Generation Interconnection

Impact Study Report

for

Queue Project AE1-085

BAKERS POND-BELL AVE 115 KV

50 MW Capacity / 75 MW Energy

Revision 1: May, 2022

Revision 0: August, 2019

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1 Introduction

This System Impact Study (SIS) has been prepared in accordance with the PJM Open Access Transmission Tariff, 205, as well as the Feasibility Study Agreement between Cabin Point Solar Center, LLC, the Interconnection Customer (IC), and PJM Interconnection, LLC (PJM), Transmission Provider (TP). The Interconnected Transmission Owner (ITO) is Virginia Electric and Power Company (VEPCO).

2 Preface

The intent of the System Impact Study is to determine a plan, with approximate cost and construction time estimates, to connect the subject generation interconnection project to the PJM network at a location specified by the Interconnection Customer. As a requirement for interconnection, the Interconnection Customer may be responsible for the cost of constructing: Network Upgrades, which are facility additions, or upgrades to existing facilities, that are needed to maintain the reliability of the PJM system. All facilities required for interconnection of a generation interconnection project must be designed to meet the technical specifications (on PJM web site) for the appropriate transmission owner.

In some instances an Interconnection Customer may not be responsible for 100% of the identified network upgrade cost because other transmission network uses, e.g. another generation interconnection or merchant transmission upgrade, may also contribute to the need for the same network reinforcement. 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 System Impact Study is performed.

The System Impact 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.

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.

3 Revision 1 Summary – May 2022

This revision is being issued to incorporate the results of AD1-023 withdraw.

4 General

The IC has proposed a solar generating facility located in Sussex County, Virginia. The installed facilities will have a capability of 75 MW with 50 MW of this output being recognized by PJM as Capacity. The proposed in-service

date for the AE1-085 project is 6/01/2022. This study does not imply an ITO commitment to either in-service date.

Queue Number	AE1-085
Project Name	BAKERS POND-BELL AVE 115 KV
Interconnection Customer	Cabin Point Solar Center, LLC
State	Virginia
County	Sussex
Transmission Owner	Dominion
MFO	75
MWE	75
MWC	50
Fuel	Solar
Basecase Study Year	2022

4.1 Point of Interconnection

AE1-085 will interconnect with the ITO transmission system via a new three breaker ring bus switching station that connects on the Bakers Pond – Bell Ave 115kV line # 106. See one line in **Attachment 1**.

4.2 Cost Summary

The AE1-085 project will be responsible for the following costs:

Description	Total Cost
Attachment Facilities	$ 1,550,000
Direct Connection Network Upgrade	$ 5,500,000
Non Direct Connection Network Upgrades	$ 800,000
Total Costs	**$ 7,850,000**

In addition, the AE1-085 project may be responsible for a contribution to the following costs

Description	Total Cost
System Upgrades	$ 29,016,000

Note: PJM Open Access Transmission Tariff (OATT) section 217.3A outline cost allocation rules. The rules are further clarified in PJM Manual 14A Attachment B. The allocation of costs for a network upgrade will start with the first Queue project to cause the need for the upgrade. Later queue projects will receive cost allocation contingent on their contribution to the violation and are allocated to the queues that have not closed less than

5 years following the execution of the first Interconnection Service Agreement which identifies the need for this upgrade.

5 Transmission Owner Scope of Work

5.1 Attachment Facilities

Generation Substation: Install metering and associated protection equipment. Estimated Cost is $550,000.

Transmission: Construct approximately one span of 115 kV Attachment line between the generation substation and a new AE1-085 Switching Station. The estimated cost for this work is $1,000,000.

The estimated total cost of the Attachment Facilities is $1,550,000. It is estimated to take 18-24 months to complete this work. 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. The total preliminary cost estimate for the Attachment work is given in the table below.

The total preliminary cost estimate for the Attachment work is given in the table below. These costs do not include CIAC Tax Gross-up.

Description	Total Cost
Substation	$ 550,000
Transmission	$ 1,000,000
Total Attachment Facility Costs	**$ 1,550,000**

5.2 Direct Connection Cost Estimate

Substation: Establish the new 115 kV AE1-085 Switching Substation (interconnection substation). The estimated cost of this work scope is $5,500,000. It is estimated to take 24-36 months to complete this work.

The total preliminary cost estimate for the Direct Connection work is given in the table below. These costs do not include CIAC Tax Gross-up.

Description	Total Cost
Substation	$ 5,500,000
	$
	$
Total Direct Connection Facility Costs	**$ 5,500,000**

5.3 Non-Direct Connection Cost Estimate

Transmission: Install transmission structure in-line with transmission line to allow the proposed interconnection switching station to be interconnected with the transmission system. Estimated cost is $800,000 and is estimated to take 24-30 months to complete.

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.

The total preliminary cost estimate for the Non-Direct Connection work is given in the table below. These costs do not include CIAC Tax Gross-up.

Description	Total Cost
Transmission	$ 800,000
Remote Terminal Work	TBD in the Facilities Study
	$
Total Non-Direct Connection Facility Costs	**$ 800,000**

6 Interconnection Customer Requirements

6.1 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.

6.2 Compliance Issues and Interconnection Customer Requirements

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

1. The purchase and installation of a fully rated protection device (circuit breaker, circuit switcher, fuse) to protect the IC's GSU transformer(s).

2. The purchase and installation of the minimum required Dominion generation interconnection relaying and control facilities as described in the System Protection noted above. This includes over/under voltage protection, over/under frequency protection, and zero sequence voltage protection relays.

3. The purchase and installation of supervisory control and data acquisition ("SCADA") equipment to provide information in a compatible format to the Dominion Transmission System Control Center.

4. Compliance with the Dominion and PJM generator power factor and voltage control requirements.

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

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

6.3 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.

7 Revenue Metering and SCADA Requirements

7.1 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.

7.2 Dominion Requirements

See Section 3.4.6 "Metering and Telecommunications" of Dominion's "Dominion's Facility Interconnection Requirements" document located at: https://www.dominionenergy.com/company/moving-energy/electric-transmission-access.

8 Network Impacts

The Queue Project AE1-085 was evaluated as a 75.0 MW (Capacity 50.0 MW) injection via a new three breaker ring bus switching station that connects on the Bakers Pond – Bell Ave 115kV line # 106 in the Dominion area. Project AE1-085 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AE1-085 was studied with a commercial probability of 100%. Potential network impacts were as follows:

Summer Peak Load Flow

9 Generation Deliverability

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

#	Contingency		Affected Area	Facility Description	Bus		ckt	Power Flow	Loading %		Rating		MW Contribution	Flowgate Appendix
	Type	Name			From	To			Initial	Final	Type	MVA		
1	N-1	DVP_P1-2: LN 106-B	DVP - DVP	3BELL AVE 2-3IVOR106 115 kV line	313879	314528	1	AC	56.4	101.39	ER	111	50	1
2	N-1	DVP_P1-2: LN 23-B	DVP - DVP	3BAKRS P-3NEWBOHE 115 kV line	314273	314280	1	AC	64.1	105.94	ER	111	50	2
3	N-1	DVP_P1-2: LN 106-B	DVP - DVP	AC2-079 TAP-3OAKRI23 115 kV line	932590	314532	1	AC	75.25	119.31	ER	111	50	3
4	N-1	DVP_P1-2: LN 23-B	DVP - DVP	AE1-085 TAP-3BAKRS P 115 kV line	938630	314273	1	AC	76.08	118.69	ER	111	50	4

10 Multiple Facility Contingency

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

NONE

11 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)

#	Contingency		Affected Area	Facility Description	Bus		Ckt	Power Flow	Loading %		Rating		MW Contribution	Flowgate Appendix
	Type	Name			From	To			Initial	Final	Type	MVA		
5	N-1	DVP_P1-2: LN 211	DVP - DVP	6HOPEWLL-6CHESTF A 230 kV line	314303	314286	1	AC	102.03	103.34	ER	449	6.05	5

12 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.

#	Contingency		Affected Area	Facility Description	Bus		ckt	Power Flow	Loading %		Rating		MW Contribution	Flowgate Appendix
	Type	Name			From	To			Initial	Final	Type	MVA		
6	N-1	DVP_P1-2: LN 106-B	DVP - DVP	3BELL AVE 2-3IVOR106 115 kV line	313879	314528	1	AC	107.41	172.73	ER	111	75	
7	N-1	DVP_P1-2: LN 23-B	DVP - DVP	3BAKRS P-3NEWBOHE 115 kV line	314273	314280	1	AC	160.59	217.27	ER	111	75	
8	N-1	DVP_P1-2: LN 23-B	DVP - DVP	3NEWBOHE-3POE 115 kV line	314280	314329	1	AC	138.81	197.92	ER	111	75	
9	N-1	DVP_P1-2: LN 563	DVP - DVP	6CHESTF B-6BASIN 230 kV line	314287	314276	1	AC	114.51	115.98	ER	664	9.61	
10	N-1	DVP_P1-2: LN 211	DVP - DVP	6HOPEWLL-6CHESTF A 230 kV line	314303	314286	1	AC	127.27	129.78	ER	449	9.08	
11	N-1	DVP_P1-2: LN 106-B	DVP - DVP	3IVOR106-AC2-079 TAP 115 kV line	314528	932590	1	AC	98	163.19	ER	111	75	
12	N-1	DVP_P1-2: LN 106-B	DVP - DVP	3OAKRI23-3SUFFOLK 115 kV line	314532	314536	1	AC	145.26	205.9	ER	111	75	
13	Non	Non	DVP - DVP	3OAKRI23-3SUFFOLK 115 kV line	314532	314536	1	AC	96.77	114.45	NR	111	20.4	
14	N-1	DVP_P1-2: LN 106-B	DVP - DVP	AC2-079 TAP-3OAKRI23 115 kV line	932590	314532	1	AC	173.58	235.04	ER	111	75	
15	Non	Non	DVP - DVP	AC2-079 TAP-3OAKRI23 115 kV line	932590	314532	1	AC	123.72	141.68	NR	111	20.4	
16	N-1	DVP_P1-2: LN 23-B	DVP - DVP	AE1-085 TAP-3BAKRS P 115 kV line	938630	314273	1	AC	172.02	229.6	ER	111	75	
17	Non	Non	DVP - DVP	AE1-085 TAP-3BAKRS P 115 kV line	938630	314273	1	AC	55.47	104.09	NR	111	54.6	

13 System Reinforcements

New System Reinforcements

(Upgrades required to mitigate reliability criteria violations, i.e. Network Impacts, initially caused by the addition of this project generation)

Violation #	Overloaded Facility	Upgrade Description	Network Upgrade Number	Upgrade Cost	Cost Allocated to AE1-085
1	3BELL AVE 2-3IVOR106 115 kV line	**DVP** **Project Id:** n6171 **Project Description:** Rebuild 0.97 miles of the Bell Ave – Ivor 115kV line #23 with 636 ACSR **Cost:** $1,261,000 **Time Estimate:** 30-36 months **New Rating:** Rate A: 261 MVA Rate B: 261 MVA Rate C: 301 MVA Note: Project AE1-085 is the driver for this overload.	n6171	$1,261,000	$1,261,000
2	3BAKRS P-3NEWBOHE 115 kV line	**DVP** **Project Id:** n6205 **Project Description**: Rebuild 2.45 miles of the Bakers Pond – New Bohemia DP 115kV line #106 with 636 ACSR **Cost:** $3,185,000 Time Estimate: 30-36 months **New Rating:** Rate A: 261 MVA Rate B: 261 MVA Rate C: 301 MVA Note: Project AE1-085 is the driver for this overload.	n6205	$3,185,000	$3,185,000

3	AC2-079 TAP-3OAKRI23 115 kV line	**DVP** **Project Id:** n6176 Project Description: Rebuild 10.5 miles of the AC2-079 tap - Oak Ridge 115kV line #23 with 636 ACSR **Cost:** $13,650,000 **Time Estimate:** 30-36 months **New Rating:** Rate A: 261 MVA Rate B: 261 MVA Rate C: 301 MVA Note: Project AE1-085 is the driver for this overload.	n6176	$13,650,000	$13,650,000
4	AE1-085 TAP-3BAKRS P 115 kV line	**DVP** **Project Id:** n6181 **Project Description:** Rebuild 8.4 miles of the AE1-085 tap – Bakers Pond 115kV line #106 with 636 ACSR **Cost:** $10,920,000 **Time Estimate:** 30-36 months **New Rating:** Rate A: 261 MVA Rate B: 261 MVA Rate C: 301 MVA Note: Project AE1-085 is the driver for this overload.	n6181	$10,920,000	$10,920,000
Total Cost ($)				$29,016,000	**$29,016,000**

Contribution to Previously Identified System Reinforcements

(Overloads initially caused by prior Queue positions with additional contribution to overloading by this project. This project may have a % allocation cost responsibility which will be calculated and reported for the Impact Study)

(Summary form of Cost allocation for transmission lines and transformers will be inserted here if any)

Violation #	Overloaded Facility	Upgrade Description	Network Upgrade Number	Upgrade Cost	Cost Allocated to AE1-085
5	6HOPEWLL-6CHESTF A 230 kV line	**PJM Baseline** **Upgrade#1** **Project Id:** b2922 **Project Description:** Rebuild 8 of 11 miles of Chesterfield - Hopewell 230 kV Line 228 to current standard with a summer emergency rating of 1046 MVA for rebuilt section.Proposed conductor is 2-636 ACSR. **This work is completed on 5/6/2020.** **Upgrade#2** **Project Id:** b3694.11 **Project Description:** Reconductor approximately 2.9 miles of 230 kV Line #228 Chesterfield – Hopewell to achieve a minimum summer emergency rating of 1046 MVA. **Type:** FAC **New Rating:** **Rate A:** 1047 MVA **Rate B:** 1047 MVA **Rate C:** 1204 MVA **Projected ISD:** 6/1/2026 **Upgrade#3** **Project Id:** b3694.12	b2922 + b3694.11 + b3694.12 + b3694.13	$0	$0

		Project Description: Upgrade equipment at Chesterfield substation to not limit ratings on Lines 211 and 228. **Projected ISD:** 06/01/2026 **<u>Upgrade#4</u>** **Project Id:** b3694.13 **Project Description:** Upgrade equipment at Hopewell substation to not limit ratings on Lines 211 and 228. **Projected ISD:** 06/01/2026 **Note 1**: Although Queue Project AE1-085 may not have cost responsibility for all these upgrade, Queue Project AE1-085 may need this upgrade in-service to be deliverable to the PJM system. If Queue Project AE1-085 comes into service prior to completion of the upgrade, Queue Project AE1-085 will need an interim study.			
Total Cost ($)				$0	**$0**

14 Flow Gate Details

The following appendices contain additional information about each flowgate presented in the body of the report. For each appendix, a description of the flowgate and its contingency was included for convenience. However, the intent of the appendix section is to provide more information on which projects/generators have contributions to the flowgate in question. Although this information is not used "as is" for cost allocation purposes, it can be used to gage other generators impact. It should be noted the generator contributions presented in the appendices sections are full contributions, whereas in the body of the report, those contributions take into consideration the commercial probability of each project.

14.1 Contingency Descriptions

Contingency Name	Description
DVP_P1-2: LN 106-B	CONTINGENCY 'DVP_P1-2: LN 106-B' OPEN BRANCH FROM BUS 938630 TO BUS 314273 CKT 1 /* AE1-085 TAP 115.00 - 3BAKRS P 115.00 OPEN BRANCH FROM BUS 314262 TO BUS 314280 CKT 1 /* 3NEWBO_1 115.00 - 3NEWBOHE 115.00 OPEN BRANCH FROM BUS 314273 TO BUS 314280 CKT 1 /* 3BAKRS P 115.00 - 3NEWBOHE 115.00 OPEN BRANCH FROM BUS 314280 TO BUS 314329 CKT 1 /* 3NEWBOHE 115.00 - 3POE 115.00 OPEN BUS 314262 /* ISLAND: 3NEWBO_1 115.00 OPEN BUS 314273 /* ISLAND: 3BAKRS P 115.00 OPEN BUS 314280 /* ISLAND: 3NEWBOHE 115.00 END
DVP_P1-2: LN 211	CONTINGENCY 'DVP_P1-2: LN 211' OPEN BRANCH FROM BUS 314287 TO BUS 314303 CKT 1 /* 6CHESTF B 230.00 - 6HOPEWLL 230.00 END
DVP_P1-2: LN 23-B	CONTINGENCY 'DVP_P1-2: LN 23-B' OPEN BRANCH FROM BUS 314206 TO BUS 314529 CKT 1 /* 3OAKRIDG 115.00 - 3KINGFORK 115.00 OPEN BRANCH FROM BUS 314206 TO BUS 314532 CKT Z1 /* 3OAKRIDG 115.00 - 3OAKRI23 115.00 OPEN BRANCH FROM BUS 932590 TO BUS 314532 CKT 1 /* AC2-079 TAP 115.00 - 3OAKRI23 115.00

	OPEN BRANCH FROM BUS 314532 TO BUS 314536 CKT 1 /* 3OAKRI23 115.00 - 3SUFFOLK 115.00 OPEN BUS 314206 /* ISLAND: 3OAKRIDG 115.00 OPEN BUS 314261 /* ISLAND: 3OAKRI_1 115.00 OPEN BUS 314529 /* ISLAND: 3KINGFORK 115.00 OPEN BUS 314532 /* ISLAND: 3OAKRI23 115.00 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

14.2 Index 1

(DVP - DVP) The 3BELL AVE 2-3IVOR106 115 kV line (from bus 313879 to bus 314528 ckt 1) loads from 56.4% to 101.39% (AC power flow) of its emergency rating (111 MVA) for the single line contingency outage of 'DVP_P1-2: LN 106-B'. This project contributes approximately 50.0 MW to the thermal violation.

Bus Number	Bus Name	Full Contribution
934571	AD1-082 C	43.3
938631	AE1-085 C O1	50.
925061	AB2-161 C O1	19.

14.3 Index 2

(DVP - DVP) The 3BAKRS P-3NEWBOHE 115 kV line (from bus 314273 to bus 314280 ckt 1) loads from 64.1% to 105.94% (AC power flow) of its emergency rating (111 MVA) for the single line contingency outage of 'DVP_P1-2: LN 23-B'. This project contributes approximately 50.0 MW to the thermal violation.

Bus Number	Bus Name	Full Contribution
932591	AC2-079 C O1	32.3
934571	AD1-082 C	43.3
938631	AE1-085 C O1	50.
925061	AB2-161 C O1	19.

14.4 Index 3

(DVP - DVP) The AC2-079 TAP-3OAKRI23 115 kV line (from bus 932590 to bus 314532 ckt 1) loads from 75.25% to 119.31% (AC power flow) of its emergency rating (111 MVA) for the single line contingency outage of 'DVP_P1-2: LN 106-B'. This project contributes approximately 50.0 MW to the thermal violation.

Bus Number	Bus Name	Full Contribution
932591	AC2-079 C O1	32.3
934571	AD1-082 C	43.3
938631	AE1-085 C O1	50.
925061	AB2-161 C O1	19.

14.5 Index 4

(DVP - DVP) The AE1-085 TAP-3BAKRS P 115 kV line (from bus 938630 to bus 314273 ckt 1) loads from 76.08% to 118.69% (AC power flow) of its emergency rating (111 MVA) for the single line contingency outage of 'DVP_P1-2: LN 23-B'. This project contributes approximately 50.0 MW to the thermal violation.

Bus Number	Bus Name	Full Contribution
932591	AC2-079 C O1	32.3
934571	AD1-082 C	43.3
938631	AE1-085 C O1	50.
925061	AB2-161 C O1	19.

14.6 Index 5

(DVP - DVP) The 6HOPEWLL-6CHESTF A 230 kV line (from bus 314303 to bus 314286 ckt 1) loads from 102.03% to 103.34% (AC power flow) of its emergency rating (449 MVA) for the single line contingency outage of 'DVP_P1-2: LN 211'. This project contributes approximately 6.05 MW to the thermal violation.

Bus Number	Bus Name	Full Contribution
315098	1CHESPKA	0.23
315099	1CHESPKB	0.39
315261	1GOSPORTB	0.24
315262	1GOSPORTC	0.2
315119	1GRAVEL3	3.49
315120	1GRAVEL4	3.53
315121	1GRAVEL5	3.49
315122	1GRAVEL6	3.53
315117	1GRAVELC	1.2
315074	1HOPCGN1	25.51
315075	1HOPCGN2	25.18
315077	1HOPHCF1	8.01
315078	1HOPHCF2	8.01
315079	1HOPHCF3	8.01
315080	1HOPHCF4	12.17
315076	1HOPPOLC	5.13
315116	1SURRY 1	34.33
314507	3THOMPSN	0.18
932041	AC2-012 C	5.13
932591	AC2-079 C O1	2.99
934011	AD1-025 C	34.59
934571	AD1-082 C	4.52
935111	AD1-144 C	0.17
935161	AD1-151 C O1	35.23
936041	AD2-007	3.67
936051	AD2-008 C	6.02
936661	AD2-085 C	1.81
938631	AE1-085 C O1	6.05
939191	AE1-149 C O1	7.64
939311	AE1-162 C	2.13
LTF	CARR	0.22
LTF	CBM-S1	1.47
LTF	CBM-S2	2.35
LTF	CBM-W1	0.68

LTF	CBM-W2	8.82
LTF	CIN	0.36
LTF	CPLE	1.3
LTF	IPL	0.21
LTF	LGEE	0.1
LTF	MEC	1.06
LTF	RENSSELAER	0.17
LTF	TILTON	0.29
LTF	WEC	0.09
924811	AB2-134 C O1	4.62
925061	AB2-161 C O1	1.98
925331	AB2-190 C	43.84
926661	AC1-147 C	0.2
927221	AC1-216 C O1	20.12

Affected Systems

15 Affected Systems

None

Short Circuit

16 Short Circuit

The following Breakers are overduty

None

Stability

17 Stability

The project Stability Study will be complete as part of the Facilities Study.

Attachment 1

System Configuration