291	AE2-123_C_O1	49.6269	50/50	49.6269
941292	AE2-123_E_O1	193.5235	50/50	193.5235
941301	AE2-124_C_O1	45.1648	50/50	45.1648
941302	AE2-124_E_O1	198.1776	50/50	198.1776
941501	AE2-147_C	21.4215	Adder	25.2
941502	AE2-147_E	14.2810	Adder	16.8
941591	AE2-156_O1	30.2340	50/50	30.2340
942131	AE2-225_C	2.9307	Adder	3.45
942132	AE2-225_E	1.9538	Adder	2.3
942171	AE2-229_C	2.1980	Adder	2.59
942172	AE2-229_E	1.4653	Adder	1.72
942401	AE2-253_C	10.4149	50/50	10.4149
942402	AE2-253_E	4.6791	50/50	4.6791
942931	AE2-313_C	44.7367	Adder	52.63
942932	AE2-313_E	29.8245	Adder	35.09
943611	AF1-032_C	2.3934	Adder	2.82
943612	AF1-032_E	1.2700	Adder	1.49
944011	AF1-069_C	16.3100	Adder	19.19
944012	AF1-069_E	6.3361	Adder	7.45
944581	AF1-123_C_O1	85.1238	50/50	85.1238
944582	AF1-123_E_O1	194.9097	50/50	194.9097
944591	AF1-124_C_O1	85.1238	50/50	85.1238
944592	AF1-124_E_O1	194.9097	50/50	194.9097
944601	AF1-125_C_O1	85.1238	50/50	85.1238

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944602	AF1-125 E O1	194.9097	50/50	194.9097
944871	AF1-152 C	7.1405	Adder	8.4
944872	AF1-152 E	4.7603	Adder	5.6
957491	AF2-043 C	2.9307	Adder	3.45
957492	AF2-043 E	1.9538	Adder	2.3
957631	AF2-057	5.1236	Adder	6.03
957821	AF2-076 C	7.1563	Adder	8.42
957822	AF2-076 E	4.7709	Adder	5.61
957871	AF2-081 C	14.2819	Adder	16.8
957872	AF2-081 E	6.1208	Adder	7.2
958161	AF2-110 C	1.7196	Adder	2.02
958162	AF2-110 E	2.6897	Adder	3.16
961851	AG1-027 C	10.8778	Adder	24.15
961852	AG1-027 E	6.0132	Adder	13.35
963041	AG1-153 C	3.6420	Adder	8.08
963042	AG1-153 E	5.4630	Adder	12.13
963111	AG1-160 C	3.7027	Adder	8.22
963112	AG1-160 E	5.5541	Adder	12.33
963291	AG1-178 C O2	44.1177	Adder	97.93
963351	AG1-184 O2	23.7682	Adder	52.76
963821	AG1-235 C O2	41.3194	50/50	41.3194
963822	AG1-235 E O2	27.5463	50/50	27.5463
964951	AG1-359 O1	45.9660	50/50	45.9660
965001	AG1-364 C O2	5.3970	Adder	11.98
965002	AG1-364 E O2	8.0955	Adder	17.97
965181	AG1-383 C	4.7032	50/50	4.7032
965182	AG1-383 E	1.3930	50/50	1.3930
965811	AG1-449	15.3830	Adder	34.15
966361	AG1-505 C	10.5908	Adder	23.51
966362	AG1-505 E	7.0605	Adder	15.67
966371	AG1-506 C	10.5908	Adder	23.51
966372	AG1-506 E	7.0605	Adder	15.67
966491	AG1-518 O2	6.4595	Adder	14.34
WEC	WEC	0.6817	Confirmed LTF	0.6817
LGEE	LGEE	1.4137	Confirmed LTF	1.4137
CPL	CPL	9.4458	Confirmed LTF	9.4458
CBM-W2	CBM-W2	34.3168	Confirmed LTF	34.3168
NY	NY	1.7209	Confirmed LTF	1.7209
TVA	TVA	6.7340	Confirmed LTF	6.7340
O-066	O-066	23.3666	Confirmed LTF	23.3666
SIGE	SIGE	0.6239	Confirmed LTF	0.6239
CBM-S2	CBM-S2	110.7266	Confirmed LTF	110.7266
CBM-S1	CBM-S1	1.6511	Confirmed LTF	1.6511
G-007	G-007	3.6676	Confirmed LTF	3.6676
MEC	MEC	4.3523	Confirmed LTF	4.3523
LAGN	LAGN	8.3738	Confirmed LTF	8.3738
AA2-074	AA2-074	6.2352	LTF	6.2352
CBM-W1	CBM-W1	27.8157	Confirmed LTF	27.8157

13.5.27 Index 27

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
163646432	314927	8YADKIN	DVP	314928	8SUFFOLK	DVP	1	DVP_P7-1: LN 579-2110	tower	3637.0	100.37	102.15	DC	154.06

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	6.0036	Adder	7.06
314295	6BIRDNECK	0.1639	50/50	0.1639
314466	6FENTRES	8.5591	50/50	8.5591
314491	3PENDLTN	1.2205	50/50	1.2205
314550	6HICKORY	12.9701	Adder	15.26
314632	6AYDLETOLD	5.8260	Adder	6.85
315099	1CHESPKB (Deactivation : 31/05/2019)	11.2198	50/50	11.2198
315108	1ELIZAR1	12.0961	50/50	12.0961
315109	1ELIZAR2	11.8860	50/50	11.8860
315110	1ELIZAR3	12.2509	50/50	12.2509
316132	AB2-190 C	14.9340	Adder	17.57
901082	W1-029 E	53.2263	Adder	62.62
913392	Y1-086 E	4.6302	Adder	5.45
916042	Z1-036 E (Suspended)	53.6050	Adder	63.06
916192	Z1-068 E	7.2703	50/50	7.2703
917122	Z2-027 E	1.9470	Adder	2.29
919152	AA1-139 E	18.1446	Adder	21.35
920692	AA2-178 E	3.5339	Adder	4.16
923832	AB2-022 E	2.6138	Adder	3.08
924814	AB2-134 E	10.5822	Adder	12.45
925332	AB2-190 E	6.4003	Adder	7.53
925522	AC1-027 E	4.4205	50/50	4.4205
926662	AC1-147 E	4.3304	Adder	5.09
927226	AC1-216 E	6.4602	Adder	7.6
932044	AC2-012 C	33.3559	Adder	39.24
932046	AC2-012 E	54.4228	Adder	64.03
933731	AC2-196 C	1.0892	50/50	1.0892
933732	AC2-196 E	4.5978	50/50	4.5978
934014	AD1-025 C	14.1195	Adder	16.61
934015	AD1-025 E	8.3638	Adder	9.84
934061	AD1-033 C	29.0107	50/50	29.0107
934062	AD1-033 E	19.3404	50/50	19.3404
935164	AD1-151 C	12.0006	Adder	14.12
935165	AD1-151 E	8.0004	Adder	9.41
936041	AD2-007 C	0.6745	Adder	0.79
936042	AD2-007 E	0.4647	Adder	0.55
936051	AD2-008 C	2.4582	Adder	2.89
936052	AD2-008 E	5.3510	Adder	6.3
937221	AD2-160 C O1	17.3124	Adder	20.37
937222	AD2-160 E O1	9.0784	Adder	10.68

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938535	AE1-072 C	47.4337	Adder	55.8
938536	AE1-072 E	24.4355	Adder	28.75
939312	AE1-162 E	2.8706	Adder	3.38
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	676.6040	50/50	676.6040
940491	AE2-034 C	6.1843	Adder	7.28
940492	AE2-034 E	2.6504	Adder	3.12
940891	AE2-078 C	2.5157	Adder	2.96
940892	AE2-078 E	1.2960	Adder	1.52
940901	AE2-079 C	2.5157	Adder	2.96
940902	AE2-079 E	1.2960	Adder	1.52
941281	AE2-122 C O1	110.0319	50/50	110.0319
941282	AE2-122 E O1	444.0054	50/50	444.0054
941291	AE2-123 C O1	113.0787	50/50	113.0787
941292	AE2-123 E O1	440.9585	50/50	440.9585
941301	AE2-124 C O1	102.8422	50/50	102.8422
941302	AE2-124 E O1	451.2590	50/50	451.2590
941501	AE2-147 C	18.3539	Adder	21.59
941502	AE2-147 E	12.2359	Adder	14.4
941591	AE2-156 O1	69.3660	50/50	69.3660
942401	AE2-253 C	18.2097	Adder	21.42
942402	AE2-253 E	8.1811	Adder	9.62
942551	AE2-270	21.3664	Adder	25.14
943621	AF1-033 C	2.5157	Adder	2.96
943622	AF1-033 E	1.2960	Adder	1.52
944581	AF1-123 C O1	205.4132	50/50	205.4132
944582	AF1-123 E O1	470.3387	50/50	470.3387
944591	AF1-124 C O1	205.4132	50/50	205.4132
944592	AF1-124 E O1	470.3387	50/50	470.3387
944601	AF1-125 C O1	205.4132	50/50	205.4132
944602	AF1-125 E O1	470.3387	50/50	470.3387
944871	AF1-152 C	6.1180	Adder	7.2
944872	AF1-152 E	4.0786	Adder	4.8
945711	AF1-236 C O1	67.7035	Adder	79.65
945712	AF1-236 E O1	41.8177	Adder	49.2
957531	AF2-047 C	14.6951	Adder	17.29
957532	AF2-047 E	7.3917	Adder	8.7
957631	AF2-057	11.7038	Adder	13.77
957711	AF2-065 C	10.8969	Adder	12.82
957712	AF2-065 E	10.4696	Adder	12.32
957871	AF2-081 C	28.2249	Adder	33.21
957872	AF2-081 E	12.0964	Adder	14.23
961711	AG1-011	12.7106	Adder	28.21
962321	AG1-081 C (Withdrawn : 01/15/2021)	1.2121	Adder	2.69
962322	AG1-081 E (Withdrawn : 01/15/2021)	0.8081	Adder	1.79
963221	AG1-171 C	0.8480	Adder	1.88
963222	AG1-171 E	0.5654	Adder	1.26
963231	AG1-172 C	0.8480	Adder	1.88
963232	AG1-172 E	0.5654	Adder	1.26
963241	AG1-173 C	0.8480	Adder	1.88
963242	AG1-173 E	0.5654	Adder	1.26

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
963251	AG1-174 C	0.8480	Adder	1.88
963252	AG1-174 E	0.5654	Adder	1.26
963261	AG1-175 C	0.8480	Adder	1.88
963262	AG1-175 E	0.5654	Adder	1.26
963821	AG1-235 C O2	41.6417	Adder	92.43
963822	AG1-235 E O2	27.7612	Adder	61.62
964951	AG1-359 O1	103.5540	50/50	103.5540
965001	AG1-364 C O2	12.2469	Adder	27.19
965002	AG1-364 E O2	18.3704	Adder	40.78
965181	AG1-383 C	4.6258	Adder	10.27
965182	AG1-383 E	1.3700	Adder	3.04
965631	AG1-431	20.7743	Adder	46.11
966931	AG1-431A	15.6080	Adder	34.65
CALDERWOOD	CALDERWOOD	0.2212	Confirmed LTF	0.2212
NY	NY	0.2284	Confirmed LTF	0.2284
PRAIRIE	PRAIRIE	1.1236	Confirmed LTF	1.1236
O-066	O-066	2.7660	Confirmed LTF	2.7660
CHEOAH	CHEOAH	0.2232	Confirmed LTF	0.2232
COTTONWOOD	COTTONWOOD	0.9219	Confirmed LTF	0.9219
G-007	G-007	0.4316	Confirmed LTF	0.4316
HAMLET	HAMLET	0.2691	Confirmed LTF	0.2691
GIBSON	GIBSON	0.2364	Confirmed LTF	0.2364
BLUEG	BLUEG	0.7500	Confirmed LTF	0.7500
TRIMBLE	TRIMBLE	0.2404	Confirmed LTF	0.2404
CATAWBA	CATAWBA	0.1638	Confirmed LTF	0.1638

13.5.28 Index 28

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174419378	314931	8SKIFF CREEK	DVP	314209	6SKIFF CREEK	DVP	1	DVP_P4-5: L122	breaker	1036.4	102.29	102.83	DC	12.26

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.5384	Adder	0.63
314189	6PAPERMILL	-3.8032	Adder	-4.47
314466	6FENTRESS	0.5757	Adder	0.68
314550	6HICKORY	1.0511	Adder	1.24
314632	6AYDLETOLD	0.5353	Adder	0.63
315233	1SURREY 2	16.2316	50/50	16.2316
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	34.6338	50/50	34.6338
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	34.6338	50/50	34.6338
316114	AB2-068 ST (Withdrawn : 01/11/2021)	59.9994	50/50	59.9994
316134	AC1-107 G1	65.0359	50/50	65.0359
316135	AC1-107 G2	65.0359	50/50	65.0359
316136	AC1-107 G3	65.0481	50/50	65.0481
916192	Z1-068 E	0.4612	Adder	0.54
919152	AA1-139 E	1.5888	Adder	1.87
925522	AC1-027 E	0.2792	Adder	0.33
925863	AC1-065 C	-4.3496	Adder	-5.12
926754	AC1-161 C	13.8409	Adder	16.28
926755	AC1-161 E	5.9083	Adder	6.95
926784	AC1-164 C	-17.3942	Adder	-20.46
933294	AC2-141 C	13.8409	Adder	16.28
933295	AC2-141 E	5.9083	Adder	6.95
933732	AC2-196 E	0.3093	Adder	0.36
934061	AD1-033 C	1.9349	Adder	2.28
934062	AD1-033 E	1.2900	Adder	1.52
934141	AD1-041 C	-3.2176	Adder	-3.79
937221	AD2-160 C O1	1.4693	Adder	1.73
937222	AD2-160 E O1	0.7705	Adder	0.91
938535	AE1-072 C	4.3009	Adder	5.06
938536	AE1-072 E	2.2156	Adder	2.61
939414	AE1-173_C1	7.9611	Adder	9.37
939415	AE1-173_C2	6.8238	Adder	8.03
939416	AE1-173_C3	7.9611	Adder	9.37
939423	AE1-173_E1	5.3074	Adder	6.24
939424	AE1-173_E2	4.5492	Adder	5.35
939425	AE1-173_E3	5.3074	Adder	6.24
939431	AE1-175 C	-2.1825	Adder	-2.57
940231	AE2-005 C	-0.7908	Adder	-0.93
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	41.7727	Adder	49.14

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940552	AE2-041 BAT	4.9692	50/50	4.9692
940641	AE2-051 C O1	4.2748	Adder	5.03
940642	AE2-051 E O1	2.8499	Adder	3.35
940891	AE2-078 C	-0.6281	Adder	-0.74
940901	AE2-079 C	-0.6281	Adder	-0.74
941281	AE2-122 C O1	7.0031	Adder	8.24
941282	AE2-122 E O1	28.2593	Adder	33.25
941291	AE2-123 C O1	7.1970	Adder	8.47
941292	AE2-123 E O1	28.0654	Adder	33.02
941301	AE2-124 C O1	6.5801	Adder	7.74
941302	AE2-124 E O1	28.8727	Adder	33.97
942401	AE2-253 C	1.5454	Adder	1.82
942402	AE2-253 E	0.6943	Adder	0.82
943472	AF1-018 BAT	4.9692	50/50	4.9692
943621	AF1-033 C	-0.6281	Adder	-0.74
944581	AF1-123 C O1	14.4429	Adder	16.99
944582	AF1-123 E O1	33.0701	Adder	38.91
944591	AF1-124 C O1	14.4429	Adder	16.99
944592	AF1-124 E O1	33.0701	Adder	38.91
944601	AF1-125 C O1	14.4429	Adder	16.99
944602	AF1-125 E O1	33.0701	Adder	38.91
945363	AF1-201 BAT	3.6594	50/50	3.6594
957871	AF2-081 C	2.4714	Adder	2.91
957872	AF2-081 E	1.0592	Adder	1.25
962132	AG1-057 BAT	2.4846	50/50	2.4846
963291	AG1-178 C O2	7.3339	Adder	16.28
963351	AG1-184 O2	3.9511	Adder	8.77
963613	AG1-210 BAT	0.5145	Merchant Transmission	0.5145
963821	AG1-235 C O2	3.3127	Adder	7.35
963822	AG1-235 E O2	2.2085	Adder	4.9
964023	AG1-256 BAT	0.9707	Merchant Transmission	0.9707
964951	AG1-359 O1	3.6916	Adder	8.19
965181	AG1-383 C	0.3749	Adder	0.83
965182	AG1-383 E	0.1110	Adder	0.25
966663	AG1-536 BAT	8.0272	50/50	8.0272
WEC	WEC	0.1569	Confirmed LTF	0.1569
LGEE	LGEE	0.3204	Confirmed LTF	0.3204
CPL	CPL	1.5145	Confirmed LTF	1.5145
CBM-W2	CBM-W2	6.6573	Confirmed LTF	6.6573
NY	NY	0.1593	Confirmed LTF	0.1593
TVA	TVA	1.2432	Confirmed LTF	1.2432
O-066	O-066	2.3084	Confirmed LTF	2.3084
SIGE	SIGE	0.0930	Confirmed LTF	0.0930
CBM-S2	CBM-S2	18.2074	Confirmed LTF	18.2074
CBM-S1	CBM-S1	0.3112	Confirmed LTF	0.3112
G-007	G-007	0.3633	Confirmed LTF	0.3633
MEC	MEC	0.9264	Confirmed LTF	0.9264
LAGN	LAGN	1.5470	Confirmed LTF	1.5470
CBM-W1	CBM-W1	6.6034	Confirmed LTF	6.6034

13.5.29 Index 29

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174419379	314931	8SKIFF CREEK	DVP	314209	6SKIFF CREEK	DVP	2	DVP_P4-5: L122	breaker	1036.4	102.29	102.83	DC	12.26

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313717	6SLIGO L2192	0.5384	Adder	0.63
314189	6PAPERMILL	-3.8032	Adder	-4.47
314466	6FENTRESS	0.5757	Adder	0.68
314550	6HICKORY	1.0511	Adder	1.24
314632	6AYDLETOLD	0.5353	Adder	0.63
315233	1SURREY 2	16.2316	50/50	16.2316
316112	AB2-068 CT1 (Withdrawn : 01/11/2021)	34.6338	50/50	34.6338
316113	AB2-068 CT2 (Withdrawn : 01/11/2021)	34.6338	50/50	34.6338
316114	AB2-068 ST (Withdrawn : 01/11/2021)	59.9994	50/50	59.9994
316134	AC1-107 G1	65.0359	50/50	65.0359
316135	AC1-107 G2	65.0359	50/50	65.0359
316136	AC1-107 G3	65.0481	50/50	65.0481
916192	Z1-068 E	0.4612	Adder	0.54
919152	AA1-139 E	1.5888	Adder	1.87
925522	AC1-027 E	0.2792	Adder	0.33
925863	AC1-065 C	-4.3496	Adder	-5.12
926754	AC1-161 C	13.8409	Adder	16.28
926755	AC1-161 E	5.9083	Adder	6.95
926784	AC1-164 C	-17.3942	Adder	-20.46
933294	AC2-141 C	13.8409	Adder	16.28
933295	AC2-141 E	5.9083	Adder	6.95
933732	AC2-196 E	0.3093	Adder	0.36
934061	AD1-033 C	1.9349	Adder	2.28
934062	AD1-033 E	1.2900	Adder	1.52
934141	AD1-041 C	-3.2176	Adder	-3.79
937221	AD2-160 C O1	1.4693	Adder	1.73
937222	AD2-160 E O1	0.7705	Adder	0.91
938535	AE1-072 C	4.3009	Adder	5.06
938536	AE1-072 E	2.2156	Adder	2.61
939414	AE1-173_C1	7.9611	Adder	9.37
939415	AE1-173_C2	6.8238	Adder	8.03
939416	AE1-173_C3	7.9611	Adder	9.37
939423	AE1-173_E1	5.3074	Adder	6.24
939424	AE1-173_E2	4.5492	Adder	5.35
939425	AE1-173_E3	5.3074	Adder	6.24
939431	AE1-175 C	-2.1825	Adder	-2.57
940231	AE2-005 C	-0.7908	Adder	-0.93
940251	AE2-007 O1 (Withdrawn : 12/11/2020)	41.7727	Adder	49.14

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940552	AE2-041 BAT	4.9692	50/50	4.9692
940641	AE2-051 C O1	4.2748	Adder	5.03
940642	AE2-051 E O1	2.8499	Adder	3.35
940891	AE2-078 C	-0.6281	Adder	-0.74
940901	AE2-079 C	-0.6281	Adder	-0.74
941281	AE2-122 C O1	7.0031	Adder	8.24
941282	AE2-122 E O1	28.2593	Adder	33.25
941291	AE2-123 C O1	7.1970	Adder	8.47
941292	AE2-123 E O1	28.0654	Adder	33.02
941301	AE2-124 C O1	6.5801	Adder	7.74
941302	AE2-124 E O1	28.8727	Adder	33.97
942401	AE2-253 C	1.5454	Adder	1.82
942402	AE2-253 E	0.6943	Adder	0.82
943472	AF1-018 BAT	4.9692	50/50	4.9692
943621	AF1-033 C	-0.6281	Adder	-0.74
944581	AF1-123 C O1	14.4429	Adder	16.99
944582	AF1-123 E O1	33.0701	Adder	38.91
944591	AF1-124 C O1	14.4429	Adder	16.99
944592	AF1-124 E O1	33.0701	Adder	38.91
944601	AF1-125 C O1	14.4429	Adder	16.99
944602	AF1-125 E O1	33.0701	Adder	38.91
945363	AF1-201 BAT	3.6594	50/50	3.6594
957871	AF2-081 C	2.4714	Adder	2.91
957872	AF2-081 E	1.0592	Adder	1.25
962132	AG1-057 BAT	2.4846	50/50	2.4846
963291	AG1-178 C O2	7.3339	Adder	16.28
963351	AG1-184 O2	3.9511	Adder	8.77
963613	AG1-210 BAT	0.5145	Merchant Transmission	0.5145
963821	AG1-235 C O2	3.3127	Adder	7.35
963822	AG1-235 E O2	2.2085	Adder	4.9
964023	AG1-256 BAT	0.9707	Merchant Transmission	0.9707
964951	AG1-359 O1	3.6916	Adder	8.19
965181	AG1-383 C	0.3749	Adder	0.83
965182	AG1-383 E	0.1110	Adder	0.25
966663	AG1-536 BAT	8.0272	50/50	8.0272
WEC	WEC	0.1569	Confirmed LTF	0.1569
LGEE	LGEE	0.3204	Confirmed LTF	0.3204
CPL	CPL	1.5145	Confirmed LTF	1.5145
CBM-W2	CBM-W2	6.6573	Confirmed LTF	6.6573
NY	NY	0.1593	Confirmed LTF	0.1593
TVA	TVA	1.2432	Confirmed LTF	1.2432
O-066	O-066	2.3084	Confirmed LTF	2.3084
SIGE	SIGE	0.0930	Confirmed LTF	0.0930
CBM-S2	CBM-S2	18.2074	Confirmed LTF	18.2074
CBM-S1	CBM-S1	0.3112	Confirmed LTF	0.3112
G-007	G-007	0.3633	Confirmed LTF	0.3633
MEC	MEC	0.9264	Confirmed LTF	0.9264
LAGN	LAGN	1.5470	Confirmed LTF	1.5470
CBM-W1	CBM-W1	6.6034	Confirmed LTF	6.6034

13.5.30 Index 30

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174025789	934060	AD1-033 TAP	DVP	314481	6LANDSTN	DVP	1	DVP_P4-2: 2110T2128	breaker	830.0	119.22	127.47	DC	68.49

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.4124	50/50	0.4124
313717	6SLIGO L2192	3.1727	50/50	3.1727
314466	6FENTRES	3.8037	50/50	3.8037
314550	6HICKORY	6.7944	50/50	6.7944
314594	6PLYMOTH	0.0329	Adder	0.04
314632	6AYDLETOLD	3.0857	50/50	3.0857
314638	6ELIZ CT	0.2411	50/50	0.2411
314639	6TANGLEW	0.3906	50/50	0.3906
314643	3O INLET	0.5890	50/50	0.5890
315293	1DOMTR9	2.0801	Adder	2.45
315294	1DOMTR10	2.5492	Adder	3.0
315603	6AA1-139SOLA	3.3000	50/50	3.3000
315605	6W1-029WIND	0.7221	50/50	0.7221
315611	6Z1-036WIND	0.7206	50/50	0.7206
901082	W1-029 E	30.6310	50/50	30.6310
913392	Y1-086 E	2.4934	50/50	2.4934
916042	Z1-036 E (Suspended)	30.6008	50/50	30.6008
917122	Z2-027 E	1.0611	50/50	1.0611
919152	AA1-139 E	9.5681	50/50	9.5681
920692	AA2-178 E	1.7770	Adder	2.09
923832	AB2-022 E	1.4076	50/50	1.4076
933731	AC2-196 C	0.4840	50/50	0.4840
933732	AC2-196 E	2.0433	50/50	2.0433
933991	AD1-023 C	3.9515	Adder	4.65
933992	AD1-023 E	2.1512	Adder	2.53
934061	AD1-033 C	15.0478	50/50	15.0478
934062	AD1-033 E	10.0318	50/50	10.0318
934521	AD1-076 C	18.9017	Adder	22.24
934522	AD1-076 E	9.6247	Adder	11.32
937221	AD2-160 C O1	9.1043	50/50	9.1043
937222	AD2-160 E O1	4.7742	50/50	4.7742
938535	AE1-072 C	25.0916	50/50	25.0916
938536	AE1-072 E	12.9260	50/50	12.9260
940491	AE2-034 C	3.1098	Adder	3.66
940492	AE2-034 E	1.3328	Adder	1.57
941501	AE2-147 C	10.5624	50/50	10.5624
941502	AE2-147 E	7.0416	50/50	7.0416
942401	AE2-253 C	9.5762	50/50	9.5762
942402	AE2-253 E	4.3023	50/50	4.3023
944581	AF1-123 C O1	20.0499	Adder	23.59
944582	AF1-123 E O1	45.9087	Adder	54.01
944591	AF1-124 C O1	20.0499	Adder	23.59

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
944592	AF1-124 E O1	45.9087	Adder	54.01
944601	AF1-125 C O1	20.0499	Adder	23.59
944602	AF1-125 E O1	45.9087	Adder	54.01
944871	AF1-152 C	3.5208	50/50	3.5208
944872	AF1-152 E	2.3472	50/50	2.3472
945711	AF1-236 C O1	34.0452	Adder	40.05
945712	AF1-236 E O1	21.0284	Adder	24.74
957531	AF2-047 C	7.3895	Adder	8.69
957532	AF2-047 E	3.7170	Adder	4.37
957632	AF2-057 BAT	3.5502	50/50	3.5502
957871	AF2-081 C	14.8837	50/50	14.8837
957872	AF2-081 E	6.3787	50/50	6.3787
963821	AG1-235 C O2	41.0954	50/50	41.0954
963822	AG1-235 E O2	27.3969	50/50	27.3969
964951	AG1-359 O1	46.0200	50/50	46.0200
965003	AG1-364 BAT	17.2080	50/50	17.2080
965181	AG1-383 C	4.5721	50/50	4.5721
965182	AG1-383 E	1.3541	50/50	1.3541
965631	AG1-431	10.4465	Adder	23.19
966931	AG1-431A	7.8486	Adder	17.42
WEC	WEC	0.0564	Confirmed LTF	0.0564
LGEE	LGEE	0.1144	Confirmed LTF	0.1144
CPL	CPL	0.4887	Confirmed LTF	0.4887
CBM-W2	CBM-W2	2.1952	Confirmed LTF	2.1952
NY	NY	0.0133	Confirmed LTF	0.0133
TVA	TVA	0.3962	Confirmed LTF	0.3962
O-066	O-066	0.2557	Confirmed LTF	0.2557
SIGE	SIGE	0.0240	Confirmed LTF	0.0240
CBM-S2	CBM-S2	5.5436	Confirmed LTF	5.5436
CBM-S1	CBM-S1	0.1007	Confirmed LTF	0.1007
G-007	G-007	0.0410	Confirmed LTF	0.0410
MEC	MEC	0.3210	Confirmed LTF	0.3210
LAGN	LAGN	0.4952	Confirmed LTF	0.4952
CBM-W1	CBM-W1	2.4114	Confirmed LTF	2.4114

13.5.31 Index 31

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
173442075	962840	AG1-133 TAP	DVP	314934	8SPOTSYL	DVP	1	DVP_P4-2: 568T575	breaker	3938.0	118.67	118.81	DC	39.98

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
314333	6POWHATN	0.4278	50/50	0.4278
314435	6SAPONY	0.3939	50/50	0.3939
314466	6FENTRES	1.8729	Adder	2.2
314550	6HICKORY	3.4594	Adder	4.07
315102	1BRUNSWICKG1	8.8966	50/50	8.8966
315103	1BRUNSWICKG2	8.8966	50/50	8.8966
315104	1BRUNSWICKG3	8.8966	50/50	8.8966
315105	1BRUNSWICKS1	18.4825	50/50	18.4825
315153	1CLOVER1	12.6320	50/50	12.6320
315154	1CLOVER2	12.5061	50/50	12.5061
315177	1S ANNAG1	1.7698	50/50	1.7698
315178	1S ANNAS1	0.9095	50/50	0.9095
315179	1S ANNAG2	1.7698	50/50	1.7698
315180	1S ANNAS2	0.9095	50/50	0.9095
315225	1N ANNA1	90.4135	50/50	90.4135
315226	1N ANNA2	90.4517	50/50	90.4517
315241	1Z1-086 GT1	11.4369	50/50	11.4369
315242	1Z1-086 GT2	11.4369	50/50	11.4369
315243	1Z1-086 GT3	11.4369	50/50	11.4369
315244	1Z1-086 ST	19.8816	50/50	19.8816
923852	AB2-025 E	1.1216	50/50	1.1216
923862	AB2-026 E	1.2182	50/50	1.2182
925021	AB2-158 C	3.3057	50/50	3.3057
925022	AB2-158 E	9.3429	50/50	9.3429
926754	AC1-161 C	25.6831	Adder	30.22
926755	AC1-161 E	10.9634	Adder	12.9
933294	AC2-141 C	25.6831	Adder	30.22
933295	AC2-141 E	10.9634	Adder	12.9
933501	AC2-165 C	10.6943	50/50	10.6943
933502	AC2-165 E	8.0489	50/50	8.0489
933732	AC2-196 E	1.0061	Adder	1.18
934061	AD1-033 C	6.3432	Adder	7.46
934062	AD1-033 E	4.2288	Adder	4.98
934615	AD1-087 C	7.9141	50/50	7.9141
934616	AD1-087 E	3.3866	50/50	3.3866
935171	AD1-152 C O1	8.6928	50/50	8.6928
935172	AD1-152 E O1	5.7952	50/50	5.7952
937481	AD2-202 C O1	2.3181	50/50	2.3181
937482	AD2-202 E O1	1.3039	50/50	1.3039
938494	AE1-068_C1	34.2399	50/50	34.2399
938497	AE1-068_C2	34.2399	50/50	34.2399

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
938498	AE1-068_E1	18.9276	50/50	18.9276
938499	AE1-068_E2	18.9276	50/50	18.9276
938504	AE1-069_C1	26.0946	50/50	26.0946
938507	AE1-069_C2	28.1362	50/50	28.1362
938508	AE1-069_E1	14.8444	50/50	14.8444
938509	AE1-069_E2	15.9928	50/50	15.9928
938551	AE1-074_C	0.4051	50/50	0.4051
938552	AE1-074_E	1.2936	50/50	1.2936
938561	AE1-075_C	0.3720	50/50	0.3720
938562	AE1-075_E	1.1593	50/50	1.1593
939231	AE1-154_C	3.4349	50/50	3.4349
939232	AE1-154_E	2.4044	50/50	2.4044
939414	AE1-173_C1	34.6987	50/50	34.6987
939415	AE1-173_C2	29.7418	50/50	29.7418
939416	AE1-173_C3	34.6987	50/50	34.6987
939423	AE1-173_E1	23.1325	50/50	23.1325
939424	AE1-173_E2	19.8278	50/50	19.8278
939425	AE1-173_E3	23.1325	50/50	23.1325
940471	AE2-031_C	37.3926	50/50	37.3926
940472	AE2-031_E	24.9284	50/50	24.9284
940481	AE2-033_C	13.5920	Adder	15.99
940482	AE2-033_E	9.1632	Adder	10.78
940541	AE2-040	2.8401	50/50	2.8401
940641	AE2-051_C O1	19.4481	50/50	19.4481
940642	AE2-051_E O1	12.9654	50/50	12.9654
941031	AE2-094_C	44.8215	50/50	44.8215
941032	AE2-094_E	20.0745	50/50	20.0745
941281	AE2-122_C O1	23.1185	Adder	27.2
941282	AE2-122_E O1	93.2888	Adder	109.75
941291	AE2-123_C O1	24.6282	Adder	28.97
941292	AE2-123_E O1	96.0393	Adder	112.99
941301	AE2-124_C O1	22.4012	Adder	26.35
941302	AE2-124_E O1	98.2935	Adder	115.64
942931	AE2-313_C	40.4325	50/50	40.4325
942932	AE2-313_E	26.9550	50/50	26.9550
944011	AF1-069_C	14.6449	50/50	14.6449
944012	AF1-069_E	5.6892	50/50	5.6892
944111	AF1-079_C	6.5263	50/50	6.5263
944112	AF1-079_E	8.8620	50/50	8.8620
944581	AF1-123_C O1	40.7456	Adder	47.94
944582	AF1-123_E O1	93.2960	Adder	109.76
944591	AF1-124_C O1	40.7456	Adder	47.94
944592	AF1-124_E O1	93.2960	Adder	109.76
944601	AF1-125_C O1	40.7456	Adder	47.94
944602	AF1-125_E O1	93.2960	Adder	109.76
945811	AF1-246_C O1	8.0182	50/50	8.0182
945812	AF1-246_E O1	11.0728	50/50	11.0728
946011	AF1-266	11.3776	Adder	13.39
946371	AF1-301_C	26.6844	50/50	26.6844
946372	AF1-301_E	17.9066	50/50	17.9066
957431	AF2-037_C	23.8617	50/50	23.8617
957432	AF2-037_E	15.9078	50/50	15.9078

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
957481	AF2-042 C	57.2730	50/50	57.2730
957482	AF2-042 E	38.1820	50/50	38.1820
957691	AF2-063 C	38.0772	50/50	38.0772
957692	AF2-063 E	25.3848	50/50	25.3848
957911	AF2-085	4.6076	50/50	4.6076
958501	AF2-144 C	2.0042	50/50	2.0042
958502	AF2-144 E	1.3361	50/50	1.3361
959531	AF2-244 C (Withdrawn : 01/06/2021)	1.8470	50/50	1.8470
959532	AF2-244 E (Withdrawn : 01/06/2021)	1.1003	50/50	1.1003
959751	AF2-266	9.0675	50/50	9.0675
961811	AG1-023 C	6.7229	50/50	6.7229
961812	AG1-023 E	26.8914	50/50	26.8914
962271	AG1-075 C O2	7.5437	Adder	16.75
962272	AG1-075 E O2	4.5975	Adder	10.21
962841	AG1-133 C O2	55.9818	50/50	55.9818
962842	AG1-133 E O2	37.3212	50/50	37.3212
963041	AG1-153 C	6.2424	50/50	6.2424
963042	AG1-153 E	9.3636	50/50	9.3636
963111	AG1-160 C	6.3219	50/50	6.3219
963112	AG1-160 E	9.4829	50/50	9.4829
963291	AG1-178 C O2	70.6972	50/50	70.6972
963351	AG1-184 O2	38.0878	50/50	38.0878
963821	AG1-235 C O2	10.8054	Adder	23.99
963822	AG1-235 E O2	7.2036	Adder	15.99
964241	AG1-285 C O2	14.4743	50/50	14.4743
964242	AG1-285 E O2	9.6495	50/50	9.6495
964421	AG1-305 C O2	30.3229	50/50	30.3229
964422	AG1-305 E O2	20.2153	50/50	20.2153
964951	AG1-359 O1	12.0094	Adder	26.66
965181	AG1-383 C	1.2338	Adder	2.74
965182	AG1-383 E	0.3654	Adder	0.81
965811	AG1-449	26.2178	50/50	26.2178
966361	AG1-505 C	18.5121	50/50	18.5121
966362	AG1-505 E	12.3414	50/50	12.3414
966371	AG1-506 C	18.5121	50/50	18.5121
966372	AG1-506 E	12.3414	50/50	12.3414
WEC	WEC	0.7113	Confirmed LTF	0.7113
LGEE	LGEE	1.5305	Confirmed LTF	1.5305
CPL	CPL	8.2739	Confirmed LTF	8.2739
CBM-W2	CBM-W2	34.2451	Confirmed LTF	34.2451
NY	NY	2.6926	Confirmed LTF	2.6926
TVA	TVA	6.6738	Confirmed LTF	6.6738
O-066	O-066	36.6314	Confirmed LTF	36.6314
SIGE	SIGE	0.8456	Confirmed LTF	0.8456
CBM-S2	CBM-S2	100.2449	Confirmed LTF	100.2449
CBM-S1	CBM-S1	1.6507	Confirmed LTF	1.6507
G-007	G-007	5.7509	Confirmed LTF	5.7509
MEC	MEC	4.4540	Confirmed LTF	4.4540
LAGN	LAGN	8.2023	Confirmed LTF	8.2023
AA2-074	AA2-074	5.4630	LTF	5.4630
CBM-W1	CBM-W1	28.6569	Confirmed LTF	28.6569

13.5.32 Index 32

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC DC	MW IMPACT
174226271	963820	AG1-235 TAP	DVP	314466	6FENTRESS	DVP	1	DVP_P4-2: 246T247	breaker	699.0	100.07	130.32	DC	211.45

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
313526	AB2-022 C	0.7762	50/50	0.7762
313717	6SLIGO L2192	4.2819	50/50	4.2819
314594	6PLYMOTH	0.1021	50/50	0.1021
314632	6AYDLETOLD	5.1019	50/50	5.1019
314638	6ELIZ CT	0.4538	50/50	0.4538
314639	6TANGLEW	0.7989	50/50	0.7989
314643	3O INLET	0.9739	50/50	0.9739
315292	1DOMTR78	1.2624	50/50	1.2624
315293	1DOMTR9	6.5292	50/50	6.5292
315294	1DOMTR10	8.0015	50/50	8.0015
315603	6AA1-139SOLA	3.4828	50/50	3.4828
315605	6W1-029WIND	2.0312	50/50	2.0312
315611	6Z1-036WIND	1.8261	50/50	1.8261
315614	AA2-178 C	1.9949	50/50	1.9949
316140	AB2-099 C (Suspended)	0.2252	Adder	0.26
316141	AB2-099 E (Suspended)	0.0965	Adder	0.11
901082	W1-029 E	86.1587	50/50	86.1587
913392	Y1-086 E	4.6928	50/50	4.6928
916042	Z1-036 E (Suspended)	77.5486	50/50	77.5486
917122	Z2-027 E	2.1701	50/50	2.1701
917332	Z2-043 E	0.4047	Adder	0.48
918512	AA1-065 E OP	2.0335	Adder	2.39
918532	AA1-067 E	0.3013	Adder	0.35
919152	AA1-139 E	10.0980	50/50	10.0980
920692	AA2-178 E	5.4190	50/50	5.4190
923832	AB2-022 E	2.6492	50/50	2.6492
925121	AB2-169 C	0.8142	50/50	0.8142
925122	AB2-169 E	4.6312	50/50	4.6312
927024	AC1-189 C	3.0488	Adder	3.59
927025	AC1-189 E	1.5187	Adder	1.79
933991	AD1-023 C	12.5680	50/50	12.5680
933992	AD1-023 E	6.8420	50/50	6.8420
934521	AD1-076 C	58.9190	50/50	58.9190
934522	AD1-076 E	30.0015	50/50	30.0015
936401	AD2-051 C O1	4.3769	Adder	5.15
936402	AD2-051 E O1	1.8794	Adder	2.21
937221	AD2-160 C O1	6.2012	50/50	6.2012
937222	AD2-160 E O1	3.2518	50/50	3.2518
938222	AE1-035 E	0.5592	Adder	0.66
938535	AE1-072 C	45.0361	50/50	45.0361
938536	AE1-072 E	23.2004	50/50	23.2004

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
940491	AE2-034 C	9.4832	50/50	9.4832
940492	AE2-034 E	4.0642	50/50	4.0642
941501	AE2-147 C	29.7099	50/50	29.7099
941502	AE2-147 E	19.8066	50/50	19.8066
941542	AE2-151 E (Withdrawn : 01/08/2021)	0.2499	Adder	0.29
942401	AE2-253 C	6.5226	50/50	6.5226
942402	AE2-253 E	2.9304	50/50	2.9304
943171	AE2-346 C	0.5406	Adder	0.64
943172	AE2-346 E	0.2317	Adder	0.27
944871	AF1-152 C	9.9033	50/50	9.9033
944872	AF1-152 E	6.6022	50/50	6.6022
945711	AF1-236 C O1	103.8182	50/50	103.8182
945712	AF1-236 E O1	64.1244	50/50	64.1244
957531	AF2-047 C	22.5338	50/50	22.5338
957532	AF2-047 E	11.3347	50/50	11.3347
957821	AF2-076 C	2.5416	Adder	2.99
957822	AF2-076 E	1.6944	Adder	1.99
957861	AF2-080 C	2.7691	Adder	3.26
957862	AF2-080 E	1.2275	Adder	1.44
957871	AF2-081 C	15.7080	50/50	15.7080
957872	AF2-081 E	6.7320	50/50	6.7320
959511	AF2-242 C	5.1205	50/50	5.1205
959512	AF2-242 E	3.9826	50/50	3.9826
961941	AG1-037 C	0.1023	Adder	0.23
961942	AG1-037 E	0.0682	Adder	0.15
962331	AG1-082 C	0.4093	Adder	0.91
962332	AG1-082 E	0.2729	Adder	0.61
962341	AG1-083 C	0.4093	Adder	0.91
962342	AG1-083 E	0.2729	Adder	0.61
962351	AG1-084 C	0.3974	Adder	0.88
962352	AG1-084 E	0.2649	Adder	0.59
962361	AG1-085 C	0.3974	Adder	0.88
962362	AG1-085 E	0.2649	Adder	0.59
963821	AG1-235 C O2	126.8717	50/50	126.8717
963822	AG1-235 E O2	84.5811	50/50	84.5811
964491	AG1-312 C O1	12.1027	50/50	12.1027
964492	AG1-312 E O1	3.0257	50/50	3.0257
965631	AG1-431	60.1053	50/50	60.1053
965691	AG1-437 C O1	8.6592	50/50	8.6592
965692	AG1-437 E O1	5.7728	50/50	5.7728
965701	AG1-438 C O1	8.6592	50/50	8.6592
965702	AG1-438 E O1	5.7728	50/50	5.7728
965741	AG1-442 O1	5.0512	50/50	5.0512
965751	AG1-443 O1	5.0512	50/50	5.0512
966491	AG1-518 O2	16.5055	50/50	16.5055
966801	AG1-551 C	0.6134	Adder	1.36
966802	AG1-551 E	0.2629	Adder	0.58
966931	AG1-431A	45.1580	50/50	45.1580
WEC	WEC	0.0860	Confirmed LTF	0.0860
LGEE	LGEE	0.1759	Confirmed LTF	0.1759
CPL	CPL	1.0797	Confirmed LTF	1.0797

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
CBM-W2	CBM-W2	3.8259	Confirmed LTF	3.8259
NY	NY	0.1089	Confirmed LTF	0.1089
TVA	TVA	0.7224	Confirmed LTF	0.7224
O-066	O-066	1.5479	Confirmed LTF	1.5479
SIGE	SIGE	0.0558	Confirmed LTF	0.0558
CBM-S2	CBM-S2	11.5466	Confirmed LTF	11.5466
CBM-S1	CBM-S1	0.1797	Confirmed LTF	0.1797
G-007	G-007	0.2425	Confirmed LTF	0.2425
MEC	MEC	0.5180	Confirmed LTF	0.5180
LAGN	LAGN	0.9013	Confirmed LTF	0.9013
CBM-W1	CBM-W1	3.6031	Confirmed LTF	3.6031

13.6 Contingency Descriptions - Secondary POI

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 - 8SURRY 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_P7-1: LN 147-2118-A	CONTINGENCY 'DVP_P7-1: LN 147-2118-A' /* . OPEN BRANCH FROM BUS 314479 TO BUS 314492 CKT 1 /* 3LANDSTN 115.00 - 3P ANNE 115.00 OPEN BRANCH FROM BUS 314482 TO BUS 314491 CKT 1 /* 3LONDONB 115.00 - 3PEND
314550 6HICKORY 230 937220 AD2-160 TAP 230 1	CONTINGENCY '314550 6HICKORY 230 937220 AD2-160 TAP 230 1' / 1085 OPEN BRANCH FROM BUS 314550 TO BUS 937220 CKT 1 / 314550 6HICKORY 230 937220 AD2-160 TAP 230 1 END
DVP_P1-2: LN 269_1-A	CONTINGENCY 'DVP_P1-2: LN 269_1-A' / 1161 OPEN BRANCH FROM BUS 314466 TO BUS 963820 CKT 1 / 314466 6FENTRES 230 963820 AG1-235 TAP 230 1 END

Contingency Name	Contingency Definition
DVP_P4-2: 240T2041	CONTINGENCY 'DVP_P4-2: 240T2041' / 1493 OPEN BRANCH FROM BUS 314303 TO BUS 935160 CKT 2 / 314303 6HOPEWLL 230 935160 AD1-151 TAP 230 2 OPEN BRANCH FROM BUS 935160 TO BUS 942550 CKT 2 / 935160 AD1-151 TAP 230 942550 AE2-270 TAP 230 2 OPEN BRANCH FROM BUS 316132 TO BUS 925332 CKT 1 / 316132 AB2-190 C 230 925332 AB2-190 E 230 1 OPEN BRANCH FROM BUS 316132 TO BUS 935160 CKT 1 / 316132 AB2-190 C 230 935160 AD1-151 TAP 230 1 OPEN BRANCH FROM BUS 935160 TO BUS 935161 CKT 1 / 935160 AD1-151 TAP 230 935161 AD1-151 MAIN 230 1 OPEN BRANCH FROM BUS 935160 TO BUS 963221 CKT 1 / 935160 AD1-151 TAP 230 963221 AG1-171 C 230 1 OPEN BRANCH FROM BUS 935160 TO BUS 963231 CKT 1 / 935160 AD1-151 TAP 230 963231 AG1-172 C 230 1 OPEN BRANCH FROM BUS 935160 TO BUS 963241 CKT 1 / 935160 AD1-151 TAP 230 963241 AG1-173 C 230 1 OPEN BRANCH FROM BUS 935160 TO BUS 963251 CKT 1 / 935160 AD1-151 TAP 230 963251 AG1-174 C 230 1 OPEN BRANCH FROM BUS 935160 TO BUS 963261 CKT 1 / 935160 AD1-151 TAP 230 963261 AG1-175 C 230 1 OPEN BRANCH FROM BUS 935161 TO BUS 935162 CKT 1 / 935161 AD1-151 MAIN 230 935162 AD1-151 COL 34.5 1 OPEN BRANCH FROM BUS 935162 TO BUS 935163 CKT 1 / 935162 AD1-151 COL 34.5 935163 AD1-151 GSU 34.5 1 OPEN BRANCH FROM BUS 935163 TO BUS 935164 CKT 1 / 935163 AD1-151 GSU 34.5 935164 AD1-151 C 0.60 1 OPEN BRANCH FROM BUS 935164 TO BUS 935165 CKT 1 / 935164 AD1-151 C 0.60 935165 AD1-151 E 0.60 1 OPEN BRANCH FROM BUS 314303 TO BUS 315077 CKT 1 / 314303 6HOPEWLL 230 315077 1HOPHCF1 13.8 1 OPEN BRANCH FROM BUS 314303 TO BUS 315078 CKT 1 / 314303 6HOPEWLL 230 315078 1HOPHCF2 13.8 1 OPEN BRANCH FROM BUS 314303 TO BUS 315079 CKT 1 / 314303 6HOPEWLL 230 315079 1HOPHCF3 13.8 1 OPEN BRANCH FROM BUS 314303 TO BUS 315080 CKT 1 / 314303 6HOPEWLL 230 315080 1HOPHCF4 13.8 1 END
DVP_P4-2: 568T575	CONTINGENCY 'DVP_P4-2: 568T575' /* LADYSMITH 500 KV OPEN BRANCH FROM BUS 314911 TO BUS 314922 CKT 1 /* 8LADYSMITH 500.00 - 8POSSUM 500.00 OPEN BRANCH FROM BUS 314911 TO BUS 314918 CKT 1 /* 8LADYSMITH 500.00 - 8NO ANNA 500.00 END
DVP_P1-2: LN 562-A	CONTINGENCY 'DVP_P1-2: LN 562-A' OPEN BRANCH FROM BUS 314902 TO BUS 940640 CKT 1 /* 8CARSON 500.00 - AE2- 051 TAP 500.00 END

Contingency Name	Contingency Definition
314295 6BIRDNECK 230 941280 AE2-122 TAP 230 1	CONTINGENCY '314295 6BIRDNECK 230 941280 AE2-122 TAP 230 1' / 738 OPEN BRANCH FROM BUS 314295 TO BUS 941280 CKT 1 / 314295 6BIRDNECK 230 941280 AE2-122 TAP 230 1 END
DVP_P7-1: LN 78-2118-A	CONTINGENCY 'DVP_P7-1: LN 78-2118-A' /* . OPEN BRANCH FROM BUS 314491 TO BUS 314511 CKT 1 /* 3PEND
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
DVP_P4-2: 531T582	CONTINGENCY 'DVP_P4-2: 531T582' / 2025 OPEN BRANCH FROM BUS 314924 TO BUS 314928 CKT 1 / 314924 8SURRY 500 314928 8SUFFOLK 500 1 OPEN BRANCH FROM BUS 314924 TO BUS 314931 CKT 1 / 314924 8SURRY 500 314931 8SKIFF CREEK 500 1 END
DVP_P4-2: 231T2128	CONTINGENCY 'DVP_P4-2: 231T2128' /* THRASHER 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 314466 TO BUS 314508 CKT 1 /* 6FENTRES 230.00 - 6THRASHER 230.00 END
DVP_P1-2: LN 271-B	CONTINGENCY 'DVP_P1-2: LN 271-B' / 839 OPEN BRANCH FROM BUS 314481 TO BUS 934060 CKT 1 / 314481 6LANDSTN 230 934060 AD1-033 TAP 230 1 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 - AF2-076 TAP 230.00 OPEN BRANCH FROM BUS 314537 TO BUS 966490 CKT 1 /* 6SUFFOLK 230.00 - AG1-518 TAP 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
DVP_P1-2: LN 240-C	CONTINGENCY 'DVP_P1-2: LN 240-C' / 694 OPEN BRANCH FROM BUS 314538 TO BUS 942550 CKT 2 / 314538 6SURRY 230 942550 AE2-270 TAP 230 2 END
DVP_P1-2: LN 557	CONTINGENCY 'DVP_P1-2: LN 557' OPEN BRANCH FROM BUS 314903 TO BUS 314908 CKT 1 /* 8CHCKAHM 500.00 - 8ELMONT 500.00 END
DVP_P1-2: LN 575	CONTINGENCY 'DVP_P1-2: LN 575' OPEN BRANCH FROM BUS 314911 TO BUS 314918 CKT 1 /* 8LADYSMITH 500.00 - 8NO ANNA 500.00 END
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
DVP_P4-2: 557T574	CONTINGENCY 'DVP_P4-2: 557T574' /* ELMONT 500 KV 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 OPEN BRANCH FROM BUS 314908 TO BUS 314911 CKT 1 /* 8ELMONT 500.00 - 8LADYSMITH 500.00 END
Base Case	

Contingency Name	Contingency Definition
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
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_P4-2: H2T557	CONTINGENCY 'DVP_P4-2: H2T557' /* ELMONT 500 KV 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 OPEN BRANCH FROM BUS 314218 TO BUS 314908 CKT 2 /* 6ELMONT 230.00 - 8ELMONT 500.00 END
DVP_P7-1: LN 579-2110	CONTINGENCY 'DVP_P7-1: LN 579-2110' /* . OPEN BRANCH FROM BUS 314923 TO BUS 314927 CKT 1 /* 8SEPTA 500.00 - 8YADKIN 500.00 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 END
DVP_P4-5: L122	CONTINGENCY 'DVP_P4-5: L122' /* CHICKAHOMINY 230 KV 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 2197	CONTINGENCY 'DVP_P1-2: LN 2197' / 1842 OPEN BRANCH FROM BUS 313896 TO BUS 314303 CKT 1 / 313896 6COLONIAL TR 230 314303 6HOPEWLL 230 1 END
314303 6HOPEWLL 230 935160 AD1-151 TAP 230 2	CONTINGENCY '314303 6HOPEWLL 230 935160 AD1-151 TAP 230 2' / 693 OPEN BRANCH FROM BUS 314303 TO BUS 935160 CKT 2 / 314303 6HOPEWLL 230 935160 AD1-151 TAP 230 2 END

14 Affected Systems

14.1 TVA

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

14.2 Duke Energy Progress

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

15 Attachment 1: One Line Diagram

