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1. EXECUTIVE SUMMARY

Shah & Associates, Inc, subconsultant to NIKA, has prepared the power system study of the WJ Dorn VA Medical Center, Columbia, South Carolina for the **Department of Veterans Affairs – Central Office**. The power system study includes short circuit analysis, protective device coordination study, voltage drop analysis, arc-flash hazard analysis, and a site assessment.

This is a 100% report on the power system study of the WJ Dorn VA Medical Center, Columbia, South Carolina. This report provides the load flow analysis (bus voltage drop), short circuit analysis and evaluation of the primary system equipment (13.09kV) and the secondary system distribution equipment (240V, 208V and 480V). This report presents the voltage drop calculations, short circuit calculations, protective device coordination studies, and an arc-flash hazard analysis study of the existing buildings' distribution equipment.

The existing electrical distribution system was surveyed for data required for modeling the electrical distribution system and for the site assessment. Certain specific data required was not available and therefore reasonable assumptions were made in order to perform the electrical power distribution study. These assumptions can be found under Section 2.2. The site assessment comments noted by S&A are based on visual observation of equipment. We believe that additional testing of equipment could provide more information of the equipment condition, but such testing is beyond the scope of this study. A commercially available software developed by SKM Power Tools was used to perform the short circuit calculations, protective device coordination study, voltage drop calculations and arc-flash hazard analysis.

The main electrical service to the VAMC facility is provided by the South Carolina Electric and Gas Company at 33kV. Each of the two underground 33kV feeders feed 5 MVA, 34.4kV – 13.09kV transformers. These two incoming feeders are connected to 33kV switches in a main-tie-main configuration with a normally open tie switch to provide power supply to the other feeder in the event of a utility feeder outage. The secondary feeders of the transformers are connected to 15kV switches in a main-tie-main configuration with a normally open tie switch to provide power supply to the other feeder in the event of a transformer being rendered out of service. These 15kV feeders (Feeder A and Feeder B) are then connected to S&C Vista switchgear SG #1 and SG #4. The VAMC complex is supplied power from three primary distribution loops to provide reliable power.

The main purpose of the short circuit calculations is to determine available short circuit current levels throughout the electrical distribution system under operating conditions. The results of the short circuit analysis are used to assess short-circuit ratings of switchgear, electrical equipment, protective devices, and for performing arc-flash analysis. In general, most ratings are adequate for the available fault currents. A list of all underrated equipment can be found in Section 3.5 as part of the pass/fail evaluation.

The protective device coordination study examines the settings of existing overcurrent devices, and identifies those that are currently not coordinated. In a coordinated system, the protective device closest to the fault interrupts the faulted circuit. A well coordinated system minimizes disruption of electrical service and damage to faulted electrical equipment. S&A has prepared

time current curves showing the existing and proposed settings for overcurrent protective devices. As shown in Section 4.4, there is device miscoordination at a number of facilities.

The voltage drop analysis examines the feeder and bus voltage drops based on normal assumed loading. Furthermore, the assumed loading of each feeder is based on the rating of the primary transformers servicing the feeder loads. Where multiple transformers are connected to a feeder, the load is divided proportionately based on the transformer kVA rating among the feeders. In some cases this will result in a calculated voltage drop that exceeds recommended values; in these cases, we recommend follow-up investigation to determine actual feeder loading. In other cases, the assumption may underestimate the actual load and may not identify a problem. An alternative to the assumed loading would be to use actual measured loads. But this task is beyond the scope of this study. Section 5.3 shows voltage drops.

The excessive voltage drop, shown in Section 5.3, can be corrected by adjusting transformer taps at the South Carolina Electric and Gas Company owned 5 MVA transformers and VAMC owned transformers.

The arc-flash hazard analysis calculates the incident energy and arc flash boundary at each location in a power system. Protective fire rated (FR) clothing requirements are also indicated. The requirements for equipment can be found in Section 6- "Arc-Flash Hazard Analysis". The arc flash analysis report, shown in Section 6.4, gives hazard/risk category (HRC) of the facilities indicated in this report.

The site assessment was performed at the same time as the data gathering. The purpose of the assessment was to identify conformance and compliance with the required NEC Code for all the electrical facilities including working clearances and grounding; confirm automatic transfer switch types; identify use of cable limiters and confirm presence of undervoltage relays on the medium voltage switchgear. Several instances of non-conformance of code issues were identified. These issues and priorities for correction are detailed in Section 7.

Utility correspondence related to the service voltage and available fault currents is given in Appendix A. VA comments and Shah/NIKA responses for the 65% submission are given in Appendix B.

WJB Dorn VA Medical Center, Columbia, South Carolina
Power Study

2. INTRODUCTION

2.1 Project Scope:

The WJ Dorn VA Medical Center is located in Columbia, South Carolina. The Center includes the following Buildings:

Building #	Name – Function	Transformer #
5	Auditorium/Mail Room	TR-5
6	Research VA	TR-6
7	Warehouse	TR-6
8	Boiler Plant	TR-8
9	Research Area	TR-9N
9A	Research Area	TR-9S
20	Engineering Offices and Shops	TR-20
22	Administration Building	TR-22
T-25	Mechanic Shop	TR-20
T-34	Equipment Storage (Grounds)	TR-20
T-36	Renovation Shop	TR-20
100	400 Bed Hospital, Medical and Surgical	T-SS2A, T-SS2B, T-SS1
100A	Expansion of Bldg. 100	T-SS2A, T-SS2B, T-SS1
103	120 Bed Nursing Home Care Unit	TR-103
105	Material Distribution Center	TR-20
106	Psychiatry	TR-106
114	MRI Building	T-SS2A, T-SS2B, T-SS1
	Water Tank	TR-8

The power system study includes the following elements: short circuit analysis, protective device coordination study, voltage drop analysis, arc-flash hazard analysis and a site assessment.

The main purpose of the short circuit calculations is to determine available short circuit current levels throughout the electrical distribution system under various operating conditions. Calculations were performed using SKM Power Tools. As part of the calculations, one-line diagrams were prepared indicating short circuit values, overcurrent protective device ratings, transformer ratings, generator ratings, system voltages and feeder data.

The protective device coordination study examines the ratings and settings of the existing overcurrent devices and identifies those that are not coordinated. The coordination study results are shown graphically on log-log paper and settings are summarized in Section 4.

The arc-flash hazard analysis calculates the incident energy and arc flash boundary at each location in a power system. The results of the analysis are provided in tabular format and also indicate personal protective equipment (PPE) that facility personnel must wear before approaching and/or working on energized electrical equipment.

A site assessment was conducted to identify conformance with working clearances-code issues; confirm grounding; confirm automatic transfer switch types; identify use of cable limiters, confirm presence of undervoltage relays on the medium voltage switchgear and overall conditions of the electrical power distribution system. The results are summarized in a tabular format.

2.1.2 Site Description and Distribution System Overview:

The main electrical service is provided by the South Carolina Electric and Gas Company at 33kV. Each of the two underground 33kV feeders feed 5 MVA, 34.4kV-13.09kV transformers. These two feeders are connected to 33kV switches in a main-tie-main configuration with a normally open tie switch to provide power supply to the other feeder in the event of a utility feeder outage. The secondary feeders of the transformers are connected to 15kV switches in a main-tie-main configuration with a normally open tie switch to provide power supply to the other feeder in the event of a transformer being rendered out of service. These two feeders (Feeder A and Feeder B) are then connected to S&C VISTA switchgear SG #1 and SG #4. The VAMC complex is supplied power from the three primary distribution loops to provide reliable power. The outdoor sub station, pad mounted switches, pad mounted transformers and underground distribution are owned and maintained by the utility company.

2.2 Assumptions:

2.2.1 Transformers:

- 2.2.1.1 Transformer impedance is based on nameplate data. The X/R ratio is based on typical data for the given transformer type/rating.

2.2.2 Circuit Breakers:

- 2.2.2.1 Existing instantaneous settings of feeder breakers are based on the field investigations and highest setting, where such information is unavailable.

2.2.3 Generators:

The X/R ratio is assumed to be 20 and the subtransient reactance is assumed to be 0.15.

3. SHORT CIRCUIT ANALYSIS

3.1 Introduction:

The short circuit analysis is based on the available short circuit currents from the local utility power system at the primary side (33 kV). The short circuit currents calculated using the available fault current from the local utility are greater than those that would be available from the standby emergency generator. Since the generator fault contribution is lower than the fault contribution from the local utility, the short circuit rating of the electrical equipment is evaluated using the local utility fault contribution. Therefore, the short circuit calculations were not performed using the standby emergency generators “only.” The study examines the electrical distribution system from the incoming utility feeders down to the branch circuit panelboards.

The main purpose of the short circuit analysis is to determine available short circuit current levels throughout the electrical distribution system under worst case conditions. These currents are calculated when the power system is operating under normal as well as emergency conditions and assumes that the motor load is at maximum. The sources of short circuit current are the utility source and motors that operate within the system. The generators are part of the emergency system and operate only when there is a power failure. It is assumed that the generators would not operate in parallel with the utility feeders. The results of the analysis are used to confirm the ratings of electrical equipment, breakers, fuses, etc., to perform coordination of the overcurrent relays and breaker protective devices, and to perform arc-flash analysis.

3.1.1 Software:

SKM Power Tools was used to perform the study. Specifically, the SKM Power Tools DAPPER module was used for performing the short circuit analysis and the Equipment Evaluation Study module was used for comparing component ratings. The calculation module is based on IEEE Standard 141 and American National Standards Institute (ANSI) C37.010, C37.5, and C37.13.

The following data was entered into the program:

1. System topology and connections;
2. Feeder sizes;
3. Transformer sizes;
4. Fault contribution data;
5. Generator data.

The system topology and connections can be found on the one-line diagram(s) in the plastic pockets at the end of the study. System data can be found in Section 3.3 under “Input Data”.

The results can be found in the following sections:

1. Short circuit calculations can be found in Section 3.4 – “Short Circuit Report.”
2. The comparison of component ratings can be found in Section 3.5 – “Pass/Fail Evaluation.”

Additional information related to the software can be found at www.skm.com.

3.1.2 Utility Data:

Ms. Jill Parker, Relay Applications Engineer (803-217-6138) at South Carolina Electric and Gas Company (local utility) was contacted for the available fault currents at the service entry point. The report is based on the values provided by Ms. Parker: maximum available 3-phase fault current is as follows:

- Bank #1 feed: 5298.81A at 34.5kV voltage base
- Bank #2 feed: 5281.75A at 34.5kV voltage base

3.2 Analysis and Recommendations:

Comparisons between electrical equipment component ratings and calculated fault currents were performed as part of the short circuit analysis. The calculated fault currents in this table are based on the calculations given in Section 3.4. The tables identify the bus or building designation and the voltage used in the report. Section 3.5 lists the results of the calculations and a comparison against the equipment ratings. There were several instances in which the equipment AIC ratings were not listed on the nameplates. In such cases, the report depicts the pass/fail evaluation results as unknown.

3.2.1 Cost Estimate

We recommend that under rated equipment/breakers be replaced. Based on the analysis of equipment studied, the cost estimate of replacing under rated equipment/breakers to withstand available short circuit currents is given in Section 3.6.

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;B-S1-2A	B100;SG-SS1-A	B100;MC-CT2	2	480	30.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/-	Impedance: 0.0368 + J	0.0393	Ohms/1000 ft		0.2396 + J	0.2559	THHN
	Z0	Impedance: 0.0585 + J	0.0999	Ohms/1000 ft		0.3809 + J	0.6504	PU
B100;B-S1-2B	B100;SG-SS1-A	B100;MC-MCEB1	2	480	30.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/-	Impedance: 0.0368 + J	0.0393	Ohms/1000 ft		0.2396 + J	0.2559	THWN
	Z0	Impedance: 0.0585 + J	0.0999	Ohms/1000 ft		0.3809 + J	0.6504	PU
B100;B-S1-2C	B100;SG-SS1-A	B100;MC-MCEB2	2	480	30.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/-	Impedance: 0.0368 + J	0.0393	Ohms/1000 ft		0.2396 + J	0.2559	THWN
	Z0	Impedance: 0.0585 + J	0.0999	Ohms/1000 ft		0.3809 + J	0.6504	PU
B100;B-S1-3C	B100;SG-SS1-A	B100;MC-MCEB4	2	480	30.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/-	Impedance: 0.0368 + J	0.0393	Ohms/1000 ft		0.2396 + J	0.2559	THHN
	Z0	Impedance: 0.0585 + J	0.0999	Ohms/1000 ft		0.3809 + J	0.6504	PU
B100;BD-EP	B100;SG-EP	B100;B-BK-EP	1	480	20.0	FEET	3200	Copper
	Duct Material: Busway		Insulation Type:			Epoxy	Insulation Class:	
	+/-	Impedance: 0.0047 + J	0.0026	Ohms/1000 ft		0.0408 + J	0.0226	Class B
	Z0	Impedance: 0.1175 + J	0.0650	Ohms/1000 ft		1.02 + J	0.5642	PU
B100;BD-T1A-S	B100;B-T1-A-S	B100;SG-SS1-A	1	480	10.0	FEET	4000	Copper
	Duct Material: Busway		Insulation Type:			Epoxy	Insulation Class:	
	+/-	Impedance: 0.0038 + J	0.0024	Ohms/1000 ft		0.0165 + J	0.0104	Class B
	Z0	Impedance: 0.0950 + J	0.0600	Ohms/1000 ft		0.4123 + J	0.2604	PU
B100;BD-T2A-S	B100;B-T2-A-S	B100;SG-SS2-A	1	480	10.0	FEET	4000	Copper
	Duct Material: Busway		Insulation Type:			Epoxy	Insulation Class:	
	+/-	Impedance: 0.0038 + J	0.0024	Ohms/1000 ft		0.0165 + J	0.0104	Class B
	Z0	Impedance: 0.0950 + J	0.0600	Ohms/1000 ft		0.4123 + J	0.2604	PU
B100;BD-T2B-S	B100;B-T2-B-S	B100;SG-SS2-B	1	480	10.0	FEET	4000	Copper
	Duct Material: Busway		Insulation Type:			Epoxy	Insulation Class:	
	+/-	Impedance: 0.0038 + J	0.0024	Ohms/1000 ft		0.0165 + J	0.0104	Class B
	Z0	Impedance: 0.0950 + J	0.0600	Ohms/1000 ft		0.4123 + J	0.2604	PU
B100;C-100AC2	B100;MC-MCCD4	B100;B-100AC2	1	480	30.0	FEET	4	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/-	Impedance: 0.3210 + J	0.0506	Ohms/1000 ft		4.18 + J	0.6589	THWN
	Z0	Impedance: 0.4960 + J	0.1287	Ohms/1000 ft		6.46 + J	1.68	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-100AC4	B100;MC-MCCD3	B100;B-100AC4	1	480	30.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.5100 + J 0.0548		Ohms/1000 ft			6.64 + J	0.7135	THHN
	Z0 Impedance: 0.8123 + J 0.1394		Ohms/1000 ft			10.58 + J	1.82	PU
B100;C-100AC7	B100;MC-MCCA4	B100;B-100AC7	1	480	30.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.3210 + J 0.0506		Ohms/1000 ft			4.18 + J	0.6589	THWN
	Z0 Impedance: 0.4960 + J 0.1287		Ohms/1000 ft			6.46 + J	1.68	PU
B100;C-100AC8	B100;MC-MCCA2	B100;B-100AC8	1	480	30.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J 0.0467		Ohms/1000 ft			2.63 + J	0.6081	THHN
	Z0 Impedance: 0.3211 + J 0.1188		Ohms/1000 ft			4.18 + J	1.55	PU
B100;C-100P1	B100;V-100P1	B100;B-100P1	1	480	30.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0766 + J 0.0415		Ohms/1000 ft			0.9974 + J	0.5404	THHN
	Z0 Impedance: 0.1217 + J 0.1055		Ohms/1000 ft			1.58 + J	1.37	PU
B100;C-100P10	B100;MC-CT2	B100;B-100P10	1	480	30.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J 0.0467		Ohms/1000 ft			2.63 + J	0.6081	THHN
	Z0 Impedance: 0.3211 + J 0.1188		Ohms/1000 ft			4.18 + J	1.55	PU
B100;C-100P11	B100;MC-CT2	B100;B-100P11	1	480	30.0 FEET	1	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.1600 + J 0.0456		Ohms/1000 ft			2.08 + J	0.5938	THHN
	Z0 Impedance: 0.2543 + J 0.1160		Ohms/1000 ft			3.31 + J	1.51	PU
B100;C-100P12	B100;MC-CT2	B100;B-100P12	1	480	30.0 FEET	1	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.1600 + J 0.0456		Ohms/1000 ft			2.08 + J	0.5938	THHN
	Z0 Impedance: 0.2543 + J 0.1160		Ohms/1000 ft			3.31 + J	1.51	PU
B100;C-100P1A	B100;MC-MCEB4	B100;B-100P1A	1	480	30.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.5100 + J 0.0548		Ohms/1000 ft			6.64 + J	0.7135	THHN
	Z0 Impedance: 0.8123 + J 0.1394		Ohms/1000 ft			10.58 + J	1.82	PU
B100;C-100P2	B100;V-100P2	B100;B-100P2	1	480	30.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0766 + J 0.0415		Ohms/1000 ft			0.9974 + J	0.5404	THHN
	Z0 Impedance: 0.1217 + J 0.1055		Ohms/1000 ft			1.58 + J	1.37	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-100P2A	B100;MC-MCEB4	B100;B-100P2A	1	480	30.0 FEET	6	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.5100 + J	0.0548 Ohms/1000 ft				6.64 + J	0.7135 PU	
	Z0 Impedance: 0.8123 + J	0.1394 Ohms/1000 ft				10.58 + J	1.82 PU	
B100;C-100P4A	B100;MC-MCEB4	B100;B-100P4A	1	480	30.0 FEET	6	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.5100 + J	0.0548 Ohms/1000 ft				6.64 + J	0.7135 PU	
	Z0 Impedance: 0.8123 + J	0.1394 Ohms/1000 ft				10.58 + J	1.82 PU	
B100;C-100P5	B100;MC-MCEB2	B100;B-100P5	1	480	30.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				1.65 + J	0.5625 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				2.63 + J	1.43 PU	
B100;C-100P5A	B100;MC-MCEB4	B100;B-100P5A	1	480	30.0 FEET	6	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.5100 + J	0.0548 Ohms/1000 ft				6.64 + J	0.7135 PU	
	Z0 Impedance: 0.8123 + J	0.1394 Ohms/1000 ft				10.58 + J	1.82 PU	
B100;C-100P6	B100;MC-MCEB2	B100;B-100P6	1	480	30.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				1.65 + J	0.5625 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				2.63 + J	1.43 PU	
B100;C-100P7	B100;MC-MCEB1	B100;B-100P7	1	480	30.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				1.65 + J	0.5625 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				2.63 + J	1.43 PU	
B100;C-100P8	B100;MC-MCEB3	B100;B-100P8	1	480	30.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				1.65 + J	0.5625 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				2.63 + J	1.43 PU	
B100;C-100P9	B100;MC-CT2	B100;B-100P9	1	480	30.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				2.63 + J	0.6081 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				4.18 + J	1.55 PU	
B100;C-150A1	B100;P-C2R4	B100;B-150A1P	1	208	80.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				11.70 + J	7.36 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				18.60 + J	18.71 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-150A1S	B100;B-150A1S	B100;P-150A1	1	120	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		4.40 + J	2.76	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		6.99 + J	7.03	PU
B100;C-150B2	B100;P-C2R4	B100;B-150B2P	1	208	80.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		37.35 + J	8.64	PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		59.38 + J	21.97	PU
B100;C-150B2S	B100;B-150B2S	B100;P-150B2	1	120	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		14.03 + J	3.24	PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		22.30 + J	8.25	PU
B100;C-150C3	B100;P-C2R5	B100;B-150C3P	1	208	80.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		37.35 + J	8.64	PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		59.38 + J	21.97	PU
B100;C-150C3S	B100;B-150C3S	B100;P-150C3	1	120	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		14.03 + J	3.24	PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		22.30 + J	8.25	PU
B100;C-164A1	B100;B-150A1P	B100;B-164A1P	1	208	30.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		4.39 + J	2.76	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		6.98 + J	7.02	PU
B100;C-164A1S	B100;B-164A1S	B100;P-164A1	1	120	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		4.40 + J	2.76	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		6.99 + J	7.03	PU
B100;C-164B2	B100;B-150B2P	B100;B-164B2P	1	208	30.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		14.01 + J	3.24	PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		22.27 + J	8.24	PU
B100;C-164B2S	B100;B-164B2S	B100;P-164B2	1	120	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		14.03 + J	3.24	PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		22.30 + J	8.25	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-164B3	B100;B-150C3P	B100;B-164C3P	1	208	30.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		14.01 + J	3.24	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		22.27 + J	8.24	PU
B100;C-164C3S	B100;B-164C3S	B100;P-164C3	1	120	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		14.03 + J	3.24	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		22.30 + J	8.25	PU
B100;C-166A1	B100;B-164A1P	B100;B-166A1P	1	208	30.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		4.39 + J	2.76	PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		6.98 + J	7.02	PU
B100;C-166A1S	B100;B-166A1S	B100;P-166A1	1	120	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		4.40 + J	2.76	PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		6.99 + J	7.03	PU
B100;C-166B2	B100;B-164B2P	B100;B-166B2P	1	208	30.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		14.01 + J	3.24	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		22.27 + J	8.24	PU
B100;C-166B2S	B100;B-166B2S	B100;P-166B2	1	120	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		14.03 + J	3.24	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		22.30 + J	8.25	PU
B100;C-166C3	B100;B-164C3P	B100;B-166C3P	1	208	30.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		14.01 + J	3.24	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		22.27 + J	8.24	PU
B100;C-166C3S	B100;B-166C3S	B100;P-166C3	1	120	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		14.03 + J	3.24	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		22.30 + J	8.25	PU
B100;C-168	B100;B-168B2P	B100;B-168BP	1	208	30.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		14.01 + J	3.24	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		22.27 + J	8.24	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH		FEEDER SIZE	FEEDER TYPE
B100;C-168A1	B100;B-169A1P	B100;B-168A1P	1	208	30.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			4.39 + J	2.76 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			6.98 + J	7.02 PU
B100;C-168A1S	B100;B-168A1S	B100;P-168A1	1	120	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			4.40 + J	2.76 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			6.99 + J	7.03 PU
B100;C-168B2	B100;B-169B2P	B100;B-168B2P	1	208	30.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft			14.01 + J	3.24 PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft			22.27 + J	8.24 PU
B100;C-168B2S	B100;B-168B2S	B100;P-168B2R	1	120	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft			14.03 + J	3.24 PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft			22.30 + J	8.25 PU
B100;C-168BS	B100;B-168BS	B100;P-168B	1	120	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft			14.03 + J	3.24 PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft			22.30 + J	8.25 PU
B100;C-168C3	B100;B-169C3P	B100;B-168C3P	1	208	30.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft			14.01 + J	3.24 PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft			22.27 + J	8.24 PU
B100;C-168C3S	B100;B-168C3S	B100;P-168C3	1	120	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft			14.03 + J	3.24 PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft			22.30 + J	8.25 PU
B100;C-169A1	B100;B-166A1P	B100;B-169A1P	1	208	30.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			4.39 + J	2.76 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			6.98 + J	7.02 PU
B100;C-169A1S	B100;B-169A1S	B100;P-169A1	1	120	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			4.40 + J	2.76 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			6.99 + J	7.03 PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-169B2	B100;B-166B2P	B100;B-169B2P	1	208	30.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		14.01 + J	3.24	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		22.27 + J	8.24	PU
B100;C-169B2S	B100;B-169B2S	B100;P-169B2	1	120	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		14.03 + J	3.24	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		22.30 + J	8.25	PU
B100;C-169C3	B100;B-166C3P	B100;B-169C3P	1	208	30.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		14.01 + J	3.24	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		22.27 + J	8.24	PU
B100;C-169C3S	B100;B-169C3S	B100;P-169C3	1	120	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		14.03 + J	3.24	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		22.30 + J	8.25	PU
B100;C-1DP1A1	B100;P-1DP1	B100;B-1DP1A1	1	480	20.0	FEET	4	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.3210 + J		0.0506	Ohms/1000 ft		2.79 + J	0.4392	PU
	Z0 Impedance: 0.4960 + J		0.1287	Ohms/1000 ft		4.31 + J	1.12	PU
B100;C-1DP1A2	B100;P-1DP1	B100;B-1DP1A2	1	480	20.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		1.10 + J	0.3750	PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		1.75 + J	0.9540	PU
B100;C-1DP1A3	B100;P-1DP1	B100;B-1DP1A3	1	480	20.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		1.75 + J	0.4054	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		2.79 + J	1.03	PU
B100;C-1DP1A4	B100;P-1DP1	B100;B-1DP1A4	1	480	20.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		1.75 + J	0.4054	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		2.79 + J	1.03	PU
B100;C-1DP1B1	B100;B-1DP1B1	B100;B-1DP1C1	3	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		0.4877 + J	0.3066	PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		0.7751 + J	0.7797	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-1DP1B3	B100;B-1DP1B3	B100;B-1DP1C3	1	208	10.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.8506 + J	0.9084	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		1.35 + J	2.31	PU
B100;C-1DP1B4	B100;B-1DP1B4	B100;B-1DP1C4	3	208	10.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.2835 + J	0.3028	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.4507 + J	0.7697	PU
B100;C-1DP1C1	B100;B-1DP1C1	B100;B-1R9-11	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34	PU
B100;C-1DP1C3	B100;B-1DP1C3	B100;B-1R1-4	1	208	10.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.8506 + J	0.9084	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		1.35 + J	2.31	PU
B100;C-1DP1C4	B100;B-1DP1C4	B100;B-1R5-8	1	208	10.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.8506 + J	0.9084	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		1.35 + J	2.31	PU
B100;C-1DP2-1	B100;P-1DP2	B100;P-1DP2S1	1	480	100.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		5.51 + J	1.88	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		8.76 + J	4.77	PU
B100;C-1DP2-10	B100;P-1DP2	B100;P-PBLOAD	1	480	100.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		5.51 + J	1.88	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		8.76 + J	4.77	PU
B100;C-1DP2-2	B100;P-1DP2	B100;P-1DP2S2	1	480	100.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		5.51 + J	1.88	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		8.76 + J	4.77	PU
B100;C-1DP2-3	B100;P-1DP2	B100;P-1DP2S3	1	480	100.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		5.51 + J	1.88	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		8.76 + J	4.77	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-1DP2-4	B100;P-1DP2	B100;P-1DP2S4	1	480	100.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		5.51 + J	1.88	THWN
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		8.76 + J	4.77	PU
B100;C-1DP2-5	B100;P-1DP2	B100;P-1DP2S5	1	480	100.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		5.51 + J	1.88	THWN
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		8.76 + J	4.77	PU
B100;C-1DP2-6	B100;P-1DP2	B100;P-1DP2S6	1	480	100.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		5.51 + J	1.88	THWN
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		8.76 + J	4.77	PU
B100;C-1DP2-7	B100;P-1DP2	B100;P-1DP2S7	1	480	100.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		5.51 + J	1.88	THWN
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		8.76 + J	4.77	PU
B100;C-1DP2-8	B100;P-1DP2	B100;P-MSI850	1	480	100.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		5.51 + J	1.88	THWN
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		8.76 + J	4.77	PU
B100;C-1DP2-9	B100;P-1DP2	B100;B-1DP2-9	1	480	100.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		5.51 + J	1.88	THWN
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		8.76 + J	4.77	PU
B100;C-1DP3A1	B100;P-1DP3	B100;B-1DP3A1	3	480	20.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		1.48 + J	0.1586	THHN
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		2.35 + J	0.4034	PU
B100;C-1DP3A2	B100;P-1DP3	B100;MC-MCCF1	1	480	55.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft		0.8785 + J	0.9382	THWN
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft		1.40 + J	2.38	PU
B100;C-1DP3B1	B100;B-1DP3B1	B100;B-1DP3C1	3	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		0.4877 + J	0.3066	THWN
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		0.7751 + J	0.7797	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-1DP3C1	B100;B-1DP3C1	B100;B-1R1617	3	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.4877 + J	0.3066 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		0.7751 + J	0.7797 PU	
B100;C-1DP4A1	B100;P-1DP4	B100;B-1DP4A1	3	480	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.1832 + J	0.1152 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		0.2911 + J	0.2928 PU	
B100;C-1DP4B1	B100;B-1DP4B1	B100;B-1DP4C1	1	208	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.6379 + J	0.8621 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.01 + J	2.31 PU	
B100;C-1DP4C1	B100;B-1DP4C1	B100;B-1R1822	1	208	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.6379 + J	0.8621 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.01 + J	2.31 PU	
B100;C-1R1	B100;B-1R1-2	B100;P-1R1	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34 PU	
B100;C-1R1-2	B100;B-1R1-4	B100;B-1R1-2	1	208	10.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.8506 + J	0.9084 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		1.35 + J	2.31 PU	
B100;C-1R10	B100;B-1R9-11	B100;P-1R10	1	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		2.94 + J	0.9985 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		4.67 + J	2.54 PU	
B100;C-1R11	B100;B-1R9-11	B100;P-1R11	1	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		2.94 + J	0.9985 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		4.67 + J	2.54 PU	
B100;C-1R12	B100;B-1DP1B2	B100;P-1R12	1	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		9.34 + J	2.16 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		14.84 + J	5.49 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH		FEEDER SIZE	FEEDER TYPE
B100;C-1R13	B100;B-BDP5D	B100;P-1R13	1	208	30.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft			1.91 + J	2.59 PU
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft			3.04 + J	6.93 PU
B100;C-1R14	B100;B-BDP5D	B100;P-1R14	1	208	30.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft			1.91 + J	2.59 PU
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft			3.04 + J	6.93 PU
B100;C-1R15	B100;B-BDP5D	B100;P-1R15	1	208	30.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft			1.91 + J	2.59 PU
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft			3.04 + J	6.93 PU
B100;C-1R15A	B100;B-BDP5D	B100;P-1R15A	1	208	30.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft			1.91 + J	2.59 PU
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft			3.04 + J	6.93 PU
B100;C-1R16	B100;B-1R1617	B100;P-1R16	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-1R16B	B100;P-1R16	B100;P-1R16B	4	208	10.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft			2.95 + J	0.3167 PU
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft			4.69 + J	0.8055 PU
B100;C-1R17	B100;B-1R1617	B100;P-1R17	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-1R18	B100;B-1R1819	B100;P-1R18	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			1.46 + J	0.9199 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			2.33 + J	2.34 PU
B100;C-1R1819	B100;B-1R1822	B100;B-1R1819	1	208	10.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft			0.6379 + J	0.8621 PU
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft			1.01 + J	2.31 PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH		FEEDER SIZE	FEEDER TYPE
B100;C-1R19	B100;B-1R1819	B100;P-1R19	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft			1.46 + J	0.9199 PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft			2.33 + J	2.34 PU
B100;C-1R2	B100;B-1R1-2	B100;P-1R2	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft			1.46 + J	0.9199 PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft			2.33 + J	2.34 PU
B100;C-1R20	B100;B-1R2021	B100;P-1R20	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft			1.46 + J	0.9199 PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft			2.33 + J	2.34 PU
B100;C-1R2021	B100;B-1R1822	B100;B-1R2021	1	208	10.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft			0.6379 + J	0.8621 PU
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft			1.01 + J	2.31 PU
B100;C-1R21	B100;B-1R2021	B100;P-1R21	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft			1.46 + J	0.9199 PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft			2.33 + J	2.34 PU
B100;C-1R22	B100;P-1R18	B100;P-1R22	1	208	10.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft			11.79 + J	1.27 PU
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft			18.78 + J	3.22 PU
B100;C-1R3	B100;B-1R3-4	B100;P-1R3	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft			1.46 + J	0.9199 PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft			2.33 + J	2.34 PU
B100;C-1R3-4	B100;B-1R1-4	B100;B-1R3-4	1	208	10.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft			0.8506 + J	0.9084 PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft			1.35 + J	2.31 PU
B100;C-1R4	B100;B-1R3-4	B100;P-1R4	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft			1.46 + J	0.9199 PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft			2.33 + J	2.34 PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH		FEEDER SIZE	TYPE
B100;C-1R5	B100;B-1R5-6	B100;P-1R5	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-1R5-6	B100;B-1R5-8	B100;B-1R5-6	1	208	10.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft			0.8506 + J	0.9084 PU
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft			1.35 + J	2.31 PU
B100;C-1R6	B100;B-1R5-6	B100;P-1R6	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-1R7	B100;B-1R7-8	B100;P-1R7	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-1R7-8	B100;B-1R5-8	B100;B-1R7-8	1	208	10.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft			0.8506 + J	0.9084 PU
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft			1.35 + J	2.31 PU
B100;C-1R8	B100;B-1R7-8	B100;P-1R8	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-1R9	B100;B-1R9-11	B100;P-1R9	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			1.46 + J	0.9199 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			2.33 + J	2.34 PU
B100;C-2A100	B100;B-E2W01M	B100;P-2A100	1	480	5.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			0.1374 + J	0.0864 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			0.2183 + J	0.2196 PU
B100;C-2DPA1	B100;P-2DP	B100;B-2DPT1P	1	480	20.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft			1.75 + J	0.4054 PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft			2.79 + J	1.03 PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-2DPA2	B100;P-2DP	B100;B-2DPT2P	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J 0.0467 Ohms/1000 ft					1.75 + J	0.4054 PU	
	Z0 Impedance: 0.3211 + J 0.1188 Ohms/1000 ft					2.79 + J	1.03 PU	
B100;C-2DPA3	B100;P-2DP	B100;B-2DPT3P	1	480	20.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.8110 + J 0.0603 Ohms/1000 ft					7.04 + J	0.5234 PU	
	Z0 Impedance: 1.29 + J 0.1534 Ohms/1000 ft					11.19 + J	1.33 PU	
B100;C-2DPA4	B100;P-2DP	B100;B-2DPT4P	1	480	20.0 FEET	2/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.1010 + J 0.0426 Ohms/1000 ft					0.8767 + J	0.3698 PU	
	Z0 Impedance: 0.1605 + J 0.1083 Ohms/1000 ft					1.39 + J	0.9401 PU	
B100;C-2DPB1	B100;B-2DPT1S	B100;B-2DPC1	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J 0.0398 Ohms/1000 ft					2.93 + J	1.84 PU	
	Z0 Impedance: 0.1006 + J 0.1012 Ohms/1000 ft					4.65 + J	4.68 PU	
B100;C-2DPB2	B100;B-2DPT2S	B100;B-2DPC2	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J 0.0398 Ohms/1000 ft					2.93 + J	1.84 PU	
	Z0 Impedance: 0.1006 + J 0.1012 Ohms/1000 ft					4.65 + J	4.68 PU	
B100;C-2DPB3	B100;B-2DPT3S	B100;B-2DPC3	1	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J 0.0467 Ohms/1000 ft					9.34 + J	2.16 PU	
	Z0 Impedance: 0.3211 + J 0.1188 Ohms/1000 ft					14.84 + J	5.49 PU	
B100;C-2DPB4	B100;B-2DPT4S	B100;P-2WRDP	2	208	20.0 FEET	2/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1010 + J 0.0426 Ohms/1000 ft					2.33 + J	0.9847 PU	
	Z0 Impedance: 0.1605 + J 0.1083 Ohms/1000 ft					3.71 + J	2.50 PU	
B100;C-2DPC1	B100;B-2DPC1	B100;B-2DP1	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J 0.0398 Ohms/1000 ft					2.93 + J	1.84 PU	
	Z0 Impedance: 0.1006 + J 0.1012 Ohms/1000 ft					4.65 + J	4.68 PU	
B100;C-2DPC2	B100;B-2DPC2	B100;B-2DP2	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J 0.0398 Ohms/1000 ft					2.93 + J	1.84 PU	
	Z0 Impedance: 0.1006 + J 0.1012 Ohms/1000 ft					4.65 + J	4.68 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-2DPC3	B100;B-2DPC3	B100;B-2DP3	3	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				3.11 + J	0.7196 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				4.95 + J	1.83 PU	
B100;C-2R1	B100;B-2DP1	B100;P-2R1	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				2.33 + J	2.34 PU	
B100;C-2R2	B100;B-2DP1	B100;P-2R2	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				2.33 + J	2.34 PU	
B100;C-2R3	B100;B-2DP1	B100;P-2R3	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				2.33 + J	2.34 PU	
B100;C-2R4	B100;B-2DP2	B100;P-2R4	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				2.33 + J	2.34 PU	
B100;C-2R5	B100;B-2DP2	B100;P-2R5	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				2.33 + J	2.34 PU	
B100;C-2R6	B100;B-2DP2	B100;P-2R6	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				2.33 + J	2.34 PU	
B100;C-2R7	B100;B-2DP3	B100;P-2R7	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				7.42 + J	2.75 PU	
B100;C-2R8	B100;B-2DP3	B100;P-2R8	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				7.42 + J	2.75 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-2WR1	B100;P-2WRDP	B100;P-2WR1	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J	0.0467		Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J	0.1188		Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-2WR2	B100;P-2WRDP	B100;P-2WR2	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J	0.0467		Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J	0.1188		Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-2WR3	B100;P-2WRDP	B100;P-2WR3	1	208	10.0 FEET	1	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THWN
	+/- Impedance: 0.1600 + J	0.0456		Ohms/1000 ft		3.70 + J	1.05 PU	
	Z0 Impedance: 0.2543 + J	0.1160		Ohms/1000 ft		5.88 + J	2.68 PU	
B100;C-3DPA1	B100;P-3DP	B100;B-3DPT1P	1	480	20.0 FEET	4	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THHN
	+/- Impedance: 0.3210 + J	0.0506		Ohms/1000 ft		2.79 + J	0.4392 PU	
	Z0 Impedance: 0.4960 + J	0.1287		Ohms/1000 ft		4.31 + J	1.12 PU	
B100;C-3DPA2	B100;P-3DP	B100;B-3DPT2P	1	480	20.0 FEET	4	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THHN
	+/- Impedance: 0.3210 + J	0.0506		Ohms/1000 ft		2.79 + J	0.4392 PU	
	Z0 Impedance: 0.4960 + J	0.1287		Ohms/1000 ft		4.31 + J	1.12 PU	
B100;C-3DPA3	B100;P-3DP	B100;B-3DPT3P	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J	0.0467		Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance: 0.3211 + J	0.1188		Ohms/1000 ft		2.79 + J	1.03 PU	
B100;C-3DPB1	B100;B-3DPT1S	B100;B-3DPC1	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THHN
	+/- Impedance: 0.0633 + J	0.0398		Ohms/1000 ft		2.93 + J	1.84 PU	
	Z0 Impedance: 0.1006 + J	0.1012		Ohms/1000 ft		4.65 + J	4.68 PU	
B100;C-3DPB2	B100;B-3DPT2S	B100;B-3DPC2	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THHN
	+/- Impedance: 0.0633 + J	0.0398		Ohms/1000 ft		2.93 + J	1.84 PU	
	Z0 Impedance: 0.1006 + J	0.1012		Ohms/1000 ft		4.65 + J	4.68 PU	
B100;C-3DPB3	B100;B-3DPT3S	B100;B-3DPC3	1	208	20.0 FEET	350	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THWN
	+/- Impedance: 0.0368 + J	0.0393		Ohms/1000 ft		1.70 + J	1.82 PU	
	Z0 Impedance: 0.0585 + J	0.0999		Ohms/1000 ft		2.70 + J	4.62 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-3DPC1	B100;B-3DPC1	B100;B-3DP1	3	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.9754 + J	0.6133	THWN PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		1.55 + J	1.56	PU
B100;C-3DPC2	B100;B-3DPC2	B100;B-3DP2	3	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.9754 + J	0.6133	THWN PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		1.55 + J	1.56	PU
B100;C-3DPC3	B100;B-3DPC3	B100;B-3DP3	3	208	20.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.5671 + J	0.6056	THWN PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.9014 + J	1.54	PU
B100;C-3ED1	B100;B-3ED1TS	B100;P-3ED1	1	208	20.0 FEET	2/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1010 + J	0.0426	Ohms/1000 ft		4.67 + J	1.97	THWN PU
	Z0 Impedance:	0.1605 + J	0.1083	Ohms/1000 ft		7.42 + J	5.01	PU
B100;C-3R1	B100;B-3DP1	B100;P-3R1	1	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		2.94 + J	0.9985	THWN PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		4.67 + J	2.54	PU
B100;C-3R10	B100;B-3DP3	B100;P-3R10	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199	THHN PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34	PU
B100;C-3R2	B100;B-3DP1	B100;P-3R2	1	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		2.94 + J	0.9985	THWN PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		4.67 + J	2.54	PU
B100;C-3R3	B100;B-3DP1	B100;P-3R3	1	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		2.94 + J	0.9985	THWN PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		4.67 + J	2.54	PU
B100;C-3R4	B100;B-3DP2	B100;P-3R4	1	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		2.94 + J	0.9985	THWN PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		4.67 + J	2.54	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH		FEEDER SIZE	TYPE
B100;C-3R5	B100;B-3DP2	B100;P-3R5	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-3R6	B100;B-3DP2	B100;P-3R6	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-3R7	B100;B-3DP3	B100;P-3R7	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			1.46 + J	0.9199 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			2.33 + J	2.34 PU
B100;C-3R8	B100;B-3DP3	B100;P-3R8	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			1.46 + J	0.9199 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			2.33 + J	2.34 PU
B100;C-3R9	B100;B-3DP3	B100;P-3R9	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			1.46 + J	0.9199 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			2.33 + J	2.34 PU
B100;C-3WD1	B100;B-3WD1TS	B100;P-3WD1	1	208	20.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft			23.58 + J	2.53 PU
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft			37.55 + J	6.44 PU
B100;C-3WD1-P	B100;MC-MCCD3	B100;B-3WD1TP	1	480	20.0	FEET	10	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 1.18 + J		0.0823	Ohms/1000 ft			10.24 + J	0.7144 PU
	Z0 Impedance: 1.88 + J		0.2093	Ohms/1000 ft			16.28 + J	1.82 PU
B100;C-4DPA1	B100;P-4DP	B100;B-4DPT1P	1	480	20.0	FEET	4	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.3210 + J		0.0506	Ohms/1000 ft			2.79 + J	0.4392 PU
	Z0 Impedance: 0.4960 + J		0.1287	Ohms/1000 ft			4.31 + J	1.12 PU
B100;C-4DPA2	B100;P-4DP	B100;B-4DPT2P	1	480	20.0	FEET	4	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.3210 + J		0.0506	Ohms/1000 ft			2.79 + J	0.4392 PU
	Z0 Impedance: 0.4960 + J		0.1287	Ohms/1000 ft			4.31 + J	1.12 PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-4DPA3	B100;P-4DP	B100;B-4DPT3P	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B100;C-4DPA4	B100;P-4DP	B100;P-4DP6	1	480	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		0.8767 + J	0.2027 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		1.39 + J	0.5156 PU	
B100;C-4DPB1	B100;B-4DPT1S	B100;B-4DPC1	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		2.93 + J	1.84 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		4.65 + J	4.68 PU	
B100;C-4DPB2	B100;B-4DPT2S	B100;B-4DPC2	1	208	20.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		5.87 + J	2.00 PU	
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		9.33 + J	5.08 PU	
B100;C-4DPB3	B100;B-4DPT3S	B100;B-4DPC3	1	208	20.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft		1.70 + J	1.82 PU	
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft		2.70 + J	4.62 PU	
B100;C-4DPC1	B100;B-4DPC1	B100;B-4DP1	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		2.93 + J	1.84 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		4.65 + J	4.68 PU	
B100;C-4DPC2	B100;B-4DPC2	B100;B-4DP2	1	208	20.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		5.87 + J	2.00 PU	
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		9.33 + J	5.08 PU	
B100;C-4DPC3	B100;B-4DPC3	B100;B-4DP3	1	208	20.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft		1.70 + J	1.82 PU	
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft		2.70 + J	4.62 PU	
B100;C-4R1	B100;B-4DP1	B100;P-4R1	1	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		2.94 + J	0.9985 PU	
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		4.67 + J	2.54 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH		FEEDER SIZE	TYPE
B100;C-4R2	B100;B-4DP1	B100;P-4R2	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-4R3	B100;B-4DP1	B100;P-4R3	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-4R4	B100;B-4DP2	B100;P-4R4	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-4R5	B100;B-4DP2	B100;P-4R5	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-4R6	B100;B-4DP2	B100;P-4R6	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-4R7	B100;B-4DP3	B100;P-4R7	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-4R8	B100;B-4DP3	B100;P-4R8	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-4R9	B100;B-4DP3	B100;P-4R9	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			2.94 + J	0.9985 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			4.67 + J	2.54 PU
B100;C-5DP1A	B100;P-5DP	B100;B-5DP1TP	3	480	20.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft			0.5845 + J	0.1351 PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft			0.9291 + J	0.3438 PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-5DP1B	B100;B-5DP1TS	B100;B-5DP1C	1	208	20.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		2.93 + J	1.84	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		4.65 + J	4.68	PU
B100;C-5DP1C	B100;B-5DP1C	B100;B-5DP15R	1	208	20.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		2.93 + J	1.84	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		4.65 + J	4.68	PU
B100;C-5DP2A	B100;P-5DP	B100;B-5DP2TP	3	480	20.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		0.5845 + J	0.1351	PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		0.9291 + J	0.3438	PU
B100;C-5DP2B	B100;B-5DP2TS	B100;B-5DP2C	1	208	20.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		2.93 + J	1.84	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		4.65 + J	4.68	PU
B100;C-5DP2C	B100;B-5DP2C	B100;B-5DP25R	1	208	20.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		2.93 + J	1.84	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		4.65 + J	4.68	PU
B100;C-5R1	B100;B-5DP15R	B100;P-5R1	4	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		0.7339 + J	0.2496	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		1.17 + J	0.6351	PU
B100;C-5R2	B100;B-5DP15R	B100;P-5R2	4	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		0.7339 + J	0.2496	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		1.17 + J	0.6351	PU
B100;C-5R3	B100;B-5DP15R	B100;P-5R3	4	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		0.7339 + J	0.2496	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		1.17 + J	0.6351	PU
B100;C-5R4	B100;B-5DP15R	B100;P-5R4	4	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		0.7339 + J	0.2496	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		1.17 + J	0.6351	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-5R5	B100;B-5DP25R	B100;P-5R5	4	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		0.7339 + J	0.2496 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		1.17 + J	0.6351 PU	
B100;C-5R6	B100;B-5DP25R	B100;P-5R6	4	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		0.7339 + J	0.2496 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		1.17 + J	0.6351 PU	
B100;C-5R7	B100;B-5DP25R	B100;P-5R7	4	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		0.7339 + J	0.2496 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		1.17 + J	0.6351 PU	
B100;C-A-9L	B100;B-A-9L	B100;P-FIRE-P	3	480	135.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0332	Ohms/1000 ft		1.24 + J	0.6484 PU	
	Z0 Impedance:	0.1006 + J	0.0844	Ohms/1000 ft		1.96 + J	1.65 PU	
B100;C-AC-10	B100;MC-EMCBP	B100;B-AC-10	1	480	10.0 FEET	1	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1600 + J	0.0456	Ohms/1000 ft		0.6944 + J	0.1979 PU	
	Z0 Impedance:	0.2543 + J	0.1160	Ohms/1000 ft		1.10 + J	0.5035 PU	
B100;C-AC11	B100;MC-MCCC4	B100;B-AC11	1	480	30.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.3210 + J	0.0506	Ohms/1000 ft		4.18 + J	0.6589 PU	
	Z0 Impedance:	0.4960 + J	0.1287	Ohms/1000 ft		6.46 + J	1.68 PU	
B100;C-AC17	B100;MC-MCCCI	B100;B-AC17	1	480	30.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		2.63 + J	0.6081 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		4.18 + J	1.55 PU	
B100;C-AC24	B100;MC-EMCF1	B100;B-AC24	1	480	30.0 FEET	1	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1600 + J	0.0456	Ohms/1000 ft		2.08 + J	0.5938 PU	
	Z0 Impedance:	0.2543 + J	0.1160	Ohms/1000 ft		3.31 + J	1.51 PU	
B100;C-AC5	B100;MC-MCCDB	B100;B-AC5	1	480	30.0 FEET	1	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1600 + J	0.0456	Ohms/1000 ft		2.08 + J	0.5938 PU	
	Z0 Impedance:	0.2543 + J	0.1160	Ohms/1000 ft		3.31 + J	1.51 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-AHU3	B100;MC-MCCD2	B100;B-AHU3	1	480	30.0 FEET	2	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				2.63 + J	0.6081 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				4.18 + J	1.55 PU	
B100;C-BD-G	B100;B-BK-EP	B100;B-G-EP	1	480	20.0 FEET	3200	Copper	
	Duct Material: Busway					Epoxy	Insulation Class:	Class B
	+/- Impedance: 0.0047 + J	0.0026 Ohms/1000 ft				0.0408 + J	0.0226 PU	
	Z0 Impedance: 0.1175 + J	0.0650 Ohms/1000 ft				1.02 + J	0.5642 PU	
B100;C-BDC1	B100;P-CBDP1	B100A;P-BDC1	1	480	250.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THWN
	+/- Impedance: 0.0766 + J	0.0415 Ohms/1000 ft				8.31 + J	4.50 PU	
	Z0 Impedance: 0.1217 + J	0.1055 Ohms/1000 ft				13.21 + J	11.45 PU	
B100;C-BDE1	B100;P-EBDP4	B100A;P-BDE1	1	480	175.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				4.81 + J	3.02 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				7.64 + J	7.69 PU	
B100;C-BDLS1	B100;P-LSBDP1	B100A;P-BDLS1	1	480	250.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				6.87 + J	4.32 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				10.92 + J	10.98 PU	
B100;C-BDP1	B100;P-BDP1	B100;MC-MCCFB	2	480	170.0 FEET	350	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THWN
	+/- Impedance: 0.0368 + J	0.0393 Ohms/1000 ft				1.36 + J	1.45 PU	
	Z0 Impedance: 0.0585 + J	0.0999 Ohms/1000 ft				2.16 + J	3.69 PU	
B100;C-BDP10A	B100;P-BDP10	B100;B-BDP10A	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J	0.0457 Ohms/1000 ft				4.43 + J	0.3967 PU	
	Z0 Impedance: 0.8123 + J	0.1163 Ohms/1000 ft				7.05 + J	1.01 PU	
B100;C-BDP10B	B100;B-BDP10B	B100;B-BDP10C	1	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				2.94 + J	0.9985 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				4.67 + J	2.54 PU	
B100;C-BDP10D	B100;P-BDP10	B100;B-BDP10D	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic					PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J	0.0457 Ohms/1000 ft				4.43 + J	0.3967 PU	
	Z0 Impedance: 0.8123 + J	0.1163 Ohms/1000 ft				7.05 + J	1.01 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-BDP10E	B100;B-BDP10E	B100;B-BDP10F	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		2.94 + J	0.9985	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		4.67 + J	2.54	PU
B100;C-BDP2A2	B100;P-BDP2	B100;MC-MCCA2	1	480	170.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		4.67 + J	2.94	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		7.42 + J	7.47	PU
B100;C-BDP2A3	B100;P-BDP2	B100;MC-MCCA3	1	480	190.0	FEET	2/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1010 + J	0.0426	Ohms/1000 ft		8.33 + J	3.51	PU
	Z0 Impedance:	0.1605 + J	0.1083	Ohms/1000 ft		13.24 + J	8.93	PU
B100;C-BDP2A4	B100;P-BDP2	B100;MC-MCCA4	1	480	210.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		5.77 + J	3.63	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		9.17 + J	9.22	PU
B100;C-BDP2A5	B100;P-BDP2	B100;MC-MCCA5	1	480	230.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		6.32 + J	3.97	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		10.04 + J	10.10	PU
B100;C-BDP3C2	B100;P-BDP3	B100;MC-MCCC2	1	480	190.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		10.47 + J	3.56	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		16.65 + J	9.06	PU
B100;C-BDP3C3	B100;P-BDP3	B100;MC-MCCC3	1	480	210.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0360	Ohms/1000 ft		11.58 + J	3.28	PU
	Z0 Impedance:	0.2019 + J	0.0916	Ohms/1000 ft		18.40 + J	8.35	PU
B100;C-BDP3C4	B100;P-BDP3	B100;MC-MCCC4	1	480	230.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0332	Ohms/1000 ft		6.32 + J	3.31	PU
	Z0 Impedance:	0.1006 + J	0.0844	Ohms/1000 ft		10.04 + J	8.43	PU
B100;C-BDP3C8	B100;P-BDP2	B100;P-BDP8	1	480	40.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		2.20 + J	0.7500	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		3.51 + J	1.91	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-BDP5A	B100;P-BDP5	B100;B-BDP5A	2	480	70.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.9616 + J	0.6046 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		1.53 + J	1.54 PU	
B100;C-BDP5B	B100;B-BDP5B	B100;B-BDP5C	3	208	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.2126 + J	0.2874 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.3375 + J	0.7697 PU	
B100;C-BDP5C	B100;B-BDP5C	B100;B-BDP5D	1	208	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.6379 + J	0.8621 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.01 + J	2.31 PU	
B100;C-BDP5R	B100;P-BDP5	B100;B-BDP5RT	1	480	15.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		5.28 + J	0.3926 PU	
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		8.39 + J	0.9987 PU	
B100;C-BDP6A1	B100;P-BDP6	B100;B-TBR13P	1	480	25.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.3210 + J	0.0506	Ohms/1000 ft		3.48 + J	0.5490 PU	
	Z0 Impedance:	0.4960 + J	0.1287	Ohms/1000 ft		5.38 + J	1.40 PU	
B100;C-BDP6A2	B100;P-BDP6	B100;B-T456P	1	480	25.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		2.19 + J	0.5067 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		3.48 + J	1.29 PU	
B100;C-BDP6A3	B100;P-BDP6	B100;B-T789P	1	480	25.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		2.19 + J	0.5067 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		3.48 + J	1.29 PU	
B100;C-BDP6B1	B100;B-TBR123S	B100;B-BDP6B1	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		2.93 + J	1.84 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		4.65 + J	4.68 PU	
B100;C-BDP6B2	B100;B-T456S	B100;B-BDP6B2	1	208	20.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		1.70 + J	1.82 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		2.70 + J	4.62 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-BDP6B3	B100;B-T789S	B100;B-BDP6B3	1	208	20.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0368 + J 0.0393 Ohms/1000 ft					1.70 + J	1.82 PU	
	Z0 Impedance: 0.0585 + J 0.0999 Ohms/1000 ft					2.70 + J	4.62 PU	
B100;C-BDP8-9	B100;P-BDP8	B100;MC-ELES9	1	480	10.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J 0.0548 Ohms/1000 ft					2.21 + J	0.2378 PU	
	Z0 Impedance: 0.8123 + J 0.1394 Ohms/1000 ft					3.53 + J	0.6050 PU	
B100;C-BDPCRM	B100;B-BDP10C	B100;P-BDPCRM	1	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J 0.0432 Ohms/1000 ft					2.94 + J	0.9985 PU	
	Z0 Impedance: 0.2019 + J 0.1099 Ohms/1000 ft					4.67 + J	2.54 PU	
B100;C-BME	B100;B-T-BMES	B100;P-BME	1	208	65.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.3210 + J 0.0506 Ohms/1000 ft					48.23 + J	7.60 PU	
	Z0 Impedance: 0.4960 + J 0.1287 Ohms/1000 ft					74.52 + J	19.34 PU	
B100;C-BR1	B100;B-BR123	B100;P-BR1	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J 0.0398 Ohms/1000 ft					1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J 0.1012 Ohms/1000 ft					2.33 + J	2.34 PU	
B100;C-BR10	B100;B-BR10-T	B100;P-BR10	1	208	15.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J 0.0467 Ohms/1000 ft					7.00 + J	1.62 PU	
	Z0 Impedance: 0.3211 + J 0.1188 Ohms/1000 ft					11.13 + J	4.12 PU	
B100;C-BR10A	B100;P-BR10	B100;P-BR10A	1	208	10.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.5100 + J 0.0548 Ohms/1000 ft					11.79 + J	1.27 PU	
	Z0 Impedance: 0.8123 + J 0.1394 Ohms/1000 ft					18.78 + J	3.22 PU	
B100;C-BR123	B100;B-BDP6B1	B100;B-BR123	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J 0.0398 Ohms/1000 ft					1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J 0.1012 Ohms/1000 ft					2.33 + J	2.34 PU	
B100;C-BR13	B100;B-BR13TS	B100;P-BR13	1	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J 0.0467 Ohms/1000 ft					9.34 + J	2.16 PU	
	Z0 Impedance: 0.3211 + J 0.1188 Ohms/1000 ft					14.84 + J	5.49 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-BR13TP	B100;MC-MCCDB	B100;B-BR13TP	1	480	25.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		8.80 + J	0.6543 PU	
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		13.99 + J	1.66 PU	
B100;C-BR2	B100;B-BR123	B100;P-BR2	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34 PU	
B100;C-BR3	B100;B-BR123	B100;P-BR3	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34 PU	
B100;C-BR4	B100;B-BR456	B100;P-BR4	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34 PU	
B100;C-BR456	B100;B-BDP6B2	B100;B-BR456	1	208	20.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		1.70 + J	1.82 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		2.70 + J	4.62 PU	
B100;C-BR5	B100;B-BR456	B100;P-BR5	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34 PU	
B100;C-BR6	B100;B-BR456	B100;P-BR6	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34 PU	
B100;C-BR7	B100;B-BR789	B100;P-BR7	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34 PU	
B100;C-BR789	B100;B-BDP6B3	B100;B-BR789	1	208	20.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		1.70 + J	1.82 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		2.70 + J	4.62 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-BR8	B100;B-BR789	B100;P-BR8	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34	PU
B100;C-BR9	B100;B-BR789	B100;P-BR9	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34	PU
B100;C-BYL1	B100;MC-MCCFB	B100;P-BYL1	1	480	20.0	FEET	4	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.3210 + J	0.0506	Ohms/1000 ft		2.79 + J	0.4392	PU
	Z0 Impedance:	0.4960 + J	0.1287	Ohms/1000 ft		4.31 + J	1.12	PU
B100;C-BYL2	B100;P-BDP1	B100;P-BYL2	1	480	110.0	FEET	2/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1010 + J	0.0426	Ohms/1000 ft		4.82 + J	2.03	PU
	Z0 Impedance:	0.1605 + J	0.1083	Ohms/1000 ft		7.66 + J	5.17	PU
B100;C-BYPASS	B100;B-U-RP6	B100;B-RP6	1	208	1.000	FEET	750	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0194 + J	0.0356	Ohms/1000 ft		0.0448 + J	0.0823	PU
	Z0 Impedance:	0.0308 + J	0.0905	Ohms/1000 ft		0.0712 + J	0.2092	PU
B100;C-C-LSBL	B100;P-LSBDP2	B100;P-LSBL1	1	480	20.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757	PU
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21	PU
B100;C-C1315L	B100;P-E1DP2	B100;P-C1315L	1	480	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.2747 + J	0.1727	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		0.4366 + J	0.4392	PU
B100;C-C1315R	B100;P-E1DP2	B100;P-C1315R	1	480	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.2747 + J	0.1727	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		0.4366 + J	0.4392	PU
B100;C-C1DP	B100;P-CBDP1	B100;P-C1DP	1	480	190.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		5.22 + J	3.28	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		8.30 + J	8.35	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-C1L1	B100;P-C1DP	B100;P-C1L1	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				1.75 + J	0.4054 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				2.79 + J	1.03 PU	
B100;C-C1L1A	B100;P-CBDP2	B100;P-C1L1A	1	480	195.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.1270 + J	0.0360 Ohms/1000 ft				10.75 + J	3.05 PU	
	Z0 Impedance: 0.2019 + J	0.0916 Ohms/1000 ft				17.09 + J	7.75 PU	
B100;C-C1L2A	B100;P-CBDP2	B100;P-C1L2A	1	480	195.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.1270 + J	0.0360 Ohms/1000 ft				10.75 + J	3.05 PU	
	Z0 Impedance: 0.2019 + J	0.0916 Ohms/1000 ft				17.09 + J	7.75 PU	
B100;C-C1R1	B100;B-C1R1,2	B100;P-C1R1	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				7.42 + J	2.75 PU	
B100;C-C1R1,2	B100;B-CC1R12	B100;B-C1R1,2	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				7.42 + J	2.75 PU	
B100;C-C1R2	B100;B-C1R1,2	B100;P-C1R2	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				7.42 + J	2.75 PU	
B100;C-C1R3	B100;B-TC1R3S	B100;P-C1R3	1	208	20.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				5.87 + J	2.00 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				9.33 + J	5.08 PU	
B100;C-C1R4	B100;P-C1R3	B100;P-C1R4	1	208	20.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				5.87 + J	2.00 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				9.33 + J	5.08 PU	
B100;C-C2DP	B100;P-CBDP1	B100;P-C2DP	2	480	210.0 FEET	500	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0276 + J	0.0373 Ohms/1000 ft				1.26 + J	1.70 PU	
	Z0 Impedance: 0.0438 + J	0.0999 Ohms/1000 ft				2.00 + J	4.55 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-C2L1	B100;P-C2DP	B100;P-C2L1	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J	0.0548 Ohms/1000 ft				4.43 + J	0.4757 PU	
	Z0 Impedance: 0.8123 + J	0.1394 Ohms/1000 ft				7.05 + J	1.21 PU	
B100;C-C2R1	B100;B-C2R1-3	B100;P-C2R1	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				2.33 + J	2.34 PU	
B100;C-C2R1-3	B100;B-C-C2R1	B100;B-C2R1-3	1	208	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0276 + J	0.0373 Ohms/1000 ft				0.6379 + J	0.8621 PU	
	Z0 Impedance: 0.0438 + J	0.0999 Ohms/1000 ft				1.01 + J	2.31 PU	
B100;C-C2R2	B100;B-C2R2,3	B100;P-C2R2	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				2.33 + J	2.34 PU	
B100;C-C2R2,3	B100;B-C2R1-3	B100;B-C2R2,3	1	208	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0276 + J	0.0373 Ohms/1000 ft				0.6379 + J	0.8621 PU	
	Z0 Impedance: 0.0438 + J	0.0999 Ohms/1000 ft				1.01 + J	2.31 PU	
B100;C-C2R3	B100;B-C2R2,3	B100;P-C2R3	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				2.33 + J	2.34 PU	
B100;C-C2R4	B100;B-C2R4,5	B100;P-C2R4	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				2.33 + J	2.34 PU	
B100;C-C2R4,5	B100;B-C-C2R4	B100;B-C2R4,5	1	208	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0276 + J	0.0373 Ohms/1000 ft				0.6379 + J	0.8621 PU	
	Z0 Impedance: 0.0438 + J	0.0999 Ohms/1000 ft				1.01 + J	2.31 PU	
B100;C-C2R5	B100;B-C2R4,5	B100;P-C2R5	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				2.33 + J	2.34 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-C2W1	B100;B-TC2WDS	B100;P-C2W1	4	208	15.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		1.10 + J	0.3744	PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		1.75 + J	0.9526	PU
B100;C-C2W2	B100;P-C2W1	B100;P-C2W2	1	208	15.0 FEET	1	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1600 + J		0.0456	Ohms/1000 ft		5.55 + J	1.58	PU
	Z0 Impedance: 0.2543 + J		0.1160	Ohms/1000 ft		8.82 + J	4.02	PU
B100;C-C2WDP	B100;P-C2DP	B100;P-C2WDP	1	480	70.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.3210 + J		0.0506	Ohms/1000 ft		9.75 + J	1.54	PU
	Z0 Impedance: 0.4960 + J		0.1287	Ohms/1000 ft		15.07 + J	3.91	PU
B100;C-C3DP	B100;P-CBDP1	B100;P-C3DP	1	480	230.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		12.68 + J	4.31	PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		20.15 + J	10.97	PU
B100;C-C3L1	B100;P-C3DP	B100;P-C3L1	1	480	20.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.3210 + J		0.0506	Ohms/1000 ft		2.79 + J	0.4392	PU
	Z0 Impedance: 0.4960 + J		0.1287	Ohms/1000 ft		4.31 + J	1.12	PU
B100;C-C3R1	B100;B-TC3R1S	B100;P-C3R1	1	208	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		23.58 + J	2.53	PU
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		37.55 + J	6.44	PU
B100;C-C4DP	B100;P-CBDP2	B100;P-C4DP	4	480	250.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		1.72 + J	1.08	PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		2.73 + J	2.75	PU
B100;C-C4L1	B100;P-C4DP	B100;P-C4L1	1	480	20.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.3210 + J		0.0506	Ohms/1000 ft		2.79 + J	0.4392	PU
	Z0 Impedance: 0.4960 + J		0.1287	Ohms/1000 ft		4.31 + J	1.12	PU
B100;C-C4R1	B100;B-C4R1,2	B100;P-C4R1	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		1.46 + J	0.9199	PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		2.33 + J	2.34	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-C4R1,2	B100;B-BK-C4R	B100;B-C4R1,2	1	208	10.0	FEET 350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.8506 + J	0.9084 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		1.35 + J	2.31 PU	
B100;C-C4R2	B100;B-C4R1,2	B100;P-C4R2	1	208	10.0	FEET 4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34 PU	
B100;C-C5DP	B100;P-CBDP2	B100;P-C5DP	1	480	270.0	FEET 1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		14.88 + J	5.06 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		23.66 + J	12.88 PU	
B100;C-C5L1	B100;P-C5DP	B100;P-C5L1	1	480	20.0	FEET 6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B100;C-C5R1	B100;B-C5R1,2	B100;P-C5R1	1	208	10.0	FEET 2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-C5R1,2	B100;B-BK-C5R	B100;B-C5R1,2	1	208	10.0	FEET 2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-C5R2	B100;B-C5R1,2	B100;P-C5R2	1	208	10.0	FEET 2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-CBDP1	B100;B-A-2L	B100;P-CBDP1	3	480	10.0	FEET 500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.0399 + J	0.0540 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.0634 + J	0.1445 PU	
B100;C-CBDP2	B100;B-A-3L	B100;P-CBDP2	2	480	10.0	FEET 500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.0599 + J	0.0809 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.0951 + J	0.2168 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-CCTV	B100;B-BDP10F	B100;P-CCTV	1	208	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		2.94 + J	0.9985	THWN PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		4.67 + J	2.54	PU
B100;C-CCU1	B100;SG-SS1-A	B100;B-CCU1	4	480	30.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		1.66 + J	0.1784	THHN PU
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		2.64 + J	0.4538	PU
B100;C-CCU2	B100;SG-SS1-A	B100;B-CCU2	4	480	30.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		1.66 + J	0.1784	THHN PU
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		2.64 + J	0.4538	PU
B100;C-CF55	B100;MC-MCCC4	B100;B-CF55	1	480	30.0	FEET	12	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	1.87 + J	0.0892	Ohms/1000 ft		24.35 + J	1.16	THHN PU
	Z0 Impedance:	2.97 + J	0.2269	Ohms/1000 ft		38.71 + J	2.95	PU
B100;C-CT1FAN	B100;MC-MCEB1	B100;B-CT1FAN	2	480	30.0	FEET	1	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1600 + J	0.0456	Ohms/1000 ft		1.04 + J	0.2969	THWN PU
	Z0 Impedance:	0.2543 + J	0.1160	Ohms/1000 ft		1.66 + J	0.7552	PU
B100;C-CT2FAN	B100;MC-MCEB3	B100;B-CT2FAN	1	480	30.0	FEET	3/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0766 + J	0.0415	Ohms/1000 ft		0.9974 + J	0.5404	THHN PU
	Z0 Impedance:	0.1217 + J	0.1055	Ohms/1000 ft		1.58 + J	1.37	PU
B100;C-E1DP1	B100;P-EBDP1	B100;P-E1DP1	1	480	190.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		5.22 + J	3.28	THWN PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		8.30 + J	8.35	PU
B100;C-E1DP2	B100;P-EBDP3	B100;P-E1DP2	3	480	200.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.7986 + J	1.08	THWN PU
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.27 + J	2.89	PU
B100;C-E1DP2A	B100;P-E1DP2	B100;P-E1DP2A	1	480	10.0	FEET	3/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0766 + J	0.0346	Ohms/1000 ft		0.3325 + J	0.1502	THHN PU
	Z0 Impedance:	0.1217 + J	0.0880	Ohms/1000 ft		0.5282 + J	0.3819	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-E1L1	B100;P-E1DP1	B100;P-E1L1	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B100;C-E1R1	B100;B-E1R124	B100;P-E1R1	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		2.33 + J	2.34 PU	
B100;C-E1R124	B100;B-BK-E1R	B100;B-E1R124	1	208	10.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft		0.8506 + J	0.9084 PU	
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft		1.35 + J	2.31 PU	
B100;C-E1R16A	B100;B-E1R16AS	B100;P-E1R16A	1	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		2.94 + J	0.9985 PU	
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		4.67 + J	2.54 PU	
B100;C-E1R16AP	B100;P-E1DP2	B100;B-E1R16AP	1	480	10.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		2.21 + J	0.2378 PU	
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		3.53 + J	0.6050 PU	
B100;C-E1R2	B100;B-E1R2,4	B100;P-E1R2	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		2.33 + J	2.34 PU	
B100;C-E1R2,4	B100;B-E1R124	B100;B-E1R2,4	1	208	10.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft		0.8506 + J	0.9084 PU	
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft		1.35 + J	2.31 PU	
B100;C-E1R4	B100;B-E1R2,4	B100;P-E1R4	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		2.33 + J	2.34 PU	
B100;C-E2DP	B100;P-EBDP2	B100;P-E2DP	3	480	210.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft		0.8385 + J	1.13 PU	
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft		1.33 + J	3.04 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH		FEEDER SIZE	TYPE
B100;C-E2L1A	B100;P-E2DP	B100;P-E2L1A	3	480	10.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic			Insulation Type:			PVC	Insulation Class:
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft			0.1837 + J	0.0625 PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft			0.2921 + J	0.1590 PU
B100;C-E2R1	B100;B-E2R1-2	B100;P-E2R1	1	208	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic			Insulation Type:			PVC	Insulation Class:
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft			4.67 + J	1.08 PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft			7.42 + J	2.75 PU
B100;C-E2R1-2	B100;B-BK-E2R	B100;B-E2R1-2	1	208	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic			Insulation Type:			PVC	Insulation Class:
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft			4.67 + J	1.08 PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft			7.42 + J	2.75 PU
B100;C-E2R2	B100;B-E2R1-2	B100;P-E2R2	1	208	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic			Insulation Type:			PVC	Insulation Class:
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft			4.67 + J	1.08 PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft			7.42 + J	2.75 PU
B100;C-E2WDP2	B100;P-E2DP	B100;P-E2WDP2	1	480	90.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic			Insulation Type:			PVC	Insulation Class:
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft			2.47 + J	1.55 PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft			3.93 + J	3.95 PU
B100;C-E2WO1	B100;P-E2DP	B100;B-E2WO1M	1	480	80.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic			Insulation Type:			PVC	Insulation Class:
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft			2.20 + J	1.38 PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft			3.49 + J	3.51 PU
B100;C-E3DP	B100;P-EBDP1	B100;P-E3DP	1	480	230.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic			Insulation Type:			PVC	Insulation Class:
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft			12.68 + J	4.31 PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft			20.15 + J	10.97 PU
B100;C-E3L1	B100;P-E3DP	B100;P-E3L1	1	480	20.0	FEET	6	Copper
	Duct Material: Non-Magnetic			Insulation Type:			PVC	Insulation Class:
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft			4.43 + J	0.4757 PU
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft			7.05 + J	1.21 PU
B100;C-E3L1A	B100;P-EBDP2	B100;P-E3L1A	1	480	235.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic			Insulation Type:			PVC	Insulation Class:
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft			12.95 + J	4.41 PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft			20.59 + J	11.21 PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-E3R1	B100;B-E3R1,2	B100;P-E3R1	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-E3R1,2	B100;B-BK-E3R	B100;B-E3R1,2	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-E3R2	B100;B-E3R1,2	B100;P-E3R2	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-E4DP	B100;P-EBDP1	B100;P-E4DP	1	480	250.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		6.87 + J	4.32 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		10.92 + J	10.98 PU	
B100;C-E4L1	B100;P-E4DP	B100;P-E4L1	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B100;C-E4L1A	B100;P-EBDP1	B100;P-E4L1A	1	480	250.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		13.78 + J	4.69 PU	
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		21.91 + J	11.92 PU	
B100;C-E4R1	B100;B-E4R1,2	B100;P-E4R1	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-E4R1,2	B100;B-BK-E4R	B100;B-E4R1,2	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-E4R2	B100;B-E4R1,2	B100;P-E4R2	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-E5DP	B100;P-EBDP1	B100;P-E5DP	1	480	270.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		14.88 + J	5.06 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		23.66 + J	12.88 PU	
B100;C-E5L1	B100;P-E5DP	B100;P-E5L1	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B100;C-E5L1A	B100;P-EBDP2	B100;P-E5L1A	1	480	275.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		15.16 + J	5.16 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		24.10 + J	13.12 PU	
B100;C-E5R1	B100;B-E5R1,2	B100;P-E5R1	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-E5R1,2	B100;B-BK-E5R	B100;B-E5R1,2	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-E5R2	B100;B-E5R1,2	B100;P-E5R2	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-EBDP1	B100;B-A-4L	B100;P-EBDP1	2	480	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.0599 + J	0.0809 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.0951 + J	0.2168 PU	
B100;C-EBDP2	B100;B-A-5L	B100;P-EBDP2	2	480	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.0599 + J	0.0809 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.0951 + J	0.2168 PU	
B100;C-EBDP3	B100;B-A-6L	B100;P-EBDP3	2	480	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.0599 + J	0.0809 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.0951 + J	0.2168 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-EBDP4	B100;B-A-7L	B100;P-EBDP4	2	480	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.0599 + J	0.0809 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.0951 + J	0.2168 PU	
B100;C-EBDP6	B100;P-EBDP1	B100;P-EBDP6	1	480	170.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		9.37 + J	3.19 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		14.90 + J	8.11 PU	
B100;C-EBDP9A	B100;P-EBDP4	B100;P-EBDP9A	2	480	150.0 FEET	250	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0541 + J	0.0396	Ohms/1000 ft		1.76 + J	1.29 PU	
	Z0 Impedance:	0.0860 + J	0.1007	Ohms/1000 ft		2.80 + J	3.28 PU	
B100;C-EBDP9B	B100;B-TEB9BS	B100;P-EBDP9B	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		2.93 + J	1.84 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		4.65 + J	4.68 PU	
B100;C-EBDPA3	B100;P-EBDP1A	B100;B-EBDPA3	1	480	10.0 FEET	1	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1600 + J	0.0456	Ohms/1000 ft		0.6944 + J	0.1979 PU	
	Z0 Impedance:	0.2543 + J	0.1160	Ohms/1000 ft		1.10 + J	0.5035 PU	
B100;C-EBDPM3	B100;P-EBDPRI	B100;P-EBDP1A	1	480	10.0 FEET	1	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1600 + J	0.0456	Ohms/1000 ft		0.6944 + J	0.1979 PU	
	Z0 Impedance:	0.2543 + J	0.1160	Ohms/1000 ft		1.10 + J	0.5035 PU	
B100;C-EBDPRIME	B100;B-A-9L	B100;P-EBDPRI	1	480	30.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.8242 + J	0.5182 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		1.31 + J	1.32 PU	
B100;C-EBL1	B100;P-EBDP6	B100;P-EBL1	1	480	30.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		2.63 + J	0.6081 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		4.18 + J	1.55 PU	
B100;C-EBL1A	B100;P-EBDP1	B100;P-EBL1A	1	480	190.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		10.47 + J	3.56 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		16.65 + J	9.06 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH		FEEDER SIZE	TYPE
B100;C-EBL2A	B100;P-EBDP1	B100;P-EBL2A	1	480	190.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			10.47 + J	3.56 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			16.65 + J	9.06 PU
B100;C-EBPR1S	B100;B-EBPR1S	B100;P-EBPR1	1	208	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft			4.67 + J	1.08 PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft			7.42 + J	2.75 PU
B100;C-EBR1	B100;B-EBR1-2	B100;P-EBR1	1	208	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft			4.67 + J	1.08 PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft			7.42 + J	2.75 PU
B100;C-EBR1-2	B100;B-BK-EBR	B100;B-EBR1-2	1	208	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft			4.67 + J	1.08 PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft			7.42 + J	2.75 PU
B100;C-EBR10P	B100;P-EBDP4	B100;B-EBR10P	1	480	25.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft			2.19 + J	0.5067 PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft			3.48 + J	1.29 PU
B100;C-EBR10S	B100;B-EBR10S	B100;P-EBR10	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			1.46 + J	0.9199 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			2.33 + J	2.34 PU
B100;C-EBR11	B100;P-EBDP7A	B100;P-EBR11	1	208	40.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			5.85 + J	3.68 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			9.30 + J	9.36 PU
B100;C-EBR11A	B100;P-EBDP7A	B100;P-EBR11A	1	208	45.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft			3.83 + J	4.09 PU
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft			6.08 + J	10.39 PU
B100;C-EBR11B	B100;P-EBDP7A	B100;P-EBR11B	1	208	30.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft			2.55 + J	2.73 PU
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft			4.06 + J	6.93 PU

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FEEDER INPUT DATA								
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B100;C-EBR11C	B100;P-EBDP7A	B100;P-EBR11C	1	208	50.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft			4.25 + J	4.54 PU
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft			6.76 + J	11.55 PU
B100;C-EBR12	B100;P-EBDP7A	B100;P-EBR12	1	208	35.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			5.12 + J	3.22 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			8.14 + J	8.19 PU
B100;C-EBR2	B100;B-EBR1-2	B100;P-EBR2	1	208	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft			4.67 + J	1.08 PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft			7.42 + J	2.75 PU
B100;C-EMCBP	B100;P-EBDP4	B100;MC-EMCBP	2	480	50.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft			0.2995 + J	0.4047 PU
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft			0.4753 + J	1.08 PU
B100;C-EMCC4	B100;MC-EMCC4	B100;B-EMCC4	1	480	10.0	FEET	12	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 1.87 + J		0.0892	Ohms/1000 ft			8.12 + J	0.3872 PU
	Z0 Impedance: 2.97 + J		0.2269	Ohms/1000 ft			12.90 + J	0.9848 PU
B100;C-EMCCC2	B100;P-EBDP4	B100;MC-EMCC2	1	480	195.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			5.36 + J	3.37 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			8.51 + J	8.57 PU
B100;C-EMCCC3	B100;P-EBDP4	B100;MC-EMCC3	1	480	225.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			12.40 + J	4.22 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			19.72 + J	10.73 PU
B100;C-EMCCC4	B100;P-EBDP4	B100;MC-EMCC4	1	480	250.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft			6.87 + J	4.32 PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft			10.92 + J	10.98 PU
B100;C-EMCCD5	B100;P-EBDP4	B100;MC-EMCD5	1	480	235.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:				PVC	Insulation Class:
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft			12.95 + J	4.41 PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft			20.59 + J	11.21 PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-EMCCDB	B100;P-EBDP4	B100;MC-EMCDB	1	480	175.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		4.81 + J	3.02 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		7.64 + J	7.69 PU	
B100;C-EMCCB	B100;P-EBDP4	B100;MC-EMCEB	1	480	50.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.38 + J	1.01 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		6.97 + J	2.58 PU	
B100;C-EMCCF1	B100;P-E1DP2	B100;MC-EMCF1	1	480	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.5495 + J	0.3455 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		0.8733 + J	0.8785 PU	
B100;C-EMCCF2	B100;P-E2DP	B100;P-E2L1	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B100;C-EMCCFB	B100;P-EBDP4	B100;MC-EMCFB	2	480	165.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.9883 + J	1.34 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.57 + J	3.58 PU	
B100;C-EMCEB	B100;MC-EMCEB	B100;B-EMCEB	1	480	30.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		2.63 + J	0.6081 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		4.18 + J	1.55 PU	
B100;C-EMH	B100;P-EBDP2	BMRI;P-EMH	1	480	380.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		84.11 + J	9.04 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		133.97 + J	22.99 PU	
B100;C-EP-1C	B100;B-A-9E	B100;SG-EP	2	480	165.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.9883 + J	1.34 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.57 + J	3.58 PU	
B100;C-EP-2A	B100;SG-EP	B100;B-EP-2A	3	480	160.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.6389 + J	0.8634 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.01 + J	2.31 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-EP-2B	B100;SG-EP	B100;B-EP-2B	3	480	160.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.6389 + J	0.8634	THWN
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.01 + J	2.31	PU
B100;C-EP-2C	B100;SG-EP	B100;B-EP-2C	2	480	160.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.9583 + J	1.30	THHN
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.52 + J	3.47	PU
B100;C-EP-2D	B100;SG-EP	B100;B-EP-2D	2	480	160.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.9583 + J	1.30	THHN
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.52 + J	3.47	PU
B100;C-EP-3A	B100;SG-EP	B100;B-EP-3A	3	480	160.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.6389 + J	0.8634	THHN
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.01 + J	2.31	PU
B100;C-EP-3B	B100;SG-EP	B100;B-EP-3B	3	480	160.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.6389 + J	0.8634	THHN
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.01 + J	2.31	PU
B100;C-EP-3C	B100;SG-EP	B100;B-EP-3C	3	480	160.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.6389 + J	0.8634	THWN
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.01 + J	2.31	PU
B100;C-EP-3D	B100;SG-EP	B100;B-EP-3D	2	480	160.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.9583 + J	1.30	THHN
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.52 + J	3.47	PU
B100;C-EPDP	B100;B-A-8L	B100;P-EPDP	2	480	10.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.0599 + J	0.0809	THWN
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.0951 + J	0.2168	PU
B100;C-FIRE-P	B100;P-FIRE-P	B100;B-FIRE-P	1	480	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.2747 + J	0.1727	THWN
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		0.4366 + J	0.4392	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-JYP	B100;P-FIRE-P	B100;B-JYP	1	480	10.0 FEET	10	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	1.18 + J	0.0823	Ohms/1000 ft		5.12 + J	0.3572 PU	
	Z0 Impedance:	1.88 + J	0.2093	Ohms/1000 ft		8.14 + J	0.9084 PU	
B100;C-KITCHE	B100;P-EBDP7A	B100;P-KITCHE	1	208	40.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		3.40 + J	3.63 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		5.41 + J	9.24 PU	
B100;C-LA108	B100;P-EBDP6	B100;B-LA108	3	480	70.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		5.16 + J	0.5550 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		8.23 + J	1.41 PU	
B100;C-LS1DP	B100;P-LSBDP1	B100;P-LS1DP	1	480	190.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		5.22 + J	3.28 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		8.30 + J	8.35 PU	
B100;C-LS1L1	B100;P-LS1DP	B100;P-LS1L1	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B100;C-LS1R1	B100;B-TLS1RS	B100;P-LS1R1	1	208	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		23.58 + J	2.53 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		37.55 + J	6.44 PU	
B100;C-LS2DP	B100;P-LSBDP1	B100;P-LS2DP	1	480	210.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		11.58 + J	3.94 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		18.40 + J	10.02 PU	
B100;C-LS2L1	B100;P-LS2DP	B100;P-LS2L1	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B100;C-LS2R1	B100;B-TLS2RS	B100;P-LS2R1	1	208	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		23.58 + J	2.53 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		37.55 + J	6.44 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-LS2WL1	B100;P-LS2DP	B100;P-LS2WL1	1	480	170.0	FEET	10	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	1.18 + J	0.0823	Ohms/1000 ft		87.07 + J	6.07	PU
	Z0 Impedance:	1.88 + J	0.2093	Ohms/1000 ft		138.41 + J	15.44	PU
B100;C-LS3DP	B100;P-LSBDP1	B100;P-LS3DP	1	480	230.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		12.68 + J	4.31	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		20.15 + J	10.97	PU
B100;C-LS3L1	B100;P-LS3DP	B100;P-LS3L1	1	480	20.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757	PU
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21	PU
B100;C-LS3R1	B100;B-TLS3RS	B100;P-LS3R1	1	208	20.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		23.58 + J	2.53	PU
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		37.55 + J	6.44	PU
B100;C-LS4DP	B100;P-LSBDP1	B100;P-LS4DP	1	480	250.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		13.78 + J	4.69	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		21.91 + J	11.92	PU
B100;C-LS4L1	B100;P-LS4DP	B100;P-LS4L1	1	480	20.0	FEET	4	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.3210 + J	0.0506	Ohms/1000 ft		2.79 + J	0.4392	PU
	Z0 Impedance:	0.4960 + J	0.1287	Ohms/1000 ft		4.31 + J	1.12	PU
B100;C-LS4R1	B100;B-TLS4RS	B100;P-LS4R1	1	208	20.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		23.58 + J	2.53	PU
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		37.55 + J	6.44	PU
B100;C-LS5DP	B100;P-LSBDP1	B100;P-LS5DP	1	480	270.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		14.88 + J	5.06	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		23.66 + J	12.88	PU
B100;C-LS5L1	B100;P-LS5DP	B100;P-LS5L1	1	480	20.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757	PU
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-LS5R1	B100;B-TLS5RS	B100;P-LS5R1	1	208	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		23.58 + J	2.53 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		37.55 + J	6.44 PU	
B100;C-LSB2	B100;P-LSBL1	B100;P-LSB2	4	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		0.4384 + J	0.1013 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		0.6968 + J	0.2578 PU	
B100;C-LSBDP1	B100;B-A-1L	B100;P-LSBDP1	3	480	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.0399 + J	0.0540 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.0634 + J	0.1445 PU	
B100;C-LSBDP2	B100;P-LSBDP1	B100;P-LSBDP2	1	480	170.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		9.37 + J	3.19 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		14.90 + J	8.11 PU	
B100;C-LSBR1	B100;B-TLSBRS	B100;P-LSBR1	1	208	15.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		17.68 + J	1.90 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		28.16 + J	4.83 PU	
B100;C-LSMCCG	B100;P-LSBDP1	B100;MC-LSMCG	1	480	125.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.3210 + J	0.0506	Ohms/1000 ft		17.42 + J	2.75 PU	
	Z0 Impedance:	0.4960 + J	0.1287	Ohms/1000 ft		26.91 + J	6.98 PU	
B100;C-M-P1	B100;P-EPDP	B100;B-RCPP1	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B100;C-M-P2	B100;P-EPDP	B100;B-RCPP2	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B100;C-M-P3	B100;P-EPDP	B100;B-RCPP3	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-M-P4	B100;P-EPDP	B100;B-RCPP4	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B100;C-M-S5	B100;P-EPDP	B100;B-RCPS5	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B100;C-M-S6	B100;P-EPDP	B100;B-RCPS6	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B100;C-M-S7	B100;P-EPDP	B100;B-RCPS7	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B100;C-M-S8	B100;P-EPDP	B100;B-RCPS8	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B100;C-MCC-A3	B100;MC-MCCA3	B100;B-3ED1TP	1	480	25.0 FEET	10	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	1.18 + J	0.0823	Ohms/1000 ft		12.80 + J	0.8930 PU	
	Z0 Impedance:	1.88 + J	0.2093	Ohms/1000 ft		20.35 + J	2.27 PU	
B100;C-MCC-CB	B100;P-EBDP9A	B100;MC-MCCCB	1	480	50.0 FEET	2/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1010 + J	0.0426	Ohms/1000 ft		2.19 + J	0.9245 PU	
	Z0 Impedance:	0.1605 + J	0.1083	Ohms/1000 ft		3.48 + J	2.35 PU	
B100;C-MCCC2	B100;MC-MCCC2	B100;B-MCCC2	1	480	30.0 FEET	12	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	1.87 + J	0.0892	Ohms/1000 ft		24.35 + J	1.16 PU	
	Z0 Impedance:	2.97 + J	0.2269	Ohms/1000 ft		38.71 + J	2.95 PU	
B100;C-MCCCI	B100;P-1DP4	B100;MC-MCCCI	1	480	65.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		1.04 + J	1.11 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		1.65 + J	2.82 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-MCCD2	B100;P-BDP4	B100;MC-MCCD2	1	480	180.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		9.92 + J	3.38	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		15.77 + J	8.59	PU
B100;C-MCCD3	B100;P-BDP4	B100;MC-MCCD3	1	480	220.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		19.29 + J	4.46	PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		30.66 + J	11.34	PU
B100;C-MCCD4	B100;P-BDP4	B100;MC-MCCD4	1	480	240.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		21.04 + J	4.86	PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		33.45 + J	12.38	PU
B100;C-MCCD5	B100;P-BDP4	B100;MC-MCCD5	1	480	240.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		21.04 + J	4.86	PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		33.45 + J	12.38	PU
B100;C-MCCDB	B100;P-BDP4	B100;MC-MCCDB	1	480	65.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		1.04 + J	1.11	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		1.65 + J	2.82	PU
B100;C-MCCEB3	B100;P-EBDP3	B100;MC-MCEB3	2	480	55.0	FEET	250	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0541 + J	0.0330	Ohms/1000 ft		0.6457 + J	0.3939	PU
	Z0 Impedance:	0.0860 + J	0.0839	Ohms/1000 ft		1.03 + J	1.00	PU
B100;C-MED-V1	B100;MC-EMCFB	B100;B-MED-V1	1	480	30.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		6.64 + J	0.7135	PU
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		10.58 + J	1.82	PU
B100;C-RL1	B100;B-RL1,2	B100;P-RL1	1	208	20.0	FEET	4	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.3210 + J	0.0506	Ohms/1000 ft		14.84 + J	2.34	PU
	Z0 Impedance:	0.4960 + J	0.1287	Ohms/1000 ft		22.93 + J	5.95	PU
B100;C-RL1,2	B100;B-TRL12S	B100;B-RL1,2	1	208	20.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		5.87 + J	2.00	PU
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		9.33 + J	5.08	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-RL2	B100;B-RL1,2	B100;P-RL2	1	208	20.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		5.87 + J	2.00 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		9.33 + J	5.08 PU	
B100;C-RP1	B100;P-RP6	B100;P-RP1	1	208	30.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		14.01 + J	3.24 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		22.27 + J	8.24 PU	
B100;C-RP1,2	B100;B-RP1,2	B100;B-C-URP6	1	208	20.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		1.28 + J	1.72 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		2.02 + J	4.62 PU	
B100;C-RP2	B100;P-RP6	B100;P-RP2	1	208	30.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		14.01 + J	3.24 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		22.27 + J	8.24 PU	
B100;C-RP3	B100;P-RP2	B100;P-RP3	1	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		9.34 + J	2.16 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		14.84 + J	5.49 PU	
B100;C-RP5	B100;P-RP1	B100;P-RP5	1	208	25.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		11.67 + J	2.70 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		18.55 + J	6.86 PU	
B100;C-RP6	B100;B-RP6	B100;P-RP6	1	208	10.0 FEET	2/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1010 + J	0.0426	Ohms/1000 ft		2.33 + J	0.9847 PU	
	Z0 Impedance:	0.1605 + J	0.1083	Ohms/1000 ft		3.71 + J	2.50 PU	
B100;C-S2-10A	B100;SG-SS2-B	B100;B-A-2N	2	480	45.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.3594 + J	0.3838 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.5713 + J	0.9756 PU	
B100;C-S2-10B	B100;SG-SS2-B	B100;B-A-1N	2	480	50.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.3993 + J	0.4264 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.6348 + J	1.08 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-S2-10D	B100;SG-SS2-B	B100;B-A-9N	2	480	35.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.2795 + J	0.2985	THWN PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.4443 + J	0.7588	PU
B100;C-S2-2A	B100;SG-SS2-A	BMRI;P-H	2	480	250.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		2.00 + J	2.13	THWN PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		3.17 + J	5.42	PU
B100;C-S2-2B	B100;SG-SS2-A	B100A;P-BDDP1	2	480	250.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		2.00 + J	2.13	THWN PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		3.17 + J	5.42	PU
B100;C-S2-2C	B100;SG-SS2-A	B100;P-BDP10	2	480	160.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		1.28 + J	1.36	THWN PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		2.03 + J	3.47	PU
B100;C-S2-3A	B100;SG-SS2-A	B100;P-BDP5	2	480	30.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.2396 + J	0.2559	THHN PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.3809 + J	0.6504	PU
B100;C-S2-3B	B100;SG-SS2-A	B100;P-BDP6	2	480	165.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		1.32 + J	1.41	THWN PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		2.09 + J	3.58	PU
B100;C-S2-3C	B100;SG-SS2-A	B100;MC-MCCBP	2	480	295.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		1.77 + J	2.39	THWN PU
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		2.80 + J	6.40	PU
B100;C-S2-4A	B100;SG-SS2-A	B100;P-BDP3	1	480	30.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.4792 + J	0.5117	THHN PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.7617 + J	1.30	PU
B100;C-S2-4B	B100;SG-SS2-A	B100;P-BDP4	2	480	30.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.2396 + J	0.2559	THHN PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.3809 + J	0.6504	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-S2-4C	B100;SG-SS2-A	B100;P-4DP	2	480	250.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		2.00 + J	2.13	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		3.17 + J	5.42	PU
B100;C-S2-4D	B100;SG-SS2-A	B100;P-5DP	2	480	270.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		2.16 + J	2.30	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		3.43 + J	5.85	PU
B100;C-S2-5A	B100;SG-SS2-A	B100;P-BDP1	2	480	30.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.2396 + J	0.2559	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.3809 + J	0.6504	PU
B100;C-S2-5B	B100;SG-SS2-A	B100;P-BDP2	2	480	30.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.2396 + J	0.2559	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.3809 + J	0.6504	PU
B100;C-S2-5C	B100;SG-SS2-A	B100;P-2DP	2	480	205.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		1.64 + J	1.75	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		2.60 + J	4.44	PU
B100;C-S2-5D	B100;SG-SS2-A	B100;P-3DP	2	480	225.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		1.80 + J	1.92	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		2.86 + J	4.88	PU
B100;C-S2-7A	B100;SG-SS2-B	B100;B-A-7N	2	480	55.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.4392 + J	0.4691	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.6982 + J	1.19	PU
B100;C-S2-7B	B100;SG-SS2-B	B100;B-A-8N	2	480	35.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.2795 + J	0.2985	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.4443 + J	0.7588	PU
B100;C-S2-8A	B100;SG-SS2-B	B100;B-A-5N	2	480	55.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.4392 + J	0.4691	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.6982 + J	1.19	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-S2-8B	B100;SG-SS2-B	B100;B-A-6N	2	480	55.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.4392 + J	0.4691 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.6982 + J	1.19 PU	
B100;C-S2-8C	B100;SG-SS2-B	B100;P-1DP3	3	480	225.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.8984 + J	1.21 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.43 + J	3.25 PU	
B100;C-S2-8D	B100;SG-SS2-B	B100;P-1DP4	2	480	250.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		1.50 + J	2.02 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		2.38 + J	5.42 PU	
B100;C-S2-9A	B100;SG-SS2-B	B100;B-A-4N	2	480	55.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.4392 + J	0.4691 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.6982 + J	1.19 PU	
B100;C-S2-9B	B100;SG-SS2-B	B100;B-A-3N	2	480	40.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.3194 + J	0.3411 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.5078 + J	0.8672 PU	
B100;C-S2-9C	B100;SG-SS2-B	B100;P-1DP1	2	480	175.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		1.05 + J	1.42 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.66 + J	3.79 PU	
B100;C-S2-9D	B100;SG-SS2-B	B100;P-1DP2	3	480	205.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.8186 + J	1.11 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.30 + J	2.96 PU	
B100;C-SF-16	B100;MC-EMCC2	B100;B-SF-16	1	480	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		0.8767 + J	0.2027 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		1.39 + J	0.5156 PU	
B100;C-T-BMEP	B100;MC-EMCFB	B100;B-T-BMEP	1	480	90.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		19.92 + J	2.14 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		31.73 + J	5.45 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-T-C4RP	B100;P-C4DP	B100;B-T-C4RP	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic			Insulation Type:		PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054	THWN PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03	PU
B100;C-T-C4RS	B100;B-T-C4RS	B100;B-BK-C4R	1	208	10.0 FEET	350	Copper	
	Duct Material: Non-Magnetic			Insulation Type:		PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.8506 + J	0.9084	THWN PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		1.35 + J	2.31	PU
B100;C-T-C5RP	B100;P-C5DP	B100;B-T-C5RP	1	480	10.0 FEET	8	Copper	
	Duct Material: Non-Magnetic			Insulation Type:		PVC	Insulation Class:	
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		3.52 + J	0.2617	THWN PU
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		5.60 + J	0.6658	PU
B100;C-T-C5RS	B100;B-T-C5RS	B100;B-BK-C5R	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic			Insulation Type:		PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08	THWN PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75	PU
B100;C-T-E2RP	B100;P-E2DP	B100;B-T-E2RP	1	480	20.0 FEET	8	Copper	
	Duct Material: Non-Magnetic			Insulation Type:		PVC	Insulation Class:	
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		7.04 + J	0.5234	THWN PU
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		11.19 + J	1.33	PU
B100;C-T-E2RS	B100;B-T-E2RS	B100;B-BK-E2R	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic			Insulation Type:		PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08	THWN PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75	PU
B100;C-T-E3RP	B100;P-E3DP	B100;B-T-E3RP	1	480	20.0 FEET	8	Copper	
	Duct Material: Non-Magnetic			Insulation Type:		PVC	Insulation Class:	
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		7.04 + J	0.5234	THWN PU
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		11.19 + J	1.33	PU
B100;C-T-E3RS	B100;B-T-E3RS	B100;B-BK-E3R	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic			Insulation Type:		PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08	THWN PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75	PU
B100;C-T-E4RP	B100;P-E4DP	B100;B-T-E4RP	1	480	20.0 FEET	8	Copper	
	Duct Material: Non-Magnetic			Insulation Type:		PVC	Insulation Class:	
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		7.04 + J	0.5234	THWN PU
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		11.19 + J	1.33	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-T-E4RS	B100;B-T-E4RS	B100;B-BK-E4R	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-T-E5RP	B100;P-E5DP	B100;B-T-E5RP	1	480	20.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		7.04 + J	0.5234 PU	
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		11.19 + J	1.33 PU	
B100;C-T-E5RS	B100;B-T-E5RS	B100;B-BK-E5R	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100;C-T-EBRP	B100;P-EBDP6	B100;B-T-EBR	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B100;C-T-EBRS	B100;B-T-EBRS	B100;B-BK-EBR	1	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		9.34 + J	2.16 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		14.84 + J	5.49 PU	
B100;C-T1-A-P	B100;B-FD5	B100;B-T1-A-P	1	13090	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	MV
	+/- Impedance:	0.0640 + J	0.0466	Ohms/1000 ft		0.00037 + J	0.00027 PU	
	Z0 Impedance:	0.1017 + J	0.1185	Ohms/1000 ft		0.00059 + J	0.00069 PU	
B100;C-T2-A-P	B100;B-FD3	B100;B-T2-A-P	1	13090	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	MV
	+/- Impedance:	0.0640 + J	0.0466	Ohms/1000 ft		0.00037 + J	0.00027 PU	
	Z0 Impedance:	0.1017 + J	0.1185	Ohms/1000 ft		0.00059 + J	0.00069 PU	
B100;C-T2-B-P	B100;B-FD2	B100;B-T2-B-P	1	13090	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	MV
	+/- Impedance:	0.0640 + J	0.0466	Ohms/1000 ft		0.00037 + J	0.00027 PU	
	Z0 Impedance:	0.1017 + J	0.1185	Ohms/1000 ft		0.00059 + J	0.00069 PU	
B100;C-TC1R1P	B100;P-C1DP	B100;B-TC1R1P	1	480	20.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		7.04 + J	0.5234 PU	
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		11.19 + J	1.33 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100;C-TC1R1S	B100;B-TC1R1S	B100;B-CC1R12	1	208	10.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		4.67 + J	1.08	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		7.42 + J	2.75	PU
B100;C-TC1R3P	B100;P-C1DP	B100;B-TC1R3P	1	480	20.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		1.10 + J	0.3750	PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		1.75 + J	0.9540	PU
B100;C-TC2R1P	B100;P-C2DP	B100;B-TC2R1P	1	480	20.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		0.5495 + J	0.3455	PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		0.8733 + J	0.8785	PU
B100;C-TC2R1S	B100;B-TC2R1S	B100;B-C-C2R1	1	208	10.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft		0.6379 + J	0.8621	PU
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft		1.01 + J	2.31	PU
B100;C-TC2R4P	B100;P-C2DP	B100;B-TC2R4P	1	480	20.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		0.5495 + J	0.3455	PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		0.8733 + J	0.8785	PU
B100;C-TC2R4S	B100;B-TC2R4S	B100;B-C-C2R4	1	208	10.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft		0.6379 + J	0.8621	PU
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft		1.01 + J	2.31	PU
B100;C-TC2WDP	B100;P-C2WDP	B100;B-TC2WDP	1	480	10.0	FEET	4	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.3210 + J		0.0506	Ohms/1000 ft		1.39 + J	0.2196	PU
	Z0 Impedance: 0.4960 + J		0.1287	Ohms/1000 ft		2.15 + J	0.5586	PU
B100;C-TC3R1P	B100;P-C3DP	B100;B-TC3R1P	1	480	20.0	FEET	10	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 1.18 + J		0.0823	Ohms/1000 ft		10.24 + J	0.7144	PU
	Z0 Impedance: 1.88 + J		0.2093	Ohms/1000 ft		16.28 + J	1.82	PU
B100;C-TE1R1P	B100;P-E1DP1	B100;B-TE1R1P	1	480	20.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		1.75 + J	0.4054	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		2.79 + J	1.03	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-TE1R1S	B100;B-TE1R1S	B100;B-BK-E1R	1	208	10.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.8506 + J	0.9084 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		1.35 + J	2.31 PU	
B100;C-TE1R3P	B100;P-E1DP2	B100;B-TE1R3P	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B100;C-TE1R3S	B100;B-TE1R3S	B100;P-E1R3	1	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		9.34 + J	2.16 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		14.84 + J	5.49 PU	
B100;C-TE2DP3	B100;B-TE2DP3	B100;P-E2WD1	4	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.7316 + J	0.4600 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		1.16 + J	1.17 PU	
B100;C-TEB7AP	B100;P-EBDP4	B100;B-TEB7AP	2	480	60.0 FEET	250	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0541 + J	0.0396	Ohms/1000 ft		0.7044 + J	0.5156 PU	
	Z0 Impedance:	0.0860 + J	0.1007	Ohms/1000 ft		1.12 + J	1.31 PU	
B100;C-TEB7AS	B100;B-TEB7AS	B100;P-EBDP7A	3	208	15.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.3190 + J	0.4311 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.5062 + J	1.15 PU	
B100;C-TEB9BP	B100;P-EBDP9A	B100;B-TEB9BP	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B100;C-TLS1RP	B100;P-LS1DP	B100;B-TLS1RP	1	480	20.0 FEET	10	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	1.18 + J	0.0823	Ohms/1000 ft		10.24 + J	0.7144 PU	
	Z0 Impedance:	1.88 + J	0.2093	Ohms/1000 ft		16.28 + J	1.82 PU	
B100;C-TLS2RP	B100;P-LS2DP	B100;B-TLS2RP	1	480	20.0 FEET	10	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	1.18 + J	0.0823	Ohms/1000 ft		10.24 + J	0.7144 PU	
	Z0 Impedance:	1.88 + J	0.2093	Ohms/1000 ft		16.28 + J	1.82 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-TLS3R1	B100;P-LS3DP	B100;B-TLS3RP	1	480	20.0 FEET	10	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 1.18 + J	0.0823 Ohms/1000 ft				10.24 + J	0.7144 PU	
	Z0 Impedance: 1.88 + J	0.2093 Ohms/1000 ft				16.28 + J	1.82 PU	
B100;C-TLS4RP	B100;P-LS4DP	B100;B-TLS4RP	1	480	20.0 FEET	10	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 1.18 + J	0.0823 Ohms/1000 ft				10.24 + J	0.7144 PU	
	Z0 Impedance: 1.88 + J	0.2093 Ohms/1000 ft				16.28 + J	1.82 PU	
B100;C-TLS5RP	B100;P-LS5DP	B100;B-TLS5RP	1	480	20.0 FEET	10	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 1.18 + J	0.0823 Ohms/1000 ft				10.24 + J	0.7144 PU	
	Z0 Impedance: 1.88 + J	0.2093 Ohms/1000 ft				16.28 + J	1.82 PU	
B100;C-TLSBRP	B100;P-LSBDP2	B100;B-TLSBRP	1	480	15.0 FEET	10	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 1.18 + J	0.0823 Ohms/1000 ft				7.68 + J	0.5358 PU	
	Z0 Impedance: 1.88 + J	0.2093 Ohms/1000 ft				12.21 + J	1.36 PU	
B100;C-TRL12	B100;P-LSBDP2	B100;B-TRL12P	1	480	75.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				6.58 + J	1.52 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				10.45 + J	3.87 PU	
B100;C-U-RP6	B100;B-C-URP6	B100;B-U-RP6	1	208	15.0 FEET	250	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0541 + J	0.0396 Ohms/1000 ft				1.88 + J	1.37 PU	
	Z0 Impedance: 0.0860 + J	0.1007 Ohms/1000 ft				2.98 + J	3.49 PU	
B100;C-UNKNOW	B100;P-1R17	B100;P-UNKNOW	1	208	10.0 FEET	4	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.3210 + J	0.0506 Ohms/1000 ft				7.42 + J	1.17 PU	
	Z0 Impedance: 0.4960 + J	0.1287 Ohms/1000 ft				11.46 + J	2.97 PU	
B100;C-UNNAM1	B100;P-1R17	B100;P-UNNAM1	1	208	10.0 FEET	4	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.3210 + J	0.0506 Ohms/1000 ft				7.42 + J	1.17 PU	
	Z0 Impedance: 0.4960 + J	0.1287 Ohms/1000 ft				11.46 + J	2.97 PU	
B100;C-UNNAM2	B100;P-1R17	B100;P-UNNAM2	1	208	10.0 FEET	4	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.3210 + J	0.0506 Ohms/1000 ft				7.42 + J	1.17 PU	
	Z0 Impedance: 0.4960 + J	0.1287 Ohms/1000 ft				11.46 + J	2.97 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100;C-V100P1	B100;MC-MCEB1	B100;V-100P1	1	480	30.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0766 + J		0.0415	Ohms/1000 ft		0.9974 + J	0.5404 PU	
	Z0 Impedance: 0.1217 + J		0.1055	Ohms/1000 ft		1.58 + J	1.37 PU	
B100;C-V100P2	B100;MC-MCEB1	B100;V-100P2	1	480	30.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0766 + J		0.0415	Ohms/1000 ft		0.9974 + J	0.5404 PU	
	Z0 Impedance: 0.1217 + J		0.1055	Ohms/1000 ft		1.58 + J	1.37 PU	
B100;C-V100P3	B100;P-EBDP3	B100;V-100P3	1	480	50.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0766 + J		0.0346	Ohms/1000 ft		1.66 + J	0.7509 PU	
	Z0 Impedance: 0.1217 + J		0.0880	Ohms/1000 ft		2.64 + J	1.91 PU	
B100;C-VFDP1	B100;MC-MCCFB	B100;B-VFDP1	1	480	30.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		2.63 + J	0.6081 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		4.18 + J	1.55 PU	
B100A;C-1DL1	B100A;P-BDDP1	B100A;P-1DL1	1	480	75.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft		0.8984 + J	1.21 PU	
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft		1.43 + J	3.25 PU	
B100A;C-1DLS1	B100A;P-BDLS1	B100A;P-1DLS1	1	480	75.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		16.60 + J	1.78 PU	
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		26.44 + J	4.54 PU	
B100A;C-1DLSP0	B100A;P-1DLS1	B100A;B-1DLSP	1	480	10.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.8110 + J		0.0603	Ohms/1000 ft		3.52 + J	0.2617 PU	
	Z0 Impedance: 1.29 + J		0.1534	Ohms/1000 ft		5.60 + J	0.6658 PU	
B100A;C-1DLSS	B100A;B-1DLSS	B100A;P-1DLSR1	1	208	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		23.58 + J	2.53 PU	
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		37.55 + J	6.44 PU	
B100A;C-1DLST	B100A;B-BDLSS	B100A;P-BDLSR1	1	208	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		23.58 + J	2.53 PU	
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		37.55 + J	6.44 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B100A;C-1DR1	B100A;B-1DT1S	B100A;P-1DR1	1	208	20.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		2.93 + J	1.84	PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		4.65 + J	4.68	PU
B100A;C-1DR1S	B100A;P-1DR1	B100A;P-1DR1S	1	208	20.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		2.93 + J	1.84	PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		4.65 + J	4.68	PU
B100A;C-1DR2	B100A;B-1DT1S	B100A;P-1DR2	1	208	20.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		9.34 + J	2.16	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		14.84 + J	5.49	PU
B100A;C-1DT1P	B100A;P-1DL1	B100A;B-1DT1P	1	480	20.0	FEET	1/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		1.10 + J	0.3750	PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		1.75 + J	0.9540	PU
B100A;C-2DCR1	B100A;B-2DCRS	B100A;P-2DCR1	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		1.46 + J	0.9199	PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		2.33 + J	2.34	PU
B100A;C-2DCR2	B100A;P-2DCR1	B100A;P-2DCR2	1	208	10.0	FEET	1	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.1600 + J		0.0456	Ohms/1000 ft		3.70 + J	1.05	PU
	Z0 Impedance: 0.2543 + J		0.1160	Ohms/1000 ft		5.88 + J	2.68	PU
B100A;C-2DCRP	B100A;P-BDC1	B100A;B-2DCRP	1	480	20.0	FEET	10	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 1.18 + J		0.0823	Ohms/1000 ft		10.24 + J	0.7144	PU
	Z0 Impedance: 1.88 + J		0.2093	Ohms/1000 ft		16.28 + J	1.82	PU
B100A;C-2DL1	B100A;P-BDDP1	B100A;P-2DL1	1	480	110.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft		1.76 + J	1.88	PU
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft		2.79 + J	4.77	PU
B100A;C-2DR1	B100A;P-2DRDP	B100A;B-2DR1	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		1.46 + J	0.9199	PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		2.33 + J	2.34	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100A;C-2DR2	B100A;P-2DRDP	B100A;B-2DR2	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100A;C-2DR3	B100A;P-2DRDP	B100A;B-2DR3	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B100A;C-2DT1P	B100A;P-2DL1	B100A;B-2DT1P	1	480	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		0.8767 + J	0.2027 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		1.39 + J	0.5156 PU	
B100A;C-2DT1S	B100A;B-2DT1S	B100A;P-2DRDP	1	208	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.6379 + J	0.8621 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.01 + J	2.31 PU	
B100A;C-BDE1P	B100A;P-BDE1	B100A;B-BDE1P	1	480	90.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		7.89 + J	1.82 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		12.54 + J	4.64 PU	
B100A;C-BDLST	B100A;P-BDLS1	B100A;B-BDLSP	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B100A;C-BDT1P	B100A;P-BDDP1	B100A;B-BDT1P	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B100A;C-BDT1S	B100A;B-BDT1S	B100A;P-BDR1	1	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		9.34 + J	2.16 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		14.84 + J	5.49 PU	
B100A;C-TBDE1	B100A;P-BDE1	B100A;B-TBDEP	1	480	40.0 FEET	10	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	1.18 + J	0.0823	Ohms/1000 ft		20.49 + J	1.43 PU	
	Z0 Impedance:	1.88 + J	0.2093	Ohms/1000 ft		32.57 + J	3.63 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B100A;C-TBDE2	B100A;B-TBDES	B100A;P-BDELV	1	208	10.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		11.79 + J	1.27	PU
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		18.78 + J	3.22	PU
B100A;C-VFDP1	B100A;P-BDDP1	B100A;V-VFDP1	1	480	50.0	FEET	10	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 1.18 + J		0.0823	Ohms/1000 ft		25.61 + J	1.79	PU
	Z0 Impedance: 1.88 + J		0.2093	Ohms/1000 ft		40.71 + J	4.54	PU
B100A;C-VFDP2	B100A;P-BDDP1	B100A;V-VFDP2	1	480	50.0	FEET	10	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 1.18 + J		0.0823	Ohms/1000 ft		25.61 + J	1.79	PU
	Z0 Impedance: 1.88 + J		0.2093	Ohms/1000 ft		40.71 + J	4.54	PU
B103;C-103S	B103;B-103S	B103;P-MDP	2	480	40.0	FEET	500	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft		0.2396 + J	0.3238	PU
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft		0.3802 + J	0.8672	PU
B103;C-A-CE	B103;B-A-CE	B103;P-NIG1	1	480	125.0	FEET	3/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0766 + J		0.0415	Ohms/1000 ft		4.16 + J	2.25	PU
	Z0 Impedance: 0.1217 + J		0.1055	Ohms/1000 ft		6.60 + J	5.72	PU
B103;C-A-CL	B103;B-A-CL	B103;P-NC1D1	1	480	20.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		0.5495 + J	0.3455	PU
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		0.8733 + J	0.8785	PU
B103;C-A-EE	B103;P-NIG1	B103;B-A-EE	1	480	130.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		28.78 + J	3.09	PU
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		45.83 + J	7.87	PU
B103;C-A-EN	B103;B-A-EN	B103;P-MDP	1	480	30.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		2.63 + J	0.6081	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		4.18 + J	1.55	PU
B103;C-DEG	B103;P-NIG1	B103;B-DEG	1	480	30.0	FEET	250	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.0541 + J		0.0396	Ohms/1000 ft		0.7044 + J	0.5156	PU
	Z0 Impedance: 0.0860 + J		0.1007	Ohms/1000 ft		1.12 + J	1.31	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B103;C-N1L1	B103;P-MDP	B103;P-N1L1	1	480	25.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		2.19 + J	0.5067 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		3.48 + J	1.29 PU	
B103;C-N1R1	B103;P-N1D1	B103;P-N1R1	1	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		9.34 + J	2.16 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		14.84 + J	5.49 PU	
B103;C-N1R2	B103;P-N1D1	B103;P-N1R2	1	208	165.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		77.04 + J	17.81 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		122.46 + J	45.31 PU	
B103;C-N1R3	B103;P-N1D1	B103;P-N1R3	1	208	180.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		84.04 + J	19.43 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		133.59 + J	49.43 PU	
B103;C-N1R4	B103;P-N1D1	B103;P-N1R4	1	208	25.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		11.67 + J	2.70 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		18.55 + J	6.86 PU	
B103;C-N2D1	B103;P-N1D1	B103;P-N2D1	2	208	100.0 FEET	250	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0541 + J		0.0396	Ohms/1000 ft		6.25 + J	4.58 PU	
	Z0 Impedance: 0.0860 + J		0.1007	Ohms/1000 ft		9.94 + J	11.64 PU	
B103;C-N2D2	B103;P-MDP	B103;P-N2D2	1	480	85.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		7.45 + J	1.72 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		11.85 + J	4.38 PU	
B103;C-N2L1	B103;P-MDP	B103;P-N2L1	1	480	85.0 FEET	10	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 1.18 + J		0.0823	Ohms/1000 ft		43.53 + J	3.04 PU	
	Z0 Impedance: 1.88 + J		0.2093	Ohms/1000 ft		69.21 + J	7.72 PU	
B103;C-N2R1	B103;P-N2D1	B103;P-N2R1	1	208	25.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		7.34 + J	2.50 PU	
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		11.67 + J	6.35 PU	

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B103;C-N2R2	B103;P-N2D1	B103;P-N2R2	1	208	120.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		35.23 + J	11.98 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		56.00 + J	30.48 PU	
B103;C-N2R3	B103;P-N2D1	B103;P-N2R3	1	208	100.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		29.35 + J	9.99 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		46.67 + J	25.40 PU	
B103;C-N2R4	B103;P-N2D1	B103;P-N2R4	1	208	25.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		7.34 + J	2.50 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		11.67 + J	6.35 PU	
B103;C-N2R5	B103;P-N2D1	B103;P-N2R5	1	208	25.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		7.34 + J	2.50 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		11.67 + J	6.35 PU	
B103;C-NC1D2P	B103;P-NC1D1	B103;B-NC1D2P	1	480	25.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		2.19 + J	0.5067 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		3.48 + J	1.29 PU	
B103;C-NC1D2S	B103;B-NC1D2S	B103;P-NC1D2	1	208	25.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		3.66 + J	2.30 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		5.81 + J	5.85 PU	
B103;C-NC1L1	B103;P-NC1D1	B103;P-NC1L1	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B103;C-NC1R1	B103;P-NC1D2	B103;P-NC1R1	1	208	25.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		46.86 + J	3.48 PU	
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		74.50 + J	8.86 PU	
B103;C-NC1R2	B103;P-NC1D2	B103;P-NC1R2	1	208	195.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		91.05 + J	21.05 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		144.73 + J	53.55 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B103;C-NC1R3	B103;P-NC1D2	B103;P-NC1R3	1	208	195.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		91.05 + J	21.05	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		144.73 + J	53.55	PU
B103;C-NC2L1	B103;P-NC1D1	B103;P-NC2L1	1	480	95.0	FEET	10	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 1.18 + J		0.0823	Ohms/1000 ft		48.65 + J	3.39	PU
	Z0 Impedance: 1.88 + J		0.2093	Ohms/1000 ft		77.35 + J	8.63	PU
B103;C-NC2R1	B103;P-NC1D2	B103;P-NC2R1	1	208	70.0	FEET	8	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.8110 + J		0.0603	Ohms/1000 ft		131.22 + J	9.76	PU
	Z0 Impedance: 1.29 + J		0.1534	Ohms/1000 ft		208.61 + J	24.82	PU
B103;C-NC2R2	B103;P-NC1D2	B103;P-NC2R2	1	208	125.0	FEET	8	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.8110 + J		0.0603	Ohms/1000 ft		234.32 + J	17.42	PU
	Z0 Impedance: 1.29 + J		0.1534	Ohms/1000 ft		372.51 + J	44.32	PU
B103;C-NC2R3	B103;P-NC1D2	B103;P-NC2R3	1	208	130.0	FEET	8	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.8110 + J		0.0603	Ohms/1000 ft		243.69 + J	18.12	PU
	Z0 Impedance: 1.29 + J		0.1534	Ohms/1000 ft		387.41 + J	46.09	PU
B103;C-NCMCC1	B103;P-NC1D1	B103;MC-NCMC1	1	480	95.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		8.33 + J	1.93	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		13.24 + J	4.90	PU
B103;C-NE1D1	B103;B-A-EL	B103;P-NE1D1	1	480	25.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		2.19 + J	0.5067	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		3.48 + J	1.29	PU
B103;C-NE1L1	B103;P-NE1D1	B103;P-NE1L1	1	480	30.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		2.63 + J	0.6081	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		4.18 + J	1.55	PU
B103;C-NE1R1P	B103;P-NE1D1	B103;B-NE1R1P	1	480	25.0	FEET	8	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance: 0.8110 + J		0.0603	Ohms/1000 ft		8.80 + J	0.6543	PU
	Z0 Impedance: 1.29 + J		0.1534	Ohms/1000 ft		13.99 + J	1.66	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B103;C-NE1R1S	B103;B-NE1R1S	B103;P-NE1R1	1	208	25.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		11.67 + J	2.70 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		18.55 + J	6.86 PU	
B103;C-NE2L1	B103;P-NE1D1	B103;P-NE2L1	1	480	75.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		16.60 + J	1.78 PU	
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		26.44 + J	4.54 PU	
B103;C-NE2R1	B103;P-NE1R1	B103;P-NE2R1	1	208	90.0 FEET	10	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 1.18 + J		0.0823	Ohms/1000 ft		245.47 + J	17.12 PU	
	Z0 Impedance: 1.88 + J		0.2093	Ohms/1000 ft		390.23 + J	43.54 PU	
B103;C-NMCC1	B103;P-MDP	B103;MC-NMCC1	1	480	125.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		3.43 + J	2.16 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		5.46 + J	5.49 PU	
B103;C-T-M	B103;P-MDP	B103;B-T-M	1	480	65.0 FEET	300	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0451 + J		0.0394	Ohms/1000 ft		1.27 + J	1.11 PU	
	Z0 Impedance: 0.0717 + J		0.1002	Ohms/1000 ft		2.02 + J	2.83 PU	
B103;C-T-S	B103;B-T-S	B103;P-N1D1	2	208	70.0 FEET	300	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0451 + J		0.0394	Ohms/1000 ft		3.65 + J	3.19 PU	
	Z0 Impedance: 0.0717 + J		0.1002	Ohms/1000 ft		5.80 + J	8.11 PU	
B103;C-TSWC	B103;P-MDP	B103;B-A-CN	1	480	30.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		0.8242 + J	0.5182 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		1.31 + J	1.32 PU	
B105;C-36H-P	B105;P-36H	B105;B-36H-P	1	480	15.0 FEET	6	Copper	
	Duct Material: Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J		0.0685	Ohms/1000 ft		3.32 + J	0.4460 PU	
	Z0 Impedance: 1.61 + J		0.1687	Ohms/1000 ft		10.46 + J	1.10 PU	
B105;C-36H-S	B105;B-36H-S	B105;P-36L	1	240	15.0 FEET	2	Copper	
	Duct Material: Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0585	Ohms/1000 ft		5.26 + J	1.52 PU	
	Z0 Impedance: 0.6366 + J		0.1440	Ohms/1000 ft		16.58 + J	3.75 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B105;C-36P,H	B105;P-36P,H	B105;P-36H	1	480	1.000 FEET	6	Copper	
	Duct Material:	Magnetic				PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0685	Ohms/1000 ft		0.2214 + J	0.0297 PU	
	Z0 Impedance:	1.61 + J	0.1687	Ohms/1000 ft		0.6976 + J	0.0732 PU	
B105;C-36P-P	B105;P-36H	B105;B-36P-P	1	480	15.0 FEET	6	Copper	
	Duct Material:	Magnetic				PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0685	Ohms/1000 ft		3.32 + J	0.4460 PU	
	Z0 Impedance:	1.61 + J	0.1687	Ohms/1000 ft		10.46 + J	1.10 PU	
B105;C-36P-S	B105;B-36P-S	B105;P-36P	1	240	15.0 FEET	4	Copper	
	Duct Material:	Magnetic				PVC	Insulation Class:	THWN
	+/- Impedance:	0.3210 + J	0.0632	Ohms/1000 ft		8.36 + J	1.65 PU	
	Z0 Impedance:	1.01 + J	0.1556	Ohms/1000 ft		26.34 + J	4.05 PU	
B106;B-MDPH	B106;SG-N	B106;P-MDPH	1	480	20.0 FEET	500	Copper	
	Duct Material:	Non-Magnetic				PVC	Insulation Class:	THHN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.2396 + J	0.3238 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.3802 + J	0.8672 PU	
B106;C-A-1,FP	B106;B-A-1,FP	B106;B-A-FP,1	1	480	10.0 FEET	2	Copper	
	Duct Material:	Non-Magnetic				PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		0.8767 + J	0.2027 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		1.39 + J	0.5156 PU	
B106;C-A-1E	B106;B-A-1E	B106;B-A-1,FP	2	480	20.0 FEET	350	Copper	
	Duct Material:	Non-Magnetic				PVC	Insulation Class:	THHN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.1597 + J	0.1706 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.2539 + J	0.4336 PU	
B106;C-A-1L	B106;B-A-1L	B106;P-EMDPH	2	480	30.0 FEET	350	Copper	
	Duct Material:	Non-Magnetic				PVC	Insulation Class:	THHN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.2396 + J	0.2559 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.3809 + J	0.6504 PU	
B106;C-A-1N	B106;SG-N	B106;B-A-1N	1	480	30.0 FEET	350	Copper	
	Duct Material:	Non-Magnetic				PVC	Insulation Class:	THHN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.4792 + J	0.5117 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.7617 + J	1.30 PU	
B106;C-A-FP,1	B106;B-A-FP,1	B106;B-DS-FP	1	480	195.0 FEET	2	Copper	
	Duct Material:	Non-Magnetic				PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		17.10 + J	3.95 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		27.18 + J	10.05 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B106;C-B100EP	B106;B-A-1,FP	B100;B-BK-EP	2	480	375.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		2.99 + J	3.20 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		4.76 + J	8.13 PU	
B106;C-E1A	B106;P-EMDPL	B106;P-E1A	1	208	45.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		21.01 + J	4.86 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		33.40 + J	12.36 PU	
B106;C-E1B	B106;P-EMDPL	B106;P-E1B	1	208	245.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		114.39 + J	26.45 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		181.84 + J	67.28 PU	
B106;C-E1C	B106;P-EMDPL	B106;P-E1C	1	208	200.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		93.38 + J	21.59 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		148.44 + J	54.92 PU	
B106;C-E1D	B106;P-EMDPL	B106;P-E1D	1	208	320.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		149.41 + J	34.54 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		237.50 + J	87.87 PU	
B106;C-E2A	B106;P-E1A	B106;P-E2A	1	208	35.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		16.34 + J	3.78 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		25.98 + J	9.61 PU	
B106;C-E2B	B106;P-E1B	B106;P-E2B	1	208	35.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		16.34 + J	3.78 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		25.98 + J	9.61 PU	
B106;C-E2C	B106;P-E1C	B106;P-E2C	1	208	30.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		14.01 + J	3.24 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		22.27 + J	8.24 PU	
B106;C-E2D	B106;P-E1D	B106;P-E2D	1	208	40.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		18.68 + J	4.32 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		29.69 + J	10.98 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B106;C-EKL	B106;P-EMDPL	B106;P-EKL	1	208	130.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		153.25 + J	16.47 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		244.08 + J	41.89 PU	
B106;C-EL-P1	B106;B-ELV	B106;B-EL-P1	1	480	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		0.8767 + J	0.2027 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		1.39 + J	0.5156 PU	
B106;C-EL-S1	B106;B-ELV	B106;B-EL-S1	1	480	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		0.8767 + J	0.2027 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		1.39 + J	0.5156 PU	
B106;C-EMDPLP	B106;P-EMDPH	B106;B-EMDPLP	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B106;C-EMDPLS	B106;B-EMDPLS	B106;P-EMDPL	1	208	15.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		2.19 + J	1.38 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		3.49 + J	3.51 PU	
B106;C-EPPH1	B106;P-EMDPH	B106;P-EPPH1	1	480	195.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		43.16 + J	4.64 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		68.75 + J	11.80 PU	
B106;C-EPPH2	B106;P-EMDPH	B106;P-EPPH2	1	480	175.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		15.34 + J	3.55 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		24.39 + J	9.02 PU	
B106;C-EPPH3	B106;P-EMDPH	B106;B-ELV	1	480	175.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		15.34 + J	3.55 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		24.39 + J	9.02 PU	
B106;C-EV	B106;B-ELV	B106;B-EV	1	480	10.0 FEET	12	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	1.87 + J	0.0892	Ohms/1000 ft		8.12 + J	0.3872 PU	
	Z0 Impedance:	2.97 + J	0.2269	Ohms/1000 ft		12.90 + J	0.9848 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B106;C-EV-P	B106;B-EV	B106;B-EV-P	1	480	10.0 FEET	12	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	1.87 + J	0.0892	Ohms/1000 ft		8.12 + J	0.3872 PU	
	Z0 Impedance:	2.97 + J	0.2269	Ohms/1000 ft		12.90 + J	0.9848 PU	
B106;C-EV-S	B106;B-EV-S	B106;P-EV	1	208	10.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		18.75 + J	1.39 PU	
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		29.80 + J	3.55 PU	
B106;C-FP	B106;B-106S	B106;B-FP	1	480	200.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		17.53 + J	4.05 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		27.87 + J	10.31 PU	
B106;C-FP-E	B106;B-FP-E	B106;B-DS-FP	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B106;C-FP-L	B106;B-FP-L	B106;B-FIRE-P	1	480	40.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		8.85 + J	0.9514 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		14.10 + J	2.42 PU	
B106;C-FP-N	B106;B-FP	B106;B-FP-N	1	480	30.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		6.64 + J	0.7135 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		10.58 + J	1.82 PU	
B106;C-KH	B106;P-MDPH	B106;P-KH	1	480	135.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		11.84 + J	2.74 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		18.81 + J	6.96 PU	
B106;C-KL	B106;P-MDPL	B106;P-KL	1	208	200.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		58.71 + J	19.97 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		93.33 + J	50.80 PU	
B106;C-L1A	B106;P-MDPL	B106;P-L1A	1	208	45.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		2.87 + J	3.88 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		4.56 + J	10.39 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B106;C-L1B	B106;P-MDPL	B106;P-L1B	1	208	245.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		15.63 + J	21.12	PU
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		24.80 + J	56.57	PU
B106;C-L1C	B106;P-MDPL	B106;P-L1C	2	208	200.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		8.51 + J	9.08	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		13.52 + J	23.09	PU
B106;C-L1D	B106;P-MDPL	B106;P-L1D	1	208	320.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		20.41 + J	27.59	PU
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		32.40 + J	73.89	PU
B106;C-L2A	B106;P-L1A	B106;P-L2A	1	208	35.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0766 + J	0.0415	Ohms/1000 ft		6.20 + J	3.36	PU
	Z0 Impedance:	0.1217 + J	0.1055	Ohms/1000 ft		9.85 + J	8.53	PU
B106;C-L2B	B106;P-L1B	B106;P-L2B	1	208	35.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0766 + J	0.0415	Ohms/1000 ft		6.20 + J	3.36	PU
	Z0 Impedance:	0.1217 + J	0.1055	Ohms/1000 ft		9.85 + J	8.53	PU
B106;C-L2C	B106;P-L1C	B106;P-L2C	1	208	30.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		2.55 + J	2.73	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		4.06 + J	6.93	PU
B106;C-L2D	B106;P-L1D	B106;P-L2D	1	208	40.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0766 + J	0.0415	Ohms/1000 ft		7.08 + J	3.84	PU
	Z0 Impedance:	0.1217 + J	0.1055	Ohms/1000 ft		11.25 + J	9.75	PU
B106;C-MDPL-P	B106;SG-N	B106;B-MDPL-P	2	480	25.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.1497 + J	0.2024	PU
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.2376 + J	0.5420	PU
B106;C-MDPL-S	B106;B-MDPL-S	B106;P-MDPL	4	208	20.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.4253 + J	0.4542	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.6761 + J	1.15	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B106;C-N	B106;B-106S	B106;SG-N	4	480	50.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft		0.1997 + J	0.2132	PU
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft		0.3174 + J	0.5420	PU
B106;C-OL	B106;P-MDPH	B106;P-OL	1	480	25.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		2.19 + J	0.5067	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		3.48 + J	1.29	PU
B106;C-PPH	B106;P-MDPH	B106;B-JB-PPH	1	480	110.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		6.06 + J	2.06	PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		9.64 + J	5.25	PU
B106;C-PPH1	B106;B-JB-PPH	B106;P-PPH1	1	480	60.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		3.31 + J	1.13	PU
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		5.26 + J	2.86	PU
B106;C-PPH2-L	B106;B-JB-PPH	B106;P-PPH2-L	1	480	55.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		4.82 + J	1.11	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		7.67 + J	2.84	PU
B106;C-PPH2-R	B106;P-PPH2-L	B106;P-PPH2-R	1	480	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		0.8767 + J	0.2027	PU
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		1.39 + J	0.5156	PU
B106;C-PPL1-P	B106;P-PPH1	B106;B-PPL1-P	1	480	15.0 FEET	12	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 1.87 + J		0.0892	Ohms/1000 ft		12.17 + J	0.5807	PU
	Z0 Impedance: 2.97 + J		0.2269	Ohms/1000 ft		19.35 + J	1.48	PU
B106;C-PPL1-S	B106;B-PPL1-S	B106;P-PPL1	1	208	20.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.8110 + J		0.0603	Ohms/1000 ft		37.49 + J	2.79	PU
	Z0 Impedance: 1.29 + J		0.1534	Ohms/1000 ft		59.60 + J	7.09	PU
B106;C-PPL2-P	B106;P-PPH2-R	B106;B-PPL2-P	1	480	10.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.8110 + J		0.0603	Ohms/1000 ft		3.52 + J	0.2617	PU
	Z0 Impedance: 1.29 + J		0.1534	Ohms/1000 ft		5.60 + J	0.6658	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B106;C-PPL2-S	B106;B-PPL2-S	B106;P-PPL2	1	208	15.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		28.12 + J	2.09 PU	
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		44.70 + J	5.32 PU	
B106;C-R1A	B106;P-L1A	B106;P-R1A	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B106;C-R1B	B106;P-L1B	B106;P-R1B	1	208	20.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		5.87 + J	2.00 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		9.33 + J	5.08 PU	
B106;C-R1C	B106;P-L1C	B106;P-R1C	1	208	20.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		5.87 + J	2.00 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		9.33 + J	5.08 PU	
B106;C-R1D	B106;P-L1D	B106;P-R1D	1	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		9.34 + J	2.16 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		14.84 + J	5.49 PU	
B106;C-R2A	B106;P-L2A	B106;P-R2A	1	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		9.34 + J	2.16 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		14.84 + J	5.49 PU	
B106;C-R2B	B106;P-L2B	B106;P-R2B	1	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		9.34 + J	2.16 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		14.84 + J	5.49 PU	
B106;C-R2C	B106;P-L2C	B106;P-R2C	1	208	20.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		5.87 + J	2.00 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		9.33 + J	5.08 PU	
B106;C-R2D	B106;P-L2D	B106;P-R2D	1	208	20.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		5.87 + J	2.00 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		9.33 + J	5.08 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B20:C-20A1-P	B20:P-T20A	B20:B-20A1-P	1	240	10.0 FEET	10	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	1.18 + J	0.0854	Ohms/1000 ft		20.49 + J	1.48 PU	
	Z0 Impedance:	3.72 + J	0.2103	Ohms/1000 ft		64.56 + J	3.65 PU	
B20:C-20A1-S	B20:B-20A1-S	B20:P-E8PB1A1	1	208	10.0 FEET	10	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	1.18 + J	0.0823	Ohms/1000 ft		27.27 + J	1.90 PU	
	Z0 Impedance:	1.88 + J	0.2093	Ohms/1000 ft		43.36 + J	4.84 PU	
B20:C-20A2-P	B20:P-T20A	B20:B-20A2-P	1	240	10.0 FEET	10	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	1.18 + J	0.0854	Ohms/1000 ft		20.49 + J	1.48 PU	
	Z0 Impedance:	3.72 + J	0.2103	Ohms/1000 ft		64.56 + J	3.65 PU	
B20:C-20A2-S	B20:B-20A2-S	B20:P-E8PB1A2	1	208	10.0 FEET	10	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	1.18 + J	0.0823	Ohms/1000 ft		27.27 + J	1.90 PU	
	Z0 Impedance:	1.88 + J	0.2093	Ohms/1000 ft		43.36 + J	4.84 PU	
B20:C-20L12	B20:P-20L11	B20:P-20L12	1	208	15.0 FEET	4/0	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		2.19 + J	1.38 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		3.49 + J	3.51 PU	
B20:C-20L14	B20:P-20L11	B20:P-20L14	1	208	65.0 FEET	2	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		30.35 + J	7.02 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		48.24 + J	17.85 PU	
B20:C-20L15	B20:P-20L11	B20:P-20L15	1	208	55.0 FEET	2	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		25.68 + J	5.94 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		40.82 + J	15.10 PU	
B20:C-20L1S-P	B20:P-20MDP	B20:B-20L1S-P	1	480	15.0 FEET	8	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.8110 + J	0.0754	Ohms/1000 ft		5.28 + J	0.4909 PU	
	Z0 Impedance:	2.56 + J	0.1856	Ohms/1000 ft		16.64 + J	1.21 PU	
B20:C-20L1S-S	B20:B-20L1S-S	B20:P-P20L15	1	208	15.0 FEET	4	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.3210 + J	0.0506	Ohms/1000 ft		11.13 + J	1.75 PU	
	Z0 Impedance:	0.4960 + J	0.1287	Ohms/1000 ft		17.20 + J	4.46 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B20;C-20MDP-4	B20;P-20MDP	B105;P-36P,H	1	480	220.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.3210 + J		0.0506	Ohms/1000 ft		30.65 + J	4.83 PU	
	Z0 Impedance: 0.4960 + J		0.1287	Ohms/1000 ft		47.36 + J	12.29 PU	
B20;C-T-20-P	B20;B-20-P	B20;B-T-20-P	1	13090	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	MV
	+/- Impedance: 0.0640 + J		0.0466	Ohms/1000 ft		0.00037 + J	0.00027 PU	
	Z0 Impedance: 0.1017 + J		0.1185	Ohms/1000 ft		0.00059 + J	0.00069 PU	
B20;C-T-20-S	B20;B-T-20-S	B20;P-20MDP	2	480	55.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		0.7555 + J	0.4750 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		1.20 + J	1.21 PU	
B20;C-T-20A-P	B20;P-20MDP	B20;B-T-20A-P	1	480	15.0 FEET	2/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1010 + J		0.0426	Ohms/1000 ft		0.6576 + J	0.2773 PU	
	Z0 Impedance: 0.1605 + J		0.1083	Ohms/1000 ft		1.04 + J	0.7051 PU	
B20;C-T-20A-S	B20;B-T-20A-S	B20;P-20L11	1	208	15.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft		0.9569 + J	1.29 PU	
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft		1.52 + J	3.46 PU	
B22;C-41-P	B22;B-C-41-P	B22;B-41-P	1	480	15.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0766 + J		0.0415	Ohms/1000 ft		0.4987 + J	0.2702 PU	
	Z0 Impedance: 0.1217 + J		0.1055	Ohms/1000 ft		0.7923 + J	0.6868 PU	
B22;C-41-S	B22;B-41-S	B22;P-LB1	1	208	25.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft		2.13 + J	2.27 PU	
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft		3.38 + J	5.77 PU	
B22;C-AC1	B22;P-ACD	B22;P-AC1	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B22;C-AC2	B22;P-ACD	B22;P-AC2	1	480	40.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		3.51 + J	0.8108 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		5.57 + J	2.06 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B22;C-AC3	B22;P-ACD	B22;P-AC3	1	480	70.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		6.14 + J	1.42 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		9.76 + J	3.61 PU	
B22;C-ACD	B22;P-MDP	B22;P-ACD	1	480	20.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft		0.3194 + J	0.3411 PU	
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft		0.5078 + J	0.8672 PU	
B22;C-ELE2	B22;P-EHB	B22;B-C-ELE2	1	208	15.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		7.00 + J	1.62 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		11.13 + J	4.12 PU	
B22;C-ELE_P1	B22;B-ELE_P1	B22;B-M-ELE_P1	1	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		2.94 + J	0.9985 PU	
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		4.67 + J	2.54 PU	
B22;C-EMER	B22;B-TS1L	B22;B-EMER	1	208	20.0 FEET	1	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1600 + J		0.0456	Ohms/1000 ft		7.40 + J	2.11 PU	
	Z0 Impedance: 0.2543 + J		0.1160	Ohms/1000 ft		11.76 + J	5.36 PU	
B22;C-GEN	B22;P-EHB	B22;P-GEN	1	208	60.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		70.73 + J	7.60 PU	
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		112.65 + J	19.33 PU	
B22;C-H1	B22;B-JB-H1	B22;P-H1	1	480	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		0.8767 + J	0.2027 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		1.39 + J	0.5156 PU	
B22;C-H1,2,3	B22;P-MDP	B22;B-JB-H1	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B22;C-H12	B22;P-MDP	B22;P-H12	1	480	15.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		1.32 + J	0.3040 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		2.09 + J	0.7734 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B22:C-H2	B22:B-JB-H2	B22:P-H2	1	480	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		0.8767 + J	0.2027 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		1.39 + J	0.5156 PU	
B22:C-H2,3	B22:B-JB-H1	B22:B-JB-H2	1	480	40.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		3.51 + J	0.8108 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		5.57 + J	2.06 PU	
B22:C-H3	B22:B-JB-H2	B22:P-H3	1	480	40.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		3.51 + J	0.8108 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		5.57 + J	2.06 PU	
B22:C-HB	B22:P-MDP	B22:P-HB	1	480	40.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		1.10 + J	0.6910 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		1.75 + J	1.76 PU	
B22:C-L1	B22:B-L1,2,3	B22:P-L1	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B22:C-L1,2,3	B22:P-LB1	B22:B-L1,2,3	1	208	30.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		4.39 + J	2.76 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		6.98 + J	7.02 PU	
B22:C-L2	B22:B-L2,3	B22:P-L2	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B22:C-L2,3	B22:B-L1,2,3	B22:B-L2,3	1	208	40.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		18.68 + J	4.32 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		29.69 + J	10.98 PU	
B22:C-L2-3	B22:B-L2,3	B22:B-L3	1	208	40.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		18.68 + J	4.32 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		29.69 + J	10.98 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B22:C-L3	B22:B-L3	B22:P-L3	1	208	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		4.67 + J	1.08 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		7.42 + J	2.75 PU	
B22:C-LB1	B22:P-MDP	B22:B-C-41-P	1	480	30.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0766 + J		0.0415	Ohms/1000 ft		0.9974 + J	0.5404 PU	
	Z0 Impedance: 0.1217 + J		0.1055	Ohms/1000 ft		1.58 + J	1.37 PU	
B22:C-LB2	B22:P-LB1	B22:P-LB2	1	208	30.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		14.01 + J	3.24 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		22.27 + J	8.24 PU	
B22:C-M-ELE2	B22:B-C-ELE2	B22:B-M-ELE2	1	208	45.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		21.01 + J	4.86 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		33.40 + J	12.36 PU	
B22:C-M-TS1E	B22:B-C-TS1E	B22:B-M-TS1E	1	208	10.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0276 + J		0.0373	Ohms/1000 ft		0.6379 + J	0.8621 PU	
	Z0 Impedance: 0.0438 + J		0.0999	Ohms/1000 ft		1.01 + J	2.31 PU	
B22:C-MTS-P1	B22:P-LB1	B22:B-P1N	1	208	20.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		5.87 + J	2.00 PU	
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		9.33 + J	5.08 PU	
B22:C-P-EMER	B22:B-EMER	B5:P-EMER	1	208	210.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		98.05 + J	22.67 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		155.86 + J	57.66 PU	
B22:C-P1E	B22:B-P1E	B22:B-TS1-P1	1	208	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		1.46 + J	0.9199 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		2.33 + J	2.34 PU	
B22:C-P1L	B22:B-P1L	B22:B-ELE_P1	1	208	100.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		29.35 + J	9.99 PU	
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		46.67 + J	25.40 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B22;C-T-22-P	B22;B-22-P	B22;B-T-22-P	1	13090	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	MV
	+/- Impedance: 0.0640 + J		0.0466	Ohms/1000 ft		0.00037 + J	0.00027 PU	
	Z0 Impedance: 0.1017 + J		0.1185	Ohms/1000 ft		0.00059 + J	0.00069 PU	
B22;C-T-22-S	B22;B-T-22-S	B22;P-MDP	2	480	130.0 FEET	600	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0237 + J		0.0371	Ohms/1000 ft		0.6686 + J	1.05 PU	
	Z0 Impedance: 0.0376 + J		0.0943	Ohms/1000 ft		1.06 + J	2.66 PU	
B22;C-TS1	B22;P-LB1	B22;B-TS1N	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		2.93 + J	1.84 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		4.65 + J	4.68 PU	
B22;C-TS1-P1	B22;P-EHB	B22;B-TS1-P1	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		2.93 + J	1.84 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		4.65 + J	4.68 PU	
B22;C-TS1E	B22;B-TS1E	B22;B-C-TS1E	1	208	65.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		9.51 + J	5.98 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		15.11 + J	15.20 PU	
B22;C-TS1L	B22;B-TS1L	B22;P-EHB	1	208	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		2.93 + J	1.84 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		4.65 + J	4.68 PU	
B5;C-5L205	B5;P-5MDP	B5;P-5L205	1	480	185.0 FEET	2	Copper	
	Duct Material: Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.2020 + J		0.0585	Ohms/1000 ft		16.22 + J	4.70 PU	
	Z0 Impedance: 0.6366 + J		0.1440	Ohms/1000 ft		51.12 + J	11.56 PU	
B5;C-5L21	B5;P-5MDP	B5;P-5L21	1	480	175.0 FEET	4/0	Copper	
	Duct Material: Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0640 + J		0.0497	Ohms/1000 ft		4.86 + J	3.77 PU	
	Z0 Impedance: 0.2017 + J		0.1224	Ohms/1000 ft		15.32 + J	9.30 PU	
B5;C-5L31	B5;B-WIREWAY	B5;B-5L31	1	240	10.0 FEET	2/0	Copper	
	Duct Material: Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1020 + J		0.0533	Ohms/1000 ft		1.77 + J	0.9253 PU	
	Z0 Impedance: 0.3214 + J		0.1312	Ohms/1000 ft		5.58 + J	2.28 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B5;C-5L31-M	B5;B-5L31	B5;P-5L31	1	240	145.0 FEET	2/0	Copper	
	Duct Material:	Magnetic				PVC	Insulation Class:	THWN
	+/- Impedance:	0.1020 + J	0.0533	Ohms/1000 ft		25.68 + J	13.42 PU	
	Z0 Impedance:	0.3214 + J	0.1312	Ohms/1000 ft		80.91 + J	33.03 PU	
B5;C-5PB1-P	B5;P-5MDP	B5;B-5PB1-P	1	480	35.0 FEET	4/0	Copper	
	Duct Material:	Magnetic				PVC	Insulation Class:	THWN
	+/- Impedance:	0.0640 + J	0.0497	Ohms/1000 ft		0.9722 + J	0.7550 PU	
	Z0 Impedance:	0.2017 + J	0.1224	Ohms/1000 ft		3.06 + J	1.86 PU	
B5;C-5PB1-S	B5;B-5PB1-S	B5;P-5PB1	1	240	35.0 FEET	500	Copper	
	Duct Material:	Non-Magnetic				PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		1.68 + J	2.27 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		2.66 + J	6.07 PU	
B5;C-DS-PL21	B5;B-WIREWAY	B5;B-PL21	1	240	10.0 FEET	2	Copper	
	Duct Material:	Magnetic				PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0585	Ohms/1000 ft		3.51 + J	1.02 PU	
	Z0 Impedance:	0.6366 + J	0.1440	Ohms/1000 ft		11.05 + J	2.50 PU	
B5;C-L1-P	B5;P-5MDP	B5;B-L1-P	1	480	35.0 FEET	2	Copper	
	Duct Material:	Magnetic				PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0585	Ohms/1000 ft		3.07 + J	0.8887 PU	
	Z0 Impedance:	0.6366 + J	0.1440	Ohms/1000 ft		9.67 + J	2.19 PU	
B5;C-L1-S	B5;B-L1-S	B5;P-L1	1	208	35.0 FEET	4/0	Copper	
	Duct Material:	Non-Magnetic				PVC	Insulation Class:	THHN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		5.12 + J	3.22 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		8.14 + J	8.19 PU	
B5;C-L1B-P	B5;P-5MDP	B5;B-L1B-P	1	480	35.0 FEET	6	Copper	
	Duct Material:	Magnetic				PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0685	Ohms/1000 ft		7.75 + J	1.04 PU	
	Z0 Impedance:	1.61 + J	0.1687	Ohms/1000 ft		24.41 + J	2.56 PU	
B5;C-L1B-S	B5;B-L1B-S	B5;P-L1B	1	208	35.0 FEET	1/0	Copper	
	Duct Material:	Non-Magnetic				PVC	Insulation Class:	THHN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		10.27 + J	3.49 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		16.33 + J	8.89 PU	
B5;C-NORMAL	B5;B-WIREWAY	B5;B-NORMAL	1	240	10.0 FEET	2/0	Copper	
	Duct Material:	Magnetic				PVC	Insulation Class:	THWN
	+/- Impedance:	0.1020 + J	0.0533	Ohms/1000 ft		1.77 + J	0.9253 PU	
	Z0 Impedance:	0.3214 + J	0.1312	Ohms/1000 ft		5.58 + J	2.28 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B5;C-NORMAL-M	B5;B-NORMAL	B5;P-NORMAL	1	240	165.0 FEET	3/0	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0805 + J	0.0519	Ohms/1000 ft		23.06 + J	14.87 PU	
	Z0 Impedance:	0.2537 + J	0.1278	Ohms/1000 ft		72.67 + J	36.61 PU	
B5;C-PL21	B5;B-PL21	B5;P-PL21	1	240	130.0 FEET	2	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		45.59 + J	10.54 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		72.47 + J	26.81 PU	
B5;C-PL22	B5;B-WIREWAY	B5;B-PL22	1	240	10.0 FEET	1/0	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		2.20 + J	0.7500 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		3.51 + J	1.91 PU	
B5;C-PL22M	B5;B-PL22	B5;P-PL22	1	240	155.0 FEET	3/0	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0766 + J	0.0415	Ohms/1000 ft		20.61 + J	11.17 PU	
	Z0 Impedance:	0.1217 + J	0.1055	Ohms/1000 ft		32.75 + J	28.39 PU	
B5;C-T-5-P	B5;B-5-P	B5;B-T-5-P	1	13090	10.0 FEET	4/0	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	EPR	Insulation Class:	MV
	+/- Impedance:	0.0640 + J	0.0466	Ohms/1000 ft		0.00037 + J	0.00027 PU	
	Z0 Impedance:	0.1017 + J	0.1185	Ohms/1000 ft		0.00059 + J	0.00069 PU	
B5;C-T-5-S	B5;B-T-5-S	B5;P-5MDP	2	480	55.0 FEET	4/0	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.7555 + J	0.4750 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		1.20 + J	1.21 PU	
B5;C-WIREWAYP	B5;P-5MDP	B5;B-WIREWAYP	1	480	35.0 FEET	4/0	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0640 + J	0.0497	Ohms/1000 ft		0.9722 + J	0.7550 PU	
	Z0 Impedance:	0.2017 + J	0.1224	Ohms/1000 ft		3.06 + J	1.86 PU	
B5;C-WIREWAYS	B5;B-WIREWAYS	B5;B-WIREWAY	1	240	45.0 FEET	500	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		2.16 + J	2.91 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		3.42 + J	7.80 PU	
B5;C-X	B5;B-WIREWAY	B5;P-X	1	240	30.0 FEET	2/0	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.1020 + J	0.0533	Ohms/1000 ft		5.31 + J	2.78 PU	
	Z0 Impedance:	0.3214 + J	0.1312	Ohms/1000 ft		16.74 + J	6.83 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B6;C-6L11A	B6;P-6LDP1	B6;P-6L11A	1	240	25.0 FEET	3/0	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0805 + J	0.0519	Ohms/1000 ft		3.49 + J	2.25 PU	
	Z0 Impedance:	0.2537 + J	0.1278	Ohms/1000 ft		11.01 + J	5.55 PU	
B6;C-6L11B	B6;P-6L11A	B6;P-6L11B	1	240	30.0 FEET	2	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		10.52 + J	2.43 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		16.72 + J	6.19 PU	
B6;C-6LDP1-A	B6;P-6LDP1	B6;P-6LDP1-A	1	240	225.0 FEET	1/0	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.1280 + J	0.0540	Ohms/1000 ft		50.00 + J	21.09 PU	
	Z0 Impedance:	0.4034 + J	0.1329	Ohms/1000 ft		157.58 + J	51.91 PU	
B6;C-6LDP1-3	B6;P-6LDP1	B6;B-6LDP1-JB	1	240	205.0 FEET	500	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0294 + J	0.0466	Ohms/1000 ft		10.46 + J	16.59 PU	
	Z0 Impedance:	0.0926 + J	0.1147	Ohms/1000 ft		32.96 + J	40.82 PU	
B6;C-6PDP1-3	B6;P-6PDP1	B6;B-T-7-JB	1	240	205.0 FEET	500	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0294 + J	0.0466	Ohms/1000 ft		10.46 + J	16.59 PU	
	Z0 Impedance:	0.0926 + J	0.1147	Ohms/1000 ft		32.96 + J	40.82 PU	
B6;C-6PDP1-4	B6;P-6PDP1	B6;P-6P11	1	240	20.0 FEET	350	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0378 + J	0.0491	Ohms/1000 ft		1.31 + J	1.70 PU	
	Z0 Impedance:	0.1191 + J	0.1209	Ohms/1000 ft		4.14 + J	4.20 PU	
B6;C-6SL1	B6;P-6MDP	B6;P-6SL1	1	480	15.0 FEET	2	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0585	Ohms/1000 ft		1.32 + J	0.3809 PU	
	Z0 Impedance:	0.6366 + J	0.1440	Ohms/1000 ft		4.14 + J	0.9375 PU	
B6;C-T-6-P	B6;B-T6-P	B6;B-T-6-P	1	13090	10.0 FEET	4/0	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	EPR	Insulation Class:	MV
	+/- Impedance:	0.0640 + J	0.0466	Ohms/1000 ft		0.00037 + J	0.00027 PU	
	Z0 Impedance:	0.1017 + J	0.1185	Ohms/1000 ft		0.00059 + J	0.00069 PU	
B6;C-T-6-S	B6;B-T-6-S	B6;P-6MDP	2	480	125.0 FEET	500	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0294 + J	0.0466	Ohms/1000 ft		0.7975 + J	1.26 PU	
	Z0 Impedance:	0.0926 + J	0.1147	Ohms/1000 ft		2.51 + J	3.11 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B6;C-T-6A-P	B6;P-6MDP	B6;B-T-6A-P	1	480	25.0 FEET	4/0	Copper	
	Duct Material: Magnetic	Insulation Type: PVC					Insulation Class: THWN	
	+/- Impedance: 0.0640 + J	0.0497 Ohms/1000 ft				0.6944 + J	0.5393 PU	
	Z0 Impedance: 0.2017 + J	0.1224 Ohms/1000 ft				2.19 + J	1.33 PU	
B6;C-T-6A-S	B6;B-T-6A-S	B6;P-6PDP1	2	240	25.0 FEET	250	Copper	
	Duct Material: Non-Magnetic	Insulation Type: PVC					Insulation Class: THWN	
	+/- Impedance: 0.0541 + J	0.0396 Ohms/1000 ft				1.17 + J	0.8594 PU	
	Z0 Impedance: 0.0860 + J	0.1007 Ohms/1000 ft				1.87 + J	2.19 PU	
B6;C-T-6B-P	B6;P-6MDP	B6;B-T-6B-P	2	480	25.0 FEET	4/0	Copper	
	Duct Material: Magnetic	Insulation Type: PVC					Insulation Class: THWN	
	+/- Impedance: 0.0640 + J	0.0497 Ohms/1000 ft				0.3472 + J	0.2696 PU	
	Z0 Impedance: 0.2017 + J	0.1224 Ohms/1000 ft				1.09 + J	0.6641 PU	
B6;C-T-6B-S	B6;B-T-6B-S	B6;P-6LDP1	2	240	25.0 FEET	500	Copper	
	Duct Material: Non-Magnetic	Insulation Type: PVC					Insulation Class: THWN	
	+/- Impedance: 0.0276 + J	0.0373 Ohms/1000 ft				0.5990 + J	0.8095 PU	
	Z0 Impedance: 0.0438 + J	0.0999 Ohms/1000 ft				0.9505 + J	2.17 PU	
B7;C-P1	B8;B-6LDP1SAF	B7;P-P1	1	240	140.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type: PVC					Insulation Class: THHN	
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				15.39 + J	9.67 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				24.45 + J	24.60 PU	
B7;C-T-7-P	B8;B-SAFETY	B7;B-T-7-P	1	240	135.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type: PVC					Insulation Class: THWN	
	+/- Impedance: 0.0633 + J	0.0398 Ohms/1000 ft				14.84 + J	9.33 PU	
	Z0 Impedance: 0.1006 + J	0.1012 Ohms/1000 ft				23.58 + J	23.72 PU	
B7;C-T-7-S	B7;B-T-7-S	B7;P-PP	1	208	15.0 FEET	2/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type: PVC					Insulation Class: THWN	
	+/- Impedance: 0.1010 + J	0.0426 Ohms/1000 ft				3.50 + J	1.48 PU	
	Z0 Impedance: 0.1605 + J	0.1083 Ohms/1000 ft				5.56 + J	3.75 PU	
B8;C-1PA	B8;B-1PA-2	B8;P-1PA	1	240	15.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type: PVC					Insulation Class: THHN	
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				3.31 + J	1.13 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				5.26 + J	2.86 PU	
B8;C-1PA-1	B8;B-1PA-1	B8;P-1PA-1	1	208	15.0 FEET	4	Copper	
	Duct Material: Non-Magnetic	Insulation Type: PVC					Insulation Class: THWN	
	+/- Impedance: 0.3210 + J	0.0506 Ohms/1000 ft				11.13 + J	1.75 PU	
	Z0 Impedance: 0.4960 + J	0.1287 Ohms/1000 ft				17.20 + J	4.46 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B8;C-1PA-D	B8;P-1PA	B8;B-T-1PA-1P	1	240	15.0 FEET	12	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	1.87 + J	0.0910	Ohms/1000 ft		48.70 + J	2.37 PU	
	Z0 Impedance:	5.89 + J	0.2241	Ohms/1000 ft		153.47 + J	5.84 PU	
B8;C-1PB	B8;P-1PB	B8;P-1PB	1	208	15.0 FEET	6	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		17.68 + J	1.90 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		28.16 + J	4.83 PU	
B8;C-6LDP1SAF	B6;B-6LDP1-JB	B8;B-6LDP1SAF	1	240	15.0 FEET	4/0	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0640 + J	0.0497	Ohms/1000 ft		1.67 + J	1.29 PU	
	Z0 Impedance:	0.2017 + J	0.1224	Ohms/1000 ft		5.25 + J	3.19 PU	
B8;C-8L11-1	B8;P-GR	B8;P-8L11	1	208	20.0 FEET	3/0	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.0766 + J	0.0415	Ohms/1000 ft		3.54 + J	1.92 PU	
	Z0 Impedance:	0.1217 + J	0.1055	Ohms/1000 ft		5.63 + J	4.88 PU	
B8;C-8L11-2	B8;P-8L11	B8;P-8L11A	1	208	60.0 FEET	4	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.3210 + J	0.0632	Ohms/1000 ft		44.52 + J	8.76 PU	
	Z0 Impedance:	1.01 + J	0.1556	Ohms/1000 ft		140.29 + J	21.58 PU	
B8;C-8LB1-P	B8;B-8PB1R	B8;B-8LB1-P	1	240	10.0 FEET	10	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	1.18 + J	0.0854	Ohms/1000 ft		20.49 + J	1.48 PU	
	Z0 Impedance:	3.72 + J	0.2103	Ohms/1000 ft		64.56 + J	3.65 PU	
B8;C-8LB1-S	B8;B-8LB1-S	B8;P-8LB1	1	208	15.0 FEET	2	Copper	
	Duct Material:	Non-Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		7.00 + J	1.62 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		11.13 + J	4.12 PU	
B8;C-8PB1L	B8;P-8PB1	B8;P-MACHSHOP	1	240	50.0 FEET	2	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0585	Ohms/1000 ft		17.53 + J	5.08 PU	
	Z0 Impedance:	0.6366 + J	0.1440	Ohms/1000 ft		55.26 + J	12.50 PU	
B8;C-8PB1R	B8;P-8PB1	B8;B-8PB1R	1	240	15.0 FEET	10	Copper	
	Duct Material:	Magnetic			Insulation Type:	PVC	Insulation Class:	THWN
	+/- Impedance:	1.18 + J	0.0854	Ohms/1000 ft		30.73 + J	2.22 PU	
	Z0 Impedance:	3.72 + J	0.2103	Ohms/1000 ft		96.84 + J	5.48 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B8;C-8PBJ-CK11	B8;P-8PBJ	B8;B-TMHC265P	1	240	20.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.8110 + J		0.0603	Ohms/1000 ft		28.16 + J	2.09 PU	
	Z0 Impedance: 1.29 + J		0.1534	Ohms/1000 ft		44.77 + J	5.33 PU	
B8;C-8PBJ-CK1	B8;P-8PBJ	B8;P-8PBJ	1	240	40.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0766 + J		0.0415	Ohms/1000 ft		5.32 + J	2.88 PU	
	Z0 Impedance: 0.1217 + J		0.1055	Ohms/1000 ft		8.45 + J	7.33 PU	
B8;C-8PBJ-CK2	B8;P-8PBJ	B8;B-T-8L11-P	1	240	15.0 FEET	3/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0766 + J		0.0415	Ohms/1000 ft		1.99 + J	1.08 PU	
	Z0 Impedance: 0.1217 + J		0.1055	Ohms/1000 ft		3.17 + J	2.75 PU	
B8;C-8PBJ-CK5	B8;P-8PBJ	B8;P-8PBJ1	1	240	50.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		5.49 + J	3.45 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		8.73 + J	8.78 PU	
B8;C-8PBJ-CK7	B8;P-8PBJ	B8;B-1PA-2	1	240	65.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J		0.0432	Ohms/1000 ft		14.33 + J	4.88 PU	
	Z0 Impedance: 0.2019 + J		0.1099	Ohms/1000 ft		22.78 + J	12.40 PU	
B8;C-8PBJ-CK9	B8;P-8PBJ	B20;P-T20A	1	240	140.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		123.96 + J	13.32 PU	
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		197.43 + J	33.88 PU	
B8;C-8PBJ1-2	B8;P-8PBJ1	B8;B-BFWP1	1	240	10.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.3210 + J		0.0506	Ohms/1000 ft		5.57 + J	0.8785 PU	
	Z0 Impedance: 0.4960 + J		0.1287	Ohms/1000 ft		8.61 + J	2.23 PU	
B8;C-8PBJ1-3	B8;P-8PBJ1	B8;B-BFWP2	1	240	10.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.3210 + J		0.0506	Ohms/1000 ft		5.57 + J	0.8785 PU	
	Z0 Impedance: 0.4960 + J		0.1287	Ohms/1000 ft		8.61 + J	2.23 PU	
B8;C-A-1E	B8;B-A-1E	B8;B-C-EP	2	240	180.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft		5.75 + J	6.14 PU	
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft		9.14 + J	15.61 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
B8;C-A-1L	B8;B-A-1L	B8;P-8PB	2	240	15.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.4792 + J	0.5117	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.7617 + J	1.30	PU
B8;C-A-1N	B8;B-BK-A-1N	B8;B-A-1N	2	240	20.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.6389 + J	0.6823	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		1.02 + J	1.73	PU
B8;C-BD-GP	B8;B-C-EP	B8;B-G-EP	2	240	10.0	FEET	350	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.3194 + J	0.3411	PU
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.5078 + J	0.8672	PU
B8;C-GRA1	B8;B-T-8L11-S	B8;P-GRA	1	208	15.0	FEET	2	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		7.00 + J	1.62	PU
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		11.13 + J	4.12	PU
B8;C-GRA2	B8;P-GRA	B8;B-1PB	1	208	85.0	FEET	6	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		100.20 + J	10.77	PU
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		159.59 + J	27.39	PU
B8;C-MHC26-1	B8;B-TMHC26S	B8;P-MHC26	1	208	40.0	FEET	8	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		74.98 + J	5.58	PU
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		119.20 + J	14.18	PU
B8;C-SAFETY	B6;B-T-7-JB	B8;B-SAFETY	1	240	10.0	FEET	4/0	Copper
	Duct Material: Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0640 + J	0.0497	Ohms/1000 ft		1.11 + J	0.8628	PU
	Z0 Impedance:	0.2017 + J	0.1224	Ohms/1000 ft		3.50 + J	2.13	PU
B8;C-T-8-P	B8;B-8-P	B8;B-T-8-P	1	13090	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	
	+/- Impedance:	0.0640 + J	0.0466	Ohms/1000 ft		0.00037 + J	0.00027	PU
	Z0 Impedance:	0.1017 + J	0.1185	Ohms/1000 ft		0.00059 + J	0.00069	PU
B8;C-T-8L11-S	B8;B-T-8L11-S	B8;P-GR	1	208	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		1.46 + J	0.9199	PU
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		2.33 + J	2.34	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B8;C-T8-S	B8;B-T-8-S	B8;B-BK-A-1N	2	240	70.0 FEET	350	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0368 + J	0.0393 Ohms/1000 ft				2.24 + J	2.39 PU	
	Z0 Impedance: 0.0585 + J	0.0999 Ohms/1000 ft				3.55 + J	6.07 PU	
B8;C-WATER-T	B8;P-GR	B8;P-BL12	1	208	145.0 FEET	4	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.3210 + J	0.0506 Ohms/1000 ft				107.58 + J	16.96 PU	
	Z0 Impedance: 0.4960 + J	0.1287 Ohms/1000 ft				166.24 + J	43.13 PU	
B9;C-9EL21	B9;B-9EL21	B9;P-9EL21	1	208	120.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				35.23 + J	11.98 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				56.00 + J	30.48 PU	
B9;C-9HDP	B9;SG-9MDP	B9;P-9HDP	1	480	85.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				4.69 + J	1.59 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				7.45 + J	4.05 PU	
B9;C-9L11	B9;P-9LDP	B9;P-9L11	1	208	110.0 FEET	2/0	Copper	
	Duct Material: Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.1020 + J	0.0533 Ohms/1000 ft				25.93 + J	13.55 PU	
	Z0 Impedance: 0.3214 + J	0.1312 Ohms/1000 ft				81.72 + J	33.36 PU	
B9;C-9L21	B9;P-9LDP	B9;P-9L21	1	208	135.0 FEET	4/0	Copper	
	Duct Material: Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0640 + J	0.0497 Ohms/1000 ft				19.97 + J	15.51 PU	
	Z0 Impedance: 0.2017 + J	0.1224 Ohms/1000 ft				62.94 + J	38.19 PU	
B9;C-9L22	B9;P-9LDP	B9;P-9L22	1	208	110.0 FEET	4/0	Copper	
	Duct Material: Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0640 + J	0.0497 Ohms/1000 ft				16.27 + J	12.64 PU	
	Z0 Impedance: 0.2017 + J	0.1224 Ohms/1000 ft				51.28 + J	31.12 PU	
B9;C-A-1E-B9A	B9;B-A-1E	B9;B-A1-A2	1	480	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				0.5512 + J	0.1875 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				0.8763 + J	0.4770 PU	
B9;C-A-1E-BST	B9;B-A-1E	B9;B-A1-A3	1	480	10.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				0.8767 + J	0.2027 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				1.39 + J	0.5156 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B9;C-A-1L	B9;B-A-1L	B9;P-9EHDP	1	480	20.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.5495 + J	0.3455 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		0.8733 + J	0.8785 PU	
B9;C-A-1N	B9;SG-9MDP	B9;B-A-1N	1	480	15.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0633 + J	0.0398	Ohms/1000 ft		0.4121 + J	0.2591 PU	
	Z0 Impedance:	0.1006 + J	0.1012	Ohms/1000 ft		0.6549 + J	0.6589 PU	
B9;C-A1-A2	B9;B-A1-A2	B9A;B-A-2E	1	480	70.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		3.86 + J	1.31 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		6.13 + J	3.34 PU	
B9;C-A1-A3	B9;B-A1-A3	B9A;B-A-3E	1	480	70.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		6.14 + J	1.42 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		9.76 + J	3.61 PU	
B9;C-G-A-1E	B9;B-A-1E	B9;B-G-A-1E	1	480	225.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		3.59 + J	3.84 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		5.71 + J	9.76 PU	
B9;C-T-9S-P	B9;B-9S-P	B9;B-T-9S-P	1	13090	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	MV
	+/- Impedance:	0.0640 + J	0.0466	Ohms/1000 ft		0.00037 + J	0.00027 PU	
	Z0 Impedance:	0.1017 + J	0.1185	Ohms/1000 ft		0.00059 + J	0.00069 PU	
B9;C-T-9S-S	B9;B-T-9S-S	B9;SG-9MDP	2	480	30.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.1797 + J	0.2428 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		0.2852 + J	0.6504 PU	
B9;C-T9ELDP-P	B9;P-9EHDP	B9;B-T9ELDP-P	1	480	10.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		2.21 + J	0.2378 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		3.53 + J	0.6050 PU	
B9;C-T9ELDP-S	B9;B-T9ELDP-S	B9;P-9ELDP	1	208	10.0 FEET	2/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1010 + J	0.0426	Ohms/1000 ft		2.33 + J	0.9847 PU	
	Z0 Impedance:	0.1605 + J	0.1083	Ohms/1000 ft		3.71 + J	2.50 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B9;C-TEL21-P	B9;P-9EHDP	B9;B-TEL21-P	1	480	15.0 FEET	6	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J	0.0548 Ohms/1000 ft				3.32 + J	0.3568 PU	
	Z0 Impedance: 0.8123 + J	0.1394 Ohms/1000 ft				5.29 + J	0.9076 PU	
B9;C-TEL21-S	B9;B-TEL21-S	B9;B-9EL21	1	208	10.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				2.94 + J	0.9985 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				4.67 + J	2.54 PU	
B9;C-TLDP-P	B9;P-9EHDP	B9;B-TLDP-P	1	480	25.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				2.19 + J	0.5067 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				3.48 + J	1.29 PU	
B9;C-TLDP-S	B9;B-TLDP-S	B9;P-9LDP	1	208	20.0 FEET	500	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.0276 + J	0.0373 Ohms/1000 ft				1.28 + J	1.72 PU	
	Z0 Impedance: 0.0438 + J	0.0999 Ohms/1000 ft				2.02 + J	4.62 PU	
B9A;C-A-2L	B9A;B-A-2L	B9A;P-ELP	1	480	20.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				1.10 + J	0.3750 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				1.75 + J	0.9540 PU	
B9A;C-A-2N	B9A;MC-MCC-9A	B9A;B-A-2N	1	480	25.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.1270 + J	0.0432 Ohms/1000 ft				1.38 + J	0.4688 PU	
	Z0 Impedance: 0.2019 + J	0.1099 Ohms/1000 ft				2.19 + J	1.19 PU	
B9A;C-A-3N	B9A;MC-MCC-9A	B9A;B-A-3N	1	480	25.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				2.19 + J	0.5067 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				3.48 + J	1.29 PU	
B9A;C-EDP2	B9A;P-EDP1	B9A;P-EDP2	1	208	180.0 FEET	2	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J	0.0467 Ohms/1000 ft				84.04 + J	19.43 PU	
	Z0 Impedance: 0.3211 + J	0.1188 Ohms/1000 ft				133.59 + J	49.43 PU	
B9A;C-ELEVATR	B9A;MC-MCC-9A	B9A;B-ELEVATR	1	480	90.0 FEET	6	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J	0.0548 Ohms/1000 ft				19.92 + J	2.14 PU	
	Z0 Impedance: 0.8123 + J	0.1394 Ohms/1000 ft				31.73 + J	5.45 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
B9A;C-LP	B9A;MC-MCC-9A	B9A;P-LP	1	480	25.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		5.53 + J	0.5946 PU	
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		8.81 + J	1.51 PU	
B9A;C-LVP	B9A;P-9ALDP	B9A;P-LVP	1	208	95.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.2020 + J		0.0467	Ohms/1000 ft		44.36 + J	10.25 PU	
	Z0 Impedance: 0.3211 + J		0.1188	Ohms/1000 ft		70.51 + J	26.09 PU	
B9A;C-M-ELEVA	B9A;B-ELEVATR	B9A;B-M-ELEVA	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.5100 + J		0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance: 0.8123 + J		0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B9A;C-PP1	B9A;P-9ALDP	B9A;P-PP1	1	208	170.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		24.87 + J	15.64 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		39.53 + J	39.77 PU	
B9A;C-PP2	B9A;P-9ALDP	B9A;P-PP2	1	208	165.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		24.14 + J	15.18 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		38.37 + J	38.60 PU	
B9A;C-PP3	B9A;P-9ALDP	B9A;P-PP3	1	208	170.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance: 0.0633 + J		0.0398	Ohms/1000 ft		24.87 + J	15.64 PU	
	Z0 Impedance: 0.1006 + J		0.1012	Ohms/1000 ft		39.53 + J	39.77 PU	
B9A;C-T-9N-P	B9A;B-P-TR-9N	B9A;B-T-9N-P	1	13090	10.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	MV
	+/- Impedance: 0.0640 + J		0.0466	Ohms/1000 ft		0.00037 + J	0.00027 PU	
	Z0 Impedance: 0.1017 + J		0.1185	Ohms/1000 ft		0.00059 + J	0.00069 PU	
B9A;C-T-9N-S	B9A;B-T-9N-S	B9A;P-9AMDP	4	480	40.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft		0.1597 + J	0.1706 PU	
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft		0.2539 + J	0.4336 PU	
B9A;C-T-9N-S0	B9A;P-9AMDP	B9A;MC-MCC-9A	2	480	25.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance: 0.0368 + J		0.0393	Ohms/1000 ft		0.1997 + J	0.2132 PU	
	Z0 Impedance: 0.0585 + J		0.0999	Ohms/1000 ft		0.3174 + J	0.5420 PU	

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FEEDER INPUT DATA								
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						SIZE	TYPE	
B9A;C-T9A-1P	B9A;MC-MCC-9A	B9A;B-T9A-1P	1	480	25.0 FEET	350	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0368 + J	0.0393	Ohms/1000 ft		0.3993 + J	0.4264 PU	
	Z0 Impedance:	0.0585 + J	0.0999	Ohms/1000 ft		0.6348 + J	1.08 PU	
B9A;C-T9A-1S	B9A;B-T9A-1S	B9A;P-9ALDP	2	208	20.0 FEET	500	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.0276 + J	0.0373	Ohms/1000 ft		0.6379 + J	0.8621 PU	
	Z0 Impedance:	0.0438 + J	0.0999	Ohms/1000 ft		1.01 + J	2.31 PU	
B9A;C-TEDP-P	B9A;P-ELP	B9A;B-TEDP-P	1	480	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		4.43 + J	0.4757 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		7.05 + J	1.21 PU	
B9A;C-TEDP-S	B9A;B-TEDP-S	B9A;P-EDP	1	208	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		9.34 + J	2.16 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		14.84 + J	5.49 PU	
B9A;C-TEDP1-P	B9A;B-A-3L	B9A;B-TEDP1-P	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
B9A;C-TEDP1-S	B9A;B-TEDP1-S	B9A;P-EDP1	1	208	20.0 FEET	1/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1270 + J	0.0432	Ohms/1000 ft		5.87 + J	2.00 PU	
	Z0 Impedance:	0.2019 + J	0.1099	Ohms/1000 ft		9.33 + J	5.08 PU	
BMRI;C-CHILL	BMRI;P-H	BMRI;MC-CHILL	1	480	20.0 FEET	2	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.2020 + J	0.0467	Ohms/1000 ft		1.75 + J	0.4054 PU	
	Z0 Impedance:	0.3211 + J	0.1188	Ohms/1000 ft		2.79 + J	1.03 PU	
BMRI;C-EMH-P	BMRI;P-EMH	BMRI;B-EMH-P	1	480	10.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		3.52 + J	0.2617 PU	
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		5.60 + J	0.6658 PU	
BMRI;C-EMH-S	BMRI;B-EMH-S	BMRI;P-EML	1	208	20.0 FEET	6	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.5100 + J	0.0548	Ohms/1000 ft		23.58 + J	2.53 PU	
	Z0 Impedance:	0.8123 + J	0.1394	Ohms/1000 ft		37.55 + J	6.44 PU	

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FEEDER INPUT DATA								
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BMRI;C-H-P	BMRI;P-H	BMRI;B-H-P	1	480	20.0 FEET	1	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.1600 + J	0.0456	Ohms/1000 ft		1.39 + J	0.3958 PU	
	Z0 Impedance:	0.2543 + J	0.1160	Ohms/1000 ft		2.21 + J	1.01 PU	
BMRI;C-H-S	BMRI;B-H-S	BMRI;P-L	1	208	15.0 FEET	300	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0451 + J	0.0394	Ohms/1000 ft		1.56 + J	1.37 PU	
	Z0 Impedance:	0.0717 + J	0.1002	Ohms/1000 ft		2.49 + J	3.47 PU	
BMRI;C-UPS	BMRI;P-H	BMRI;U-UPS	1	480	20.0 FEET	600	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.0237 + J	0.0371	Ohms/1000 ft		0.2057 + J	0.3220 PU	
	Z0 Impedance:	0.0376 + J	0.0943	Ohms/1000 ft		0.3264 + J	0.8186 PU	
BT25;C-MSPP1	BT34;P-T34A	BT25;P-MSPP1	1	208	145.0 FEET	8	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.8110 + J	0.0603	Ohms/1000 ft		271.81 + J	20.21 PU	
	Z0 Impedance:	1.29 + J	0.1534	Ohms/1000 ft		432.11 + J	51.41 PU	
BT34;C-T34A	B20;P-20L12	BT34;P-T34A	1	208	175.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.3210 + J	0.0506	Ohms/1000 ft		129.84 + J	20.47 PU	
	Z0 Impedance:	0.4960 + J	0.1287	Ohms/1000 ft		200.63 + J	52.06 PU	
BT34;C-T34B	B20;P-20L12	BT34;P-T34B	1	208	170.0 FEET	4	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.3210 + J	0.0506	Ohms/1000 ft		126.13 + J	19.88 PU	
	Z0 Impedance:	0.4960 + J	0.1287	Ohms/1000 ft		194.90 + J	50.57 PU	
BT36;C-36P1A	BT36;B-T36	BT36;P-36P1	1	480	125.0 FEET	6	Copper	
	Duct Material: Magnetic		Insulation Type:			PVC	Insulation Class:	THHN
	+/- Impedance:	0.5100 + J	0.0685	Ohms/1000 ft		27.67 + J	3.72 PU	
	Z0 Impedance:	1.61 + J	0.1687	Ohms/1000 ft		87.20 + J	9.15 PU	
BT36;C-36P2-P	BT36;P-36P1	BT36;B-36P2-P	1	480	35.0 FEET	2	Copper	
	Duct Material: Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.2020 + J	0.0585	Ohms/1000 ft		3.07 + J	0.8887 PU	
	Z0 Impedance:	0.6366 + J	0.1440	Ohms/1000 ft		9.67 + J	2.19 PU	
BT36;C-36P2-S	BT36;B-36P2-S	BT36;P-36P2	1	208	25.0 FEET	2/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			PVC	Insulation Class:	THWN
	+/- Impedance:	0.1010 + J	0.0426	Ohms/1000 ft		5.84 + J	2.46 PU	
	Z0 Impedance:	0.1605 + J	0.1083	Ohms/1000 ft		9.27 + J	6.26 PU	

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CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER SIZE	FEEDER TYPE	
BT36;C-T36	B105;P-36P,H	BT36;B-T36	1	480	15.0 FEET	6	Copper	
	Duct Material: Magnetic	Insulation Type:				PVC	Insulation Class:	THHN
	+/- Impedance: 0.5100 + J	0.0685 Ohms/1000 ft				3.32 + J	0.4460 PU	
	Z0 Impedance: 1.61 + J	0.1687 Ohms/1000 ft				10.46 + J	1.10 PU	
OD;C-FD-5	OD;SG-3	B100;B-FD5	1	13090	330.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				EPR	Insulation Class:	MV
	+/- Impedance: 0.0640 + J	0.0466 Ohms/1000 ft				0.0123 + J	0.0090 PU	
	Z0 Impedance: 0.1017 + J	0.1185 Ohms/1000 ft				0.0196 + J	0.0228 PU	
OD;C-FD-6	OD;SG-3	B106;B-T106P	1	13090	80.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				EPR	Insulation Class:	MV
	+/- Impedance: 0.0640 + J	0.0466 Ohms/1000 ft				0.0030 + J	0.0022 PU	
	Z0 Impedance: 0.1017 + J	0.1185 Ohms/1000 ft				0.0047 + J	0.0055 PU	
OD;C-FD-A	OD;B-FD-A	OD;SG-1	1	13090	60.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				EPR	Insulation Class:	MV
	+/- Impedance: 0.0640 + J	0.0466 Ohms/1000 ft				0.0022 + J	0.0016 PU	
	Z0 Impedance: 0.1017 + J	0.1185 Ohms/1000 ft				0.0036 + J	0.0041 PU	
OD;C-FD-B	OD;B-FD-B	OD;SG-4	1	13090	60.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				EPR	Insulation Class:	MV
	+/- Impedance: 0.0640 + J	0.0466 Ohms/1000 ft				0.0022 + J	0.0016 PU	
	Z0 Impedance: 0.1017 + J	0.1185 Ohms/1000 ft				0.0036 + J	0.0041 PU	
OD;C-FD1	OD;SG-1	B6;B-T6-P	1	13090	550.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				EPR	Insulation Class:	MV
	+/- Impedance: 0.0640 + J	0.0466 Ohms/1000 ft				0.0205 + J	0.0150 PU	
	Z0 Impedance: 0.1017 + J	0.1185 Ohms/1000 ft				0.0326 + J	0.0380 PU	
OD;C-FD2	OD;SG-1	B100;B-FD2	1	13090	340.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				EPR	Insulation Class:	MV
	+/- Impedance: 0.0640 + J	0.0466 Ohms/1000 ft				0.0127 + J	0.0092 PU	
	Z0 Impedance: 0.1017 + J	0.1185 Ohms/1000 ft				0.0202 + J	0.0235 PU	
OD;C-FD3	OD;SG-2	B100;B-FD3	1	13090	340.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				EPR	Insulation Class:	MV
	+/- Impedance: 0.0640 + J	0.0466 Ohms/1000 ft				0.0127 + J	0.0092 PU	
	Z0 Impedance: 0.1017 + J	0.1185 Ohms/1000 ft				0.0202 + J	0.0235 PU	
OD;C-FD4-T5	OD;SG-2	B5;B-5-P	1	13090	850.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic	Insulation Type:				EPR	Insulation Class:	MV
	+/- Impedance: 0.0640 + J	0.0466 Ohms/1000 ft				0.0317 + J	0.0231 PU	
	Z0 Impedance: 0.1017 + J	0.1185 Ohms/1000 ft				0.0504 + J	0.0588 PU	

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
OD;C-FD9	OD;SG-4	B103;B-T103P	1	13090	982.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	
	+/-	Impedance: 0.0640 + J	0.0466	Ohms/1000 ft		0.0367 + J	0.0267	PU
	Z0	Impedance: 0.1017 + J	0.1185	Ohms/1000 ft		0.0583 + J	0.0679	PU
OD;C-SG-1-2	OD;SG-1	OD;SG-2	1	13090	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	
	+/-	Impedance: 0.0640 + J	0.0466	Ohms/1000 ft		0.00037 + J	0.00027	PU
	Z0	Impedance: 0.1017 + J	0.1185	Ohms/1000 ft		0.00059 + J	0.00069	PU
OD;C-SG3-4	OD;SG-3	OD;SG-4	1	13090	10.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	
	+/-	Impedance: 0.0640 + J	0.0466	Ohms/1000 ft		0.00037 + J	0.00027	PU
	Z0	Impedance: 0.1017 + J	0.1185	Ohms/1000 ft		0.00059 + J	0.00069	PU
OD;C-T-U1-P	OD;B-TRU1P	OD;B-T-U1-P	1	33000	40.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	
	+/-	Impedance: 0.0710 + J	0.0890	Ohms/1000 ft		0.00026 + J	0.00033	PU
	Z0	Impedance: 0.3660 + J	0.2620	Ohms/1000 ft		0.0013 + J	0.00096	PU
OD;C-T-U1-S	OD;B-T-U1-S	OD;B-FD-A	1	13090	40.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	
	+/-	Impedance: 0.0640 + J	0.0466	Ohms/1000 ft		0.0015 + J	0.0011	PU
	Z0	Impedance: 0.1017 + J	0.1185	Ohms/1000 ft		0.0024 + J	0.0028	PU
OD;C-T-U2-P	OD;B-TRU2P	OD;B-T-U2-P	1	33000	40.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	
	+/-	Impedance: 0.0710 + J	0.0890	Ohms/1000 ft		0.00026 + J	0.00033	PU
	Z0	Impedance: 0.3660 + J	0.2620	Ohms/1000 ft		0.0013 + J	0.00096	PU
OD;C-T-U2-S	OD;B-T-U2-S	OD;B-FD-B	1	13090	40.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	
	+/-	Impedance: 0.0640 + J	0.0466	Ohms/1000 ft		0.0015 + J	0.0011	PU
	Z0	Impedance: 0.1017 + J	0.1185	Ohms/1000 ft		0.0024 + J	0.0028	PU
OD;C-T22-5	B5;B-5-P	B22;B-22-P	1	13090	595.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	
	+/-	Impedance: 0.0640 + J	0.0466	Ohms/1000 ft		0.0222 + J	0.0162	PU
	Z0	Impedance: 0.1017 + J	0.1185	Ohms/1000 ft		0.0353 + J	0.0411	PU
OD;C-T22-9N	B22;B-22-P	B9A;B-P-TR-9N	1	13090	695.0	FEET	4/0	Copper
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	
	+/-	Impedance: 0.0640 + J	0.0466	Ohms/1000 ft		0.0260 + J	0.0189	PU
	Z0	Impedance: 0.1017 + J	0.1185	Ohms/1000 ft		0.0413 + J	0.0481	PU

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FEEDER INPUT DATA								
CABLE NAME	FEEDER FROM NAME	FEEDER TO NAME	QTY /PH	VOLTS L-L	LENGTH	FEEDER		
						SIZE	TYPE	
OD;C-T6-8	B6;B-T6-P	B8;B-8-P	1	13090	225.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	MV
	+/- Impedance:	0.0640 + J	0.0466	Ohms/1000 ft		0.0084 + J	0.0061 PU	
	Z0 Impedance:	0.1017 + J	0.1185	Ohms/1000 ft		0.0134 + J	0.0156 PU	
OD;C-T8-20	B8;B-8-P	B20;B-20-P	1	13090	485.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	MV
	+/- Impedance:	0.0640 + J	0.0466	Ohms/1000 ft		0.0181 + J	0.0132 PU	
	Z0 Impedance:	0.1017 + J	0.1185	Ohms/1000 ft		0.0288 + J	0.0335 PU	
OD;C-T9N-9S	B9;B-9S-P	B9A;B-P-TR-9N	1	13090	170.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	MV
	+/- Impedance:	0.0640 + J	0.0466	Ohms/1000 ft		0.0063 + J	0.0046 PU	
	Z0 Impedance:	0.1017 + J	0.1185	Ohms/1000 ft		0.0101 + J	0.0118 PU	
OD;C-UTIL-2	OD;B-UTIL-2	OD;B-TRU2P	1	33000	40.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	MV
	+/- Impedance:	0.0710 + J	0.0890	Ohms/1000 ft		0.00026 + J	0.00033 PU	
	Z0 Impedance:	0.3660 + J	0.2620	Ohms/1000 ft		0.0013 + J	0.00096 PU	
OD;C-UTIL1	OD;B-UTIL1	OD;B-TRU1P	1	33000	40.0 FEET	4/0	Copper	
	Duct Material: Non-Magnetic		Insulation Type:			EPR	Insulation Class:	MV
	+/- Impedance:	0.0710 + J	0.0890	Ohms/1000 ft		0.00026 + J	0.00033 PU	
	Z0 Impedance:	0.3660 + J	0.2620	Ohms/1000 ft		0.0013 + J	0.00096 PU	

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME		VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100;T-150A1	B100;B-150A1P D		208.00	B100;B-150A1S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):	30.00 Deg.		
B100;T-150B2	B100;B-150B2P D		208.00	B100;B-150B2S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):	30.00 Deg.		
B100;T-150C3	B100;B-150C3P D		208.00	B100;B-150C3S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):	30.00 Deg.		
B100;T-164A1	B100;B-164A1P D		208.00	B100;B-164A1S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):	30.00 Deg.		
B100;T-164B2	B100;B-164B2P D		208.00	B100;B-164B2S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):	30.00 Deg.		
B100;T-164C3	B100;B-164C3P D		208.00	B100;B-164C3S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):	30.00 Deg.		

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME		VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100;T-166A1	B100;B-166A1P D		208.00	B100;B-166A1S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):		30.00 Deg.	
B100;T-166B2	B100;B-166B2P D		208.00	B100;B-166B2S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):		30.00 Deg.	
B100;T-166C3	B100;B-166C3P D		208.00	B100;B-166C3S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):		30.00 Deg.	
B100;T-168A1	B100;B-168A1P D		208.00	B100;B-168A1S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):		30.00 Deg.	
B100;T-168B	B100;B-168BP D		208.00	B100;B-168BS YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):		30.00 Deg.	
B100;T-168B2	B100;B-168B2P D		208.00	B100;B-168B2S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):		30.00 Deg.	

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME		VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100;T-168C3	B100;B-168C3P D		208.00	B100;B-168C3S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):		30.00 Deg.	
B100;T-169A1	B100;B-169A1P D		208.00	B100;B-169A1S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):		30.00 Deg.	
B100;T-169B2	B100;B-169B2P D		208.00	B100;B-169B2S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):		30.00 Deg.	
B100;T-169C3	B100;B-169C3P D		208.00	B100;B-169C3S YG	120.00	5.00	5.00
	Pos. Seq. Z%:	0.055 + J	0.998	(Zpu 11.10 + j 199.7)			Shell Type
	Zero Seq. Z%:	0.055 + J	0.998	(Sec 11.10 + j 199.7 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):		30.00 Deg.	
B100;T-1DP1-1	B100;B-1DP1A1 D		480.00	B100;B-1DP1B1 YG	208.00	75.00	75.00
	Pos. Seq. Z%:	0.305 + J	5.49	(Zpu 4.07 + j 73.22)			Shell Type
	Zero Seq. Z%:	0.305 + J	5.49	(Sec 4.07 + j 73.22 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):		30.00 Deg.	
B100;T-1DP1-2	B100;B-1DP1A2 D		480.00	B100;B-1DP1B2 YG	208.00	30.00	30.00
	Pos. Seq. Z%:	0.260 + J	4.69	(Zpu 8.69 + j 156.4)			Shell Type
	Zero Seq. Z%:	0.260 + J	4.69	(Sec 8.69 + j 156.4 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %		Phase Shift (Pri. Leading Sec.):		30.00 Deg.	

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TRANSFORMER INPUT DATA						
TRANSFORMER NAME	PRIMARY RECORD NO NAME	VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100;T-1DP1-3	B100;B-1DP1A3 D	480.00	B100;B-1DP1B3 YG	208.00	75.00	75.00
	Pos. Seq. Z%:	0.260 + J	4.69 (Zpu	3.48 + j	62.57)	Shell Type
	Zero Seq. Z%:	0.260 + J	4.69 (Sec	3.48 + j	62.57 Pri Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-1DP1-4	B100;B-1DP1A4 D	480.00	B100;B-1DP1B4 YG	208.00	75.00	75.00
	Pos. Seq. Z%:	0.260 + J	4.69 (Zpu	3.48 + j	62.57)	Shell Type
	Zero Seq. Z%:	0.260 + J	4.69 (Sec	3.48 + j	62.57 Pri Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-1DP3	B100;B-1DP3A1 D	480.00	B100;B-1DP3B1 YG	208.00	45.00	45.00
	Pos. Seq. Z%:	0.327 + J	5.89 (Zpu	7.27 + j	130.9)	Shell Type
	Zero Seq. Z%:	0.327 + J	5.89 (Sec	7.27 + j	130.9 Pri Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-1DP4	B100;B-1DP4A1 D	480.00	B100;B-1DP4B1 YG	208.00	300.00	112.50
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	2.96 + j	53.25)	Shell Type
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	2.96 + j	53.25 Pri Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-1RE1R3	B100;B-TE1R3P D	480.00	B100;B-TE1R3S YG	208.00	30.00	30.00
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	11.09 + j	199.6)	Shell Type
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	11.09 + j	199.6 Pri Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-2DP1	B100;B-2DPT1P D	480.00	B100;B-2DPT1S YG	208.00	300.00	30.00
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	11.09 + j	199.6)	Shell Type
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	11.09 + j	199.6 Pri Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA						
TRANSFORMER NAME	PRIMARY RECORD NO NAME	VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100;T-2DP2	B100;B-2DPT2P D	480.00	B100;B-2DPT2S YG	208.00	300.00	45.00
	Pos. Seq. Z%:	0.327 + J	5.89 (Zpu	7.27 + j	130.9)	Shell Type
	Zero Seq. Z%:	0.327 + J	5.89 (Sec	7.27 + j	130.9 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-2DP3	B100;B-2DPT3P D	480.00	B100;B-2DPT3S YG	208.00	300.00	30.00
	Pos. Seq. Z%:	0.327 + J	5.89 (Zpu	10.91 + j	196.3)	Shell Type
	Zero Seq. Z%:	0.327 + J	5.89 (Sec	10.91 + j	196.3 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-2DP4	B100;B-2DPT4P D	480.00	B100;B-2DPT4S YG	208.00	300.00	112.50
	Pos. Seq. Z%:	0.305 + J	5.49 (Zpu	2.71 + j	48.81)	Shell Type
	Zero Seq. Z%:	0.305 + J	5.49 (Sec	2.71 + j	48.81 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-3DPT1	B100;B-3DPT1P D	480.00	B100;B-3DPT1S YG	208.00	300.00	45.00
	Pos. Seq. Z%:	0.327 + J	5.89 (Zpu	7.27 + j	130.9)	Shell Type
	Zero Seq. Z%:	0.327 + J	5.89 (Sec	7.27 + j	130.9 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-3DPT2	B100;B-3DPT2P D	480.00	B100;B-3DPT2S YG	208.00	300.00	45.00
	Pos. Seq. Z%:	0.327 + J	5.89 (Zpu	7.27 + j	130.9)	Shell Type
	Zero Seq. Z%:	0.327 + J	5.89 (Sec	7.27 + j	130.9 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-3DPT3	B100;B-3DPT3P D	480.00	B100;B-3DPT3S YG	208.00	300.00	75.00
	Pos. Seq. Z%:	0.260 + J	4.69 (Zpu	3.48 + j	62.57)	Shell Type
	Zero Seq. Z%:	0.260 + J	4.69 (Sec	3.48 + j	62.57 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME		VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100;T-3ED1	B100;B-3ED1TP D		480.00	B100;B-3ED1TS YG	208.00	15.00	15.00
	Pos. Seq. Z%:	0.266 + J	4.79	(Zpu 17.75 + j 319.5)		Shell Type	
	Zero Seq. Z%:	0.266 + J	4.79	(Sec 17.75 + j 319.5 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B100;T-3WD1	B100;B-3WD1TP D		480.00	B100;B-3WD1TS YG	208.00	15.00	15.00
	Pos. Seq. Z%:	0.266 + J	4.79	(Zpu 17.75 + j 319.5)		Shell Type	
	Zero Seq. Z%:	0.266 + J	4.79	(Sec 17.75 + j 319.5 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B100;T-4DPT1	B100;B-4DPT1P D		480.00	B100;B-4DPT1S YG	208.00	300.00	45.00
	Pos. Seq. Z%:	0.327 + J	5.89	(Zpu 7.27 + j 130.9)		Shell Type	
	Zero Seq. Z%:	0.327 + J	5.89	(Sec 7.27 + j 130.9 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B100;T-4DPT2	B100;B-4DPT2P D		480.00	B100;B-4DPT2S YG	208.00	300.00	45.00
	Pos. Seq. Z%:	0.327 + J	5.89	(Zpu 7.27 + j 130.9)		Shell Type	
	Zero Seq. Z%:	0.327 + J	5.89	(Sec 7.27 + j 130.9 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B100;T-4DPT3	B100;B-4DPT3P D		480.00	B100;B-4DPT3S YG	208.00	300.00	75.00
	Pos. Seq. Z%:	0.260 + J	4.69	(Zpu 3.48 + j 62.57)		Shell Type	
	Zero Seq. Z%:	0.260 + J	4.69	(Sec 3.48 + j 62.57 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B100;T-5DP1	B100;B-5DP1TP D		480.00	B100;B-5DP1TS YG	208.00	300.00	45.00
	Pos. Seq. Z%:	0.327 + J	5.89	(Zpu 7.27 + j 130.9)		Shell Type	
	Zero Seq. Z%:	0.327 + J	5.89	(Sec 7.27 + j 130.9 Pri Open)			
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				

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TRANSFORMER INPUT DATA						
TRANSFORMER NAME	PRIMARY RECORD NO NAME	VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100;T-5DP2	B100;B-5DP2TP D	480.00	B100;B-5DP2TS YG	208.00	300.00	45.00
	Pos. Seq. Z%:	0.327 + J	5.89 (Zpu	7.27 + j	130.9)	Shell Type
	Zero Seq. Z%:	0.327 + J	5.89 (Sec	7.27 + j	130.9 Pri Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-BDP10A	B100;B-BDP10A D	480.00	B100;B-BDP10B YG	208.00	300.00	25.00
	Pos. Seq. Z%:	0.327 + J	5.89 (Zpu	13.09 + j	235.6)	Shell Type
	Zero Seq. Z%:	0.327 + J	5.89 (Sec	13.09 + j	235.6 Pri Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-BDP10D	B100;B-BDP10D D	480.00	B100;B-BDP10E YG	208.00	300.00	25.00
	Pos. Seq. Z%:	0.327 + J	5.89 (Zpu	13.09 + j	235.6)	Shell Type
	Zero Seq. Z%:	0.327 + J	5.89 (Sec	13.09 + j	235.6 Pri Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-BDP5-L	B100;B-BDP5A D	480.00	B100;B-BDP5B YG	208.00	300.00	300.00
	Pos. Seq. Z%:	0.299 + J	5.39 (Zpu	0.998 + j	17.97)	Shell Type
	Zero Seq. Z%:	0.299 + J	5.39 (Sec	0.998 + j	17.97 Pri Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-BDP5-R	B100;B-BDP5RT D	480.00	B100;B-BR10-T YG	208.00	30.00	30.00
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	11.09 + j	199.6)	Shell Type
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	11.09 + j	199.6 Pri Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-BME	B100;B-T-BMEP D	480.00	B100;B-T-BMES YG	208.00	45.00	45.00
	Pos. Seq. Z%:	0.249 + J	4.49 (Zpu	5.55 + j	99.85)	Shell Type
	Zero Seq. Z%:	0.249 + J	4.49 (Sec	5.55 + j	99.85 Pri Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA						
TRANSFORMER NAME	PRIMARY RECORD NO NAME	VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100;T-BR123	B100;B-TBR13P D	480.00	B100;B-TBR123S YG	208.00	300.00	45.00
	Pos. Seq. Z%:	0.327 + J	5.89 (Zpu	7.27 + j	130.9)	Shell Type
	Zero Seq. Z%:	0.327 + J	5.89 (Sec	7.27 + j	130.9 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-BR13	B100;B-BR13TP D	480.00	B100;B-BR13TS YG	208.00	300.00	30.00
	Pos. Seq. Z%:	0.299 + J	5.39 (Zpu	9.98 + j	179.7)	Shell Type
	Zero Seq. Z%:	0.299 + J	5.39 (Sec	9.98 + j	179.7 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-BR456	B100;B-T456P D	480.00	B100;B-T456S YG	208.00	300.00	75.00
	Pos. Seq. Z%:	0.260 + J	4.69 (Zpu	3.48 + j	62.57)	Shell Type
	Zero Seq. Z%:	0.260 + J	4.69 (Sec	3.48 + j	62.57 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-BR789	B100;B-T789P D	480.00	B100;B-T789S YG	208.00	300.00	75.00
	Pos. Seq. Z%:	0.260 + J	4.69 (Zpu	3.48 + j	62.57)	Shell Type
	Zero Seq. Z%:	0.260 + J	4.69 (Sec	3.48 + j	62.57 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-C1R1,2	B100;B-TC1R1P D	480.00	B100;B-TC1R1S YG	208.00	30.00	30.00
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	11.09 + j	199.6)	Shell Type
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	11.09 + j	199.6 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-C1R3,4	B100;B-TC1R3P D	480.00	B100;B-TC1R3S YG	208.00	30.00	30.00
	Pos. Seq. Z%:	0.275 + J	4.96 (Zpu	9.19 + j	165.4)	Shell Type
	Zero Seq. Z%:	0.275 + J	4.96 (Sec	9.19 + j	165.4 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA						
TRANSFORMER NAME	PRIMARY RECORD NO NAME	VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100;T-C2R1-3	B100;B-TC2R1P D	480.00	B100;B-TC2R1S YG	208.00	112.50	112.50
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	2.96 + j	53.25)	Shell Type
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	2.96 + j	53.25 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-C2R4,5	B100;B-TC2R4P D	480.00	B100;B-TC2R4S YG	208.00	112.50	112.50
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	2.96 + j	53.25)	Shell Type
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	2.96 + j	53.25 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-C2WDP	B100;B-TC2WDP D	480.00	B100;B-TC2WDS YG	208.00	45.00	45.00
	Pos. Seq. Z%:	0.343 + J	6.19 (Zpu	7.64 + j	137.5)	Shell Type
	Zero Seq. Z%:	0.343 + J	6.19 (Sec	7.64 + j	137.5 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-C3R1	B100;B-TC3R1P D	480.00	B100;B-TC3R1S YG	208.00	15.00	15.00
	Pos. Seq. Z%:	0.155 + J	2.80 (Zpu	10.35 + j	186.3)	Shell Type
	Zero Seq. Z%:	0.155 + J	2.80 (Sec	10.35 + j	186.3 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-C4R1,2	B100;B-T-C4RP D	480.00	B100;B-T-C4RS YG	208.00	75.00	75.00
	Pos. Seq. Z%:	0.260 + J	4.69 (Zpu	3.48 + j	62.57)	Shell Type
	Zero Seq. Z%:	0.260 + J	4.69 (Sec	3.48 + j	62.57 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-C5R1,2	B100;B-T-C5RP D	480.00	B100;B-T-C5RS YG	208.00	30.00	30.00
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	11.09 + j	199.6)	Shell Type
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	11.09 + j	199.6 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME	VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA	
B100;T-E1R124	B100;B-TE1R1P D	480.00	B100;B-TE1R1S YG	208.00	75.00	75.00	
	Pos. Seq. Z%:	0.260 + J	4.69 (Zpu	3.48 + j	62.57)	Shell Type	
	Zero Seq. Z%:	0.260 + J	4.69 (Sec	3.48 + j	62.57 Pri Open)		
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B100;T-E1R16A	B100;B-E1R16AP D	480.00	B100;B-E1R16AS YG	208.00	30.00	30.00	
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	11.09 + j	199.6)	Shell Type	
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	11.09 + j	199.6 Pri Open)		
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B100;T-E2DP3	B100;B-E2W01M D	480.00	B100;B-TE2DP3 YG	208.00	75.00	75.00	
	Pos. Seq. Z%:	0.305 + J	5.49 (Zpu	4.07 + j	73.22)	Shell Type	
	Zero Seq. Z%:	0.305 + J	5.49 (Sec	4.07 + j	73.22 Pri Open)		
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B100;T-E2R1-2	B100;B-T-E2RP D	480.00	B100;B-T-E2RS YG	208.00	30.00	30.00	
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	11.09 + j	199.6)	Shell Type	
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	11.09 + j	199.6 Pri Open)		
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B100;T-E3R1,2	B100;B-T-E3RP D	480.00	B100;B-T-E3RS YG	208.00	30.00	30.00	
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	11.09 + j	199.6)	Shell Type	
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	11.09 + j	199.6 Pri Open)		
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B100;T-E4R1,2	B100;B-T-E4RP D	480.00	B100;B-T-E4RS YG	208.00	30.00	30.00	
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	11.09 + j	199.6)	Shell Type	
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	11.09 + j	199.6 Pri Open)		
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME		VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100;T-E5R1,2	B100;B-T-E5RP D		480.00	B100;B-T-E5RS YG	208.00	30.00	30.00
	Pos. Seq. Z%:		0.332 + J	5.99 (Zpu	11.09 + j	199.6)	Shell Type
	Zero Seq. Z%:		0.332 + J	5.99 (Sec	11.09 + j	199.6 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-EBDP7A	B100;B-TEB7AP D		480.00	B100;B-TEB7AS YG	208.00	300.00	300.00
	Pos. Seq. Z%:		0.299 + J	5.39 (Zpu	0.998 + j	17.97)	Shell Type
	Zero Seq. Z%:		0.299 + J	5.39 (Sec	0.998 + j	17.97 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-EBDP9B	B100;B-TEB9BP D		480.00	B100;B-TEB9BS YG	208.00	300.00	75.00
	Pos. Seq. Z%:		0.321 + J	5.79 (Zpu	4.29 + j	77.21)	Shell Type
	Zero Seq. Z%:		0.321 + J	5.79 (Sec	4.29 + j	77.21 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-EBPR1	B100;MC-EMCBP D		480.00	B100;B-EBPR1S YG	208.00	15.00	15.00
	Pos. Seq. Z%:		0.155 + J	2.80 (Zpu	10.35 + j	186.3)	Shell Type
	Zero Seq. Z%:		0.155 + J	2.80 (Sec	10.35 + j	186.3 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-EBR1-2	B100;B-T-EBR D		480.00	B100;B-T-EBRS YG	208.00	30.00	30.00
	Pos. Seq. Z%:		0.332 + J	5.99 (Zpu	11.09 + j	199.6)	Shell Type
	Zero Seq. Z%:		0.332 + J	5.99 (Sec	11.09 + j	199.6 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-EBR10	B100;B-EBR10P D		480.00	B100;B-EBR10S YG	208.00	300.00	75.00
	Pos. Seq. Z%:		0.305 + J	5.49 (Zpu	4.07 + j	73.22)	Shell Type
	Zero Seq. Z%:		0.305 + J	5.49 (Sec	4.07 + j	73.22 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA						
TRANSFORMER NAME	PRIMARY RECORD NO NAME	VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100;T-LS1R1	B100;B-TLS1RP D	480.00	B100;B-TLS1RS YG	208.00	15.00	15.00
	Pos. Seq. Z%:	0.155 + J	2.80 (Zpu	10.35 + j	186.3)	Shell Type
	Zero Seq. Z%:	0.155 + J	2.80 (Sec	10.35 + j	186.3 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-LS2R1	B100;B-TLS2RP D	480.00	B100;B-TLS2RS YG	208.00	15.00	15.00
	Pos. Seq. Z%:	0.155 + J	2.80 (Zpu	10.35 + j	186.3)	Shell Type
	Zero Seq. Z%:	0.155 + J	2.80 (Sec	10.35 + j	186.3 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-LS3R1	B100;B-TLS3RP D	480.00	B100;B-TLS3RS YG	208.00	15.00	15.00
	Pos. Seq. Z%:	0.155 + J	2.80 (Zpu	10.35 + j	186.3)	Shell Type
	Zero Seq. Z%:	0.155 + J	2.80 (Sec	10.35 + j	186.3 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-LS4R1	B100;B-TLS4RP D	480.00	B100;B-TLS4RS YG	208.00	15.00	15.00
	Pos. Seq. Z%:	0.155 + J	2.80 (Zpu	10.35 + j	186.3)	Shell Type
	Zero Seq. Z%:	0.155 + J	2.80 (Sec	10.35 + j	186.3 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-LS5R1	B100;B-TLS5RP D	480.00	B100;B-TLS5RS YG	208.00	15.00	15.00
	Pos. Seq. Z%:	0.155 + J	2.80 (Zpu	10.35 + j	186.3)	Shell Type
	Zero Seq. Z%:	0.155 + J	2.80 (Sec	10.35 + j	186.3 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-LSBR1	B100;B-TLSBRP D	480.00	B100;B-TLSBRS YG	208.00	15.00	15.00
	Pos. Seq. Z%:	0.155 + J	2.80 (Zpu	10.35 + j	186.3)	Shell Type
	Zero Seq. Z%:	0.155 + J	2.80 (Sec	10.35 + j	186.3 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA						
TRANSFORMER NAME	PRIMARY RECORD NO NAME	VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100;T-RL1,2	B100;B-TRL12P D	480.00	B100;B-TRL12S YG	208.00	75.00	75.00
	Pos. Seq. Z%:	0.321 + J	5.79 (Zpu	4.29 + j	77.21)	Shell Type
	Zero Seq. Z%:	0.321 + J	5.79 (Sec	4.29 + j	77.21 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-RP1,2	B100;B-LA108 D	480.00	B100;B-RP1,2 YG	208.00	75.00	75.00
	Pos. Seq. Z%:	0.321 + J	5.79 (Zpu	4.29 + j	77.21)	Shell Type
	Zero Seq. Z%:	0.321 + J	5.79 (Sec	4.29 + j	77.21 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-SS1-A	B100;B-T1-A-P D	13094.0	B100;B-T1-A-S YG	480.00	3500.00	2500.00
	Pos. Seq. Z%:	0.310 + J	5.59 (Zpu	0.124 + j	2.24)	Shell Type
	Zero Seq. Z%:	0.310 + J	5.59 (Sec	0.124 + j	2.24 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-SS2-A	B100;B-T2-A-P D	13094.0	B100;B-T2-A-S YG	480.00	3500.00	2500.00
	Pos. Seq. Z%:	0.316 + J	5.69 (Zpu	0.126 + j	2.28)	Shell Type
	Zero Seq. Z%:	0.316 + J	5.69 (Sec	0.126 + j	2.28 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-SS2-B	B100;B-T2-B-P D	13094.0	B100;B-T2-B-S YG	480.00	3500.00	2500.00
	Pos. Seq. Z%:	0.316 + J	5.69 (Zpu	0.126 + j	2.28)	Shell Type
	Zero Seq. Z%:	0.316 + J	5.69 (Sec	0.126 + j	2.28 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100;T-T-XP6	B100;B-1DP2-9 D	480.00	B100;P-1C90 YG	480.00	150.00	150.00
	Pos. Seq. Z%:	0.284 + J	5.12 (Zpu	1.90 + j	34.15)	Shell Type
	Zero Seq. Z%:	0.284 + J	5.12 (Sec	1.90 + j	34.15 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME		VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100A;T-1DLST1	B100A;B-1DLSP D		480.00	B100A;B-1DLSS YG	208.00	15.00	15.00
	Pos. Seq. Z%:		0.133 + J	2.40 (Zpu	8.87 + j	159.7)	Shell Type
	Zero Seq. Z%:		0.133 + J	2.40 (Sec	8.87 + j	159.7 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100A;T-1DT1	B100A;B-1DT1P D		480.00	B100A;B-1DT1S YG	208.00	112.50	112.50
	Pos. Seq. Z%:		0.227 + J	4.09 (Zpu	2.02 + j	36.39)	Shell Type
	Zero Seq. Z%:		0.227 + J	4.09 (Sec	2.02 + j	36.39 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100A;T-2DCR1	B100A;B-2DCRP D		480.00	B100A;B-2DCRS YG	208.00	15.00	15.00
	Pos. Seq. Z%:		0.155 + J	2.80 (Zpu	10.35 + j	186.3)	Shell Type
	Zero Seq. Z%:		0.155 + J	2.80 (Sec	10.35 + j	186.3 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100A;T-2DT1	B100A;B-2DT1P D		480.00	B100A;B-2DT1S YG	208.00	75.00	75.00
	Pos. Seq. Z%:		0.288 + J	5.19 (Zpu	3.85 + j	69.23)	Shell Type
	Zero Seq. Z%:		0.288 + J	5.19 (Sec	3.85 + j	69.23 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100A;T-BDE1	B100A;B-BDE1P D		480.00	B100A;B-BDE1S YG	208.00	45.00	45.00
	Pos. Seq. Z%:		0.252 + J	4.54 (Zpu	5.61 + j	100.9)	Shell Type
	Zero Seq. Z%:		0.252 + J	4.54 (Sec	5.61 + j	100.9 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100A;T-BDLST1	B100A;B-BDLSP D		480.00	B100A;B-BDLSS YG	208.00	15.00	15.00
	Pos. Seq. Z%:		0.133 + J	2.40 (Zpu	8.87 + j	159.7)	Shell Type
	Zero Seq. Z%:		0.133 + J	2.40 (Sec	8.87 + j	159.7 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA						
TRANSFORMER NAME	PRIMARY RECORD NO NAME	VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B100A;T-BDT1	B100A;B-BDT1P D	480.00	B100A;B-BDT1S YG	208.00	45.00	45.00
	Pos. Seq. Z%:	0.349 + J	6.29 (Zpu	7.77 + j	139.7)	Shell Type
	Zero Seq. Z%:	0.349 + J	6.29 (Sec	7.77 + j	139.7 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B100A;T-TBDE1	B100A;B-TBDEP D	480.00	B100A;B-TBDES YG	208.00	15.00	15.00
	Pos. Seq. Z%:	0.252 + J	4.54 (Zpu	16.83 + j	302.8)	Shell Type
	Zero Seq. Z%:	0.252 + J	4.54 (Sec	16.83 + j	302.8 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B103;T-103	B103;B-T103P D	12470.0	B103;B-103S YG	480.00	500.00	500.00
	Pos. Seq. Z%:	0.194 + J	3.50 (Zpu	0.389 + j	7.01)	Shell Type
	Zero Seq. Z%:	0.194 + J	3.50 (Sec	0.389 + j	7.01 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B103;T-NC1D2	B103;B-NC1D2P D	480.00	B103;B-NC1D2S YG	208.00	75.00	75.00
	Pos. Seq. Z%:	0.321 + J	5.79 (Zpu	4.29 + j	77.21)	Shell Type
	Zero Seq. Z%:	0.321 + J	5.79 (Sec	4.29 + j	77.21 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B103;T-NE1R1	B103;B-NE1R1P D	480.00	B103;B-NE1R1S YG	208.00	30.00	30.00
	Pos. Seq. Z%:	0.172 + J	3.10 (Zpu	5.73 + j	103.1)	Shell Type
	Zero Seq. Z%:	0.172 + J	3.10 (Sec	5.73 + j	103.1 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B103;T-T	B103;B-T-M D	480.00	B103;B-T-S YG	208.00	225.00	225.00
	Pos. Seq. Z%:	0.319 + J	5.74 (Zpu	1.42 + j	25.52)	Shell Type
	Zero Seq. Z%:	0.319 + J	5.74 (Sec	1.42 + j	25.52 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME		VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B105;T-36H	B105;B-36H-P	D	480.00	B105;B-36H-S	YG 240.00	15.00	15.00
	Pos. Seq. Z%:		0.105 + J	1.90 (Zpu	7.03 + j 126.4)		Shell Type
	Zero Seq. Z%:		0.105 + J	1.90 (Sec	7.03 + j 126.4 Pri		Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B105;T-36P	B105;B-36P-P	D	480.00	B105;B-36P-S	YG 240.00	30.00	30.00
	Pos. Seq. Z%:		0.349 + J	6.29 (Zpu	11.65 + j 209.6)		Shell Type
	Zero Seq. Z%:		0.349 + J	6.29 (Sec	11.65 + j 209.6 Pri		Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B106;T-106	B106;B-T106P	D	12470.0	B106;B-106S	YG 480.00	500.00	500.00
	Pos. Seq. Z%:		0.194 + J	3.50 (Zpu	0.389 + j 7.01)		Shell Type
	Zero Seq. Z%:		0.194 + J	3.50 (Sec	0.389 + j 7.01 Pri		Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B106;T-EMDPL	B106;B-EMDPLP	D	480.00	B106;B-EMDPLS	YG 208.00	75.00	75.00
	Pos. Seq. Z%:		0.321 + J	5.79 (Zpu	4.29 + j 77.21)		Shell Type
	Zero Seq. Z%:		0.321 + J	5.79 (Sec	4.29 + j 77.21 Pri		Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B106;T-EV	B106;B-EV-P	D	480.00	B106;B-EV-S	YG 208.00	9.00	9.00
	Pos. Seq. Z%:		0.172 + J	3.10 (Zpu	19.11 + j 343.9)		Shell Type
	Zero Seq. Z%:		0.172 + J	3.10 (Sec	19.11 + j 343.9 Pri		Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B106;T-MDPL	B106;B-MDPL-P	D	480.00	B106;B-MDPL-S	YG 208.00	500.00	500.00
	Pos. Seq. Z%:		0.343 + J	6.19 (Zpu	0.687 + j 12.38)		Shell Type
	Zero Seq. Z%:		0.343 + J	6.19 (Sec	0.687 + j 12.38 Pri		Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME	VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA	
B106;T-PPL1	B106;B-PPL1-P D	480.00	B106;B-PPL1-S YG	208.00	9.00	9.00	
	Pos. Seq. Z%:	0.172 + J	3.10 (Zpu	19.11 + j	343.9)	Shell Type	
	Zero Seq. Z%:	0.172 + J	3.10 (Sec	19.11 + j	343.9 Pri	Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B106;T-PPL2	B106;B-PPL2-P D	480.00	B106;B-PPL2-S YG	208.00	9.00	9.00	
	Pos. Seq. Z%:	0.172 + J	3.10 (Zpu	19.11 + j	343.9)	Shell Type	
	Zero Seq. Z%:	0.172 + J	3.10 (Sec	19.11 + j	343.9 Pri	Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B20;T-20	B20;B-T-20-P D	12470.0	B20;B-T-20-S YG	480.00	225.00	150.00	
	Pos. Seq. Z%:	0.133 + J	2.40 (Zpu	0.887 + j	15.98)	Shell Type	
	Zero Seq. Z%:	0.133 + J	2.40 (Sec	0.887 + j	15.98 Pri	Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B20;T-20A	B20;B-T-20A-P D	480.00	B20;B-T-20A-S YG	208.00	112.50	112.50	
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	2.96 + j	53.25)	Shell Type	
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	2.96 + j	53.25 Pri	Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B20;T-20A1	B20;B-20A1-P D	240.00	B20;B-20A1-S YG	208.00	5.00	5.00	
	Pos. Seq. Z%:	0.127 + J	2.30 (Zpu	25.52 + j	459.3)	Shell Type	
	Zero Seq. Z%:	0.127 + J	2.30 (Sec	25.52 + j	459.3 Pri	Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
B20;T-20A2	B20;B-20A2-P D	240.00	B20;B-20A2-S YG	208.00	5.00	5.00	
	Pos. Seq. Z%:	0.127 + J	2.30 (Zpu	25.52 + j	459.3)	Shell Type	
	Zero Seq. Z%:	0.127 + J	2.30 (Sec	25.52 + j	459.3 Pri	Open)	
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				

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TRANSFORMER INPUT DATA						
TRANSFORMER NAME	PRIMARY RECORD NO NAME	VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B20;T-20L1S	B20;B-20L1S-P D	480.00	B20;B-20L1S-S YG	208.00	30.00	30.00
	Pos. Seq. Z%:	0.332 + J	5.99 (Zpu	11.09 + j	199.6)	Shell Type
	Zero Seq. Z%:	0.332 + J	5.99 (Sec	11.09 + j	199.6 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B22;T-22	B22;B-T-22-P D	12470.0	B22;B-T-22-S YG	480.00	300.00	300.00
	Pos. Seq. Z%:	0.140 + J	2.54 (Zpu	0.469 + j	8.45)	Shell Type
	Zero Seq. Z%:	0.140 + J	2.54 (Sec	0.469 + j	8.45 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B22;T-41	B22;B-41-P D	480.00	B22;B-41-S YG	208.00	112.50	112.50
	Pos. Seq. Z%:	0.299 + J	5.39 (Zpu	2.66 + j	47.93)	Shell Type
	Zero Seq. Z%:	0.299 + J	5.39 (Sec	2.66 + j	47.93 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B5;T-5	B5;B-T-5-P Y	12470.0	B5;B-T-5-S YG	480.00	225.00	225.00
	Pos. Seq. Z%:	0.119 + J	2.16 (Zpu	0.532 + j	9.59)	Shell Type
	Zero Seq. Z%:	9999. + J	9999. (Sec	44440 + j	44440 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 0.000 Deg.			
B5;T-5PB1	B5;B-5PB1-P D	480.00	B5;B-5PB1-S YG	240.00	150.00	150.00
	Pos. Seq. Z%:	0.255 + J	4.59 (Zpu	1.70 + j	30.62)	Shell Type
	Zero Seq. Z%:	0.255 + J	4.59 (Sec	1.70 + j	30.62 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B5;T-L1	B5;B-L1-P D	480.00	B5;B-L1-S YG	208.00	75.00	75.00
	Pos. Seq. Z%:	0.249 + J	4.49 (Zpu	3.33 + j	59.91)	Shell Type
	Zero Seq. Z%:	0.249 + J	4.49 (Sec	3.33 + j	59.91 Pri	Open)
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME		VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B5;T-L1B	B5;B-L1B-P	D	480.00	B5;B-L1B-S	YG	208.00	45.00
	Pos. Seq. Z%:		0.343 + J	6.19	(Zpu 7.64 + j 137.5)		Shell Type
	Zero Seq. Z%:		0.343 + J	6.19	(Sec 7.64 + j 137.5 Pri Open)		
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B5;T-WIREWAY	B5;B-WIREWAYP	D	480.00	B5;B-WIREWAYS	YG	240.00	75.00
	Pos. Seq. Z%:		0.249 + J	4.49	(Zpu 3.33 + j 59.91)		Shell Type
	Zero Seq. Z%:		0.249 + J	4.49	(Sec 3.33 + j 59.91 Pri Open)		
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B6;T-6	B6;B-T-6-P	D	12470.0	B6;B-T-6-S	YG	480.00	300.00
	Pos. Seq. Z%:		0.140 + J	2.54	(Zpu 0.469 + j 8.45)		Shell Type
	Zero Seq. Z%:		0.140 + J	2.54	(Sec 0.469 + j 8.45 Pri Open)		
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B6;T-6A	B6;B-T-6A-P	D	480.00	B6;B-T-6A-S	D	240.00	150.00
	Pos. Seq. Z%:		0.155 + J	2.80	(Zpu 1.04 + j 18.64)		Shell Type
	Zero Seq. Z%:		9999. + J	9999.	(Pri Open, Sec Open)		
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 0.000 Deg.			
B6;T-6B	B6;B-T-6B-P	D	480.00	B6;B-T-6B-S	YG	240.00	167.00
	Pos. Seq. Z%:		0.371 + J	6.69	(Zpu 2.23 + j 40.06)		Shell Type
	Zero Seq. Z%:		0.371 + J	6.69	(Sec 2.23 + j 40.06 Pri Open)		
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B7;T-7	B7;B-T-7-P	D	240.00	B7;B-T-7-S	YG	208.00	45.00
	Pos. Seq. Z%:		0.332 + J	5.99	(Zpu 7.40 + j 133.1)		Shell Type
	Zero Seq. Z%:		0.332 + J	5.99	(Sec 7.40 + j 133.1 Pri Open)		
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME		VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B8;T-1PA-1	B8;B-T-1PA-1P D		240.00	B8;B-1PA-1 YG	208.00	15.00	15.00
	Pos. Seq. Z%:		0.172 + J	3.10 (Zpu	11.47 + j	206.3)	Shell Type
	Zero Seq. Z%:		0.172 + J	3.10 (Sec	11.47 + j	206.3 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B8;T-8	B8;B-T-8-P D		12470.0	B8;B-T-8-S YG	240.00	150.00	150.00
	Pos. Seq. Z%:		0.168 + J	3.03 (Zpu	1.12 + j	20.17)	Shell Type
	Zero Seq. Z%:		0.168 + J	3.03 (Sec	1.12 + j	20.17 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B8;T-8L11,GR	B8;B-T-8L11-P D		240.00	B8;B-T-8L11-S YG	208.00	75.00	75.00
	Pos. Seq. Z%:		0.177 + J	3.20 (Zpu	2.37 + j	42.60)	Shell Type
	Zero Seq. Z%:		0.177 + J	3.20 (Sec	2.37 + j	42.60 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B8;T-8LB1	B8;B-8LB1-P D		240.00	B8;B-8LB1-S YG	208.00	15.00	15.00
	Pos. Seq. Z%:		0.155 + J	2.80 (Zpu	10.35 + j	186.3)	Shell Type
	Zero Seq. Z%:		0.155 + J	2.80 (Sec	10.35 + j	186.3 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B8;T-MHC265	B8;B-TMHC265P D		240.00	B8;B-TMHC265S YG	208.00	15.00	15.00
	Pos. Seq. Z%:		0.127 + J	2.30 (Zpu	8.51 + j	153.1)	Shell Type
	Zero Seq. Z%:		0.127 + J	2.30 (Sec	8.51 + j	153.1 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B9;T-9S	B9;B-T-9S-P D		12470.0	B9;B-T-9S-S YG	480.00	300.00	300.00
	Pos. Seq. Z%:		0.140 + J	2.54 (Zpu	0.469 + j	8.45)	Shell Type
	Zero Seq. Z%:		0.140 + J	2.54 (Sec	0.469 + j	8.45 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME		VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA
B9;T-T9ELDP	B9;B-T9ELDP-P	D	480.00	B9;B-T9ELDP-S	YG 208.00	45.00	45.00
	Pos. Seq. Z%:		0.194 + J	3.49 (Zpu	4.31 + j	77.66)	Shell Type
	Zero Seq. Z%:		0.194 + J	3.49 (Sec	4.31 + j	77.66 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B9;T-TEL21	B9;B-TEL21-P	D	480.00	B9;B-TEL21-S	YG 208.00	45.00	45.00
	Pos. Seq. Z%:		0.305 + J	5.49 (Zpu	6.78 + j	122.0)	Shell Type
	Zero Seq. Z%:		0.305 + J	5.49 (Sec	6.78 + j	122.0 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B9;T-TLDP	B9;B-TLDP-P	D	480.00	B9;B-TLDP-S	YG 208.00	112.50	112.50
	Pos. Seq. Z%:		0.266 + J	4.79 (Zpu	2.37 + j	42.60)	Shell Type
	Zero Seq. Z%:		0.266 + J	4.79 (Sec	2.37 + j	42.60 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B9A;T-9N	B9A;B-T-9N-P	D	12470.0	B9A;B-T-9N-S	YG 480.00	225.00	150.00
	Pos. Seq. Z%:		0.133 + J	2.40 (Zpu	0.887 + j	15.98)	Shell Type
	Zero Seq. Z%:		0.133 + J	2.40 (Sec	0.887 + j	15.98 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B9A;T-T9A-1	B9A;B-T9A-1P	D	480.00	B9A;B-T9A-1S	YG 208.00	225.00	225.00
	Pos. Seq. Z%:		0.366 + J	6.59 (Zpu	1.63 + j	29.29)	Shell Type
	Zero Seq. Z%:		0.366 + J	6.59 (Sec	1.63 + j	29.29 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			
B9A;T-TEDP	B9A;B-TEDP-P	D	480.00	B9A;B-TEDP-S	YG 208.00	45.00	45.00
	Pos. Seq. Z%:		0.194 + J	3.49 (Zpu	4.31 + j	77.66)	Shell Type
	Zero Seq. Z%:		0.194 + J	3.49 (Sec	4.31 + j	77.66 Pri	Open)
	Taps Pri. 0.000 %		Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.			

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TRANSFORMER INPUT DATA							
TRANSFORMER NAME	PRIMARY RECORD NO NAME	VOLTS L-L	* SECONDARY RECORD NO NAME	VOLTS L-L	FULL-LOAD KVA	NOMINAL KVA	
B9A;T-TEDP1	B9A;B-TEDP1-P D	480.00	B9A;B-TEDP1-S YG	208.00	45.00	45.00	
	Pos. Seq. Z%:	0.343 + J	6.19 (Zpu	7.64 + j	137.5)	Shell Type	
	Zero Seq. Z%:	0.343 + J	6.19 (Sec	7.64 + j	137.5 Pri Open)		
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
BMRI;T-EMH	BMRI;B-EMH-P D	480.00	BMRI;B-EMH-S YG	208.00	15.00	15.00	
	Pos. Seq. Z%:	0.260 + J	4.69 (Zpu	17.38 + j	312.8)	Shell Type	
	Zero Seq. Z%:	0.260 + J	4.69 (Sec	17.38 + j	312.8 Pri Open)		
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
BMRI;T-H	BMRI;B-H-P D	480.00	BMRI;B-H-S YG	208.00	75.00	75.00	
	Pos. Seq. Z%:	0.299 + J	5.39 (Zpu	3.99 + j	71.89)	Shell Type	
	Zero Seq. Z%:	0.299 + J	5.39 (Sec	3.99 + j	71.89 Pri Open)		
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
BT36;T-36P2	BT36;B-36P2-P D	480.00	BT36;B-36P2-S YG	208.00	75.00	75.00	
	Pos. Seq. Z%:	0.288 + J	5.19 (Zpu	3.85 + j	69.23)	Shell Type	
	Zero Seq. Z%:	0.288 + J	5.19 (Sec	3.85 + j	69.23 Pri Open)		
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
OD;T-UTIL1	OD;B-T-U1-P D	34400.0	OD;B-T-U1-S YG	13090.0	7000.00	5000.00	
	Pos. Seq. Z%:	0.349 + J	6.29 (Zpu	0.069 + j	1.26)	Shell Type	
	Zero Seq. Z%:	0.349 + J	6.29 (Sec	0.069 + j	1.26 Pri Open)		
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				
OD;T-UTIL2	OD;B-T-U2-P D	34400.0	OD;B-T-U2-S YG	13090.0	7000.00	5000.00	
	Pos. Seq. Z%:	0.348 + J	6.28 (Zpu	0.069 + j	1.26)	Shell Type	
	Zero Seq. Z%:	0.348 + J	6.28 (Sec	0.069 + j	1.26 Pri Open)		
	Taps Pri. 0.000 %	Sec. 0.000 %	Phase Shift (Pri. Leading Sec.): 30.00 Deg.				

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GENERATION CONTRIBUTION DATA						
BUS	CONTRIBUTION	VOLTAGE				
NAME	NAME	L-L	MVA	X"d	X/R	
B100;B-G-EP	B100;G-EP	480.00	1.88	0.1500	20.00	
	Pos Sequence Impedance (100 MVA Base)				0.4000 + J	8.00 PU
	Neg Sequence Impedance (100 MVA Base)				0.4000 + J	8.00 PU
	Zero Sequence Impedance (100 MVA Base)				0.4000 + J	8.00 PU
B103;B-DEG	B103;G-DEG	480.00	0.156	0.1500	20.00	
	Pos Sequence Impedance (100 MVA Base)				4.80 + J	96.00 PU
	Neg Sequence Impedance (100 MVA Base)				4.80 + J	96.00 PU
	Zero Sequence Impedance (100 MVA Base)				4.80 + J	96.00 PU
B22;B-M-TS1E	B22;G-TS1E	208.00	0.075	0.1500	20.00	
	Pos Sequence Impedance (100 MVA Base)				10.00 + J	200.00 PU
	Neg Sequence Impedance (100 MVA Base)				10.00 + J	200.00 PU
	Zero Sequence Impedance (100 MVA Base)				10.00 + J	200.00 PU
B8;B-G-EP	B8;G-EP	240.00	0.187	0.1500	20.00	
	Pos Sequence Impedance (100 MVA Base)				4.00 + J	80.00 PU
	Neg Sequence Impedance (100 MVA Base)				4.00 + J	80.00 PU
	Zero Sequence Impedance (100 MVA Base)				4.00 + J	80.00 PU
B9;B-G-A-1E	B9;G-A-1E	480.00	0.288	0.1500	20.00	
	Pos Sequence Impedance (100 MVA Base)				2.60 + J	52.08 PU
	Neg Sequence Impedance (100 MVA Base)				2.60 + J	52.08 PU
	Zero Sequence Impedance (100 MVA Base)				2.60 + J	52.08 PU
OD;B-UTIL-2	OD;UT-BANK2	33000.0	316.90			
	Three Phase Contribution:				5544.31 AMPS	22.65
	Single Line to Ground Contribution:				5376.98 AMPS	20.57
	Pos Sequence Impedance (100 MVA Base)				0.0139 + J	0.3153 PU
	Zero Sequence Impedance (100 MVA Base)				0.0195 + J	0.3445 PU
OD;B-UTIL1	OD;UT-BANK1	33000.0	317.92			
	Three Phase Contribution:				5562.08 AMPS	22.56
	Single Line to Ground Contribution:				5378.74 AMPS	20.30
	Pos Sequence Impedance (100 MVA Base)				0.0139 + J	0.3142 PU
	Zero Sequence Impedance (100 MVA Base)				0.0201 + J	0.3462 PU

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MOTOR CONTRIBUTION DATA						
BUS NAME	CONTRIBUTION NAME	VOLTAGE L-L	BASE kVA	X'd	X/R	Motor Number
B100;B-100AC2	B100;M-100AC2	480	116.56	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			13.39 + j		133.94 PU
B100;B-100AC4	B100;M-100AC4	480	97.15	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			16.07 + j		160.70 PU
B100;B-100AC7	B100;M-100AC7	480	28.26	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			55.24 + j		552.43 PU
B100;B-100AC8	B100;M-AC8	480	47.02	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			33.20 + j		332.02 PU
B100;B-100P1	B100;M-100P1	480	86.89	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			17.97 + j		179.69 PU
B100;B-100P10	B100;M-100P10	480	97.75	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			15.97 + j		159.73 PU
B100;B-100P11	B100;M-CTFAN1	480	58.28	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			26.79 + j		267.89 PU
B100;B-100P12	B100;M-CTFAN2	480	58.28	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			26.79 + j		267.89 PU
B100;B-100P1A	B100;M-100P1A	480	41.06	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			38.02 + j		380.22 PU
B100;B-100P2	B100;M-100P2	480	86.89	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			17.97 + j		179.69 PU

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MOTOR CONTRIBUTION DATA						
BUS NAME	CONTRIBUTION NAME	VOLTAGE L-L	BASE kVA	X"d	X/R	Motor Number
B100;B-100P2A	B100;M-100P2A	480	41.06	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			38.02 + j		380.22 PU
B100;B-100P4A	B100;M-100P4A	480	27.98	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			55.80 + j		558.00 PU
B100;B-100P5	B100;M-100P5	480	87.42	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			17.86 + j		178.59 PU
B100;B-100P5A	B100;M-100P5A	480	27.98	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			55.80 + j		558.00 PU
B100;B-100P6	B100;M-100P6	480	69.73	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			22.39 + j		223.90 PU
B100;B-100P7	B100;M-100P7	480	87.42	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			17.86 + j		178.59 PU
B100;B-100P8	B100;M-100P8	480	23.31	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			66.97 + j		669.72 PU
B100;B-100P9	B100;M-100P9	480	97.75	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			15.97 + j		159.73 PU
B100;B-AC-10	B100;M-AC-10	480	58.28	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			26.79 + j		267.89 PU
B100;B-AC11	B100;M-AC11	480	58.28	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			26.79 + j		267.89 PU

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MOTOR CONTRIBUTION DATA						
BUS NAME	CONTRIBUTION NAME	VOLTAGE L-L	BASE kVA	X'd	X/R	Motor Number
B100;B-AC17	B100;M-AC17	480	87.42	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			17.86 + j		178.59 PU
B100;B-AC24	B100;M-AC24	480	71.62	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			21.80 + j		217.99 PU
B100;B-AC5	B100;M-AC5	480	47.75	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			32.70 + j		326.99 PU
B100;B-AHU3	B100;M-AHU3	480	29.14	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			53.58 + j		535.78 PU
B100;B-CCU1	B100;M-CCU13A	480	667.04	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			2.34 + j		23.41 PU
B100;B-CCU2	B100;M-CCU23B	480	667.04	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			2.34 + j		23.41 PU
B100;B-CF55	B100;M-CF55	480	130.55	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			11.96 + j		119.59 PU
B100;B-CT1FAN	B100;M-CT1FAN	480	58.28	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			26.79 + j		267.89 PU
B100;B-CT2FAN	B100;M-CT2FAN	480	58.28	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			26.79 + j		267.89 PU
B100;B-EMCC4	B100;M-100C67	480	2.33	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			669.72 + j		6697.20 PU

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MOTOR CONTRIBUTION DATA						
BUS NAME	CONTRIBUTION NAME	VOLTAGE L-L	BASE kVA	X"d	X/R	Motor Number
B100;B-EMCEB	B100;M-EMCEB	480	87.42	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)				17.86 + j	178.59 PU
B100;B-FIRE-P	B100;M-FIRE-P	480	125.34	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)				12.46 + j	124.57 PU
B100;B-JYP	B100;M-JYP	480	10.03	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)				155.71 + j	1557.10 PU
B100;B-MCCC2	B100;M-MCCC2	480	1.17	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)				1339.44 + j	13394.4 PU
B100;B-MED-V1	B100;M-MED-V1	480	29.14	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)				53.58 + j	535.78 PU
B100;B-SF-16	B100;M-SF-16	480	34.97	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)				44.65 + j	446.48 PU
B100;B-VFDP1	B100;M-VFDP1	480	31.31	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)				49.87 + j	498.70 PU
B100;MC-EMCBP	B100;M-100CFP	480	13.11	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)				119.06 + j	1190.61 PU
B100;MC-EMCC2	B100;M-COBP56	480	25.06	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)				62.30 + j	623.00 PU
B100;MC-EMCC3	B100;M-COBEM3	480	15.15	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)				103.03 + j	1030.34 PU

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MOTOR CONTRIBUTION DATA						
BUS NAME	CONTRIBUTION NAME	VOLTAGE L-L	BASE kVA	X"d	X/R	Motor Number
B100;MC-EMCD5	B100;M-COB-E5	480	4.66	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			334.86 + j		3348.60 PU
B100;MC-EMCDB	B100;M-COB-EB	480	6.99	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			223.24 + j		2232.40 PU
B100;MC-EMCF1	B100;M-COB-F1	480	11.07	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			140.99 + j		1409.94 PU
B100;MC-EMCFB	B100;M-COB-V2	480	139.87	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			11.16 + j		111.62 PU
B100;MC-MCCA2	B100;M-COB-A2	480	17.48	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			89.30 + j		892.96 PU
B100;MC-MCCA3	B100;M-MCCA3	480	47.79	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			32.67 + j		326.69 PU
B100;MC-MCCA4	B100;M-COB-A4	480	4.66	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			334.86 + j		3348.60 PU
B100;MC-MCCA5	B100;M-MCCA5	480	20.40	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			76.54 + j		765.39 PU
B100;MC-MCCBP	B100;M-MCCBP	480	46.33	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			33.70 + j		336.97 PU
B100;MC-MCCC3	B100;M-MCCC3	480	23.31	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			66.97 + j		669.72 PU

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MOTOR CONTRIBUTION DATA						
BUS NAME	CONTRIBUTION NAME	VOLTAGE L-L	BASE kVA	X'd	X/R	Motor Number
B100;MC-MCCC4	B100;M-100CFN	480	9.32	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			167.43 + j		1674.30 PU
B100;MC-MCCCI	B100;M-WEF39	480	9.32	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			167.43 + j		1674.30 PU
B100;MC-MCCD2	B100;M-COB-EF	480	9.32	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			167.43 + j		1674.30 PU
B100;MC-MCCD3	B100;M-COBCF4	480	18.94	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			82.43 + j		824.27 PU
B100;MC-MCCD4	B100;M-COB-WE	480	4.66	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			334.86 + j		3348.60 PU
B100;MC-MCCD5	B100;M-MCC-D5	480	20.40	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			76.54 + j		765.39 PU
B100;MC-MCCDB	B100;M-100ICF	480	13.40	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			116.47 + j		1164.73 PU
B100;MC-MCCF1	B100;M-MCCF1	480	16.61	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			94.00 + j		939.96 PU
B100;MC-MCCFB	B100;M-MCCFB	480	112.48	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			13.88 + j		138.80 PU
B100;V-100P3	B100;M-100P3	480	86.89	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			17.97 + j		179.69 PU

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MOTOR CONTRIBUTION DATA						
BUS NAME	CONTRIBUTION NAME	VOLTAGE L-L	BASE kVA	X"d	X/R	Motor Number
B100A;V-VFDP1	B100A;M-VFDP1	480	11.66	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			133.94 + j		1339.44 PU
B100A;V-VFDP2	B100A;M-VFDP2	480	11.66	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			133.94 + j		1339.44 PU
B106;B-EL-P1	B106;M-EL-P1	480	46.63	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			33.49 + j		334.86 PU
B106;B-EL-S1	B106;M-EL-S1	480	46.63	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			33.49 + j		334.86 PU
B106;B-FIRE-P	B106;M-FIRE-P	480	42.63	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			36.63 + j		366.25 PU
B22;B-M-ELE2	B22;M-ELE2	208	39.64	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			39.65 + j		396.52 PU
B22;B-M-ELE_P1	B22;M-ELE_P1	208	39.64	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			39.65 + j		396.52 PU
B8;B-BFWP1	B8;M-BFWP1	240	17.48	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			89.30 + j		892.96 PU
B8;B-BFWP2	B8;M-BFWP2	240	17.48	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			89.30 + j		892.96 PU
B8;P-8PBJ	B8;M-8PBJ-CK3	240	9.32	0.17	10.0	1.00
	Pos Sequence Impedance (100 MVA Base)			167.43 + j		1674.30 PU

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MOTOR CONTRIBUTION DATA						
=====						
BUS	CONTRIBUTION	VOLTAGE	BASE			Motor
NAME	NAME	L-L	kVA	X"d	X/R	Number
=====						
B9A;B-M-ELEVA	B9A;M-ELEVATR	480	46.63	0.17	10.0	1.00
	Pos Sequence Impedance	(100 MVA Base)		33.49 + j		334.86 PU
=====						
BMRI;MC-CHILL	BMRI;M-CHILL	480	46.63	0.17	10.0	1.00
	Pos Sequence Impedance	(100 MVA Base)		33.49 + j		334.86 PU

Project: VAMC – Columbia, South Carolina

DAPPER Unbalanced Fault Report

Comprehensive Short Circuit Study Settings

Three Phase Fault	Yes	Faulted Bus	All Buses
Single Line to Ground	Yes	Bus Voltages	First Bus From Fault
Line to Line Fault	No	Branch Currents	First Branch From Fault
Line to Line to Ground	No	Phase or Sequence	Report phase quantities
Motor Contribution	Yes	Fault Current Calculation	Initial Symmetrical RMS (with 1/2 Cycle Asym)
Transformer Tap	Yes	Asym Fault Current at Time	0.50 Cycles
Xformer Phase Shift	Yes		

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;B-100AC2	480	4,683	3.89	0.55	3,703	1.03	0.49	4,683	4,683	4,683	4,683
B100;B-100AC4	480	4,544	3.78	0.51	3,610	1.00	0.45	4,544	4,544	4,544	4,544
B100;B-100AC7	480	9,098	7.56	0.75	7,352	2.04	0.80	9,100	9,098	9,098	9,098
B100;B-100AC8	480	11,439	9.51	0.92	9,192	2.55	0.95	11,451	11,439	11,439	11,439
B100;B-100P1	480	26,067	21.67	1.60	21,603	5.99	1.52	26,569	26,067	26,067	26,067
B100;B-100P10	480	25,959	21.58	1.12	21,904	6.07	1.03	26,054	25,959	25,959	25,959
B100;B-100P11	480	28,063	23.33	1.33	23,871	6.62	1.22	28,310	28,063	28,063	28,063
B100;B-100P12	480	28,063	23.33	1.33	23,871	6.62	1.22	28,310	28,063	28,063	28,063
B100;B-100P1A	480	14,785	12.29	0.51	12,310	3.41	0.47	14,785	14,785	14,785	14,785
B100;B-100P2	480	26,067	21.67	1.60	21,603	5.99	1.52	26,569	26,067	26,067	26,067
B100;B-100P2A	480	14,785	12.29	0.51	12,310	3.41	0.47	14,785	14,785	14,785	14,785
B100;B-100P4A	480	14,740	12.25	0.50	12,288	3.41	0.47	14,740	14,740	14,740	14,740
B100;B-100P5	480	29,978	24.92	1.59	25,689	7.12	1.45	30,553	29,978	29,978	29,978
B100;B-100P5A	480	14,740	12.25	0.50	12,288	3.41	0.47	14,740	14,740	14,740	14,740
B100;B-100P6	480	29,922	24.88	1.58	25,660	7.11	1.45	30,483	29,922	29,922	29,922
B100;B-100P7	480	30,119	25.04	1.60	25,759	7.14	1.45	30,702	30,119	30,119	30,119
B100;B-100P8	480	21,506	17.88	1.54	18,400	5.10	1.42	21,863	21,506	21,506	21,506
B100;B-100P9	480	25,959	21.58	1.12	21,904	6.07	1.03	26,054	25,959	25,959	25,959
B100;B-150A1P	208	3,718	1.34	3.47	3,530	0.42	3.30	4,282	3,718	3,718	3,718
B100;B-150A1S	120	1,707	0.35	8.68	1,870	0.13	10.09	2,396	1,729	1,708	1,707
B100;B-150B2P	208	3,186	1.15	1.54	2,930	0.35	1.41	3,240	3,186	3,186	3,186
B100;B-150B2S	120	1,674	0.35	4.77	1,847	0.13	5.95	2,074	1,675	1,674	1,674
B100;B-150C3P	208	3,186	1.15	1.54	2,930	0.35	1.41	3,240	3,186	3,186	3,186
B100;B-150C3S	120	1,674	0.35	4.77	1,847	0.13	5.95	2,074	1,675	1,674	1,674
B100;B-164A1P	208	3,524	1.27	2.95	3,285	0.39	2.82	3,921	3,524	3,524	3,524
B100;B-164A1S	120	1,687	0.35	7.68	1,854	0.13	9.08	2,314	1,699	1,687	1,687

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;B-164B2P	208	2,819	1.02	1.23	2,533	0.30	1.14	2,837	2,819	2,819	2,819
B100;B-164B2S	120	1,636	0.34	3.87	1,819	0.13	4.90	1,932	1,636	1,636	1,636
B100;B-164C3P	208	2,819	1.02	1.23	2,533	0.30	1.14	2,837	2,819	2,819	2,819
B100;B-164C3S	120	1,636	0.34	3.87	1,819	0.13	4.90	1,932	1,636	1,636	1,636
B100;B-166A1P	208	3,343	1.20	2.60	3,067	0.37	2.49	3,628	3,343	3,343	3,343
B100;B-166A1S	120	1,666	0.35	6.90	1,838	0.13	8.26	2,238	1,673	1,667	1,666
B100;B-166B2P	208	2,508	0.90	1.04	2,214	0.27	0.97	2,514	2,508	2,508	2,508
B100;B-166B2S	120	1,597	0.33	3.27	1,790	0.12	4.17	1,815	1,597	1,597	1,597
B100;B-166C3P	208	2,508	0.90	1.04	2,214	0.27	0.97	2,514	2,508	2,508	2,508
B100;B-166C3S	120	1,597	0.33	3.27	1,790	0.12	4.17	1,815	1,597	1,597	1,597
B100;B-168A1P	208	3,019	1.09	2.13	2,697	0.32	2.07	3,175	3,019	3,019	3,019
B100;B-168A1S	120	1,626	0.34	5.76	1,806	0.13	7.02	2,103	1,629	1,626	1,626
B100;B-168B2P	208	2,030	0.73	0.82	1,752	0.21	0.78	2,031	2,030	2,030	2,030
B100;B-168B2S	120	1,516	0.32	2.51	1,729	0.12	3.24	1,636	1,516	1,516	1,516
B100;B-168BP	208	1,846	0.67	0.75	1,582	0.19	0.72	1,847	1,846	1,846	1,846
B100;B-168BS	120	1,475	0.31	2.26	1,697	0.12	2.92	1,564	1,475	1,475	1,475
B100;B-168C3P	208	2,030	0.73	0.82	1,752	0.21	0.78	2,031	2,030	2,030	2,030
B100;B-168C3S	120	1,516	0.32	2.51	1,729	0.12	3.24	1,636	1,516	1,516	1,516
B100;B-169A1P	208	3,175	1.14	2.33	2,872	0.34	2.25	3,383	3,175	3,175	3,175
B100;B-169A1S	120	1,646	0.34	6.27	1,822	0.13	7.58	2,168	1,650	1,646	1,646
B100;B-169B2P	208	2,248	0.81	0.91	1,959	0.24	0.86	2,250	2,248	2,248	2,248
B100;B-169B2S	120	1,557	0.32	2.83	1,759	0.12	3.64	1,718	1,557	1,557	1,557
B100;B-169C3P	208	2,248	0.81	0.91	1,959	0.24	0.86	2,250	2,248	2,248	2,248
B100;B-169C3S	120	1,557	0.32	2.83	1,759	0.12	3.64	1,718	1,557	1,557	1,557
B100;B-IDP1A1	480	18,085	15.04	1.21	15,281	4.23	1.18	18,184	18,085	18,085	18,085
B100;B-IDP1A2	480	21,352	17.75	2.03	18,127	5.02	1.95	22,300	21,352	21,352	21,352
B100;B-IDP1A3	480	20,077	16.69	1.61	16,979	4.71	1.55	20,474	20,077	20,077	20,077
B100;B-IDP1A4	480	20,077	16.69	1.61	16,979	4.71	1.55	20,474	20,077	20,077	20,077
B100;B-IDP1B1	208	3,389	1.22	9.60	3,466	0.42	11.28	4,839	3,455	3,394	3,389
B100;B-IDP1B2	208	1,647	0.59	14.56	1,664	0.20	15.53	2,497	1,766	1,669	1,648
B100;B-IDP1B3	208	3,928	1.42	10.36	4,030	0.48	11.97	5,680	4,030	3,937	3,929
B100;B-IDP1B4	208	3,928	1.42	10.36	4,030	0.48	11.97	5,680	4,030	3,937	3,929
B100;B-IDP1C1	208	3,373	1.22	9.09	3,443	0.41	10.45	4,773	3,426	3,377	3,373
B100;B-IDP1C3	208	3,872	1.39	9.28	3,943	0.47	10.31	5,498	3,938	3,876	3,872
B100;B-IDP1C4	208	3,909	1.41	9.97	4,001	0.48	11.35	5,618	3,997	3,917	3,910
B100;B-IDP2-9	480	12,933	10.75	0.92	10,617	2.94	0.94	12,947	12,933	12,933	12,933
B100;B-IDP3A1	480	22,494	18.70	1.70	19,451	5.39	1.58	23,044	22,494	22,494	22,494
B100;B-IDP3B1	208	1,962	0.71	13.70	1,984	0.24	14.86	2,952	2,083	1,982	1,963
B100;B-IDP3C1	208	1,957	0.70	13.09	1,977	0.24	14.00	2,927	2,064	1,973	1,958
B100;B-IDP4A1	480	21,282	17.69	2.79	17,575	4.87	2.69	23,411	21,282	21,282	21,282
B100;B-IDP4B1	208	4,546	1.64	12.19	4,686	0.56	13.56	6,735	4,748	4,573	4,548
B100;B-IDP4C1	208	4,477	1.61	10.91	4,573	0.55	11.74	6,525	4,616	4,491	4,477
B100;B-1R1-2	208	3,762	1.36	7.74	3,777	0.45	8.18	5,170	3,791	3,763	3,762
B100;B-1R1-4	208	3,816	1.37	8.43	3,859	0.46	9.10	5,328	3,860	3,819	3,816
B100;B-1R1617	208	1,952	0.70	12.53	1,969	0.24	13.25	2,903	2,046	1,965	1,953
B100;B-1R1819	208	4,342	1.56	9.09	4,362	0.52	9.38	6,144	4,410	4,346	4,342
B100;B-1R1822	208	4,408	1.59	9.91	4,465	0.54	10.40	6,328	4,505	4,416	4,409
B100;B-1R2021	208	4,342	1.56	9.09	4,362	0.52	9.38	6,144	4,410	4,346	4,342
B100;B-1R3-4	208	3,762	1.36	7.74	3,777	0.45	8.18	5,170	3,791	3,763	3,762
B100;B-1R5-6	208	3,798	1.37	8.19	3,831	0.46	8.77	5,274	3,836	3,800	3,798

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;B-1R5-8	208	3,853	1.39	8.98	3,914	0.47	9.87	5,440	3,911	3,857	3,853
B100;B-1R7-8	208	3,798	1.37	8.19	3,831	0.46	8.77	5,274	3,836	3,800	3,798
B100;B-1R9-11	208	3,328	1.20	7.87	3,375	0.41	8.60	4,586	3,355	3,329	3,328
B100;B-2DP1	208	1,270	0.46	10.12	1,269	0.15	10.16	1,830	1,301	1,273	1,270
B100;B-2DP2	208	1,891	0.68	8.33	1,889	0.23	8.37	2,634	1,911	1,892	1,891
B100;B-2DP3	208	1,286	0.46	6.33	1,288	0.15	6.43	1,696	1,289	1,286	1,286
B100;B-2DPC1	208	1,283	0.46	11.69	1,288	0.15	12.09	1,890	1,333	1,289	1,283
B100;B-2DPC2	208	1,920	0.69	9.95	1,932	0.23	10.38	2,759	1,963	1,924	1,920
B100;B-2DPC3	208	1,293	0.47	6.98	1,298	0.16	7.24	1,741	1,299	1,293	1,293
B100;B-2DPT1P	480	18,197	15.13	1.42	15,282	4.24	1.39	18,411	18,197	18,197	18,197
B100;B-2DPT1S	208	1,296	0.47	13.89	1,307	0.16	15.01	1,954	1,379	1,310	1,297
B100;B-2DPT2P	480	18,197	15.13	1.42	15,282	4.24	1.39	18,411	18,197	18,197	18,197
B100;B-2DPT2S	208	1,950	0.70	12.45	1,976	0.24	13.84	2,897	2,042	1,962	1,950
B100;B-2DPT3P	480	11,098	9.23	0.59	9,264	2.57	0.59	11,098	11,098	11,098	11,098
B100;B-2DPT3S	208	1,314	0.47	10.16	1,327	0.16	11.85	1,893	1,345	1,316	1,314
B100;B-2DPT4P	480	19,733	16.41	1.85	16,623	4.61	1.80	20,383	19,733	19,733	19,733
B100;B-2DPT4S	208	4,908	1.77	9.82	5,076	0.61	11.44	7,036	5,013	4,916	4,908
B100;B-3DP1	208	1,906	0.69	8.66	1,914	0.23	9.11	2,674	1,930	1,907	1,906
B100;B-3DP2	208	1,906	0.69	8.66	1,914	0.23	9.11	2,674	1,930	1,907	1,906
B100;B-3DP3	208	3,750	1.35	7.36	3,784	0.45	7.99	5,102	3,772	3,751	3,750
B100;B-3DPC1	208	1,916	0.69	9.18	1,929	0.23	9.80	2,715	1,947	1,918	1,916
B100;B-3DPC2	208	1,916	0.69	9.18	1,929	0.23	9.80	2,715	1,947	1,918	1,916
B100;B-3DPC3	208	3,786	1.36	7.75	3,838	0.46	8.55	5,204	3,815	3,787	3,786
B100;B-3DPT1P	480	15,922	13.24	1.11	13,318	3.69	1.11	15,977	15,922	15,922	15,922
B100;B-3DPT1S	208	1,945	0.70	11.24	1,973	0.24	12.80	2,848	2,012	1,953	1,946
B100;B-3DPT2P	480	15,922	13.24	1.11	13,318	3.69	1.11	15,977	15,922	15,922	15,922
B100;B-3DPT2S	208	1,945	0.70	11.24	1,973	0.24	12.80	2,848	2,012	1,953	1,946
B100;B-3DPT3P	480	17,556	14.60	1.40	14,658	4.06	1.39	17,753	17,556	17,556	17,556
B100;B-3DPT3S	208	3,897	1.40	9.31	4,008	0.48	10.99	5,537	3,964	3,901	3,897
B100;B-3ED1TP	480	5,097	4.24	0.36	4,188	1.16	0.39	5,097	5,097	5,097	5,097
B100;B-3ED1TS	208	808	0.29	8.39	816	0.10	10.17	1,127	817	808	808
B100;B-3WD1TP	480	3,946	3.28	0.37	3,174	0.88	0.36	3,946	3,946	3,946	3,946
B100;B-3WD1TS	208	800	0.29	7.30	811	0.10	9.05	1,087	805	800	800
B100;B-4DP1	208	1,883	0.68	7.71	1,884	0.23	7.95	2,586	1,897	1,884	1,883
B100;B-4DP2	208	1,867	0.67	5.84	1,864	0.22	5.70	2,422	1,870	1,867	1,867
B100;B-4DP3	208	3,667	1.32	6.59	3,671	0.44	7.02	4,880	3,679	3,667	3,667
B100;B-4DPC1	208	1,913	0.69	9.07	1,927	0.23	9.72	2,705	1,942	1,914	1,913
B100;B-4DPC2	208	1,906	0.69	7.61	1,918	0.23	7.79	2,610	1,919	1,906	1,906
B100;B-4DPC3	208	3,773	1.36	7.61	3,829	0.46	8.43	5,168	3,800	3,774	3,773
B100;B-4DPT1P	480	15,305	12.72	1.11	12,731	3.53	1.12	15,358	15,305	15,305	15,305
B100;B-4DPT1S	208	1,942	0.70	11.08	1,971	0.24	12.65	2,837	2,006	1,949	1,942
B100;B-4DPT2P	480	15,305	12.72	1.11	12,731	3.53	1.12	15,358	15,305	15,305	15,305
B100;B-4DPT2S	208	1,942	0.70	11.08	1,971	0.24	12.65	2,837	2,006	1,949	1,942
B100;B-4DPT3P	480	16,815	13.98	1.38	13,947	3.87	1.38	16,994	16,815	16,815	16,815
B100;B-4DPT3S	208	3,884	1.40	9.09	3,999	0.48	10.77	5,495	3,945	3,887	3,884
B100;B-5DP15R	208	1,888	0.68	8.68	1,887	0.23	8.61	2,650	1,913	1,890	1,888
B100;B-5DP1C	208	1,917	0.69	10.47	1,930	0.23	10.75	2,777	1,969	1,922	1,917
B100;B-5DP1TP	480	18,501	15.38	1.82	15,392	4.27	1.80	19,074	18,501	18,501	18,501
B100;B-5DP1TS	208	1,946	0.70	13.27	1,974	0.24	14.50	2,917	2,057	1,963	1,947
B100;B-5DP25R	208	1,888	0.68	8.68	1,887	0.23	8.61	2,650	1,913	1,890	1,888

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;B-5DP2C	208	1,917	0.69	10.47	1,930	0.23	10.75	2,777	1,969	1,922	1,917
B100;B-5DP2TP	480	18,501	15.38	1.82	15,392	4.27	1.80	19,074	18,501	18,501	18,501
B100;B-5DP2TS	208	1,946	0.70	13.27	1,974	0.24	14.50	2,917	2,057	1,963	1,947
B100;B-A-1L	480	32,591	27.10	5.49	31,856	8.83	4.33	41,697	32,624	32,591	32,591
B100;B-A-1N	480	32,591	27.10	5.49	31,856	8.83	4.33	41,697	32,625	32,591	32,591
B100;B-A-2L	480	33,048	27.48	5.79	32,516	9.01	4.52	42,777	33,097	33,048	33,048
B100;B-A-2N	480	33,048	27.48	5.79	32,516	9.01	4.52	42,777	33,097	33,048	33,048
B100;B-A-3L	480	33,515	27.86	6.13	33,201	9.20	4.73	43,921	33,586	33,516	33,515
B100;B-A-3N	480	33,515	27.86	6.13	33,201	9.20	4.73	43,922	33,586	33,516	33,515
B100;B-A-4L	480	32,143	26.72	5.23	31,219	8.65	4.17	40,677	32,167	32,143	32,143
B100;B-A-4N	480	32,143	26.72	5.23	31,220	8.65	4.17	40,677	32,167	32,144	32,143
B100;B-A-5L	480	32,143	26.72	5.23	31,219	8.65	4.17	40,677	32,167	32,143	32,143
B100;B-A-5N	480	32,143	26.72	5.23	31,220	8.65	4.17	40,677	32,167	32,144	32,143
B100;B-A-6L	480	32,650	27.15	5.54	31,547	8.74	4.29	41,859	32,687	32,651	32,650
B100;B-A-6N	480	32,651	27.15	5.54	31,547	8.74	4.29	41,859	32,687	32,651	32,651
B100;B-A-7L	480	32,987	27.42	5.75	31,762	8.80	4.36	42,644	33,034	32,988	32,987
B100;B-A-7N	480	32,987	27.43	5.75	31,762	8.80	4.36	42,644	33,034	32,988	32,987
B100;B-A-8L	480	33,993	28.26	6.52	33,912	9.40	4.97	45,136	34,097	33,995	33,993
B100;B-A-8N	480	33,993	28.26	6.52	33,912	9.40	4.97	45,137	34,098	33,995	33,993
B100;B-A-9E	480	12,668	10.53	6.38	11,198	3.10	4.53	16,744	12,702	12,668	12,668
B100;B-A-9L	480	34,179	28.42	6.69	34,040	9.43	5.03	45,624	34,301	34,182	34,179
B100;B-A-9N	480	34,179	28.42	6.69	34,040	9.43	5.03	45,625	34,301	34,182	34,179
B100;B-AC-10	480	26,195	21.78	2.55	23,013	6.38	2.24	28,341	26,195	26,195	26,195
B100;B-AC11	480	9,283	7.72	0.76	7,292	2.02	0.77	9,286	9,283	9,283	9,283
B100;B-AC17	480	13,806	11.48	1.34	10,876	3.01	1.37	13,931	13,806	13,806	13,806
B100;B-AC24	480	17,017	14.15	1.41	13,838	3.83	1.39	17,214	17,017	17,017	17,017
B100;B-AC5	480	19,106	15.88	1.41	16,012	4.44	1.35	19,326	19,106	19,106	19,106
B100;B-AHU3	480	7,890	6.56	0.59	6,409	1.78	0.61	7,891	7,890	7,890	7,890
B100;B-BDP10A	480	15,075	12.53	0.80	12,720	3.53	0.77	15,080	15,075	15,075	15,075
B100;B-BDP10B	208	1,104	0.40	12.61	1,112	0.13	13.99	1,643	1,158	1,111	1,104
B100;B-BDP10C	208	1,098	0.40	10.97	1,104	0.13	11.68	1,602	1,133	1,102	1,098
B100;B-BDP10D	480	15,075	12.53	0.80	12,720	3.53	0.77	15,080	15,075	15,075	15,075
B100;B-BDP10E	208	1,104	0.40	12.61	1,112	0.13	13.99	1,643	1,158	1,111	1,104
B100;B-BDP10F	208	1,098	0.40	10.97	1,104	0.13	11.68	1,602	1,133	1,102	1,098
B100;B-BDP5A	480	27,779	23.10	2.65	25,438	7.05	2.32	30,256	27,779	27,779	27,779
B100;B-BDP5B	208	12,102	4.36	8.86	12,887	1.55	10.40	17,048	12,273	12,112	12,102
B100;B-BDP5C	208	11,934	4.30	8.27	12,599	1.51	9.42	16,602	12,058	11,940	11,934
B100;B-BDP5D	208	11,452	4.13	6.94	11,802	1.42	7.47	15,401	11,502	11,453	11,452
B100;B-BDP5RT	480	16,832	13.99	0.63	14,505	4.02	0.55	16,833	16,832	16,832	16,832
B100;B-BDP6B1	208	1,921	0.69	9.02	1,933	0.23	9.68	2,714	1,950	1,923	1,921
B100;B-BDP6B2	208	3,808	1.37	7.74	3,853	0.46	8.55	5,233	3,837	3,809	3,808
B100;B-BDP6B3	208	3,808	1.37	7.74	3,853	0.46	8.55	5,233	3,837	3,809	3,808
B100;B-BK-C4R	208	3,860	1.39	8.14	3,935	0.47	9.32	5,355	3,898	3,862	3,860
B100;B-BK-C5R	208	1,253	0.45	6.03	1,272	0.15	7.06	1,636	1,255	1,253	1,253
B100;B-BK-E1R	208	3,708	1.34	5.88	3,831	0.46	7.14	4,816	3,714	3,708	3,708
B100;B-BK-E2R	208	1,283	0.46	8.45	1,292	0.16	9.14	1,792	1,298	1,284	1,283
B100;B-BK-E3R	208	1,254	0.45	5.78	1,273	0.15	6.83	1,622	1,256	1,254	1,254
B100;B-BK-E4R	208	1,259	0.45	6.88	1,276	0.15	7.83	1,690	1,264	1,259	1,259
B100;B-BK-E5R	208	1,247	0.45	5.47	1,268	0.15	6.53	1,594	1,248	1,247	1,247
B100;B-BK-EBR	208	1,255	0.45	5.98	1,266	0.15	6.50	1,637	1,258	1,256	1,255

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;B-BK-EP	480	14,970	12.45	18.20	14,599	4.05	10.69	23,270	16,751	15,437	15,030
B100;B-BR10-T	208	1,304	0.47	12.05	1,313	0.16	13.52	1,929	1,360	1,312	1,305
B100;B-BR123	208	1,906	0.69	8.29	1,911	0.23	8.70	2,653	1,926	1,907	1,906
B100;B-BR13TP	480	10,101	8.40	0.48	8,422	2.33	0.47	10,101	10,101	10,101	10,101
B100;B-BR13TS	208	1,433	0.52	9.12	1,448	0.17	10.87	2,028	1,455	1,434	1,433
B100;B-BR456	208	3,700	1.33	6.68	3,694	0.44	7.09	4,938	3,714	3,701	3,700
B100;B-BR789	208	3,700	1.33	6.68	3,694	0.44	7.09	4,938	3,714	3,701	3,700
B100;B-C-C2R1	208	4,440	1.60	9.88	4,548	0.55	10.90	6,370	4,536	4,447	4,440
B100;B-C-C2R4	208	4,440	1.60	9.88	4,548	0.55	10.90	6,370	4,536	4,447	4,440
B100;B-C-URP6	208	2,999	1.08	4.14	3,085	0.37	5.30	3,597	2,999	2,999	2,999
B100;B-C1R1,2	208	1,257	0.45	6.28	1,267	0.15	6.73	1,656	1,260	1,257	1,257
B100;B-C2R1-3	208	4,372	1.58	9.07	4,441	0.53	9.76	6,183	4,440	4,377	4,372
B100;B-C2R2,3	208	4,307	1.55	8.39	4,338	0.52	8.87	6,008	4,355	4,309	4,307
B100;B-C2R4,5	208	4,372	1.58	9.07	4,441	0.53	9.76	6,183	4,440	4,377	4,372
B100;B-C4R1,2	208	3,805	1.37	7.49	3,851	0.46	8.33	5,195	3,829	3,805	3,805
B100;B-C5R1,2	208	1,242	0.45	5.34	1,257	0.15	5.98	1,579	1,243	1,242	1,242
B100;B-CC1R12	208	1,267	0.46	7.26	1,281	0.15	8.16	1,720	1,274	1,268	1,267
B100;B-CCU1	480	37,609	31.27	1.77	33,426	9.26	1.34	38,666	37,609	37,609	37,609
B100;B-CCU2	480	37,609	31.27	1.77	33,426	9.26	1.34	38,666	37,609	37,609	37,609
B100;B-CF55	480	4,037	3.36	0.52	3,175	0.88	0.41	4,037	4,037	4,037	4,037
B100;B-CT1FAN	480	34,755	28.90	2.04	30,651	8.49	1.80	36,323	34,755	34,755	34,755
B100;B-CT2FAN	480	23,059	19.17	1.98	19,845	5.50	1.80	24,002	23,059	23,059	23,059
B100;B-E1R124	208	3,655	1.32	5.56	3,750	0.45	6.59	4,690	3,659	3,655	3,655
B100;B-E1R16AP	480	19,067	15.85	1.32	15,923	4.41	1.27	19,231	19,067	19,067	19,067
B100;B-E1R16AS	208	1,298	0.47	13.87	1,309	0.16	15.00	1,957	1,381	1,312	1,299
B100;B-E1R2,4	208	3,603	1.30	5.28	3,671	0.44	6.13	4,571	3,606	3,603	3,603
B100;B-E2R1-2	208	1,273	0.46	7.13	1,278	0.15	7.37	1,721	1,279	1,273	1,273
B100;B-E2WO1M	480	16,045	13.34	1.62	13,037	3.61	1.66	16,377	16,045	16,045	16,045
B100;B-E3R1,2	208	1,243	0.45	5.14	1,258	0.15	5.81	1,567	1,243	1,243	1,243
B100;B-E4R1,2	208	1,249	0.45	6.00	1,261	0.15	6.51	1,629	1,251	1,249	1,249
B100;B-E5R1,2	208	1,236	0.45	4.90	1,253	0.15	5.59	1,541	1,236	1,236	1,236
B100;B-EBDPA3	480	22,873	19.02	1.57	20,047	5.56	1.42	23,285	22,873	22,873	22,873
B100;B-EBPR1S	208	1,396	0.50	16.86	1,406	0.17	17.22	2,153	1,538	1,430	1,400
B100;B-EBR1-2	208	1,244	0.45	5.30	1,251	0.15	5.58	1,580	1,245	1,244	1,244
B100;B-EBR10P	480	23,446	19.49	1.42	20,453	5.67	1.26	23,721	23,446	23,446	23,446
B100;B-EBR10S	208	3,433	1.24	11.18	3,496	0.42	12.73	5,022	3,549	3,445	3,433
B100;B-EMCC4	480	6,541	5.44	0.53	5,325	1.48	0.58	6,541	6,541	6,541	6,541
B100;B-EMCEB	480	12,860	10.69	0.74	10,554	2.92	0.69	12,862	12,860	12,860	12,860
B100;B-EP-2A	480	13,396	11.14	7.95	12,106	3.35	5.14	18,502	13,513	13,401	13,396
B100;B-EP-2B	480	13,396	11.14	7.95	12,106	3.35	5.14	18,502	13,513	13,401	13,396
B100;B-EP-2C	480	12,727	10.58	6.49	11,270	3.12	4.57	16,881	12,765	12,728	12,727
B100;B-EP-2D	480	12,727	10.58	6.49	11,270	3.12	4.57	16,881	12,765	12,728	12,727
B100;B-EP-3A	480	13,396	11.14	7.95	12,106	3.35	5.14	18,502	13,513	13,401	13,396
B100;B-EP-3B	480	13,396	11.14	7.95	12,106	3.35	5.14	18,502	13,513	13,401	13,396
B100;B-EP-3C	480	13,396	11.14	7.95	12,106	3.35	5.14	18,502	13,513	13,401	13,396
B100;B-EP-3D	480	12,727	10.58	6.49	11,270	3.12	4.57	16,881	12,765	12,728	12,727
B100;B-FD2	13,090	3,184	72.20	12.91	3,214	24.29	13.08	4,755	3,352	3,209	3,186
B100;B-FD3	13,090	3,184	72.19	12.88	3,213	24.28	13.03	4,753	3,350	3,208	3,185
B100;B-FD5	13,090	3,200	72.55	13.48	3,226	24.38	13.46	4,805	3,389	3,230	3,202
B100;B-FIRE-P	480	25,391	21.11	2.17	22,451	6.22	1.90	26,759	25,391	25,391	25,391

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;B-G-EP	480	15,016	12.48	20.00	15,016	4.16	20.00	23,556	17,145	15,652	15,115
B100;B-JYP	480	14,393	11.97	0.64	12,124	3.36	0.59	14,394	14,393	14,393	14,393
B100;B-LA108	480	6,807	5.66	0.48	5,601	1.55	0.51	6,807	6,807	6,807	6,807
B100;B-MCCC2	480	3,166	2.63	0.23	2,628	0.73	0.25	3,166	3,166	3,166	3,166
B100;B-MED-V1	480	11,833	9.84	0.69	9,641	2.67	0.69	11,834	11,833	11,833	11,833
B100;B-RCPP1	480	25,686	21.35	1.65	23,223	6.44	1.43	26,249	25,686	25,686	25,686
B100;B-RCPP2	480	25,686	21.35	1.65	23,223	6.44	1.43	26,249	25,686	25,686	25,686
B100;B-RCPP3	480	25,686	21.35	1.65	23,223	6.44	1.43	26,249	25,686	25,686	25,686
B100;B-RCPP4	480	25,686	21.35	1.65	23,223	6.44	1.43	26,249	25,686	25,686	25,686
B100;B-RCPS5	480	25,686	21.35	1.65	23,223	6.44	1.43	26,249	25,686	25,686	25,686
B100;B-RCPS6	480	25,686	21.35	1.65	23,223	6.44	1.43	26,249	25,686	25,686	25,686
B100;B-RCPS7	480	25,686	21.35	1.65	23,223	6.44	1.43	26,249	25,686	25,686	25,686
B100;B-RCPS8	480	25,686	21.35	1.65	23,223	6.44	1.43	26,249	25,686	25,686	25,686
B100;B-RL1,2	208	2,910	1.05	3.27	3,004	0.36	3.83	3,308	2,910	2,910	2,910
B100;B-RP1,2	208	3,067	1.10	4.32	3,193	0.38	5.68	3,715	3,067	3,067	3,067
B100;B-RP6	208	2,937	1.06	3.86	2,994	0.36	4.76	3,465	2,937	2,937	2,937
B100;B-SF-16	480	11,969	9.95	1.08	9,488	2.63	1.12	12,004	11,969	11,969	11,969
B100;B-T-BMEP	480	5,121	4.26	0.32	4,220	1.17	0.34	5,121	5,121	5,121	5,121
B100;B-T-BMES	208	2,418	0.87	3.95	2,504	0.30	5.26	2,869	2,418	2,418	2,418
B100;B-T-C4RP	480	17,946	14.92	1.21	15,176	4.21	1.17	18,048	17,946	17,946	17,946
B100;B-T-C4RS	208	3,917	1.41	8.93	4,023	0.48	10.63	5,526	3,974	3,921	3,917
B100;B-T-C5RP	480	5,505	4.58	0.46	4,508	1.25	0.51	5,505	5,505	5,505	5,505
B100;B-T-C5RS	208	1,264	0.46	6.92	1,286	0.15	8.65	1,699	1,269	1,264	1,264
B100;B-T-E2RP	480	11,429	9.50	0.61	9,522	2.64	0.61	11,429	11,429	11,429	11,429
B100;B-T-E2RS	208	1,293	0.47	10.40	1,306	0.16	12.07	1,870	1,327	1,296	1,293
B100;B-T-E3RP	480	5,213	4.33	0.41	4,288	1.19	0.45	5,213	5,213	5,213	5,213
B100;B-T-E3RS	208	1,265	0.46	6.60	1,287	0.15	8.30	1,683	1,269	1,265	1,265
B100;B-T-E4RP	480	6,824	5.67	0.58	5,556	1.54	0.63	6,824	6,824	6,824	6,824
B100;B-T-E4RS	208	1,269	0.46	8.09	1,290	0.15	9.85	1,759	1,281	1,270	1,269
B100;B-T-E5RP	480	4,718	3.92	0.41	3,875	1.07	0.45	4,718	4,718	4,718	4,718
B100;B-T-E5RS	208	1,258	0.45	6.19	1,283	0.15	7.86	1,652	1,261	1,258	1,258
B100;B-T-EBR	480	7,099	5.90	0.50	5,839	1.62	0.53	7,099	7,099	7,099	7,099
B100;B-T-EBRS	208	1,276	0.46	8.08	1,295	0.16	9.84	1,768	1,288	1,277	1,276
B100;B-T1-A-P	13,090	3,199	72.53	13.44	3,225	24.37	13.41	4,802	3,387	3,229	3,201
B100;B-T1-A-S	480	46,829	38.93	11.03	48,294	13.38	12.55	68,363	48,337	46,985	46,834
B100;B-T2-A-P	13,090	3,184	72.18	12.84	3,212	24.28	12.98	4,750	3,348	3,207	3,185
B100;B-T2-A-S	480	38,085	31.66	11.81	41,509	11.50	13.04	56,166	39,619	38,271	38,092
B100;B-T2-B-P	13,090	3,184	72.18	12.88	3,213	24.28	13.03	4,752	3,350	3,208	3,185
B100;B-T2-B-S	480	37,729	31.37	13.62	41,224	11.42	14.58	56,728	40,026	38,101	37,752
B100;B-T456P	480	18,557	15.43	1.31	15,707	4.35	1.26	18,708	18,557	18,557	18,557
B100;B-T456S	208	3,921	1.41	9.31	4,025	0.48	10.99	5,570	3,988	3,925	3,921
B100;B-T789P	480	18,557	15.43	1.31	15,707	4.35	1.26	18,708	18,557	18,557	18,557
B100;B-T789S	208	3,921	1.41	9.31	4,025	0.48	10.99	5,570	3,988	3,925	3,921
B100;B-TBR123S	208	1,951	0.70	11.01	1,977	0.24	12.60	2,847	2,013	1,957	1,951
B100;B-TBR13P	480	16,236	13.50	0.98	13,736	3.81	0.96	16,263	16,236	16,236	16,236
B100;B-TC1R1P	480	7,785	6.47	0.57	6,385	1.77	0.60	7,785	7,785	7,785	7,785
B100;B-TC1R1S	208	1,277	0.46	8.63	1,295	0.16	10.39	1,791	1,294	1,278	1,277
B100;B-TC1R3P	480	11,563	9.61	1.03	9,333	2.59	1.08	11,588	11,563	11,563	11,563
B100;B-TC1R3S	208	1,536	0.55	10.69	1,559	0.19	12.31	2,232	1,580	1,540	1,536
B100;B-TC2R1P	480	19,057	15.84	2.27	15,692	4.35	2.26	20,216	19,057	19,057	19,057

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;B-TC2R1S	208	4,509	1.62	10.89	4,660	0.56	12.42	6,570	4,648	4,523	4,509
B100;B-TC2R4P	480	19,057	15.84	2.27	15,692	4.35	2.26	20,216	19,057	19,057	19,057
B100;B-TC2R4S	208	4,509	1.62	10.89	4,660	0.56	12.42	6,570	4,648	4,523	4,509
B100;B-TC2WDP	480	7,807	6.49	0.53	6,464	1.79	0.57	7,807	7,807	7,807	7,807
B100;B-TC2WDS	208	1,823	0.66	6.99	1,860	0.22	8.71	2,456	1,832	1,824	1,823
B100;B-TC3R1P	480	4,605	3.83	0.36	3,799	1.05	0.40	4,605	4,605	4,605	4,605
B100;B-TC3R1S	208	1,346	0.48	5.75	1,373	0.16	7.37	1,739	1,347	1,346	1,346
B100;B-TE1R1P	480	10,871	9.04	0.95	8,780	2.43	1.00	10,885	10,871	10,871	10,871
B100;B-TE1R1S	208	3,762	1.36	6.25	3,916	0.47	7.83	4,951	3,771	3,762	3,762
B100;B-TE1R3P	480	14,890	12.38	0.86	12,334	3.42	0.85	14,901	14,890	14,890	14,890
B100;B-TE1R3S	208	1,296	0.47	12.07	1,307	0.16	13.54	1,917	1,352	1,303	1,296
B100;B-TE2DP3	208	3,339	1.20	10.12	3,431	0.41	11.74	4,810	3,418	3,346	3,339
B100;B-TEB7AP	480	27,154	22.58	2.98	24,242	6.72	2.58	30,274	27,154	27,154	27,154
B100;B-TEB7AS	208	12,031	4.33	9.36	12,832	1.54	10.88	17,110	12,244	12,046	12,032
B100;B-TEB9BP	480	17,307	14.39	1.25	14,359	3.98	1.22	17,421	17,307	17,307	17,307
B100;B-TEB9BS	208	3,213	1.16	9.75	3,287	0.39	11.42	4,600	3,279	3,218	3,213
B100;B-TLS1RP	480	6,477	5.39	0.47	5,330	1.48	0.50	6,477	6,477	6,477	6,477
B100;B-TLS1RS	208	1,360	0.49	7.32	1,382	0.17	9.07	1,849	1,368	1,360	1,360
B100;B-TLS2RP	480	4,819	4.01	0.36	3,978	1.10	0.40	4,819	4,819	4,819	4,819
B100;B-TLS2RS	208	1,349	0.49	5.92	1,376	0.17	7.57	1,755	1,351	1,349	1,349
B100;B-TLS3RP	480	4,595	3.82	0.36	3,790	1.05	0.40	4,595	4,595	4,595	4,595
B100;B-TLS3RS	208	1,345	0.48	5.74	1,373	0.16	7.36	1,738	1,347	1,345	1,345
B100;B-TLS4RP	480	4,392	3.65	0.36	3,619	1.00	0.40	4,392	4,392	4,392	4,392
B100;B-TLS4RS	208	1,341	0.48	5.57	1,371	0.16	7.17	1,722	1,343	1,341	1,341
B100;B-TLS5RP	480	4,205	3.50	0.36	3,463	0.96	0.40	4,205	4,205	4,205	4,205
B100;B-TLS5RS	208	1,338	0.48	5.41	1,368	0.16	6.99	1,706	1,339	1,338	1,338
B100;B-TLSBRP	480	6,022	5.01	0.41	4,974	1.38	0.44	6,022	6,022	6,022	6,022
B100;B-TLSBRS	208	1,360	0.49	6.90	1,383	0.17	8.62	1,827	1,366	1,361	1,360
B100;B-TRL12P	480	6,218	5.17	0.50	5,092	1.41	0.54	6,218	6,218	6,218	6,218
B100;B-TRL12S	208	3,026	1.09	4.09	3,164	0.38	5.38	3,618	3,026	3,026	3,026
B100;B-U-EBDP	480	0	0.00	0.00	0	0.00	1,000,	0	0	0	0
B100;B-U-RP6	208	2,940	1.06	3.86	2,999	0.36	4.76	3,469	2,940	2,940	2,940
B100;B-VFDP1	480	17,001	14.13	1.22	14,019	3.89	1.19	17,100	17,001	17,001	17,001
B100;MC-CT2	480	42,378	35.23	6.07	39,742	11.01	4.73	55,420	42,463	42,379	42,378
B100;MC-ELES9	480	17,765	14.77	0.87	15,214	4.22	0.80	17,777	17,765	17,765	17,765
B100;MC-EMCBP	480	28,736	23.89	4.18	25,914	7.18	3.49	34,539	28,740	28,736	28,736
B100;MC-EMCC2	480	12,935	10.75	1.20	10,253	2.84	1.23	13,003	12,935	12,935	12,935
B100;MC-EMCC3	480	7,668	6.37	0.61	6,210	1.72	0.65	7,668	7,668	7,668	7,668
B100;MC-EMCC4	480	10,640	8.85	1.04	8,448	2.34	1.12	10,666	10,640	10,640	10,640
B100;MC-EMCD5	480	7,349	6.11	0.59	5,966	1.65	0.63	7,349	7,349	7,349	7,349
B100;MC-EMCDB	480	13,586	11.29	1.20	10,928	3.03	1.25	13,659	13,586	13,586	13,586
B100;MC-EMCEB	480	17,388	14.46	0.96	14,541	4.03	0.88	17,412	17,388	17,388	17,388
B100;MC-EMCF1	480	21,787	18.11	2.52	18,170	5.04	2.38	23,516	21,787	21,787	21,787
B100;MC-EMCFB	480	23,160	19.25	3.10	19,207	5.32	2.86	26,041	23,160	23,160	23,160
B100;MC-LSMCG	480	6,024	5.01	0.35	5,058	1.40	0.36	6,024	6,024	6,024	6,024
B100;MC-MCCA2	480	14,628	12.16	1.25	11,810	3.27	1.26	14,725	14,628	14,628	14,628
B100;MC-MCCA3	480	10,593	8.81	0.81	8,564	2.37	0.83	10,598	10,593	10,593	10,593
B100;MC-MCCA4	480	12,561	10.44	1.13	10,073	2.79	1.17	12,609	12,561	12,561	12,561
B100;MC-MCCA5	480	11,715	9.74	1.08	9,377	2.60	1.14	11,750	11,715	11,715	11,715
B100;MC-MCCBP	480	20,192	16.79	2.71	16,508	4.57	2.69	22,087	20,192	20,192	20,192

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;MC-MCCC2	480	8,730	7.26	0.63	7,134	1.98	0.67	8,731	8,730	8,730	8,730
B100;MC-MCCC3	480	8,314	6.91	0.57	6,798	1.88	0.59	8,314	8,314	8,314	8,314
B100;MC-MCCC4	480	12,864	10.69	1.11	9,990	2.77	1.10	12,908	12,864	12,864	12,864
B100;MC-MCCCB	480	15,707	13.06	1.24	12,854	3.56	1.25	15,807	15,707	15,707	15,707
B100;MC-MCCCI	480	17,558	14.60	2.33	13,930	3.86	2.34	18,703	17,558	17,558	17,558
B100;MC-MCCD2	480	9,524	7.92	0.67	7,751	2.15	0.69	9,524	9,524	9,524	9,524
B100;MC-MCCD3	480	5,889	4.90	0.55	4,683	1.30	0.51	5,889	5,889	5,889	5,889
B100;MC-MCCD4	480	5,483	4.56	0.55	4,340	1.20	0.51	5,483	5,483	5,483	5,483
B100;MC-MCCD5	480	5,083	4.23	0.41	4,164	1.15	0.43	5,083	5,083	5,083	5,083
B100;MC-MCCDB	480	25,251	20.99	2.92	22,101	6.12	2.65	28,038	25,251	25,251	25,251
B100;MC-MCCF1	480	20,744	17.25	2.61	17,339	4.81	2.53	22,527	20,744	20,744	20,744
B100;MC-MCCFB	480	23,354	19.42	2.67	19,888	5.51	2.47	25,480	23,354	23,354	23,354
B100;MC-MCEB1	480	42,387	35.24	6.08	39,748	11.02	4.73	55,449	42,473	42,389	42,387
B100;MC-MCEB2	480	42,151	35.04	5.93	39,605	10.98	4.68	54,857	42,224	42,152	42,151
B100;MC-MCEB3	480	27,863	23.17	3.03	25,196	6.98	2.59	31,170	27,863	27,863	27,863
B100;MC-MCEB4	480	42,124	35.02	5.92	39,589	10.97	4.67	54,787	42,196	42,125	42,124
B100;P-150A1	120	-	-	-	1,835	0.13	8.44	-	-	-	-
B100;P-150B2	120	-	-	-	1,789	0.12	4.32	-	-	-	-
B100;P-150C3	120	-	-	-	1,789	0.12	4.32	-	-	-	-
B100;P-164A1	120	-	-	-	1,819	0.13	7.74	-	-	-	-
B100;P-164B2	120	-	-	-	1,759	0.12	3.75	-	-	-	-
B100;P-164C3	120	-	-	-	1,759	0.12	3.75	-	-	-	-
B100;P-166A1	120	-	-	-	1,803	0.12	7.15	-	-	-	-
B100;P-166B2	120	-	-	-	1,728	0.12	3.32	-	-	-	-
B100;P-166C3	120	-	-	-	1,728	0.12	3.32	-	-	-	-
B100;P-168A1	120	-	-	-	1,772	0.12	6.23	-	-	-	-
B100;P-168B	120	-	-	-	1,634	0.11	2.50	-	-	-	-
B100;P-168B2R	120	-	-	-	1,666	0.12	2.72	-	-	-	-
B100;P-168C3	120	-	-	-	1,666	0.12	2.72	-	-	-	-
B100;P-169A1	120	-	-	-	1,787	0.12	6.65	-	-	-	-
B100;P-169B2	120	-	-	-	1,697	0.12	2.99	-	-	-	-
B100;P-169C3	120	-	-	-	1,697	0.12	2.99	-	-	-	-
B100;P-1C90	480	2,809	2.34	4.75	2,982	0.83	6.08	3,477	2,810	2,809	2,809
B100;P-1DP1	480	24,793	20.61	3.49	21,625	5.99	3.20	28,590	24,793	24,793	24,793
B100;P-1DP2	480	26,868	22.34	3.95	24,072	6.67	3.50	31,879	26,870	26,868	26,868
B100;P-1DP2S1	480	12,933	10.75	0.92	10,617	2.94	0.94	12,947	12,933	12,933	12,933
B100;P-1DP2S2	480	12,933	10.75	0.92	10,617	2.94	0.94	12,947	12,933	12,933	12,933
B100;P-1DP2S3	480	12,933	10.75	0.92	10,617	2.94	0.94	12,947	12,933	12,933	12,933
B100;P-1DP2S4	480	12,933	10.75	0.92	10,617	2.94	0.94	12,947	12,933	12,933	12,933
B100;P-1DP2S5	480	12,933	10.75	0.92	10,617	2.94	0.94	12,947	12,933	12,933	12,933
B100;P-1DP2S6	480	12,933	10.75	0.92	10,617	2.94	0.94	12,947	12,933	12,933	12,933
B100;P-1DP2S7	480	12,933	10.75	0.92	10,617	2.94	0.94	12,947	12,933	12,933	12,933
B100;P-1DP3	480	26,174	21.76	3.79	23,196	6.43	3.39	30,753	26,175	26,174	26,174
B100;P-1DP4	480	21,965	18.26	3.03	18,237	5.05	2.89	24,569	21,965	21,965	21,965
B100;P-1R1	208	3,704	1.33	6.75	3,693	0.44	6.92	4,954	3,718	3,704	3,704
B100;P-1R10	208	3,270	1.18	6.17	3,292	0.40	6.32	4,292	3,277	3,270	3,270
B100;P-1R11	208	3,270	1.18	6.17	3,292	0.40	6.32	4,292	3,277	3,270	3,270
B100;P-1R12	208	1,616	0.58	8.01	1,620	0.19	7.59	2,235	1,631	1,617	1,616
B100;P-1R13	208	10,191	3.67	4.89	9,892	1.19	5.00	12,703	10,195	10,191	10,191
B100;P-1R14	208	10,191	3.67	4.89	9,892	1.19	5.00	12,703	10,195	10,191	10,191

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;P-1R15	208	10,191	3.67	4.89	9,892	1.19	5.00	12,703	10,195	10,191	10,191
B100;P-1R15A	208	10,191	3.67	4.89	9,892	1.19	5.00	12,703	10,195	10,191	10,191
B100;P-1R16	208	1,934	0.70	9.93	1,943	0.23	9.96	2,778	1,977	1,938	1,934
B100;P-1R16B	208	1,925	0.69	8.20	1,931	0.23	7.94	2,674	1,944	1,926	1,925
B100;P-1R17	208	1,934	0.70	9.93	1,943	0.23	9.96	2,778	1,977	1,938	1,934
B100;P-1R18	208	4,266	1.54	7.58	4,251	0.51	7.56	5,838	4,296	4,267	4,266
B100;P-1R19	208	4,266	1.54	7.58	4,251	0.51	7.56	5,838	4,296	4,267	4,266
B100;P-1R2	208	3,704	1.33	6.75	3,693	0.44	6.92	4,954	3,718	3,704	3,704
B100;P-1R20	208	4,266	1.54	7.58	4,251	0.51	7.56	5,838	4,296	4,267	4,266
B100;P-1R21	208	4,266	1.54	7.58	4,251	0.51	7.56	5,838	4,296	4,267	4,266
B100;P-1R22	208	4,021	1.45	3.16	3,927	0.47	2.87	4,539	4,021	4,021	4,021
B100;P-1R3	208	3,704	1.33	6.75	3,693	0.44	6.92	4,954	3,718	3,704	3,704
B100;P-1R4	208	3,704	1.33	6.75	3,693	0.44	6.92	4,954	3,718	3,704	3,704
B100;P-1R5	208	3,724	1.34	6.17	3,725	0.45	6.19	4,887	3,732	3,724	3,724
B100;P-1R6	208	3,724	1.34	6.17	3,725	0.45	6.19	4,887	3,732	3,724	3,724
B100;P-1R7	208	3,724	1.34	6.17	3,725	0.45	6.19	4,887	3,732	3,724	3,724
B100;P-1R8	208	3,724	1.34	6.17	3,725	0.45	6.19	4,887	3,732	3,724	3,724
B100;P-1R9	208	3,282	1.18	6.95	3,308	0.40	7.34	4,415	3,297	3,282	3,282
B100;P-2A100	480	15,726	13.07	1.59	12,753	3.53	1.63	16,025	15,726	15,726	15,726
B100;P-2DP	480	22,451	18.67	2.51	19,303	5.35	2.38	24,213	22,451	22,451	22,451
B100;P-2R1	208	1,264	0.46	9.49	1,260	0.15	9.43	1,801	1,287	1,265	1,264
B100;P-2R2	208	1,264	0.46	9.49	1,260	0.15	9.43	1,801	1,287	1,265	1,264
B100;P-2R3	208	1,264	0.46	9.49	1,260	0.15	9.43	1,801	1,287	1,265	1,264
B100;P-2R4	208	1,876	0.68	7.71	1,868	0.22	7.65	2,576	1,890	1,877	1,876
B100;P-2R5	208	1,876	0.68	7.71	1,868	0.22	7.65	2,576	1,890	1,877	1,876
B100;P-2R6	208	1,876	0.68	7.71	1,868	0.22	7.65	2,576	1,890	1,877	1,876
B100;P-2R7	208	1,274	0.46	5.56	1,272	0.15	5.51	1,635	1,276	1,274	1,274
B100;P-2R8	208	1,274	0.46	5.56	1,272	0.15	5.51	1,635	1,276	1,274	1,274
B100;P-2WR1	208	4,638	1.67	4.48	4,682	0.56	4.28	5,666	4,639	4,638	4,638
B100;P-2WR2	208	4,638	1.67	4.48	4,682	0.56	4.28	5,666	4,639	4,638	4,638
B100;P-2WR3	208	4,656	1.68	4.86	4,706	0.57	4.70	5,795	4,658	4,656	4,656
B100;P-2WRDP	208	4,797	1.73	7.02	4,908	0.59	7.30	6,466	4,819	4,797	4,797
B100;P-3DP	480	21,536	17.90	2.40	18,344	5.08	2.30	23,047	21,536	21,536	21,536
B100;P-3ED1	208	802	0.29	7.54	807	0.10	8.73	1,096	807	802	802
B100;P-3R1	208	1,888	0.68	7.37	1,888	0.23	7.48	2,569	1,899	1,888	1,888
B100;P-3R10	208	3,692	1.33	6.46	3,699	0.44	6.79	4,893	3,702	3,692	3,692
B100;P-3R2	208	1,888	0.68	7.37	1,888	0.23	7.48	2,569	1,899	1,888	1,888
B100;P-3R3	208	1,888	0.68	7.37	1,888	0.23	7.48	2,569	1,899	1,888	1,888
B100;P-3R4	208	1,888	0.68	7.37	1,888	0.23	7.48	2,569	1,899	1,888	1,888
B100;P-3R5	208	1,888	0.68	7.37	1,888	0.23	7.48	2,569	1,899	1,888	1,888
B100;P-3R6	208	1,888	0.68	7.37	1,888	0.23	7.48	2,569	1,899	1,888	1,888
B100;P-3R7	208	3,692	1.33	6.46	3,699	0.44	6.79	4,893	3,702	3,692	3,692
B100;P-3R8	208	3,692	1.33	6.46	3,699	0.44	6.79	4,893	3,702	3,692	3,692
B100;P-3R9	208	3,692	1.33	6.46	3,699	0.44	6.79	4,893	3,702	3,692	3,692
B100;P-3WD1	208	785	0.28	4.83	792	0.10	5.14	975	785	785	785
B100;P-4DP	480	20,486	17.03	2.28	17,267	4.79	2.22	21,747	20,486	20,486	20,486
B100;P-4DP6	480	18,573	15.44	1.71	15,509	4.30	1.69	19,035	18,573	18,573	18,573
B100;P-4R1	208	1,865	0.67	6.69	1,858	0.22	6.70	2,489	1,871	1,865	1,865
B100;P-4R2	208	1,865	0.67	6.69	1,858	0.22	6.70	2,489	1,871	1,865	1,865
B100;P-4R3	208	1,865	0.67	6.69	1,858	0.22	6.70	2,489	1,871	1,865	1,865

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;P-4R4	208	1,848	0.67	5.24	1,836	0.22	5.04	2,340	1,849	1,848	1,848
B100;P-4R5	208	1,848	0.67	5.24	1,836	0.22	5.04	2,340	1,849	1,848	1,848
B100;P-4R6	208	1,848	0.67	5.24	1,836	0.22	5.04	2,340	1,849	1,848	1,848
B100;P-4R7	208	3,594	1.29	5.26	3,570	0.43	5.34	4,554	3,597	3,594	3,594
B100;P-4R8	208	3,594	1.29	5.26	3,570	0.43	5.34	4,554	3,597	3,594	3,594
B100;P-4R9	208	3,594	1.29	5.26	3,570	0.43	5.34	4,554	3,597	3,594	3,594
B100;P-5DP	480	19,712	16.39	2.20	16,492	4.57	2.16	20,813	19,712	19,712	19,712
B100;P-5R1	208	1,884	0.68	8.32	1,881	0.23	8.19	2,624	1,904	1,885	1,884
B100;P-5R2	208	1,884	0.68	8.32	1,881	0.23	8.19	2,624	1,904	1,885	1,884
B100;P-5R3	208	1,884	0.68	8.32	1,881	0.23	8.19	2,624	1,904	1,885	1,884
B100;P-5R4	208	1,884	0.68	8.32	1,881	0.23	8.19	2,624	1,904	1,885	1,884
B100;P-5R5	208	1,884	0.68	8.32	1,881	0.23	8.19	2,624	1,904	1,885	1,884
B100;P-5R6	208	1,884	0.68	8.32	1,881	0.23	8.19	2,624	1,904	1,885	1,884
B100;P-5R7	208	1,884	0.68	8.32	1,881	0.23	8.19	2,624	1,904	1,885	1,884
B100;P-BDP1	480	34,932	29.04	6.64	34,945	9.68	5.10	46,550	35,050	34,934	34,932
B100;P-BDP10	480	24,795	20.61	2.84	21,862	6.06	2.61	27,378	24,795	24,795	24,795
B100;P-BDP2	480	34,959	29.06	6.66	34,964	9.69	5.11	46,619	35,081	34,962	34,959
B100;P-BDP3	480	32,413	26.95	4.91	31,038	8.60	3.97	40,435	32,428	32,413	32,413
B100;P-BDP4	480	35,201	29.27	6.80	35,128	9.74	5.16	47,144	35,339	35,205	35,201
B100;P-BDP5	480	34,759	28.90	6.48	34,826	9.65	5.05	46,097	34,862	34,761	34,759
B100;P-BDP6	480	24,512	20.38	2.80	21,546	5.97	2.58	26,982	24,512	24,512	24,512
B100;P-BDP8	480	23,863	19.84	1.49	21,119	5.85	1.34	24,211	23,863	23,863	23,863
B100;P-BDPCRM	208	1,092	0.39	9.72	1,095	0.13	10.04	1,563	1,115	1,094	1,092
B100;P-BME	208	1,945	0.70	1.52	1,914	0.23	1.51	1,976	1,945	1,945	1,945
B100;P-BR1	208	1,891	0.68	7.67	1,889	0.23	7.92	2,594	1,905	1,892	1,891
B100;P-BR10	208	1,290	0.46	8.58	1,293	0.16	8.77	1,807	1,306	1,291	1,290
B100;P-BR10A	208	1,272	0.46	5.78	1,268	0.15	5.51	1,646	1,274	1,272	1,272
B100;P-BR13	208	1,407	0.51	6.31	1,413	0.17	6.65	1,856	1,411	1,407	1,407
B100;P-BR2	208	1,891	0.68	7.67	1,889	0.23	7.92	2,594	1,905	1,892	1,891
B100;P-BR3	208	1,891	0.68	7.67	1,889	0.23	7.92	2,594	1,905	1,892	1,891
B100;P-BR4	208	3,643	1.31	5.95	3,611	0.43	6.16	4,743	3,649	3,643	3,643
B100;P-BR5	208	3,643	1.31	5.95	3,611	0.43	6.16	4,743	3,649	3,643	3,643
B100;P-BR6	208	3,643	1.31	5.95	3,611	0.43	6.16	4,743	3,649	3,643	3,643
B100;P-BR7	208	3,643	1.31	5.95	3,611	0.43	6.16	4,743	3,649	3,643	3,643
B100;P-BR8	208	3,643	1.31	5.95	3,611	0.43	6.16	4,743	3,649	3,643	3,643
B100;P-BR9	208	3,643	1.31	5.95	3,611	0.43	6.16	4,743	3,649	3,643	3,643
B100;P-BYL1	480	16,995	14.13	1.12	14,152	3.92	1.10	17,058	16,995	16,995	16,995
B100;P-BYL2	480	15,370	12.78	1.00	12,822	3.55	0.99	15,399	15,370	15,370	15,370
B100;P-C1315L	480	22,808	18.96	2.78	19,232	5.33	2.60	25,075	22,808	22,808	22,808
B100;P-C1315R	480	22,808	18.96	2.78	19,232	5.33	2.60	25,075	22,808	22,808	22,808
B100;P-C1DP	480	12,882	10.71	1.16	10,427	2.89	1.21	12,939	12,882	12,882	12,882
B100;P-C1L1	480	11,026	9.17	0.94	8,919	2.47	1.00	11,040	11,026	11,026	11,026
B100;P-C1L1A	480	8,803	7.32	0.57	7,257	2.01	0.60	8,804	8,803	8,803	8,803
B100;P-C1L2A	480	8,803	7.32	0.57	7,257	2.01	0.60	8,804	8,803	8,803	8,803
B100;P-C1R1	208	1,246	0.45	5.53	1,252	0.15	5.75	1,597	1,247	1,246	1,246
B100;P-C1R2	208	1,246	0.45	5.53	1,252	0.15	5.75	1,597	1,247	1,246	1,246
B100;P-C1R3	208	1,513	0.55	7.93	1,526	0.18	8.31	2,088	1,526	1,514	1,513
B100;P-C1R4	208	1,489	0.54	6.33	1,492	0.18	6.32	1,965	1,493	1,489	1,489
B100;P-C2DP	480	20,870	17.35	2.74	17,430	4.83	2.67	22,888	20,870	20,870	20,870
B100;P-C2L1	480	13,588	11.30	0.90	11,207	3.11	0.91	13,600	13,588	13,588	13,588

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;P-C2R1	208	4,295	1.55	7.55	4,326	0.52	7.76	5,874	4,324	4,296	4,295
B100;P-C2R2	208	4,231	1.52	7.10	4,228	0.51	7.23	5,716	4,252	4,232	4,231
B100;P-C2R3	208	4,231	1.52	7.10	4,228	0.51	7.23	5,716	4,252	4,232	4,231
B100;P-C2R4	208	4,295	1.55	7.55	4,326	0.52	7.76	5,874	4,324	4,296	4,295
B100;P-C2R5	208	4,295	1.55	7.55	4,326	0.52	7.76	5,874	4,324	4,296	4,295
B100;P-C2W1	208	1,817	0.65	6.65	1,850	0.22	8.09	2,422	1,823	1,817	1,817
B100;P-C2W2	208	1,787	0.64	5.36	1,809	0.22	5.98	2,273	1,788	1,787	1,787
B100;P-C2WDP	480	8,576	7.13	0.58	7,095	1.97	0.62	8,577	8,576	8,576	8,576
B100;P-C3DP	480	7,475	6.21	0.59	6,104	1.69	0.63	7,475	7,475	7,475	7,475
B100;P-C3L1	480	6,377	5.30	0.51	5,227	1.45	0.56	6,378	6,377	6,377	6,377
B100;P-C3R1	208	1,295	0.47	3.43	1,309	0.16	3.61	1,488	1,295	1,295	1,295
B100;P-C4DP	480	22,533	18.73	1.95	19,576	5.43	1.81	23,422	22,533	22,533	22,533
B100;P-C4L1	480	16,127	13.41	0.98	13,632	3.78	0.95	16,153	16,127	16,127	16,127
B100;P-C4R1	208	3,745	1.35	6.55	3,763	0.45	7.01	4,977	3,757	3,745	3,745
B100;P-C4R2	208	3,745	1.35	6.55	3,763	0.45	7.01	4,977	3,757	3,745	3,745
B100;P-C5DP	480	6,519	5.42	0.55	5,314	1.47	0.60	6,519	6,519	6,519	6,519
B100;P-C5L1	480	5,275	4.39	0.45	4,319	1.20	0.50	5,275	5,275	5,275	5,275
B100;P-C5R1	208	1,231	0.44	4.80	1,242	0.15	5.19	1,527	1,231	1,231	1,231
B100;P-C5R2	208	1,231	0.44	4.80	1,242	0.15	5.19	1,527	1,231	1,231	1,231
B100;P-CBDP1	480	32,488	27.01	5.51	31,689	8.78	4.36	41,596	32,523	32,489	32,488
B100;P-CBDP2	480	32,662	27.16	5.66	31,927	8.85	4.46	42,075	32,704	32,663	32,662
B100;P-CCTV	208	1,092	0.39	9.72	1,095	0.13	10.04	1,563	1,115	1,094	1,092
B100;P-E1DP1	480	12,670	10.53	1.16	10,234	2.84	1.21	12,725	12,670	12,670	12,670
B100;P-E1DP2	480	24,000	19.95	3.19	20,453	5.67	2.92	27,146	24,001	24,000	24,000
B100;P-E1DP2A	480	22,814	18.97	2.68	19,253	5.34	2.50	24,900	22,814	22,814	22,814
B100;P-E1L1	480	10,871	9.04	0.95	8,780	2.43	1.00	10,885	10,871	10,871	10,871
B100;P-E1R1	208	3,597	1.30	5.06	3,664	0.44	5.77	4,518	3,599	3,597	3,597
B100;P-E1R16A	208	1,290	0.46	11.62	1,298	0.16	12.00	1,899	1,340	1,296	1,291
B100;P-E1R2	208	3,546	1.28	4.84	3,589	0.43	5.44	4,409	3,548	3,546	3,546
B100;P-E1R3	208	1,276	0.46	7.87	1,280	0.15	7.88	1,759	1,287	1,277	1,276
B100;P-E1R4	208	3,546	1.28	4.84	3,589	0.43	5.44	4,409	3,548	3,546	3,546
B100;P-E2DP	480	23,102	19.21	3.01	19,827	5.49	2.83	25,815	23,102	23,102	23,102
B100;P-E2L1	480	14,511	12.06	0.87	12,098	3.35	0.86	14,522	14,511	14,511	14,511
B100;P-E2L1A	480	22,562	18.76	2.73	19,280	5.34	2.59	24,725	22,562	22,562	22,562
B100;P-E2R1	208	1,262	0.45	6.18	1,263	0.15	6.19	1,657	1,265	1,262	1,262
B100;P-E2R2	208	1,262	0.45	6.18	1,263	0.15	6.19	1,657	1,265	1,262	1,262
B100;P-E2WD1	208	3,317	1.19	9.31	3,397	0.41	10.46	4,712	3,374	3,321	3,317
B100;P-E2WDP2	480	15,418	12.82	1.56	12,480	3.46	1.60	15,687	15,418	15,418	15,418
B100;P-E3DP	480	7,406	6.16	0.59	6,043	1.67	0.64	7,406	7,406	7,406	7,406
B100;P-E3L1	480	5,851	4.86	0.47	4,796	1.33	0.51	5,851	5,851	5,851	5,851
B100;P-E3L1A	480	7,273	6.05	0.59	5,932	1.64	0.63	7,273	7,273	7,273	7,273
B100;P-E3R1	208	1,231	0.44	4.64	1,242	0.15	5.07	1,516	1,231	1,231	1,231
B100;P-E3R2	208	1,231	0.44	4.64	1,242	0.15	5.07	1,516	1,231	1,231	1,231
B100;P-E4DP	480	10,504	8.73	1.04	8,391	2.33	1.12	10,529	10,504	10,504	10,504
B100;P-E4L1	480	7,862	6.54	0.70	6,355	1.76	0.76	7,863	7,862	7,862	7,862
B100;P-E4L1A	480	6,900	5.74	0.57	5,624	1.56	0.62	6,901	6,900	6,900	6,900
B100;P-E4R1	208	1,238	0.45	5.32	1,246	0.15	5.59	1,572	1,239	1,238	1,238
B100;P-E4R2	208	1,238	0.45	5.32	1,246	0.15	5.59	1,572	1,239	1,238	1,238
B100;P-E5DP	480	6,458	5.37	0.56	5,260	1.46	0.61	6,458	6,458	6,458	6,458
B100;P-E5L1	480	5,236	4.35	0.46	4,285	1.19	0.50	5,236	5,236	5,236	5,236

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;P-E5L1A	480	6,356	5.28	0.55	5,176	1.43	0.60	6,356	6,356	6,356	6,356
B100;P-E5R1	208	1,224	0.44	4.44	1,238	0.15	4.91	1,492	1,225	1,224	1,224
B100;P-E5R2	208	1,224	0.44	4.44	1,238	0.15	4.91	1,492	1,225	1,224	1,224
B100;P-EBDP1	480	31,348	26.06	4.91	30,082	8.34	3.98	39,112	31,363	31,348	31,348
B100;P-EBDP1A	480	25,473	21.18	2.01	22,812	6.32	1.78	26,567	25,473	25,473	25,473
B100;P-EBDP2	480	31,348	26.06	4.91	30,082	8.34	3.98	39,112	31,363	31,348	31,348
B100;P-EBDP3	480	31,922	26.54	5.22	30,442	8.44	4.10	40,381	31,945	31,922	31,922
B100;P-EBDP4	480	32,303	26.86	5.43	30,680	8.50	4.18	41,229	32,334	32,303	32,303
B100;P-EBDP6	480	9,474	7.88	0.67	7,767	2.15	0.70	9,475	9,474	9,474	9,474
B100;P-EBDP7A	208	11,784	4.25	8.41	12,409	1.49	9.35	16,444	11,916	11,791	11,784
B100;P-EBDP9A	480	21,477	17.86	1.99	18,159	5.03	1.88	22,378	21,477	21,477	21,477
B100;P-EBDP9B	208	3,131	1.13	7.41	3,164	0.38	7.90	4,265	3,150	3,131	3,131
B100;P-EBDPRI	480	28,295	23.52	2.91	26,061	7.22	2.50	31,401	28,295	28,295	28,295
B100;P-EBL1	480	7,831	6.51	0.58	6,413	1.78	0.62	7,831	7,831	7,831	7,831
B100;P-EBL1A	480	8,671	7.21	0.64	7,094	1.97	0.68	8,671	8,671	8,671	8,671
B100;P-EBL2A	480	8,671	7.21	0.64	7,094	1.97	0.68	8,671	8,671	8,671	8,671
B100;P-EBPR1	208	1,386	0.50	11.99	1,391	0.17	11.51	2,049	1,445	1,394	1,387
B100;P-EBR1	208	1,233	0.44	4.77	1,236	0.15	4.89	1,528	1,234	1,233	1,233
B100;P-EBR10	208	3,386	1.22	9.34	3,427	0.41	10.02	4,814	3,446	3,391	3,387
B100;P-EBR11	208	9,692	3.49	3.06	9,354	1.12	2.90	10,868	9,692	9,692	9,692
B100;P-EBR11A	208	9,750	3.51	4.08	9,386	1.13	4.01	11,656	9,751	9,750	9,750
B100;P-EBR11B	208	10,361	3.73	4.82	10,235	1.23	4.77	12,870	10,365	10,361	10,361
B100;P-EBR11C	208	9,559	3.44	3.90	9,131	1.10	3.83	11,306	9,560	9,559	9,559
B100;P-EBR12	208	9,930	3.58	3.29	9,673	1.16	3.12	11,308	9,930	9,930	9,930
B100;P-EBR2	208	1,233	0.44	4.77	1,236	0.15	4.89	1,528	1,234	1,233	1,233
B100;P-EPDP	480	33,120	27.54	5.98	32,588	9.03	4.66	43,179	33,181	33,121	33,120
B100;P-FIRE-P	480	26,898	22.36	2.40	24,203	6.71	2.06	28,797	26,898	26,898	26,898
B100;P-KITCHE	208	9,947	3.58	4.29	9,654	1.16	4.22	12,031	9,948	9,947	9,947
B100;P-LS1DP	480	12,799	10.64	1.16	10,352	2.87	1.21	12,855	12,799	12,799	12,799
B100;P-LS1L1	480	9,127	7.59	0.71	7,438	2.06	0.75	9,128	9,127	9,127	9,127
B100;P-LS1R1	208	1,313	0.47	3.92	1,322	0.16	3.96	1,555	1,313	1,313	1,313
B100;P-LS2DP	480	8,039	6.68	0.61	6,571	1.82	0.65	8,039	8,039	8,039	8,039
B100;P-LS2L1	480	6,244	5.19	0.48	5,125	1.42	0.51	6,244	6,244	6,244	6,244
B100;P-LS2R1	208	1,298	0.47	3.49	1,312	0.16	3.65	1,498	1,298	1,298	1,298
B100;P-LS2WL1	480	1,151	0.96	0.14	958	0.27	0.16	1,151	1,151	1,151	1,151
B100;P-LS3DP	480	7,448	6.19	0.59	6,080	1.68	0.63	7,448	7,448	7,448	7,448
B100;P-LS3L1	480	5,876	4.89	0.47	4,818	1.34	0.51	5,876	5,876	5,876	5,876
B100;P-LS3R1	208	1,294	0.47	3.43	1,309	0.16	3.61	1,487	1,294	1,294	1,294
B100;P-LS4DP	480	6,936	5.77	0.57	5,657	1.57	0.62	6,936	6,936	6,936	6,936
B100;P-LS4L1	480	5,978	4.97	0.50	4,894	1.36	0.55	5,978	5,978	5,978	5,978
B100;P-LS4R1	208	1,290	0.46	3.37	1,306	0.16	3.56	1,477	1,290	1,290	1,290
B100;P-LS5DP	480	6,489	5.40	0.55	5,288	1.47	0.60	6,490	6,489	6,489	6,489
B100;P-LS5L1	480	5,256	4.37	0.45	4,303	1.19	0.50	5,256	5,256	5,256	5,256
B100;P-LS5R1	208	1,286	0.46	3.32	1,304	0.16	3.52	1,467	1,286	1,286	1,286
B100;P-LSB2	480	6,948	5.78	0.49	5,716	1.58	0.52	6,948	6,948	6,948	6,948
B100;P-LSBDP1	480	32,044	26.64	5.25	31,059	8.61	4.19	40,580	32,068	32,044	32,044
B100;P-LSBDP2	480	9,543	7.93	0.67	7,830	2.17	0.70	9,544	9,543	9,543	9,543
B100;P-LSBL1	480	7,136	5.93	0.50	5,872	1.63	0.53	7,136	7,136	7,136	7,136
B100;P-LSBR1	208	1,326	0.48	4.27	1,338	0.16	4.48	1,601	1,326	1,326	1,326
B100;P-MSI850	480	12,933	10.75	0.92	10,617	2.94	0.94	12,947	12,933	12,933	12,933

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100;P-PBLOAD	480	12,933	10.75	0.92	10,617	2.94	0.94	12,947	12,933	12,933	12,933
B100;P-RL1	208	-	-	-	2,722	0.33	2.24	-	-	-	-
B100;P-RL2	208	2,795	1.01	2.74	2,847	0.34	3.02	3,065	2,795	2,795	2,795
B100;P-RP1	208	2,664	0.96	2.35	2,641	0.32	2.47	2,842	2,664	2,664	2,664
B100;P-RP2	208	2,664	0.96	2.35	2,641	0.32	2.47	2,842	2,664	2,664	2,664
B100;P-RP3	208	2,515	0.91	1.94	2,456	0.29	1.97	2,612	2,515	2,515	2,515
B100;P-RP5	208	2,478	0.89	1.86	2,411	0.29	1.88	2,562	2,478	2,478	2,478
B100;P-RP6	208	2,887	1.04	3.54	2,926	0.35	4.20	3,340	2,887	2,887	2,887
B100;P-UNKNOW	208	-	-	-	1,903	0.23	6.15	-	-	-	-
B100;P-UNNAM1	208	-	-	-	1,903	0.23	6.15	-	-	-	-
B100;P-UNNAM2	208	-	-	-	1,903	0.23	6.15	-	-	-	-
B100;SG-EP	480	14,924	12.41	16.71	14,180	3.93	7.41	22,990	16,412	15,267	14,960
B100;SG-SS1-A	480	46,772	38.89	10.78	46,298	12.83	7.47	68,043	48,166	46,909	46,776
B100;SG-SS2-A	480	37,998	31.59	11.35	39,999	11.08	8.01	55,717	39,348	38,148	38,004
B100;SG-SS2-B	480	37,639	31.29	13.01	39,745	11.01	8.58	56,257	39,661	37,938	37,655
B100;V-100P1	480	32,894	27.35	2.29	28,440	7.88	2.06	34,950	32,894	32,894	32,894
B100;V-100P2	480	32,894	27.35	2.29	28,440	7.88	2.06	34,950	32,894	32,894	32,894
B100;V-100P3	480	23,810	19.79	1.90	20,671	5.73	1.70	24,662	23,810	23,810	23,810
B100A;B-IDLSP	480	3,926	3.26	0.36	3,229	0.89	0.40	3,926	3,926	3,926	3,926
B100A;B-IDLSS	208	1,534	0.55	4.64	1,579	0.19	6.09	1,889	1,534	1,534	1,534
B100A;B-IDT1P	480	14,518	12.07	1.59	11,588	3.21	1.67	14,793	14,518	14,518	14,518
B100A;B-IDT1S	208	6,111	2.20	6.89	6,468	0.78	8.44	8,207	6,136	6,111	6,111
B100A;B-2DCRP	480	5,474	4.55	0.45	4,488	1.24	0.50	5,474	5,474	5,474	5,474
B100A;B-2DCRS	208	1,349	0.49	6.60	1,375	0.17	8.30	1,796	1,354	1,349	1,349
B100A;B-2DR1	208	3,371	1.21	7.23	3,440	0.41	7.99	4,572	3,389	3,372	3,371
B100A;B-2DR2	208	3,343	1.20	5.59	3,405	0.41	5.73	4,294	3,347	3,343	3,343
B100A;B-2DR3	208	3,343	1.20	5.59	3,405	0.41	5.73	4,294	3,347	3,343	3,343
B100A;B-2DT1P	480	13,256	11.02	1.48	10,547	2.92	1.57	13,446	13,256	13,256	13,256
B100A;B-2DT1S	208	3,460	1.25	8.77	3,579	0.43	10.44	4,865	3,507	3,463	3,460
B100A;B-BDE1P	480	7,325	6.09	0.63	5,924	1.64	0.68	7,326	7,325	7,325	7,325
B100A;B-BDE1S	208	2,399	0.86	5.77	2,476	0.30	7.34	3,103	2,403	2,399	2,399
B100A;B-BDLSP	480	7,910	6.58	0.70	6,398	1.77	0.76	7,911	7,910	7,910	7,910
B100A;B-BDLSS	208	1,572	0.57	8.06	1,602	0.19	9.81	2,176	1,586	1,572	1,572
B100A;B-BDT1P	480	13,246	11.01	0.84	10,967	3.04	0.85	13,254	13,246	13,246	13,246
B100A;B-BDT1S	208	1,822	0.66	10.08	1,848	0.22	11.76	2,623	1,865	1,825	1,822
B100A;B-TBDEP	480	4,251	3.53	0.31	3,513	0.97	0.33	4,251	4,251	4,251	4,251
B100A;B-TBDES	208	848	0.31	7.27	859	0.10	9.03	1,152	853	849	848
B100A;P-IDL1	480	16,295	13.55	2.03	13,066	3.62	2.10	17,014	16,295	16,295	16,295
B100A;P-IDLS1	480	4,437	3.69	0.40	3,641	1.01	0.44	4,437	4,437	4,437	4,437
B100A;P-IDLSR1	208	1,460	0.53	2.86	1,487	0.18	3.06	1,614	1,460	1,460	1,460
B100A;P-IDR1	208	5,802	2.09	4.90	5,989	0.72	5.23	7,233	5,805	5,802	5,802
B100A;P-IDR1S	208	5,508	1.98	3.86	5,554	0.67	3.92	6,501	5,508	5,508	5,508
B100A;P-IDR2	208	5,560	2.00	2.90	5,669	0.68	2.76	6,165	5,560	5,560	5,560
B100A;P-2DCR1	208	1,341	0.48	6.32	1,364	0.16	7.78	1,770	1,345	1,341	1,341
B100A;P-2DCR2	208	-	-	-	1,349	0.16	6.66	-	-	-	-
B100A;P-2DL1	480	14,300	11.89	1.76	11,377	3.15	1.85	14,695	14,300	14,300	14,300
B100A;P-2DRDP	208	3,419	1.23	8.27	3,512	0.42	9.60	4,756	3,454	3,420	3,419
B100A;P-BDC1	480	9,614	7.99	0.89	7,722	2.14	0.96	9,622	9,614	9,614	9,614
B100A;P-BDDP1	480	20,603	17.13	2.30	17,323	4.80	2.23	21,901	20,603	20,603	20,603
B100A;P-BDE1	480	13,551	11.27	1.20	10,913	3.02	1.24	13,623	13,551	13,551	13,551

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B100A;P-BDELV	208	840	0.30	5.72	848	0.10	6.43	1,085	841	840	840
B100A;P-BDLS1	480	10,593	8.81	1.04	8,469	2.35	1.12	10,618	10,593	10,593	10,593
B100A;P-BDLSR1	208	1,510	0.54	3.84	1,521	0.18	3.75	1,780	1,510	1,510	1,510
B100A;P-BDR1	208	1,781	0.64	6.21	1,791	0.22	6.28	2,341	1,785	1,781	1,781
B100A;V-VFDP1	480	4,048	3.37	0.27	3,355	0.93	0.28	4,048	4,048	4,048	4,048
B100A;V-VFDP2	480	4,048	3.37	0.27	3,355	0.93	0.28	4,048	4,048	4,048	4,048
B103;B-103S	480	14,248	11.85	16.09	15,127	4.19	16.60	21,857	15,556	14,532	14,276
B103;B-A-CE	480	1,212	1.01	10.22	1,194	0.33	9.44	1,749	1,242	1,215	1,212
B103;B-A-CL	480	12,802	10.64	5.86	12,822	3.55	5.29	16,616	12,822	12,802	12,802
B103;B-A-CN	480	12,802	10.64	5.86	12,822	3.55	5.29	16,616	12,822	12,802	12,802
B103;B-A-EE	480	1,142	0.95	2.91	1,102	0.31	2.53	1,266	1,142	1,142	1,142
B103;B-A-EL	480	12,099	10.06	2.77	11,875	3.29	2.41	13,294	12,099	12,099	12,099
B103;B-A-EN	480	12,099	10.06	2.77	11,875	3.29	2.41	13,294	12,099	12,099	12,099
B103;B-DEG	480	1,251	1.04	20.00	1,251	0.35	20.00	1,963	1,429	1,304	1,260
B103;B-NC1D2P	480	10,949	9.10	2.35	10,343	2.87	2.10	11,679	10,949	10,949	10,949
B103;B-NC1D2S	208	3,183	1.15	10.14	3,315	0.40	11.70	4,586	3,259	3,189	3,183
B103;B-NE1R1P	480	6,782	5.64	0.74	5,937	1.65	0.65	6,784	6,782	6,782	6,782
B103;B-NE1R1S	208	2,420	0.87	5.65	2,512	0.30	7.19	3,116	2,423	2,420	2,420
B103;B-T-M	480	11,960	9.94	4.86	11,607	3.22	4.45	14,888	11,965	11,960	11,960
B103;B-T-S	208	7,851	2.83	10.25	8,667	1.04	11.57	11,332	8,047	7,868	7,851
B103;B-T103P	13,090	3,146	71.33	10.69	3,152	23.82	10.42	4,571	3,237	3,155	3,146
B103;MC-NCMC1	480	7,752	6.45	1.11	6,824	1.89	1.03	7,779	7,752	7,752	7,752
B103;MC-NMCC1	480	10,313	8.57	2.61	9,509	2.64	2.41	11,204	10,313	10,313	10,313
B103;P-MDP	480	13,699	11.39	11.48	14,196	3.93	11.07	20,120	14,204	13,756	13,701
B103;P-N1D1	208	7,117	2.56	5.44	7,426	0.89	5.17	9,086	7,124	7,118	7,117
B103;P-N1L1	480	12,393	10.30	3.15	12,277	3.40	2.73	13,976	12,393	12,393	12,393
B103;P-N1R1	208	6,357	2.29	2.48	6,324	0.76	2.20	6,843	6,357	6,357	6,357
B103;P-N1R2	208	2,759	0.99	0.67	2,366	0.28	0.64	2,759	2,759	2,759	2,759
B103;P-N1R3	208	2,587	0.93	0.64	2,209	0.27	0.62	2,587	2,587	2,587	2,587
B103;P-N1R4	208	6,158	2.22	2.20	6,056	0.73	1.94	6,503	6,158	6,158	6,158
B103;P-N2D1	208	6,181	2.23	3.23	6,042	0.73	3.00	7,012	6,182	6,181	6,181
B103;P-N2D2	480	9,067	7.54	1.28	8,219	2.28	1.15	9,134	9,067	9,067	9,067
B103;P-N2L1	480	2,641	2.20	0.27	2,224	0.62	0.25	2,641	2,641	2,641	2,641
B103;P-N2R1	208	5,572	2.01	2.21	5,264	0.63	2.04	5,887	5,572	5,572	5,572
B103;P-N2R2	208	3,802	1.37	1.14	3,324	0.40	1.09	3,817	3,802	3,802	3,802
B103;P-N2R3	208	4,098	1.48	1.25	3,621	0.43	1.19	4,124	4,098	4,098	4,098
B103;P-N2R4	208	5,572	2.01	2.21	5,264	0.63	2.04	5,887	5,572	5,572	5,572
B103;P-N2R5	208	5,572	2.01	2.21	5,264	0.63	2.04	5,887	5,572	5,572	5,572
B103;P-NC1D1	480	12,227	10.17	4.52	11,995	3.32	4.07	14,964	12,230	12,227	12,227
B103;P-NC1D2	208	3,088	1.11	7.30	3,168	0.38	7.57	4,195	3,105	3,088	3,088
B103;P-NC1L1	480	11,211	9.32	2.59	10,668	2.96	2.31	12,160	11,211	11,211	11,211
B103;P-NC1R1	208	2,533	0.91	1.58	2,435	0.29	1.37	2,579	2,533	2,533	2,533
B103;P-NC1R2	208	1,845	0.66	1.07	1,648	0.20	0.99	1,851	1,845	1,845	1,845
B103;P-NC1R3	208	1,845	0.66	1.07	1,648	0.20	0.99	1,851	1,845	1,845	1,845
B103;P-NC2L1	480	2,309	1.92	0.26	1,940	0.54	0.25	2,309	2,309	2,309	2,309
B103;P-NC2R1	208	1,601	0.58	0.69	1,418	0.17	0.61	1,601	1,601	1,601	1,601
B103;P-NC2R2	208	1,040	0.37	0.43	892	0.11	0.39	1,040	1,040	1,040	1,040
B103;P-NC2R3	208	1,006	0.36	0.42	862	0.10	0.38	1,006	1,006	1,006	1,006
B103;P-NE1D1	480	10,635	8.84	1.78	10,007	2.77	1.56	10,940	10,635	10,635	10,635
B103;P-NE1L1	480	9,067	7.54	1.28	8,219	2.28	1.15	9,134	9,067	9,067	9,067

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B103;P-NE1R1	208	2,316	0.83	3.66	2,369	0.28	3.90	2,700	2,316	2,316	2,316
B103;P-NE2L1	480	4,828	4.01	0.53	4,120	1.14	0.49	4,828	4,828	4,828	4,828
B103;P-NE2R1	208	908	0.33	0.48	794	0.10	0.43	908	908	908	908
B103;P-NIG1	480	1,244	1.03	17.53	1,241	0.34	17.15	1,927	1,382	1,278	1,248
B105;B-36H-P	480	2,827	2.35	0.65	2,369	0.66	0.58	2,827	2,827	2,827	2,827
B105;B-36H-S	240	1,555	0.65	3.48	1,667	0.23	4.58	1,793	1,555	1,555	1,555
B105;B-36P-P	480	2,827	2.35	0.65	2,369	0.66	0.58	2,827	2,827	2,827	2,827
B105;B-36P-S	240	1,019	0.42	4.89	1,063	0.15	6.32	1,270	1,019	1,019	1,019
B105;P-36H	480	-	-	-	2,637	0.73	0.65	-	-	-	-
B105;P-36L	240	1,526	0.63	3.13	1,618	0.22	3.60	1,719	1,526	1,526	1,526
B105;P-36P	240	1,005	0.42	4.19	1,039	0.14	4.55	1,208	1,005	1,005	1,005
B105;P-36P,H	480	3,056	2.54	0.70	2,657	0.74	0.66	3,056	3,056	3,056	3,056
B106;B-106S	480	15,272	12.70	15.03	15,880	4.40	15.83	23,243	16,467	15,503	15,291
B106;B-A-1,FP	480	10,250	8.52	3.27	8,747	2.42	3.00	11,651	10,250	10,250	10,250
B106;B-A-1E	480	10,069	8.37	3.17	8,556	2.37	2.93	11,371	10,069	10,069	10,069
B106;B-A-1L	480	14,017	11.65	7.46	13,841	3.84	6.90	19,126	14,106	14,020	14,017
B106;B-A-1N	480	14,017	11.65	7.46	13,841	3.84	6.90	19,126	14,106	14,020	14,017
B106;B-A-FP,1	480	9,851	8.19	2.65	8,351	2.31	2.47	10,731	9,851	9,851	9,851
B106;B-DS-FP	480	4,563	3.79	0.72	3,725	1.03	0.75	4,564	4,563	4,563	4,563
B106;B-EL-P1	480	6,020	5.00	0.88	4,932	1.37	0.79	6,025	6,020	6,020	6,020
B106;B-EL-S1	480	6,020	5.00	0.88	4,932	1.37	0.79	6,025	6,020	6,020	6,020
B106;B-ELV	480	6,255	5.20	0.91	5,138	1.42	0.81	6,261	6,255	6,255	6,255
B106;B-EMDPLP	480	12,470	10.37	2.95	11,757	3.26	2.66	13,874	12,470	12,470	12,470
B106;B-EMDPLS	208	3,223	1.16	11.67	3,344	0.40	13.09	4,744	3,348	3,238	3,223
B106;B-EV	480	4,631	3.85	0.60	3,786	1.05	0.55	4,632	4,631	4,631	4,631
B106;B-EV-P	480	3,611	3.00	0.45	2,955	0.82	0.42	3,611	3,611	3,611	3,611
B106;B-EV-S	208	774	0.28	7.20	787	0.09	8.94	1,049	778	774	774
B106;B-FIRE-P	480	3,506	2.91	0.51	2,881	0.80	0.46	3,506	3,506	3,506	3,506
B106;B-FP	480	5,791	4.81	0.73	4,851	1.34	0.68	5,792	5,791	5,791	5,791
B106;B-FP-E	480	3,968	3.30	0.61	3,246	0.90	0.64	3,968	3,968	3,968	3,968
B106;B-FP-L	480	4,545	3.78	0.60	3,765	1.04	0.55	4,545	4,545	4,545	4,545
B106;B-FP-N	480	4,545	3.78	0.60	3,765	1.04	0.55	4,545	4,545	4,545	4,545
B106;B-JB-PPH	480	9,598	7.98	1.50	8,533	2.36	1.40	9,741	9,598	9,598	9,598
B106;B-MDPL-P	480	14,502	12.06	9.66	14,621	4.05	9.27	20,731	14,792	14,524	14,502
B106;B-MDPL-S	208	13,473	4.85	13.37	15,560	1.87	14.21	20,209	14,253	13,595	13,480
B106;B-PPL1-P	480	4,733	3.94	0.54	4,000	1.11	0.53	4,733	4,733	4,733	4,733
B106;B-PPL1-S	208	780	0.28	8.56	790	0.09	10.32	1,091	789	780	780
B106;B-PPL2-P	480	5,988	4.98	0.74	5,091	1.41	0.72	5,989	5,988	5,988	5,988
B106;B-PPL2-S	208	781	0.28	10.07	791	0.10	11.76	1,125	800	783	781
B106;B-T106P	13,090	3,211	72.80	14.32	3,249	24.55	14.73	4,858	3,434	3,250	3,214
B106;P-E1A	208	2,865	1.03	3.03	2,827	0.34	2.72	3,204	2,865	2,865	2,865
B106;P-E1B	208	1,658	0.60	0.92	1,453	0.17	0.86	1,660	1,658	1,658	1,658
B106;P-E1C	208	1,861	0.67	1.06	1,655	0.20	0.98	1,866	1,861	1,861	1,861
B106;P-E1D	208	1,393	0.50	0.77	1,200	0.14	0.73	1,394	1,393	1,393	1,393
B106;P-E2A	208	2,606	0.94	2.05	2,491	0.30	1.84	2,726	2,606	2,606	2,606
B106;P-E2B	208	1,524	0.55	0.84	1,324	0.16	0.79	1,525	1,524	1,524	1,524
B106;P-E2C	208	1,721	0.62	0.96	1,515	0.18	0.89	1,724	1,721	1,721	1,721
B106;P-E2D	208	1,281	0.46	0.71	1,097	0.13	0.69	1,281	1,281	1,281	1,281
B106;P-EKL	208	1,446	0.52	0.64	1,260	0.15	0.57	1,446	1,446	1,446	1,446
B106;P-EMDPH	480	13,611	11.32	6.45	13,226	3.67	5.92	18,029	13,650	13,612	13,611

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B106;P-EMDPL	208	3,165	1.14	9.14	3,254	0.39	9.50	4,483	3,216	3,168	3,165
B106;P-EPPH1	480	2,604	2.17	0.30	2,179	0.60	0.30	2,604	2,604	2,604	2,604
B106;P-EPPH2	480	5,831	4.85	0.74	4,933	1.37	0.72	5,833	5,831	5,831	5,831
B106;P-EV	208	765	0.28	5.25	775	0.09	5.74	968	765	765	765
B106;P-KH	480	7,135	5.93	0.87	6,151	1.70	0.83	7,141	7,135	7,135	7,135
B106;P-KL	208	3,813	1.37	0.68	3,212	0.39	0.68	3,814	3,813	3,813	3,813
B106;P-L1A	208	10,967	3.95	5.17	11,092	1.33	4.74	13,840	10,974	10,967	10,967
B106;P-L1B	208	6,105	2.20	2.40	5,040	0.61	2.52	6,536	6,105	6,105	6,105
B106;P-L1C	208	8,737	3.15	2.88	8,103	0.97	2.71	9,676	8,737	8,737	8,737
B106;P-L1D	208	5,212	1.88	2.18	4,174	0.50	2.35	5,495	5,212	5,212	5,212
B106;P-L2A	208	9,179	3.31	2.57	8,652	1.04	2.36	9,944	9,179	9,179	9,179
B106;P-L2B	208	5,432	1.96	1.92	4,429	0.53	2.03	5,633	5,432	5,432	5,432
B106;P-L2C	208	7,888	2.84	2.53	7,085	0.85	2.43	8,520	7,888	7,888	7,888
B106;P-L2D	208	4,638	1.67	1.78	3,687	0.44	1.95	4,773	4,638	4,638	4,638
B106;P-MDPH	480	14,279	11.87	8.87	14,276	3.96	8.46	20,118	14,482	14,291	14,279
B106;P-MDPL	208	13,163	4.74	10.72	14,954	1.80	10.51	19,132	13,548	13,200	13,164
B106;P-OL	480	12,787	10.63	2.84	12,260	3.40	2.54	14,122	12,787	12,787	12,787
B106;P-PPH1	480	7,795	6.48	1.13	6,722	1.86	1.09	7,824	7,795	7,795	7,795
B106;P-PPH2-L	480	7,307	6.07	0.98	6,281	1.74	0.94	7,319	7,307	7,307	7,307
B106;P-PPH2-R	480	6,981	5.80	0.93	5,978	1.66	0.90	6,989	6,981	6,981	6,981
B106;P-PPL1	208	761	0.27	4.54	766	0.09	4.51	932	761	761	761
B106;P-PPL2	208	769	0.28	5.64	775	0.09	5.59	989	770	769	769
B106;P-R1A	208	10,061	3.62	2.74	9,835	1.18	2.44	11,033	10,061	10,061	10,061
B106;P-R1B	208	5,579	2.01	1.89	4,575	0.55	1.99	5,775	5,579	5,579	5,579
B106;P-R1C	208	7,735	2.79	1.97	6,962	0.84	1.87	8,048	7,735	7,735	7,735
B106;P-R1D	208	4,661	1.68	1.60	3,733	0.45	1.74	4,753	4,661	4,661	4,661
B106;P-R2A	208	7,613	2.74	1.50	6,870	0.82	1.39	7,727	7,613	7,613	7,613
B106;P-R2B	208	4,807	1.73	1.44	3,909	0.47	1.53	4,868	4,807	4,807	4,807
B106;P-R2C	208	7,035	2.53	1.85	6,179	0.74	1.79	7,266	7,035	7,035	7,035
B106;P-R2D	208	4,300	1.55	1.54	3,414	0.41	1.69	4,372	4,300	4,300	4,300
B106;SG-N	480	14,886	12.38	11.41	15,231	4.22	11.17	21,844	15,423	14,947	14,889
B20;B-20-P	13,090	3,116	70.64	9.76	3,114	23.53	9.49	4,462	3,181	3,121	3,116
B20;B-20A1-P	240	1,578	0.66	0.26	1,245	0.17	0.25	1,578	1,578	1,578	1,578
B20;B-20A1-S	208	530	0.19	2.86	558	0.07	3.89	586	530	530	530
B20;B-20A2-P	240	1,578	0.66	0.26	1,245	0.17	0.25	1,578	1,578	1,578	1,578
B20;B-20A2-S	208	530	0.19	2.86	558	0.07	3.89	586	530	530	530
B20;B-20L1S-P	480	6,135	5.10	2.60	5,652	1.57	1.68	6,663	6,135	6,135	6,135
B20;B-20L1S-S	208	1,277	0.46	12.01	1,315	0.16	13.41	1,888	1,331	1,284	1,277
B20;B-T-20-P	13,090	3,115	70.63	9.74	3,113	23.53	9.46	4,459	3,179	3,120	3,115
B20;B-T-20-S	480	6,923	5.76	16.79	7,126	1.97	17.15	10,671	7,621	7,085	6,941
B20;B-T-20A-P	480	6,590	5.48	7.43	6,617	1.83	6.76	8,982	6,631	6,591	6,590
B20;B-T-20A-S	208	3,900	1.40	13.21	4,264	0.51	14.24	5,840	4,118	3,933	3,902
B20;P-20L11	208	3,827	1.38	11.43	4,131	0.50	11.75	5,617	3,966	3,843	3,827
B20;P-20L12	208	3,745	1.35	8.66	3,993	0.48	8.31	5,254	3,793	3,748	3,745
B20;P-20L14	208	3,183	1.15	2.17	3,153	0.38	1.86	3,355	3,183	3,183	3,183
B20;P-20L15	208	3,289	1.19	2.46	3,302	0.40	2.10	3,535	3,289	3,289	3,289
B20;P-20MDP	480	6,718	5.59	9.99	6,809	1.89	9.34	9,657	6,871	6,731	6,719
B20;P-E8PBJ1A1	208	-	-	-	545	0.07	3.10	-	-	-	-
B20;P-E8PBJ1A2	208	-	-	-	545	0.07	3.10	-	-	-	-
B20;P-20L15	208	1,260	0.45	7.50	1,291	0.15	7.41	1,721	1,268	1,260	1,260

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B20;P-T20A	240	1,817	0.76	0.29	1,514	0.21	0.30	1,817	1,817	1,817	1,817
B22;B-22-P	13,090	3,104	70.37	9.36	3,095	23.39	9.02	4,413	3,159	3,108	3,104
B22;B-41-P	480	10,447	8.69	4.28	9,843	2.73	3.90	12,629	10,448	10,447	10,447
B22;B-41-S	208	5,984	2.16	8.79	5,932	0.71	10.64	8,417	6,066	5,989	5,984
B22;B-C-41-P	480	10,761	8.95	5.06	10,273	2.85	4.62	13,516	10,767	10,761	10,761
B22;B-C-ELE2	208	5,156	1.86	3.22	4,645	0.56	2.91	5,841	5,156	5,156	5,156
B22;B-C-TS1E	208	1,380	0.50	18.88	1,377	0.17	18.71	2,153	1,556	1,429	1,387
B22;B-ELE_P1	208	4,212	1.52	1.85	3,542	0.43	1.60	4,350	4,212	4,212	4,212
B22;B-EMER	208	5,217	1.88	3.16	4,800	0.58	3.03	5,890	5,217	5,217	5,217
B22;B-JB-H1	480	10,659	8.86	3.62	10,208	2.83	3.29	12,400	10,659	10,659	10,659
B22;B-JB-H2	480	9,002	7.48	1.80	8,227	2.28	1.64	9,273	9,002	9,002	9,002
B22;B-L1,2,3	208	5,426	1.95	4.62	5,078	0.61	4.64	6,675	5,427	5,426	5,426
B22;B-L2,3	208	4,497	1.62	1.85	4,037	0.48	1.78	4,645	4,497	4,497	4,497
B22;B-L3	208	3,668	1.32	1.22	3,197	0.38	1.19	3,689	3,668	3,668	3,668
B22;B-M-ELE2	208	4,315	1.55	1.85	3,670	0.44	1.59	4,458	4,315	4,315	4,315
B22;B-M-ELE_P1	208	4,097	1.48	1.78	3,419	0.41	1.54	4,215	4,097	4,097	4,097
B22;B-M-TS1E	208	1,386	0.50	20.00	1,386	0.17	20.00	2,174	1,583	1,445	1,395
B22;B-P1E	208	5,053	1.82	3.47	4,554	0.55	3.33	5,820	5,054	5,053	5,053
B22;B-P1L	208	5,554	2.00	4.47	5,196	0.62	4.20	6,780	5,555	5,554	5,554
B22;B-P1N	208	5,554	2.00	4.47	5,196	0.62	4.20	6,780	5,555	5,554	5,554
B22;B-T-22-P	13,090	3,103	70.35	9.34	3,094	23.38	9.00	4,411	3,157	3,107	3,103
B22;B-T-22-S	480	12,605	10.48	14.85	13,125	3.64	15.69	19,157	13,563	12,786	12,619
B22;B-TS1-P1	208	5,173	1.86	3.77	4,693	0.56	3.61	6,070	5,173	5,173	5,173
B22;B-TS1E	208	1,336	0.48	10.27	1,312	0.16	9.50	1,928	1,369	1,339	1,336
B22;B-TS1L	208	5,618	2.02	5.60	5,279	0.63	5.55	7,218	5,624	5,618	5,618
B22;B-TS1N	208	5,618	2.02	5.60	5,279	0.63	5.55	7,218	5,624	5,618	5,618
B22;P-AC1	480	10,283	8.55	3.38	9,711	2.69	3.09	11,777	10,283	10,283	10,283
B22;P-AC2	480	9,491	7.89	2.30	8,764	2.43	2.10	10,087	9,491	9,491	9,491
B22;P-AC3	480	8,335	6.93	1.59	7,481	2.07	1.48	8,495	8,335	8,335	8,335
B22;P-ACD	480	11,006	9.15	6.86	10,637	2.95	6.47	14,766	11,051	11,007	11,006
B22;P-EHB	208	5,421	1.95	4.61	4,991	0.60	4.40	6,664	5,423	5,421	5,421
B22;P-GEN	208	2,791	1.01	0.71	2,379	0.29	0.68	2,791	2,791	2,791	2,791
B22;P-H1	480	10,248	8.52	2.86	9,692	2.69	2.59	11,332	10,249	10,248	10,248
B22;P-H12	480	10,857	9.03	4.20	10,465	2.90	3.82	13,065	10,858	10,857	10,857
B22;P-H2	480	8,606	7.16	1.62	7,790	2.16	1.48	8,781	8,606	8,606	8,606
B22;P-H3	480	7,528	6.26	1.25	6,658	1.85	1.17	7,578	7,528	7,528	7,528
B22;P-HB	480	10,545	8.77	4.75	10,025	2.78	4.41	13,053	10,549	10,545	10,545
B22;P-L1	208	5,202	1.87	3.30	4,815	0.58	3.22	5,928	5,202	5,202	5,202
B22;P-L2	208	4,272	1.54	1.63	3,802	0.46	1.57	4,361	4,272	4,272	4,272
B22;P-L3	208	3,492	1.26	1.14	3,027	0.36	1.11	3,505	3,492	3,492	3,492
B22;P-LB1	208	5,819	2.10	7.31	5,587	0.67	7.81	7,908	5,853	5,820	5,819
B22;P-LB2	208	5,099	1.84	2.48	4,719	0.57	2.36	5,488	5,099	5,099	5,099
B22;P-MDP	480	11,400	9.48	8.31	11,192	3.10	7.92	15,876	11,522	11,406	11,400
B5;B-5-P	13,090	3,145	71.31	10.89	3,157	23.86	10.74	4,583	3,242	3,155	3,145
B5;B-5L31	240	3,160	1.31	7.88	3,240	0.45	7.02	4,357	3,187	3,162	3,160
B5;B-5PB1-P	480	9,672	8.04	5.13	0	0.00	Infinite	12,187	9,678	9,672	9,672
B5;B-5PB1-S	240	5,620	2.34	10.47	6,219	0.86	11.77	8,139	5,771	5,634	5,620
B5;B-L1-P	480	9,167	7.62	2.77	0	0.00	Infinite	10,068	9,167	9,167	9,167
B5;B-L1-S	208	3,842	1.38	9.25	4,081	0.49	10.78	5,452	3,907	3,846	3,842
B5;B-L1B-P	480	7,781	6.47	1.37	0	0.00	Infinite	7,860	7,781	7,781	7,781

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B5;B-L1B-S	208	1,850	0.67	8.93	1,907	0.23	10.61	2,610	1,877	1,852	1,850
B5;B-NORMAL	240	3,160	1.31	7.88	3,240	0.45	7.02	4,357	3,187	3,162	3,160
B5;B-PL21	240	3,147	1.31	6.69	3,214	0.45	5.48	4,200	3,158	3,147	3,147
B5;B-PL22	240	3,165	1.32	7.52	3,253	0.45	7.28	4,326	3,186	3,166	3,165
B5;B-T-5-P	13,090	3,144	71.29	10.86	3,156	23.85	10.70	4,580	3,241	3,154	3,145
B5;B-T-5-S	480	10,930	9.09	16.55	0	0.00	Infinite	16,820	11,998	11,172	10,955
B5;B-WIREWAY	240	3,207	1.33	9.53	3,317	0.46	9.68	4,575	3,268	3,212	3,208
B5;B-WIREWAYP	480	9,672	8.04	5.13	0	0.00	Infinite	12,187	9,678	9,672	9,672
B5;B-WIREWAYS	240	3,345	1.39	12.61	3,548	0.49	13.83	4,978	3,509	3,368	3,346
B5;P-5L205	480	5,052	4.20	0.92	0	0.00	Infinite	5,057	5,052	5,052	5,052
B5;P-5L21	480	7,318	6.08	2.44	0	0.00	Infinite	7,853	7,318	7,318	7,318
B5;P-5L31	240	-	-	-	2,229	0.31	1.72	-	-	-	-
B5;P-5MDP	480	10,420	8.66	8.10	0	0.00	Infinite	14,441	10,519	10,424	10,420
B5;P-5PB1	240	5,319	2.21	7.82	5,676	0.79	7.98	7,323	5,362	5,321	5,319
B5;P-EMER	208	-	-	-	1,720	0.21	0.66	-	-	-	-
B5;P-L1	208	3,646	1.31	5.84	3,771	0.45	5.87	4,729	3,652	3,647	3,646
B5;P-L1B	208	1,792	0.65	5.67	1,821	0.22	5.81	2,309	1,794	1,792	1,792
B5;P-NORMAL	240	-	-	-	2,234	0.31	1.92	-	-	-	-
B5;P-PL21	240	-	-	-	2,145	0.30	1.32	-	-	-	-
B5;P-PL22	240	-	-	-	2,494	0.35	2.61	-	-	-	-
B5;P-X	240	-	-	-	3,084	0.43	4.62	-	-	-	-
B6;B-6LDP1-JB	240	3,435	1.43	4.59	3,152	0.44	3.34	4,218	3,436	3,435	3,435
B6;B-T-6-P	13,090	3,165	71.77	11.86	3,188	24.09	11.89	4,671	3,295	3,181	3,166
B6;B-T-6-S	480	12,187	10.13	16.72	12,820	3.55	17.08	18,775	13,404	12,468	12,216
B6;B-T-6A-P	480	10,171	8.46	5.62	9,684	2.68	3.89	13,081	10,183	10,171	10,171
B6;B-T-6A-S	240	7,937	3.30	9.73	0	0.00	Infinite	11,359	8,100	7,949	7,937
B6;B-T-6B-P	480	10,454	8.69	6.59	10,110	2.80	4.65	13,912	10,488	10,455	10,454
B6;B-T-6B-S	240	4,689	1.95	13.00	5,066	0.70	14.09	7,007	4,940	4,726	4,691
B6;B-T-7-JB	240	4,842	2.01	3.24	0	0.00	Infinite	5,494	4,842	4,842	4,842
B6;B-T6-P	13,090	3,166	71.79	11.90	3,189	24.10	11.94	4,674	3,297	3,182	3,167
B6;P-6L11A	240	-	-	-	4,547	0.63	5.18	-	-	-	-
B6;P-6L11B	240	-	-	-	4,010	0.56	2.47	-	-	-	-
B6;P-6LDP-1A	240	-	-	-	2,009	0.28	0.89	-	-	-	-
B6;P-6LDP1	240	-	-	-	4,931	0.68	11.94	-	-	-	-
B6;P-6MDP	480	10,746	8.93	8.04	10,556	2.93	5.89	14,873	10,844	10,750	10,746
B6;P-6P11	240	7,253	3.01	5.87	0	0.00	Infinite	9,417	7,264	7,253	7,253
B6;P-6PDP1	240	7,686	3.20	7.27	0	0.00	Infinite	10,434	7,729	7,688	7,686
B6;P-6SL1	480	-	-	-	9,619	2.67	2.84	-	-	-	-
B7;B-T-7-P	240	3,691	1.53	1.89	0	0.00	Infinite	3,822	3,691	3,691	3,691
B7;B-T-7-S	208	1,434	0.52	5.02	1,606	0.19	6.17	1,798	1,435	1,434	1,434
B7;P-P1	240	-	-	-	2,421	0.34	2.08	-	-	-	-
B7;P-PP	208	1,419	0.51	4.63	1,580	0.19	5.43	1,746	1,419	1,419	1,419
B8;B-1PA-1	208	1,109	0.40	2.91	1,189	0.14	3.89	1,230	1,109	1,109	1,109
B8;B-1PA-2	240	7,138	2.97	1.54	6,119	0.85	1.49	7,256	7,138	7,138	7,138
B8;B-1PB	208	1,989	0.72	0.69	1,795	0.22	0.58	1,990	1,989	1,989	1,989
B8;B-6LDP1SAF	240	3,357	1.40	4.21	3,045	0.42	3.03	4,041	3,358	3,357	3,357
B8;B-8-P	13,090	3,150	71.42	11.12	3,165	23.92	11.02	4,605	3,255	3,161	3,151
B8;B-8LB1-P	240	3,573	1.49	0.50	2,299	0.32	0.36	3,573	3,573	3,573	3,573
B8;B-8LB1-S	208	1,226	0.44	3.05	1,314	0.16	4.06	1,374	1,226	1,226	1,226
B8;B-8PB1R	240	4,903	2.04	0.71	3,358	0.47	0.52	4,903	4,903	4,903	4,903

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B8;B-A-1E	240	2,763	1.15	8.59	2,658	0.37	7.97	3,870	2,797	2,765	2,763
B8;B-A-1L	240	10,342	4.30	6.11	9,641	1.34	5.60	13,546	10,364	10,343	10,342
B8;B-A-1N	240	10,342	4.30	6.11	9,641	1.34	5.60	13,546	10,364	10,343	10,342
B8;B-BFWP1	240	7,793	3.24	1.95	6,672	0.92	1.83	8,095	7,793	7,793	7,793
B8;B-BFWP2	240	7,793	3.24	1.95	6,672	0.92	1.83	8,095	7,793	7,793	7,793
B8;B-BK-A-1N	240	10,649	4.43	6.97	10,074	1.40	6.40	14,336	10,697	10,650	10,649
B8;B-C-EP	240	2,990	1.24	18.60	2,983	0.41	18.37	4,658	3,361	3,090	3,003
B8;B-G-EP	240	3,003	1.25	20.00	3,003	0.42	20.00	4,711	3,429	3,130	3,023
B8;B-SAFETY	240	4,732	1.97	3.07	0	0.00	Infinite	5,307	4,732	4,732	4,732
B8;B-T-1PA-1P	240	3,129	1.30	0.45	2,087	0.29	0.35	3,129	3,129	3,129	3,129
B8;B-T-8-P	13,090	3,149	71.41	11.09	3,164	23.91	10.99	4,602	3,253	3,160	3,150
B8;B-T-8-S	240	11,841	4.92	16.25	11,891	1.65	16.79	18,185	12,952	12,086	11,865
B8;B-T-8L11-P	240	9,534	3.96	3.98	8,628	1.20	3.70	11,332	9,535	9,534	9,534
B8;B-T-8L11-S	208	4,123	1.49	7.86	4,707	0.57	9.09	5,683	4,157	4,125	4,123
B8;B-TMHC265P	240	5,867	2.44	0.79	5,037	0.70	0.74	5,869	5,867	5,867	5,867
B8;B-TMHC265S	208	1,524	0.55	4.37	1,617	0.19	5.66	1,852	1,525	1,524	1,524
B8;P-1PA	240	-	-	-	5,598	0.78	1.33	-	-	-	-
B8;P-1PA-1	208	1,086	0.39	2.58	1,159	0.14	3.21	1,177	1,086	1,086	1,086
B8;P-1PB	208	-	-	-	1,591	0.19	0.52	-	-	-	-
B8;P-8L11	208	3,916	1.41	5.17	4,330	0.52	5.07	4,942	3,918	3,916	3,916
B8;P-8L11A	208	-	-	-	2,385	0.29	0.86	-	-	-	-
B8;P-8LB1	208	-	-	-	1,287	0.15	3.53	-	-	-	-
B8;P-8PB1	240	8,620	3.58	2.78	7,593	1.05	2.64	9,476	8,620	8,620	8,620
B8;P-8PBJ	240	10,122	4.21	5.62	9,338	1.29	5.15	13,016	10,134	10,122	10,122
B8;P-8PBJ1	240	8,592	3.57	2.97	7,467	1.03	2.76	9,570	8,592	8,592	8,592
B8;P-BL12	208	1,925	0.69	0.72	1,742	0.21	0.64	1,926	1,925	1,925	1,925
B8;P-GR	208	4,057	1.46	6.80	4,583	0.55	7.33	5,434	4,073	4,057	4,057
B8;P-GRA	208	3,959	1.43	4.43	4,419	0.53	4.13	4,822	3,960	3,959	3,959
B8;P-MACHSHOP	240	5,832	2.42	1.17	4,342	0.60	0.90	5,859	5,832	5,832	5,832
B8;P-MHC26	208	1,284	0.46	1.59	1,299	0.16	1.49	1,308	1,284	1,284	1,284
B9;B-9EL21	208	2,070	0.75	9.04	2,122	0.25	9.55	2,926	2,102	2,072	2,070
B9;B-9S-P	13,090	3,044	69.01	7.79	3,007	22.72	7.37	4,188	3,068	3,045	3,044
B9;B-A-1E	480	2,138	1.78	9.02	2,063	0.57	8.39	3,021	2,170	2,140	2,138
B9;B-A-1L	480	11,480	9.54	8.33	11,736	3.25	7.83	15,995	11,604	11,486	11,480
B9;B-A-1N	480	11,480	9.54	8.33	11,736	3.25	7.83	15,995	11,604	11,486	11,480
B9;B-A1-A2	480	2,128	1.77	8.31	2,050	0.57	7.69	2,964	2,151	2,129	2,128
B9;B-A1-A3	480	2,126	1.77	7.93	2,048	0.57	7.32	2,935	2,145	2,127	2,126
B9;B-G-A-1E	480	2,307	1.92	20.00	2,307	0.64	20.00	3,618	2,634	2,404	2,322
B9;B-T-9S-P	13,090	3,043	68.99	7.78	3,006	22.72	7.36	4,185	3,067	3,044	3,043
B9;B-T-9S-S	480	12,118	10.07	15.00	12,769	3.54	15.78	18,439	13,062	12,300	12,133
B9;B-T9ELDP-P	480	10,294	8.56	2.75	10,059	2.79	2.41	11,294	10,294	10,294	10,294
B9;B-T9ELDP-S	208	3,137	1.13	10.65	3,276	0.39	12.16	4,555	3,226	3,145	3,137
B9;B-TEL21-P	480	9,850	8.19	2.18	9,486	2.63	1.90	10,387	9,850	9,850	9,850
B9;B-TEL21-S	208	2,090	0.75	11.19	2,152	0.26	12.70	3,058	2,161	2,098	2,090
B9;B-TLDP-P	480	10,083	8.38	2.83	9,762	2.71	2.51	11,127	10,083	10,083	10,083
B9;B-TLDP-S	208	5,147	1.85	8.47	5,545	0.67	9.97	7,193	5,207	5,150	5,147
B9;P-9EHDP	480	11,041	9.18	5.99	11,073	3.07	5.48	14,398	11,061	11,041	11,041
B9;P-9EL21	208	1,809	0.65	2.92	1,755	0.21	2.67	2,008	1,809	1,809	1,809
B9;P-9ELDP	208	3,094	1.11	8.41	3,210	0.39	8.84	4,318	3,129	3,096	3,094
B9;P-9HDP	480	9,288	7.72	2.14	8,752	2.43	1.91	9,766	9,288	9,288	9,288

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
B9;P-9L11	208	3,634	1.31	2.06	3,137	0.38	1.43	3,802	3,634	3,634	3,634
B9;P-9L21	208	3,662	1.32	2.58	3,242	0.39	1.86	3,969	3,662	3,662	3,662
B9;P-9L22	208	3,863	1.39	2.86	3,515	0.42	2.08	4,270	3,863	3,863	3,863
B9;P-9LDP	208	4,976	1.79	7.28	5,249	0.63	8.06	6,757	5,004	4,977	4,976
B9;SG-9MDP	480	11,816	9.82	12.09	12,260	3.40	12.08	17,484	12,328	11,881	11,819
B9A;B-A-2E	480	2,060	1.71	5.41	1,959	0.54	4.94	2,627	2,062	2,060	2,060
B9A;B-A-2L	480	6,850	5.70	6.19	6,746	1.87	5.71	8,998	6,866	6,850	6,850
B9A;B-A-2N	480	6,850	5.70	6.19	6,746	1.87	5.71	8,998	6,866	6,850	6,850
B9A;B-A-3E	480	2,037	1.69	4.36	1,932	0.54	3.95	2,472	2,038	2,037	2,037
B9A;B-A-3L	480	6,779	5.64	4.82	6,654	1.84	4.36	8,420	6,782	6,779	6,779
B9A;B-A-3N	480	6,779	5.64	4.82	6,654	1.84	4.36	8,420	6,782	6,779	6,779
B9A;B-ELEVATR	480	4,417	3.67	1.04	3,851	1.07	0.87	4,428	4,417	4,417	4,417
B9A;B-M-ELEVA	480	3,937	3.27	0.91	3,376	0.94	0.76	3,940	3,937	3,937	3,937
B9A;B-P-TR-9N	13,090	3,055	69.27	8.06	3,024	22.85	7.64	4,230	3,084	3,057	3,055
B9A;B-T-9N-P	13,090	3,055	69.26	8.04	3,023	22.85	7.63	4,228	3,083	3,056	3,055
B9A;B-T-9N-S	480	7,261	6.04	14.96	7,361	2.04	15.83	11,046	7,824	7,369	7,270
B9A;B-T9A-1P	480	6,917	5.75	9.47	6,833	1.89	9.16	9,855	7,045	6,926	6,917
B9A;B-T9A-1S	208	5,969	2.15	13.47	6,818	0.82	14.33	8,962	6,322	6,025	5,972
B9A;B-TEDP-P	480	6,020	5.00	2.19	5,682	1.57	1.95	6,354	6,020	6,020	6,020
B9A;B-TEDP-S	208	2,888	1.04	7.58	3,092	0.37	9.10	3,952	2,908	2,888	2,888
B9A;B-TEDP1-P	480	6,480	5.39	3.32	6,255	1.73	2.98	7,394	6,480	6,480	6,480
B9A;B-TEDP1-S	208	1,792	0.65	11.93	1,864	0.22	13.31	2,646	1,866	1,801	1,792
B9A;MC-MCC-9A	480	7,105	5.91	11.80	7,110	1.97	11.74	10,476	7,390	7,139	7,106
B9A;P-9ALDP	208	5,855	2.11	11.59	6,593	0.79	11.68	8,611	6,077	5,881	5,856
B9A;P-9AMDP	480	7,191	5.98	13.35	7,248	2.01	13.67	10,784	7,606	7,256	7,195
B9A;P-EDP	208	2,780	1.00	4.46	2,927	0.35	4.42	3,392	2,780	2,780	2,780
B9A;P-EDP1	208	1,762	0.63	8.33	1,820	0.22	8.35	2,455	1,781	1,763	1,762
B9A;P-EDP2	208	-	-	-	1,286	0.15	1.53	-	-	-	-
B9A;P-ELP	480	6,634	5.52	4.55	6,450	1.79	4.13	8,132	6,636	6,634	6,634
B9A;P-LP	480	6,404	5.32	2.52	6,175	1.71	2.21	6,913	6,404	6,404	6,404
B9A;P-LVP	208	3,705	1.33	1.19	3,453	0.41	1.02	3,724	3,705	3,705	3,705
B9A;P-PP1	208	4,020	1.45	2.18	3,783	0.45	1.98	4,240	4,020	4,020	4,020
B9A;P-PP2	208	4,062	1.46	2.22	3,836	0.46	2.01	4,296	4,062	4,062	4,062
B9A;P-PP3	208	4,020	1.45	2.18	3,783	0.45	1.98	4,240	4,020	4,020	4,020
BMRI;B-EMH-P	480	1,292	1.07	0.15	1,074	0.30	0.17	1,292	1,292	1,292	1,292
BMRI;B-EMH-S	208	777	0.28	3.08	806	0.10	4.21	872	777	777	777
BMRI;B-H-P	480	17,540	14.58	1.53	14,482	4.01	1.52	17,829	17,540	17,540	17,540
BMRI;B-H-S	208	3,423	1.23	10.20	3,510	0.42	11.83	4,937	3,507	3,430	3,423
BMRI;MC-CHILL	480	12,952	10.77	0.97	10,546	2.92	0.97	12,971	12,952	12,952	12,952
BMRI;P-EMH	480	1,345	1.12	0.15	1,118	0.31	0.17	1,345	1,345	1,345	1,345
BMRI;P-EML	208	754	0.27	2.54	779	0.09	3.11	815	754	754	754
BMRI;P-H	480	20,719	17.23	2.32	17,378	4.82	2.24	22,057	20,719	20,719	20,719
BMRI;P-L	208	3,357	1.21	8.61	3,410	0.41	9.40	4,705	3,399	3,359	3,357
BMRI;U-UPS	480	19,403	16.13	2.26	16,059	4.45	2.22	20,565	19,403	19,403	19,403
BT25;P-MSPP1	208	-	-	-	554	0.07	0.27	-	-	-	-
BT34;P-T34A	208	-	-	-	1,467	0.18	0.62	-	-	-	-
BT34;P-T34B	208	1,702	0.61	0.70	1,500	0.18	0.63	1,702	1,702	1,702	1,702
BT36;B-36P2-P	480	1,680	1.40	0.42	1,188	0.33	0.34	1,680	1,680	1,680	1,680
BT36;B-36P2-S	208	2,332	0.84	1.38	2,792	0.34	1.82	2,356	2,332	2,332	2,332
BT36;B-T36	480	2,840	2.36	0.65	2,385	0.66	0.59	2,841	2,840	2,840	2,840

Fault Location Bus Name	Bus Voltage	3-Phase Amps	3-Phase MVA	3P X/R	SLG Amps	SLG MVA	SLG X/R	Mom Amps	-----3P Asym Amps-----		
									3 Cycles	5 Cycles	8 Cycles
BT36;P-36P1	480	1,758	1.46	0.42	1,255	0.35	0.34	1,758	1,758	1,758	1,758
BT36;P-36P2	208	2,230	0.80	1.31	2,616	0.31	1.66	2,248	2,230	2,230	2,230
OD;B-FD-A	13,090	3,208	72.74	14.63	3,254	24.59	15.44	4,868	3,444	3,252	3,212
OD;B-FD-B	13,090	3,220	73.00	15.07	3,264	24.67	15.76	4,902	3,473	3,269	3,224
OD;B-T-U1-P	33,000	5,710	326.38	20.67	5,458	104.00	18.31	8,985	6,567	5,977	5,754
OD;B-T-U1-S	13,090	3,210	72.78	14.80	3,258	24.62	15.70	4,877	3,452	3,256	3,214
OD;B-T-U2-P	33,000	5,695	325.53	20.88	5,459	104.01	18.59	8,969	6,565	5,969	5,741
OD;B-T-U2-S	13,090	3,222	73.05	15.24	3,268	24.70	16.04	4,912	3,483	3,274	3,226
OD;B-TRU1P	33,000	5,716	326.72	21.00	5,468	104.18	18.94	9,007	6,598	5,996	5,764
OD;B-TRU2P	33,000	5,701	325.86	21.21	5,468	104.19	19.25	8,991	6,595	5,989	5,751
OD;B-UTIL-2	33,000	5,707	326.20	21.56	5,478	104.37	19.95	9,014	6,626	6,009	5,761
OD;B-UTIL1	33,000	5,722	327.06	21.34	5,477	104.36	19.63	9,029	6,628	6,016	5,773
OD;SG-1	13,090	3,205	72.67	14.39	3,249	24.55	15.06	4,853	3,431	3,246	3,208
OD;SG-2	13,090	3,205	72.66	14.34	3,248	24.54	14.99	4,850	3,428	3,245	3,208
OD;SG-3	13,090	3,216	72.92	14.77	3,257	24.62	15.30	4,885	3,458	3,262	3,220
OD;SG-4	13,090	3,217	72.93	14.81	3,258	24.62	15.37	4,888	3,460	3,263	3,220

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Equipment Identification	Status	Equipment Type	Bus Voltage	Calc Isc kA	Equipment kA Rating	Isc Rating%
B100;MC-EMCBP	Fail	MCC	480	*28.74	22.00	*130.62
B100;MC-EMCFB	Fail	MCC	480	*23.16	22.00	*105.27
B100;MC-MCCDB	Fail	MCC	480	*25.25	22.00	*114.78
B100;MC-MCCFB	Fail	MCC	480	*23.35	22.00	*106.16
B100;MC-MCEB1	Fail	MCC	480	*42.39	42.00	*100.92
B100;MC-MCEB2	Fail	MCC	480	*42.15	42.00	*100.36
B100;P-1R13	Fail	Panel	208	*10.19	10.00	*101.91
B100;P-1R15	Fail	Panel	208	*10.19	10.00	*101.91
B100;P-1R15A	Fail	Panel	208	*10.19	10.00	*101.91
B100;P-4DP	Fail	Panel	480	*20.49	18.00	*113.81
B100;P-4DP6	Fail	Panel	480	*18.57	18.00	*103.18
B100;P-BDP4	Fail	Panel	480	*35.20	14.00	*251.44
B100;P-BDP5	Fail	Panel	480	*34.83	30.00	*116.09
B100;P-BYL2	Fail	Panel	480	*15.37	14.00	*109.79
B100;P-C2DP	Fail	Panel	480	*20.87	18.00	*115.94
B100;P-C4DP	Fail	Panel	480	*22.53	14.00	*160.95
B100;P-E1DP2A	Fail	Panel	480	*22.81	14.00	*162.95
B100;P-E2DP	Fail	Panel	480	*23.10	18.00	*128.35
B100;P-EBDPRI	Fail	Panel	480	*28.29	25.00	*113.18
B100;P-EBR11B	Fail	Panel	208	*10.36	10.00	*103.61
B100A;P-1DL1	Fail	Panel	480	*16.30	14.00	*116.40
B100A;P-2DL1	Fail	Panel	480	*14.30	10.00	*143.00
B100A;P-BDDP1	Fail	Panel	480	*20.60	14.00	*147.16
B8;P-8PBJ	Fail	Panel	240	*10.12	10.00	*101.22
BMRI;P-H	Fail	Panel	480	*20.72	10.00	*207.19
B100;MC-EMCC2	Pass	MCC	480	12.94	25.00	51.74
B100;MC-EMCC4	Pass	MCC	480	10.64	25.00	42.56
B100;MC-EMCD5	Pass	MCC	480	7.35	25.00	29.39
B100;MC-EMCDB	Pass	MCC	480	13.59	22.00	61.75
B100;MC-EMCEB	Pass	MCC	480	17.39	22.00	79.04
B100;MC-EMCF1	Pass	MCC	480	21.79	22.00	99.03
B100;MC-LSMCG	Pass	MCC	480	6.02	25.00	24.10
B100;MC-MCCA2	Pass	MCC	480	14.63	25.00	58.51
B100;MC-MCCA3	Pass	MCC	480	10.59	25.00	42.37
B100;MC-MCCA4	Pass	MCC	480	12.56	25.00	50.25
B100;MC-MCCA5	Pass	MCC	480	11.71	25.00	46.86
B100;MC-MCCBP	Pass	MCC	480	20.19	22.00	91.78
B100;MC-MCCC2	Pass	MCC	480	8.73	25.00	34.92
B100;MC-MCCC3	Pass	MCC	480	8.31	25.00	33.26
B100;MC-MCCC4	Pass	MCC	480	12.86	25.00	51.45
B100;MC-MCCCB	Pass	MCC	480	15.71	25.00	62.83
B100;MC-MCCCI	Pass	MCC	480	17.56	22.00	79.81
B100;MC-MCCD2	Pass	MCC	480	9.52	22.00	43.29
B100;MC-MCCD3	Pass	MCC	480	5.89	22.00	26.77
B100;MC-MCCD4	Pass	MCC	480	5.48	25.00	21.93
B100;MC-MCCD5	Pass	MCC	480	5.08	25.00	20.33
B100;MC-MCCF1	Pass	MCC	480	20.74	22.00	94.29

South Carolina (Columbia) VA Medical Center - Equipment: Pass / Fail Evaluation

Equipment Identification	Status	Equipment Type	Bus Voltage	Calc Isc kA	Equipment kA Rating	Isc Rating%
B100;MC-MCEB3	Pass	MCC	480	27.86	42.00	66.34
B100;MC-MCEB4	Pass	MCC	480	42.12	65.00	64.81
B100;P-150A1	Pass	Panel	120	1.83	10.00	18.35
B100;P-150B2	Pass	Panel	120	1.79	18.00	9.94
B100;P-150C3	Pass	Panel	120	1.79	18.00	9.94
B100;P-164A1	Pass	Panel	120	1.82	10.00	18.19
B100;P-164B2	Pass	Panel	120	1.76	18.00	9.77
B100;P-164C3	Pass	Panel	120	1.76	18.00	9.77
B100;P-166A1	Pass	Panel	120	1.80	10.00	18.03
B100;P-166B2	Pass	Panel	120	1.73	18.00	9.60
B100;P-166C3	Pass	Panel	120	1.73	18.00	9.60
B100;P-168A1	Pass	Panel	120	1.77	10.00	17.72
B100;P-168B	Pass	Panel	120	1.63	18.00	9.08
B100;P-168B2R	Pass	Panel	120	1.67	18.00	9.26
B100;P-168C3	Pass	Panel	120	1.67	18.00	9.26
B100;P-169A1	Pass	Panel	120	1.79	10.00	17.87
B100;P-1DP1	Pass	Panel	480	24.79	35.00	70.84
B100;P-1DP2	Pass	Panel	480	26.87	35.00	76.77
B100;P-1DP3	Pass	Panel	480	26.17	35.00	74.78
B100;P-1DP4	Pass	Panel	480	21.96	35.00	62.76
B100;P-1R1	Pass	Panel	208	3.70	10.00	37.04
B100;P-1R10	Pass	Panel	208	3.29	10.00	32.92
B100;P-1R11	Pass	Panel	208	3.29	10.00	32.92
B100;P-1R12	Pass	Panel	208	1.62	10.00	16.20
B100;P-1R14	Pass	Panel	208	10.19	18.00	56.61
B100;P-1R16	Pass	Panel	208	1.94	10.00	19.43
B100;P-1R16B	Pass	Panel	208	1.93	10.00	19.31
B100;P-1R17	Pass	Panel	208	1.94	10.00	19.43
B100;P-1R18	Pass	Panel	208	4.27	10.00	42.66
B100;P-1R19	Pass	Panel	208	4.27	10.00	42.66
B100;P-1R2	Pass	Panel	208	3.70	10.00	37.04
B100;P-1R20	Pass	Panel	208	4.27	10.00	42.66
B100;P-1R21	Pass	Panel	208	4.27	10.00	42.66
B100;P-1R22	Pass	Panel	208	4.02	10.00	40.21
B100;P-1R3	Pass	Panel	208	3.70	10.00	37.04
B100;P-1R4	Pass	Panel	208	3.70	10.00	37.04
B100;P-1R5	Pass	Panel	208	3.73	10.00	37.25
B100;P-1R6	Pass	Panel	208	3.73	10.00	37.25
B100;P-1R7	Pass	Panel	208	3.73	10.00	37.25
B100;P-1R8	Pass	Panel	208	3.73	10.00	37.25
B100;P-1R9	Pass	Panel	208	3.31	10.00	33.08
B100A;P-2DL1	Fail	Panel	480	*14.30	10.00	*143.00
B100;P-2DP	Pass	Panel	480	22.45	25.00	89.80
B100;P-2R1	Pass	Panel	208	1.26	25.00	5.06
B100;P-2R2	Pass	Panel	208	1.26	25.00	5.06
B100;P-2R3	Pass	Panel	208	1.26	25.00	5.06
B100;P-2R7	Pass	Panel	208	1.27	25.00	5.10

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Equipment Identification	Status	Equipment Type	Bus Voltage	Calc Isc kA	Equipment kA Rating	Isc Rating%
B100;P-2R8	Pass	Panel	208	1.27	25.00	5.10
B100;P-2WR1	Pass	Panel	208	4.68	22.00	21.28
B100;P-2WR3	Pass	Panel	208	4.71	22.00	21.39
B100;P-2WRDP	Pass	Panel	208	4.91	30.00	16.36
B100;P-3DP	Pass	Panel	480	21.54	25.00	86.14
B100;P-3R1	Pass	Panel	208	1.89	10.00	18.88
B100;P-3R10	Pass	Panel	208	3.70	18.00	20.55
B100;P-3R2	Pass	Panel	208	1.89	10.00	18.88
B100;P-3R3	Pass	Panel	208	1.89	10.00	18.88
B100;P-3R4	Pass	Panel	208	1.89	10.00	18.88
B100;P-3R5	Pass	Panel	208	1.89	10.00	18.88
B100;P-3R6	Pass	Panel	208	1.89	10.00	18.88
B100;P-3R7	Pass	Panel	208	3.70	18.00	20.55
B100;P-3R8	Pass	Panel	208	3.70	18.00	20.55
B100;P-3R9	Pass	Panel	208	3.70	18.00	20.55
B100;P-4R1	Pass	Panel	208	1.86	10.00	18.65
B100;P-4R2	Pass	Panel	208	1.86	10.00	18.65
B100;P-4R3	Pass	Panel	208	1.86	10.00	18.65
B100;P-4R4	Pass	Panel	208	1.85	10.00	18.48
B100;P-4R5	Pass	Panel	208	1.85	10.00	18.48
B100;P-4R6	Pass	Panel	208	1.85	10.00	18.48
B100;P-4R7	Pass	Panel	208	3.59	18.00	19.97
B100;P-4R8	Pass	Panel	208	3.59	18.00	19.97
B100;P-4R9	Pass	Panel	208	3.59	18.00	19.97
B100;P-5DP	Pass	Panel	480	19.71	25.00	78.85
B100;P-5R1	Pass	Panel	208	1.88	10.00	18.84
B100;P-5R2	Pass	Panel	208	1.88	10.00	18.84
B100;P-5R4	Pass	Panel	208	1.88	10.00	18.84
B100;P-5R5	Pass	Panel	208	1.88	10.00	18.84
B100;P-5R6	Pass	Panel	208	1.88	10.00	18.84
B100;P-5R7	Pass	Panel	208	1.88	10.00	18.84
B100;P-BDP1	Pass	Panel	480	34.95	35.00	99.84
B100;P-BDP2	Pass	Panel	480	34.96	35.00	99.90
B100;P-BDP3	Pass	Panel	480	32.41	100.00	32.41
B100;P-BDP6	Pass	Panel	480	24.51	25.00	98.05
B100;P-BR1	Pass	Panel	208	1.89	25.00	7.57
B100;P-BR10	Pass	Panel	208	1.29	10.00	12.93
B100;P-BR10A	Pass	Panel	208	1.27	22.00	5.78
B100;P-BR13	Pass	Panel	208	1.41	10.00	14.13
B100;P-BR2	Pass	Panel	208	1.89	25.00	7.57
B100;P-BR4	Pass	Panel	208	3.64	25.00	14.57
B100;P-BR5	Pass	Panel	208	3.64	25.00	14.57
B100;P-BR7	Pass	Panel	208	3.64	25.00	14.57
B100;P-BR8	Pass	Panel	208	3.64	25.00	14.57
B100;P-BR9	Pass	Panel	208	3.64	25.00	14.57
B100;P-BYL1	Pass	Panel	480	17.00	18.00	94.42
B100;P-C1DP	Pass	Panel	480	12.88	35.00	36.81

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Equipment Identification	Status	Equipment Type	Bus Voltage	Calc Isc kA	Equipment kA Rating	Isc Rating%
B100;P-C1L1	Pass	Panel	480	11.03	35.00	31.50
B100;P-C1L1A	Pass	Panel	480	8.80	35.00	25.15
B100;P-C1L2A	Pass	Panel	480	8.80	35.00	25.15
B100;P-C1R1	Pass	Panel	208	1.25	25.00	5.01
B100;P-C1R2	Pass	Panel	208	1.25	10.00	12.52
B100;P-C1R4	Pass	Panel	208	1.49	22.00	6.78
B100;P-C2L1	Pass	Panel	480	13.59	18.00	75.49
B100;P-C2R1	Pass	Panel	208	4.33	10.00	43.26
B100;P-C2R2	Pass	Panel	208	4.23	10.00	42.31
B100;P-C2R3	Pass	Panel	208	4.23	10.00	42.31
B100;P-C2R4	Pass	Panel	208	4.33	10.00	43.26
B100;P-C2R5	Pass	Panel	208	4.33	10.00	43.26
B100;P-C2W1	Pass	Panel	208	1.85	10.00	18.50
B100;P-C2W2	Pass	Panel	208	1.81	22.00	8.22
B100;P-C3DP	Pass	Panel	480	7.47	18.00	41.53
B100;P-C3L1	Pass	Panel	480	6.38	18.00	35.43
B100;P-C3R1	Pass	Panel	208	1.31	10.00	13.09
B100;P-C4L1	Pass	Panel	480	16.13	18.00	89.60
B100;P-C4R1	Pass	Panel	208	3.76	18.00	20.91
B100;P-C4R2	Pass	Panel	208	3.76	18.00	20.91
B100;P-C5DP	Pass	Panel	480	6.52	35.00	18.63
B100;P-C5L1	Pass	Panel	480	5.27	35.00	15.07
B100;P-C5R1	Pass	Panel	208	1.24	10.00	12.42
B100;P-C5R2	Pass	Panel	208	1.24	10.00	12.42
B100;P-CBDP1	Pass	Panel	480	32.49	35.00	92.82
B100;P-CBDP2	Pass	Panel	480	32.66	35.00	93.32
B100;P-E1DP1	Pass	Panel	480	12.67	35.00	36.20
B100;P-E1DP2	Pass	Panel	480	24.00	35.00	68.57
B100;P-E1L1	Pass	Panel	480	10.87	35.00	31.06
B100;P-E1R16A	Pass	Panel	208	1.30	10.00	12.98
B100;P-E1R2	Pass	Panel	208	3.59	25.00	14.35
B100;P-E1R3	Pass	Panel	208	1.28	10.00	12.80
B100;P-E1R4	Pass	Panel	208	3.59	10.00	35.89
B100;P-E2L1	Pass	Panel	480	14.51	35.00	41.46
B100;P-E2L1A	Pass	Panel	480	22.56	35.00	64.46
B100;P-E2R1	Pass	Panel	208	1.26	10.00	12.63
B100;P-E2R2	Pass	Panel	208	1.26	10.00	12.63
B100;P-E2WD1	Pass	Panel	208	3.40	10.00	33.97
B100;P-E2WDP2	Pass	Panel	480	15.42	18.00	85.66
B100;P-E3DP	Pass	Panel	480	7.41	18.00	41.15
B100;P-E3L1	Pass	Panel	480	5.85	18.00	32.50
B100;P-E3L1A	Pass	Panel	480	7.27	22.00	33.06
B100;P-E3R1	Pass	Panel	208	1.24	10.00	12.42
B100;P-E3R2	Pass	Panel	208	1.24	10.00	12.42
B100;P-E4L1	Pass	Panel	480	7.86	18.00	43.68
B100;P-E4L1A	Pass	Panel	480	6.90	18.00	38.34
B100;P-E4R1	Pass	Panel	208	1.25	10.00	12.46

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Equipment Identification	Status	Equipment Type	Bus Voltage	Calc Isc kA	Equipment kA Rating	Isc Rating%
B100;P-E4R2	Pass	Panel	208	1.25	10.00	12.46
B100;P-E5DP	Pass	Panel	480	6.46	35.00	18.45
B100;P-E5L1	Pass	Panel	480	5.24	35.00	14.96
B100;P-EBDP1	Pass	Panel	480	31.35	35.00	89.57
B100;P-EBDP2	Pass	Panel	480	31.35	35.00	89.57
B100;P-EBDP3	Pass	Panel	480	31.92	50.00	63.84
B100;P-EBDP4	Pass	Panel	480	32.30	35.00	92.29
B100;P-EBDP6	Pass	Panel	480	9.47	14.00	67.67
B100;P-EBDP7A	Pass	Panel	208	12.41	22.00	56.41
B100;P-EBDP9A	Pass	Panel	480	21.48	25.00	85.91
B100;P-EBDP9B	Pass	Panel	208	3.16	10.00	31.64
B100;P-EBL1A	Pass	Panel	480	8.67	35.00	24.77
B100;P-EBL2A	Pass	Panel	480	8.67	35.00	24.77
B100;P-EBPR1	Pass	Panel	208	1.39	10.00	13.91
B100;P-EBR1	Pass	Panel	208	1.24	25.00	4.94
B100;P-EBR10	Pass	Panel	208	3.43	10.00	34.27
B100;P-EBR11	Pass	Panel	208	9.69	10.00	96.92
B100;P-EBR11A	Pass	Panel	208	9.75	22.00	44.32
B100;P-EBR11C	Pass	Panel	208	9.56	10.00	95.59
B100;P-EBR12	Pass	Panel	208	9.93	10.00	99.30
B100;P-EBR2	Pass	Panel	208	1.24	25.00	4.94
B100;P-EPDP	Pass	Panel	480	33.12	35.00	94.63
B100;P-LS1DP	Pass	Panel	480	12.80	35.00	36.57
B100;P-LS1L1	Pass	Panel	480	9.13	35.00	26.08
B100;P-LS1R1	Pass	Panel	208	1.32	10.00	13.22
B100;P-LS2DP	Pass	Panel	480	8.04	14.00	57.42
B100;P-LS2L1	Pass	Panel	480	6.24	18.00	34.69
B100;P-LS2R1	Pass	Panel	208	1.31	10.00	13.12
B100;P-LS2WL1	Pass	Panel	480	1.15	10.00	11.51
B100;P-LS3DP	Pass	Panel	480	7.45	14.00	53.20
B100;P-LS3L1	Pass	Panel	480	5.88	18.00	32.64
B100;P-LS3R1	Pass	Panel	208	1.31	10.00	13.09
B100;P-LS4DP	Pass	Panel	480	6.94	14.00	49.54
B100;P-LS4L1	Pass	Panel	480	5.98	18.00	33.21
B100;P-LS4R1	Pass	Panel	208	1.31	10.00	13.06
B100;P-LS5DP	Pass	Panel	480	6.49	35.00	18.54
B100;P-LS5L1	Pass	Panel	480	5.26	35.00	15.02
B100;P-LSB2	Pass	Panel	480	6.95	10.00	69.48
B100;P-LSBDP1	Pass	Panel	480	32.04	35.00	91.55
B100;P-LSBDP2	Pass	Panel	480	9.54	14.00	68.17
B100;P-LSBL1	Pass	Panel	480	7.14	10.00	71.36
B100;P-LSBR1	Pass	Panel	208	1.34	10.00	13.38
B100;P-RL1	Pass	Panel	208	2.72	10.00	27.22
B100;P-RL2	Pass	Panel	208	2.85	10.00	28.47
B100;P-RP1	Pass	Panel	208	2.66	10.00	26.64
B100;P-RP2	Pass	Panel	208	2.66	10.00	26.64
B100;P-RP3	Pass	Panel	208	2.51	10.00	25.15

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Equipment Identification	Status	Equipment Type	Bus Voltage	Calc Isc kA	Equipment kA Rating	Isc Rating%
B100;P-RP5	Pass	Panel	208	2.48	10.00	24.78
B100;P-RP6	Pass	Panel	208	2.93	10.00	29.26
B100;P-UNKNOW	Pass	Panel	208	1.91	10.00	19.05
B100;P-UNNAM1	Pass	Panel	208	1.91	10.00	19.05
B100;P-UNNAM2	Pass	Panel	208	1.91	10.00	19.05
B100A;P-1DLS1	Pass	Panel	480	4.44	22.00	20.17
B100A;P-1DLSR1	Pass	Panel	208	1.49	10.00	14.87
B100A;P-1DR1	Pass	Panel	208	5.99	22.00	27.22
B100A;P-1DR1S	Pass	Panel	208	5.55	22.00	25.24
B100A;P-1DR2	Pass	Panel	208	5.67	22.00	25.77
B100A;P-2DCR2	Pass	Panel	208	1.35	10.00	13.49
B100A;P-BDC1	Pass	Panel	480	9.61	18.00	53.41
B100A;P-BDE1	Pass	Panel	480	13.55	14.00	96.80
B100A;P-BDLS1	Pass	Panel	480	10.59	14.00	75.66
B100A;P-BDLSR1	Pass	Panel	208	1.52	22.00	6.91
B100A;P-BDR1	Pass	Panel	208	1.79	22.00	8.14
B103;P-N2D2	Pass	Panel	480	9.07	14.00	64.76
B103;P-N2L1	Pass	Panel	480	2.64	35.00	7.55
B103;P-N2R2	Pass	Panel	208	3.80	10.00	38.02
B103;P-N2R3	Pass	Panel	208	4.10	18.00	22.76
B103;P-N2R4	Pass	Panel	208	5.57	10.00	55.72
B103;P-N2R5	Pass	Panel	208	5.57	10.00	55.72
B103;P-NC1R1	Pass	Panel	208	2.53	10.00	25.33
B103;P-NC2L1	Pass	Panel	480	2.31	35.00	6.60
B103;P-NC2R2	Pass	Panel	208	1.04	10.00	10.40
B103;P-NE2R1	Pass	Panel	208	0.91	10.00	9.08
B103;P-NIG1	Pass	Panel	480	1.24	14.00	8.89
B105;P-36H	Pass	Panel	480	3.04	14.00	21.72
B106;P-E1A	Pass	Panel	208	2.86	10.00	28.65
B106;P-E1B	Pass	Panel	208	1.66	22.00	7.54
B106;P-E1C	Pass	Panel	208	1.86	22.00	8.46
B106;P-E1D	Pass	Panel	208	1.39	22.00	6.33
B106;P-E2A	Pass	Panel	208	2.61	22.00	11.85
B106;P-E2B	Pass	Panel	208	1.52	22.00	6.93
B106;P-E2C	Pass	Panel	208	1.72	22.00	7.82
B106;P-E2D	Pass	Panel	208	1.28	22.00	5.82
B106;P-EMDPH	Pass	Panel	480	13.61	30.00	45.37
B106;P-EMDPL	Pass	Panel	208	3.25	25.00	13.01
B106;P-EV	Pass	Panel	208	0.78	22.00	3.52
B106;P-L1B	Pass	Panel	208	6.10	22.00	27.75
B106;P-L1C	Pass	Panel	208	8.74	22.00	39.71
B106;P-L1D	Pass	Panel	208	5.21	22.00	23.69
B106;P-L2A	Pass	Panel	208	9.18	22.00	41.72
B106;P-L2B	Pass	Panel	208	5.43	22.00	24.69
B106;P-L2C	Pass	Panel	208	7.89	22.00	35.86
B106;P-MDPL	Pass	Panel	208	14.95	22.00	67.97
B106;P-PPH1	Pass	Panel	480	7.79	18.00	43.30

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Equipment Identification	Status	Equipment Type	Bus Voltage	Calc Isc kA	Equipment kA Rating	Isc Rating%
B106;P-PPH2-L	Pass	Panel	480	7.31	18.00	40.59
B106;P-PPH2-R	Pass	Panel	480	6.98	18.00	38.78
B106;P-PPL2	Pass	Panel	208	0.77	22.00	3.52
B106;P-R1B	Pass	Panel	208	5.58	22.00	25.36
B106;P-R1D	Pass	Panel	208	4.66	22.00	21.19
B106;P-R2A	Pass	Panel	208	7.61	22.00	34.61
B106;P-R2B	Pass	Panel	208	4.81	22.00	21.85
B106;P-R2C	Pass	Panel	208	7.03	22.00	31.98
B106;SG-N	Pass	Switchgear	480	15.23	65.00	23.43
B20;P-20L11	Pass	Panel	208	4.13	10.00	41.31
B20;P-20L12	Pass	Panel	208	3.99	10.00	39.93
B20;P-20MDP	Pass	Panel	480	6.81	14.00	48.64
B22;P-AC1	Pass	Panel	480	10.28	14.00	73.45
B22;P-AC2	Pass	Panel	480	9.49	14.00	67.79
B22;P-AC3	Pass	Panel	480	8.33	14.00	59.53
B22;P-ACD	Pass	Panel	480	11.01	18.00	61.14
B22;P-EHB	Pass	Panel	208	5.42	10.00	54.21
B22;P-GEN	Pass	Panel	208	2.79	22.00	12.68
B22;P-H1	Pass	Panel	480	10.25	14.00	73.20
B22;P-H12	Pass	Panel	480	10.86	18.00	60.32
B22;P-H3	Pass	Panel	480	7.53	14.00	53.77
B22;P-HB	Pass	Panel	480	10.54	14.00	75.32
B22;P-L1	Pass	Panel	208	5.20	10.00	52.02
B22;P-LB1	Pass	Panel	208	5.82	14.00	41.57
B22;P-LB2	Pass	Panel	208	5.10	10.00	50.99
B22;P-MDP	Pass	Panel	480	11.40	30.00	38.00
B5;P-5L205	Pass	Panel	480	5.05	18.00	28.07
B5;P-5MDP	Pass	Panel	480	10.42	30.00	34.73
B5;P-EMER	Pass	Panel	208	2.06	18.00	11.42
B5;P-L1B	Pass	Panel	208	1.82	10.00	18.21
B5;P-NORMAL	Pass	Panel	240	2.51	10.00	25.07
B5;P-PL21	Pass	Panel	240	2.34	10.00	23.36
B5;P-PL22	Pass	Panel	240	2.62	10.00	26.25
B6;P-6L11A	Pass	Panel	240	4.55	10.00	45.47
B6;P-6L11B	Pass	Panel	240	4.04	10.00	40.40
B6;P-6LDP-1A	Pass	Panel	240	2.65	10.00	26.48
B6;P-6LDP1	Pass	Panel	240	4.93	18.00	27.39
B6;P-6MDP	Pass	Panel	480	10.75	30.00	35.82
B6;P-6P11	Pass	Panel	240	7.25	18.00	40.29
B6;P-6PDP1	Pass	Panel	240	7.69	42.00	18.30
B7;P-P1	Pass	Panel	240	2.81	10.00	28.14
B7;P-PP	Pass	Panel	208	1.58	10.00	15.80
B8;P-1PA	Pass	Panel	240	6.59	10.00	65.92
B8;P-1PB	Pass	Panel	208	1.79	10.00	17.87
B8;P-8L11A	Pass	Panel	208	2.85	10.00	28.54
B8;P-8LB1	Pass	Panel	208	1.29	10.00	12.87
B8;P-8PB1	Pass	Panel	240	8.59	22.00	39.06

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Equipment Identification	Status	Equipment Type	Bus Voltage	Calc Isc kA	Equipment kA Rating	Isc Rating%
B8;P-GR	Pass	Panel	208	4.58	10.00	45.83
B8;P-GRA	Pass	Panel	208	4.42	10.00	44.19
B8;P-MACHSHOP	Pass	Panel	240	5.83	18.00	32.40
B8;P-MHC26	Pass	Panel	208	1.30	10.00	12.99
B9;P-9EHDP	Pass	Panel	480	11.07	14.00	79.09
B9;P-9HDP	Pass	Panel	480	9.29	14.00	66.34
B9;P-9L11	Pass	Panel	208	3.63	10.00	36.34
B9;P-9L21	Pass	Panel	208	3.66	10.00	36.62
B9;P-9L22	Pass	Panel	208	3.86	10.00	38.63
B9;P-9LDP	Pass	Panel	208	5.25	10.00	52.49
B9;SG-9MDP	Pass	Switchgear	480	12.26	30.00	40.87
B9A;P-LVP	Pass	Panel	208	3.71	14.00	26.46
B9A;P-PP1	Pass	Panel	208	4.02	14.00	28.72
B9A;P-PP3	Pass	Panel	208	4.02	14.00	28.72
BMRI;P-EMH	Pass	Panel	480	1.34	14.00	9.60
BMRI;P-EML	Pass	Panel	208	0.78	10.00	7.79
BMRI;P-L	Pass	Panel	208	3.41	10.00	34.10
BT25;P-MSPP1	Pass	Panel	208	0.66	10.00	6.56
BT34;P-T34B	Pass	Panel	208	1.70	10.00	17.02
BT36;P-36P1	Pass	Panel	480	1.76	22.00	7.99
BT36;P-36P2	Pass	Panel	208	2.62	10.00	26.16
OD;SG-1	Pass	Switchgear	13090	3.25	12.50	25.99
OD;SG-2	Pass	Switchgear	13090	3.25	12.50	25.98
OD;SG-3	Pass	Switchgear	13090	3.26	12.50	26.06
OD;SG-4	Pass	Switchgear	13090	3.26	12.50	26.07
B100;MC-CT2	Unknown	MCC	480	42.38		
B100;MC-ELES9	Unknown	MCC	480	17.76		
B100;MC-EMCC3	Unknown	MCC	480	7.67		
B100;P-169B2	Unknown	Panel	120	1.70		
B100;P-169C3	Unknown	Panel	120	1.70		
B100;P-1C90	Unknown	Panel	480	2.98		
B100;P-1DP2S1	Unknown	Panel	480	12.93		
B100;P-1DP2S2	Unknown	Panel	480	12.93		
B100;P-1DP2S3	Unknown	Panel	480	12.93		
B100;P-1DP2S4	Unknown	Panel	480	12.93		
B100;P-1DP2S5	Unknown	Panel	480	12.93		
B100;P-1DP2S6	Unknown	Panel	480	12.93		
B100;P-1DP2S7	Unknown	Panel	480	12.93		
B100;P-2A100	Unknown	Panel	480	15.73		
B100;P-2R4	Unknown	Panel	208	1.88		
B100;P-2R5	Unknown	Panel	208	1.88		
B100;P-2R6	Unknown	Panel	208	1.88		
B100;P-2WR2	Unknown	Panel	208	4.68		
B100;P-3ED1	Unknown	Panel	208	0.81		
B100;P-3WD1	Unknown	Panel	208	0.79		
B100;P-5R3	Unknown	Panel	208	1.88		
B100;P-BDP10	Unknown	Panel	480	24.79		

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Equipment Identification	Status	Equipment Type	Bus Voltage	Calc Isc kA	Equipment kA Rating	Isc Rating%
B100;P-BDP8	Unknown	Panel	480	23.86		
B100;P-BDPCRM	Unknown	Panel	208	1.10		
B100;P-BME	Unknown	Panel	208	1.95		
B100;P-BR3	Unknown	Panel	208	1.89		
B100;P-BR6	Unknown	Panel	208	3.64		
B100;P-C1315L	Unknown	Panel	480	22.81		
B100;P-C1315R	Unknown	Panel	480	22.81		
B100;P-C1R3	Unknown	Panel	208	1.53		
B100;P-C2WDP	Unknown	Panel	480	8.58		
B100;P-CCTV	Unknown	Panel	208	1.10		
B100;P-E1R1	Unknown	Panel	208	3.66		
B100;P-E4DP	Unknown	Panel	480	10.50		
B100;P-E5L1A	Unknown	Panel	480	6.36		
B100;P-E5R1	Unknown	Panel	208	1.24		
B100;P-E5R2	Unknown	Panel	208	1.24		
B100;P-EBDP1A	Unknown	Panel	480	25.47		
B100;P-EBL1	Unknown	Panel	480	7.83		
B100;P-FIRE-P	Unknown	Panel	480	26.90		
B100;P-KITCHE	Unknown	Panel	208	9.95		
B100;P-LS5R1	Unknown	Panel	208	1.30		
B100;P-MSI850	Unknown	Panel	480	12.93		
B100;P-PBLOAD	Unknown	Panel	480	12.93		
B100;SG-EP	Unknown	Switchgear	480	14.92		
B100;SG-SS1-A	Unknown	Switchgear	480	46.77		
B100;SG-SS2-A	Unknown	Switchgear	480	40.00		
B100;SG-SS2-B	Unknown	Switchgear	480	39.74		
B100A;P-2DCR1	Unknown	Panel	208	1.36		
B100A;P-2DR1	Unknown	Panel	208	3.44		
B100A;P-2DR2	Unknown	Panel	208	3.40		
B100A;P-2DR3	Unknown	Panel	208	3.40		
B100A;P-BDELV	Unknown	Panel	208	0.85		
B103;MC-NCMC1	Unknown	MCC	480	7.75		
B103;MC-NMCC1	Unknown	MCC	480	10.31		
B103;P-MDP	Unknown	Panel	480	14.20		
B103;P-N1D1	Unknown	Panel	208	7.43		
B103;P-N1L1	Unknown	Panel	480	12.39		
B103;P-N1R1	Unknown	Panel	208	6.36		
B103;P-N1R2	Unknown	Panel	208	2.76		
B103;P-N1R3	Unknown	Panel	208	2.59		
B103;P-N1R4	Unknown	Panel	208	6.16		
B103;P-N2D1	Unknown	Panel	208	6.18		
B103;P-N2R1	Unknown	Panel	208	5.57		
B103;P-NC1D1	Unknown	Panel	480	12.23		
B103;P-NC1D2	Unknown	Panel	208	3.17		
B103;P-NC1L1	Unknown	Panel	480	11.21		
B103;P-NC1R2	Unknown	Panel	208	1.85		
B103;P-NC1R3	Unknown	Panel	208	1.85		

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Equipment Identification	Status	Equipment Type	Bus Voltage	Calc Isc kA	Equipment kA Rating	Isc Rating%
B103;P-NC2R1	Unknown	Panel	208	1.60		
B103;P-NC2R3	Unknown	Panel	208	1.01		
B103;P-NE1D1	Unknown	Panel	480	10.64		
B103;P-NE1L1	Unknown	Panel	480	9.07		
B103;P-NE1R1	Unknown	Panel	208	2.37		
B103;P-NE2L1	Unknown	Panel	480	4.83		
B105;P-36L	Unknown	Panel	240	1.62		
B105;P-36P	Unknown	Panel	240	1.04		
B105;P-36P,H	Unknown	Panel	480	3.06		
B106;P-EKL	Unknown	Panel	208	1.45		
B106;P-EPPH1	Unknown	Panel	480	2.60		
B106;P-EPPH2	Unknown	Panel	480	5.83		
B106;P-KH	Unknown	Panel	480	7.14		
B106;P-KL	Unknown	Panel	208	3.81		
B106;P-L1A	Unknown	Panel	208	11.09		
B106;P-L2D	Unknown	Panel	208	4.64		
B106;P-MDPH	Unknown	Panel	480	14.28		
B106;P-OL	Unknown	Panel	480	12.79		
B106;P-PPL1	Unknown	Panel	208	0.77		
B106;P-R1A	Unknown	Panel	208	10.06		
B106;P-R1C	Unknown	Panel	208	7.74		
B106;P-R2D	Unknown	Panel	208	4.30		
B20;P-20L14	Unknown	Panel	208	3.18		
B20;P-20L15	Unknown	Panel	208	3.30		
B20;P-E8PBJ1A1	Unknown	Panel	208	0.55		
B20;P-E8PBJ1A2	Unknown	Panel	208	0.55		
B20;P-P20L15	Unknown	Panel	208	1.29		
B20;P-T20A	Unknown	Panel	240	1.82		
B22;P-H2	Unknown	Panel	480	8.61		
B22;P-L2	Unknown	Panel	208	4.27		
B22;P-L3	Unknown	Panel	208	3.49		
B5;P-5L21	Unknown	Panel	480	7.32		
B5;P-5L31	Unknown	Panel	240	2.52		
B5;P-5PB1	Unknown	Panel	240	5.68		
B5;P-L1	Unknown	Panel	208	3.77		
B5;P-X	Unknown	Panel	240	3.08		
B6;P-6SL1	Unknown	Panel	480	10.20		
B8;P-1PA-1	Unknown	Panel	208	1.16		
B8;P-8L11	Unknown	Panel	208	4.33		
B8;P-8PB1	Unknown	Panel	240	8.62		
B8;P-BL12	Unknown	Panel	208	1.93		
B9;P-9EL21	Unknown	Panel	208	1.81		
B9;P-9ELDP	Unknown	Panel	208	3.21		
B9A;P-9ALDP	Unknown	Panel	208	6.59		
B9A;P-9AMDP	Unknown	Panel	480	7.25		
B9A;P-EDP	Unknown	Panel	208	2.93		
B9A;P-EDP1	Unknown	Panel	208	1.82		

South Carolina (Columbia) VA Medical Center - Equipment: Pass / Fail Evaluation

Equipment Identification	Status	Equipment Type	Bus Voltage	Calc Isc kA	Equipment kA Rating	Isc Rating%
B9A;P-EDP2	Unknown	Panel	208	1.37		
B9A;P-ELP	Unknown	Panel	480	6.63		
B9A;P-LP	Unknown	Panel	480	6.40		
B9A;P-PP2	Unknown	Panel	208	4.06		
BMRI;MC-CHILL	Unknown	MCC	480	12.95		
BT34;P-T34A	Unknown	Panel	208	1.67		

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

Device Name / Equipment Bus / Manufacturer	Status	Description	Calculated Isc (kA) / Device kAIC rating / Series rating (kAIC)
B100;BK-150A1S	Unknown	NB	*2.66
B100;P-150A1		15-50A	
FPE		NB	
B100;BK-150B2S	Unknown	NB	*2.27
B100;P-150B2		15-50A	
FPE		NB	
B100;BK-150C3S	Unknown	NB	*2.27
B100;P-150C3		15-50A	
FPE		NB	
B100;BK-164A1S	Unknown	NB	*2.60
B100;P-164A1		15-50A	
FPE		NB	
B100;BK-164B2S	Unknown	NB	*2.16
B100;P-164B2		15-50A	
FPE		NB	
B100;BK-164C3S	Unknown	NB	*2.16
B100;P-164C3		15-50A	
FPE		NB	
B100;BK-166A1S	Unknown	NB	*2.54
B100;P-166A1		15-50A	
FPE		NB	
B100;BK-166B2S	Unknown	NB	*2.06
B100;P-166B2		15-50A	
FPE		NB	
B100;BK-166C3S	Unknown	NB	*2.06
B100;P-166C3		15-50A	
FPE		NB	
B100;BK-168A1S	Unknown	NB	*2.44
B100;P-168A1		15-50A	
FPE		NB	
B100;BK-168B2S	Unknown	NB	*1.88
B100;P-168B2R		15-50A	
FPE		NB	
B100;BK-168C3S	Unknown	NB	*1.88
B100;P-168C3		15-50A	

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

FPE		NB	
B100;BK-169A1S	Unknown	NB	*2.49
B100;P-169A1		15-50A	
FPE		NB	
B100;BK-169B2S	Unknown	NB	*1.96
B100;P-169B2		15-50A	
FPE		NB	
B100;BK-169C3S	Unknown	NB	*1.96
B100;P-169C3		15-50A	
FPE		NB	
B100;BK-1DP1B3	Unknown	NJL, HJL	*5.89
B100;B-1DP1C3		70-400A	
FPE		NJL	
B100;BK-1DP1B4	Unknown	NJL, HJL	*6.05
B100;B-1DP1C4		70-400A	
FPE		NJL	
B100;BK-3DPB3	Unknown	NJL, HJL	*5.59
B100;B-3DPC3		70-400A	
FPE		HJL	
B100;BK-4DPB2	Unknown	NJL, HJL	*2.75
B100;B-4DPC2		70-400A	
FPE		NJL	
B100;BK-4DPB3	Unknown	NJL, HJL	*5.56
B100;B-4DPC3		70-400A	
FPE		HJL	
B100;BK-BDP10B	Unknown	NJL, HJL	*1.67
B100;B-BDP10C		70-400A	
FPE		NJL	
B100;BK-BDP10E	Unknown	NJL, HJL	*1.67
B100;B-BDP10F		70-400A	
FPE		NJL	
B100;BK-BDP6B2	Unknown	NJL, HJL	*5.61
B100;B-BDP6B2		70-400A	
FPE		HJL	
B100;BK-BDP6B3	Unknown	NJL, HJL	*5.61
B100;B-BDP6B3		70-400A	
FPE		HJL	

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;BK-C4R1,2	Unknown	NJL, HJL	*5.80
B100;B-BK-C4R		70-400A	
FPE		NJL	
B100;BK-E1R124	Unknown	NJL, HJL	*5.42
B100;B-BK-E1R		70-400A	
FPE		HJL	
B8;BK-8PBJ-CK1	Fail	TQD	*13.64
B8;P-8PBJ		100-225A	10.00
GE		TQD	
B8;BK-8PBJ-CK11	Fail	TEB	*13.64
B8;P-8PBJ		15-100A	10.00
GE		TEB	
B8;BK-8PBJ-CK2	Fail	TQD	*13.64
B8;P-8PBJ		100-225A	10.00
GE		TQD	
B8;BK-8PBJ-CK5	Fail	TQD	*13.64
B8;P-8PBJ		100-225A	10.00
GE		TQD	
B8;BK-8PBJ-CK7	Fail	TEB	*13.64
B8;P-8PBJ		15-100A	10.00
GE		TEB	
B8;BK-8PBJ-CK9	Fail	TEB	*13.64
B8;P-8PBJ		15-100A	10.00
GE		TEB	
B100;BK-EBDPRIM	Fail	KA	*36.39
B100;B-A-9L		70-250A	25.00
SQUARE D		250A	
B100;BK-100P10	Fail	KA	*44.30
B100;MC-CT2		70-250A	25.00
SQUARE D		250A	
B100;BK-100P11	Fail	FA	*49.28
B100;MC-CT2		15-100A	18.00
SQUARE D		FA	
B100;BK-100P12	Fail	FA	*49.28
B100;MC-CT2		15-100A	18.00
SQUARE D		FA	

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;BK-100P9	Fail	KA	*44.30
B100;MC-CT2		70-250A	25.00
SQUARE D		250A	
B100;BK-AC-10	Fail	HKB	*28.74
B100;MC-EMCBP		70-250A	25.00
WESTINGHOUSE		HKB	
B100;BK-EBPR1	Fail	FB	*30.81
B100;MC-EMCBP		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-EMCEB	Fail	FB	*17.39
B100;MC-EMCEB		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-MED-V1	Fail	FB	*23.16
B100;MC-EMCFB		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-AC8	Fail	FB	*14.63
B100;MC-MCCA2		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-AC5	Fail	FB	*25.25
B100;MC-MCCDB		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-BR13	Fail	FDB SER C	*25.25
B100;MC-MCCDB		15-45A	14.00
WESTINGHOUSE		FDB	
B100;BK-BYL1	Fail	FB	*23.35
B100;MC-MCCFB		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-100P7	Fail	FB	*49.31
B100;MC-MCEB1		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-CT1FAN	Fail	FB	*49.31
B100;MC-MCEB1		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-100P6	Fail	FB	*48.80
B100;MC-MCEB2		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-CT2FAN	Fail	FB, 2 & 3-Pole	*27.86

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;MC-MCEB3		15-150A	14.00
CUTLER-HAMMER		FB, 3 Pole	
B100;BK-100P1A	Fail	ED6 Sentron, 2 & 3-Pole	*48.74
B100;MC-MCEB4		15-125A	18.00
SIEMENS		ED6	
B100;BK-100P2A	Fail	ED6 Sentron, 2 & 3-Pole	*48.74
B100;MC-MCEB4		15-125A	18.00
SIEMENS		ED6	
B100;BK-100P4A	Fail	ED6 Sentron, 2 & 3-Pole	*48.74
B100;MC-MCEB4		15-125A	18.00
SIEMENS		ED6	
B100;BK-100P5A	Fail	ED6 Sentron, 2 & 3-Pole	*48.74
B100;MC-MCEB4		15-125A	18.00
SIEMENS		ED6	
B100;BK-1DP1A1	Fail	FA	*25.40
B100;P-1DP1		15-100A	18.00
SQUARE D		FA	
B100;BK-1DP1A2	Fail	FA	*25.40
B100;P-1DP1		15-100A	18.00
SQUARE D		FA	
B100;BK-1DP2A1	Fail	KA	*26.87
B100;P-1DP2		70-250A	25.00
SQUARE D		100A	
B100;BK-1DP2A10	Fail	KA	*26.87
B100;P-1DP2		70-250A	25.00
SQUARE D		250A	
B100;BK-1DP2A2	Fail	KA	*26.87
B100;P-1DP2		70-250A	25.00
SQUARE D		100A	
B100;BK-1DP2A3	Fail	KA	*26.87
B100;P-1DP2		70-250A	25.00
SQUARE D		100A	
B100;BK-1DP2A4	Fail	KA	*26.87
B100;P-1DP2		70-250A	25.00
SQUARE D		150A	
B100;BK-1DP2A5	Fail	KA	*26.87
B100;P-1DP2		70-250A	25.00

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

SQUARE D		150A	
B100;BK-1DP2A6	Fail	KA	*26.87
B100;P-1DP2		70-250A	25.00
SQUARE D		150A	
B100;BK-1DP2A7	Fail	KA	*26.87
B100;P-1DP2		70-250A	25.00
SQUARE D		150A	
B100;BK-1DP2A8	Fail	KA	*26.87
B100;P-1DP2		70-250A	25.00
SQUARE D		100A	
B100;BK-1DP2A9	Fail	KA	*26.87
B100;P-1DP2		70-250A	25.00
SQUARE D		150A	
B100;BK-1DP3A1	Fail	FA	*27.39
B100;P-1DP3		15-100A	18.00
SQUARE D		FA	
B100;BK-2DPA1	Fail	FA	*22.45
B100;P-2DP		15-100A	18.00
SQUARE D		FA	
B100;BK-2DPA3	Fail	FA	*22.45
B100;P-2DP		15-100A	18.00
SQUARE D		FA	
B100;BK-3DPA1	Fail	FA	*21.54
B100;P-3DP		15-100A	18.00
SQUARE D		FA	
B100;BK-3DPA2	Fail	FA	*21.54
B100;P-3DP		15-100A	18.00
SQUARE D		FA	
B100;BK-4DPA1	Fail	FA	*20.49
B100;P-4DP		15-100A	18.00
SQUARE D		FA	
B100;BK-4DPA2	Fail	FA	*20.49
B100;P-4DP		15-100A	18.00
SQUARE D		FA	
B100;BK-5DP1A	Fail	FA	*19.71
B100;P-5DP		15-100A	18.00
SQUARE D		FA	

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;BK-5DP2A	Fail	FA	*19.71
B100;P-5DP		15-100A	18.00
SQUARE D		FA	
B100;BK-BDP10A	Fail	FA	*24.80
B100;P-BDP10		15-100A	18.00
SQUARE D		FA	
B100;BK-BDP10D	Fail	FA	*24.80
B100;P-BDP10		15-100A	18.00
SQUARE D		FA	
B100;BK-BDP2A2	Fail	KA	*37.19
B100;P-BDP2		70-250A	25.00
SQUARE D		150A	
B100;BK-BDP8	Fail	KA	*37.19
B100;P-BDP2		70-250A	25.00
SQUARE D		250A	
B100;BK-MCCD2	Fail	KA	*37.59
B100;P-BDP4		70-250A	25.00
SQUARE D		150A	
B100;BK-MCCDB	Fail	LA	*37.59
B100;P-BDP4		125-400A, Inst 5-10	30.00
SQUARE D		LA	
B100;BK-BDP5A	Fail	MA	*36.80
B100;P-BDP5		125-1200A	30.00
SQUARE D		600A	
B100;BK-BDP6A1	Fail	FA	*24.51
B100;P-BDP6		15-100A	18.00
SQUARE D		FA	
B100;BK-C1315L2	Fail	KA	*22.81
B100;P-C1315L		70-250A	22.00
SQUARE D		150A	
B100;BK-C1315R2	Fail	KA	*22.81
B100;P-C1315R		70-250A	22.00
SQUARE D		150A	
B100;BK-C2L1	Fail	FA	*20.87
B100;P-C2DP		15-100A	18.00
SQUARE D		FA	

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;BK-C2WDP	Fail	FA	*20.87
B100;P-C2DP		15-100A	18.00
SQUARE D		FA	
B100;BK-C4L1	Fail	FA	*22.53
B100;P-C4DP		15-100A	14.00
SQUARE D		FA	
B100;BK-T-C4R1,2P	Fail	KA	*22.53
B100;P-C4DP		70-250A	22.00
SQUARE D		150A	
B100;BK-BDC1	Fail	KA	*33.31
B100;P-CBDP1		70-250A	22.00
SQUARE D		250A	
B100;BK-C1DP	Fail	KA	*33.31
B100;P-CBDP1		70-250A	25.00
SQUARE D		150A	
B100;BK-C1L1A	Fail	KA	*33.68
B100;P-CBDP2		70-250A	25.00
SQUARE D		250A	
B100;BK-C4DP	Fail	KA	*33.68
B100;P-CBDP2		70-250A	25.00
SQUARE D		250A	
B100;BK-C1315L1	Fail	KA	*24.00
B100;P-E1DP2		70-250A	22.00
SQUARE D		250A	
B100;BK-C1315R1	Fail	KA	*24.00
B100;P-E1DP2		70-250A	22.00
SQUARE D		250A	
B100;BK-E1DP2A	Fail	KA	*24.00
B100;P-E1DP2		70-250A	22.00
SQUARE D		250A	
B100;BK-E1R16	Fail	FA	*24.02
B100;P-E1DP2		15-100A	14.00
SQUARE D		FA	
B100;BK-E1R3	Fail	FA	*24.02
B100;P-E1DP2		15-100A	14.00
SQUARE D		FA	
B100;BK-E2L1A	Fail	KA	*23.10

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;P-E2DP		70-250A	22.00
SQUARE D		250A	
B100;BK-E2WDP2	Fail	KA	*23.10
B100;P-E2DP		70-250A	22.00
SQUARE D		250A	
B100;BK-E2WO1	Fail	KA	*23.10
B100;P-E2DP		70-250A	22.00
SQUARE D		250A	
B100;BK-EMCCF2	Fail	FA	*23.10
B100;P-E2DP		15-100A	14.00
SQUARE D		FA	
B100;BK-T-E2RP	Fail	FA	*23.10
B100;P-E2DP		15-100A	14.00
SQUARE D		FA	
B100;BK-E1DP1	Fail	KA	*31.37
B100;P-EBDP1		70-250A	25.00
SQUARE D		250A	
B100;BK-E4DP	Fail	KA	*31.37
B100;P-EBDP1		70-250A	25.00
SQUARE D		250A	
B100;BK-EBDP2	Fail	MA	*31.37
B100;P-EBDP2		125-1200A	30.00
SQUARE D		600A	
B100;BK-EMH	Fail	FA	*34.89
B100;P-EBDP2		15-100A	14.00
SQUARE D		FA	
B100;BK-BDE1	Fail	KA	*33.03
B100;P-EBDP4		70-250A	25.00
SQUARE D		250A	
B100;BK-EBDP7A	Fail	MA	*33.03
B100;P-EBDP4		125-1200A	30.00
SQUARE D		600A	
B100;BK-EBDP9A	Fail	MA	*33.03
B100;P-EBDP4		125-1200A	30.00
SQUARE D		600A	
B100;BK-EMCBP	Fail	MA	*33.03
B100;P-EBDP4		125-1200A	30.00

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

SQUARE D		450A	
B100;BK-EMCCC2	Fail	KA	*33.03
B100;P-EBDP4		70-250A	25.00
SQUARE D		250A	
B100;BK-EBDPM3	Fail	FD, 2 & 3-Pole	*28.29
B100;P-EBDPRI		15-100A	18.00
SQUARE D		FD	
B100;BK-M-P1	Fail	FA	*38.41
B100;P-EPDP		15-100A	18.00
SQUARE D		FA	
B100;BK-M-P2	Fail	FA	*38.41
B100;P-EPDP		15-100A	18.00
SQUARE D		FA	
B100;BK-M-P3	Fail	FA	*38.41
B100;P-EPDP		15-100A	18.00
SQUARE D		FA	
B100;BK-M-P4	Fail	FA	*38.41
B100;P-EPDP		15-100A	18.00
SQUARE D		FA	
B100;BK-M-S5	Fail	KA	*34.53
B100;P-EPDP		70-250A	25.00
SQUARE D		150A	
B100;BK-M-S6	Fail	KA	*34.53
B100;P-EPDP		70-250A	25.00
SQUARE D		150A	
B100;BK-M-S7	Fail	KA	*34.53
B100;P-EPDP		70-250A	25.00
SQUARE D		150A	
B100;BK-M-S8	Fail	KA	*34.53
B100;P-EPDP		70-250A	25.00
SQUARE D		150A	
B100;BK-BDLS1	Fail	KA	*32.52
B100;P-LSBDP1		70-250A	25.00
SQUARE D		250A	
B100;BK-LSBDP2	Fail	FA	*36.18
B100;P-LSBDP1		15-100A	18.00
SQUARE D		FA	

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;BK-LSMCC-G	Fail	KA	*32.52
B100;P-LSBDP1		70-250A	25.00
SQUARE D		150A	
B100;BK-CCU1-3A	Fail	LA, Static Trip II	*53.53
B100;SG-SS1-A		LSI, 80-4000A	42.00
SIEMENS-ALLIS		LA-1600	42.00
B100;BK-CCU2-3B	Fail	AC-Pro Retrofit	*53.53
B100;SG-SS1-A		for Siemens-Allis LA	42.00
UTILITY RELAY CO.		LA-1600B	42.00
B100;BK-S2-10D	Fail	AC-Pro Retrofit	*44.08
B100;SG-SS2-B		for Siemens-Allis LA	42.00
UTILITY RELAY CO.		LA-1600B	42.00
B100A;BK-BDR1	Fail	FA	*20.60
B100A;P-BDDP1		15-100A	18.00
SQUARE D		FA	
B100A;BK-VFDP1	Fail	FA	*20.60
B100A;P-BDDP1		15-100A	18.00
SQUARE D		FA	
B100A;BK-VFDP2	Fail	FA	*20.60
B100A;P-BDDP1		15-100A	18.00
SQUARE D		FA	
B103;F-T103-P	Unknown	DO-III Dual Element	*3.15
B103;B-T103P		5-50A	
ABB		DO-III	
B106;F-T106	Unknown	DO-III Dual Element	*3.25
B106;B-T106P		5-50A	
ABB		DO-III	
B20;F-T-20-P	Unknown	DO-III Dual Element	*3.12
B20;B-20-P		5-50A	
ABB		DO-III	
B22;F-T22-P	Unknown	DO-III Dual Element	*3.10
B22;B-22-P		5-50A	
ABB		DO-III	
B5;F-T-5-P	Unknown	DO-III Dual Element	*3.16
B5;B-5-P		5-50A	
ABB		DO-III	

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B6;F-T-6-P	Unknown	DO-III Dual Element	*3.19
B6;B-T6-P		5-50A	
ABB		DO-III	
B8;F-T8-P	Unknown	DO-III Dual Element	*3.17
B8;B-8-P		5-50A	
ABB		DO-III	
B9;F-T-9S-P	Unknown	DO-III Dual Element	*3.04
B9;B-9S-P		5-50A	
ABB		DO-III	
B9A;F-T-9N-P	Fail	Bay-O-Net Dual Element Fuse Link, 23kV	*3.06
B9A;B-P-TR-9N		C3-C12	2.50
COOPER		108C7	
B100;BK-168BS	Pass	FA	1.63
B100;P-168B		15-100A	25.00
SQUARE D		FA	
BT34;BK-T34A	Pass	ED4 Sentron, 1-Pole	1.67
BT34;P-T34A		15-100A	22.00
SIEMENS		ED4	
B100;BK-1DP1B1	Pass	TQD	5.14
B100;B-1DP1C1		100-225A	10.00
GE		TQD	
B100;BK-1DP3B1	Pass	KA	2.33
B100;B-1DP3C1		70-250A	25.00
SQUARE D		250A	
B100;BK-1DP4B1	Pass	NN	6.94
B100;B-1DP4C1		800-1200A	
AMERICAN		NN	42.00
B100;BK-2DPB1	Pass	TQD	1.96
B100;B-2DPC1		100-225A	10.00
GE		TQD	
B100;BK-2DPB2	Pass	TQD	2.88
B100;B-2DPC2		100-225A	10.00
GE		TQD	
B100;BK-2DPB3	Pass	NE & NEF, 3-Pole	1.4
B100;B-2DPC3		30-100A	14.00
FEDERAL PACIFIC		NE	
B100;BK-3DPB1	Pass	NEJ/HEJ	2.18

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B100;B-3DPC1		125-225A	22.00
FPE		NEJ	
B100;BK-3DPB2	Pass	NEJ/HEJ	2.18
B100;B-3DPC2		125-225A	22.00
FPE		NEJ	
B100;BK-4DPB1	Pass	TQD	2.85
B100;B-4DPC1		100-225A	10.00
GE		TQD	
B100;BK-5DP1B	Pass	TQD	2.89
B100;B-5DP1C		100-225A	10.00
GE		TQD	
B100;BK-5DP2B	Pass	TQD	2.89
B100;B-5DP2C		100-225A	10.00
GE		TQD	
B100;BK-BDP5B	Pass	NN, HN, 2-3 Pole	14.16
B100;B-BDP5C		1000-1200A	22.00
FEDERAL PIONEER		NN	
B100;BK-BDP6B1	Pass	TQD	2.86
B100;B-BDP6B1		100-225A	10.00
GE		TQD	
B100;BK-C5R1,2	Pass	NE/NEF	1.37
B100;B-BK-C5R		30-100A	99.00
FPE		NE	
B100;BK-E2R1-2	Pass	NE, 2-Pole	1.45
B100;B-BK-E2R		30-100A	14.00
FPE		NE	
B100;BK-E3R1,2	Pass	NE & NEF, 3-Pole	1.36
B100;B-BK-E3R		30-100A	14.00
FEDERAL PACIFIC		NEF	
B100;BK-E4R1,2	Pass	NE, 2-Pole	1.4
B100;B-BK-E4R		30-100A	14.00
FPE		NE	
B100;BK-E5R1,2	Pass	NE, 2-Pole	1.34
B100;B-BK-E5R		30-100A	14.00
FPE		NE	
B100;BK-T-EBRS	Pass	NE & NEF, 3-Pole	1.34
B100;B-BK-EBR		30-100A	14.00

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FEDERAL PACIFIC		NEF	
B100;BK-C2R1-3	Pass	NN	6.84
B100;B-C-C2R1		800-1200A	
AMERICAN		NN	42.00
B100;BK-C2R4,5	Pass	NN	6.84
B100;B-C-C2R4		800-1200A	
AMERICAN		NN	42.00
B100;BK-RP1,2	Pass	KA	3.14
B100;B-C-URP6		70-250A	42.00
SQUARE D		250A	
B100;F-RP1,2	Pass	FRN-R, 250V Class RK5	3.14
B100;B-C-URP6		1-600A	200.00
BUSSMANN		FRN-R	
B100;BK-C1R1,2	Pass	NE, 2-Pole	1.41
B100;B-CC1R12		30-100A	14.00
FPE		NE	
B100;BK-1R1	Pass	KA	3.96
B100;P-1R1		70-250A	25.00
SQUARE D		250A	
B100;BK-1R10	Pass	KA	3.47
B100;P-1R10		70-250A	25.00
SQUARE D		250A	
B100;BK-1R11	Pass	KA	3.47
B100;P-1R11		70-250A	25.00
SQUARE D		250A	
B100;BK-1R16	Pass	KA	2.2
B100;P-1R16		70-250A	25.00
SQUARE D		250A	
B100;BK-1R16B	Pass	IF I-LIM	2.2
B100;P-1R16		60-100A	200.00
SQUARE D		60	
B100;BK-1R17	Pass	KA	2.2
B100;P-1R17		70-250A	25.00
SQUARE D		250A	
B100;BK-UNKNOW	Pass	A1, B/L/U	2.89
B100;P-1R17		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 2-Pole	

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B100;BK-UNNAM1	Pass	A1, B/L/U	2.89
B100;P-1R17		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 2-Pole	
B100;BK-UNNAM2	Pass	A1, B/L/U	2.88
B100;P-1R17		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 2-Pole	
B100;BK-1R2	Pass	KA	3.96
B100;P-1R2		70-250A	25.00
SQUARE D		250A	
B100;BK-1R3	Pass	KA	3.96
B100;P-1R3		70-250A	25.00
SQUARE D		250A	
B100;BK-1R4	Pass	Q2	5.18
B100;P-1R4		100-225A	10.00
SQUARE D		Q2	
B100;BK-1R5	Pass	KA	3.91
B100;P-1R5		70-250A	25.00
SQUARE D		250A	
B100;BK-1R6	Pass	KA	3.91
B100;P-1R6		70-250A	25.00
SQUARE D		250A	
B100;BK-1R7	Pass	KA	3.91
B100;P-1R7		70-250A	25.00
SQUARE D		250A	
B100;BK-1R8	Pass	KA	3.91
B100;P-1R8		70-250A	25.00
SQUARE D		250A	
B100;BK-1R9	Pass	KA	3.58
B100;P-1R9		70-250A	25.00
SQUARE D		250A	
B100;BK-P-2R1	Pass	KA	1.42
B100;P-2R1		70-250A	25.00
SQUARE D		250A	
B100;BK-P-2R2	Pass	KA	1.42
B100;P-2R2		70-250A	25.00
SQUARE D		250A	

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;BK-P-2R3	Pass	KA	1.42
B100;P-2R3		70-250A	25.00
SQUARE D		250A	
B100;BK-P-2R4	Pass	KA	2.05
B100;P-2R4		70-250A	25.00
SQUARE D		250A	
B100;BK-P-2R5	Pass	KA	2.05
B100;P-2R5		70-250A	25.00
SQUARE D		250A	
B100;BK-P-2R6	Pass	KA	2.05
B100;P-2R6		70-250A	25.00
SQUARE D		250A	
B100;BK-P-2R7	Pass	KA	1.31
B100;P-2R7		70-250A	25.00
SQUARE D		250A	
B100;BK-P-2R8	Pass	KA	1.31
B100;P-2R8		70-250A	25.00
SQUARE D		250A	
B100;BK-2WRDP	Pass	LA	5.31
B100;P-2WRDP		125-400A	42.00
SQUARE D		400A	
B100;BK-3ED1	Pass	QO-VH, 2-Pole	0.9
B100;P-3ED1		15-150A	22.00
SQUARE D		50A	
B100;BK-3R1	Pass	Q2	2.68
B100;P-3R1		100-225A	10.00
SQUARE D		Q2	
B100;BK-3R10	Pass	KA	3.95
B100;P-3R10		70-250A	42.00
SQUARE D		250A	
B100;BK-3R2	Pass	Q2	2.68
B100;P-3R2		100-225A	10.00
SQUARE D		Q2	
B100;BK-3R3	Pass	Q2	2.68
B100;P-3R3		100-225A	10.00
SQUARE D		Q2	
B100;BK-3R4	Pass	KA	2.05

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;P-3R4		70-250A	42.00
SQUARE D		250A	
B100;BK-3R5	Pass	KA	2.05
B100;P-3R5		70-250A	42.00
SQUARE D		250A	
B100;BK-3R6	Pass	KA	2.05
B100;P-3R6		70-250A	42.00
SQUARE D		250A	
B100;BK-3R7	Pass	KA	3.95
B100;P-3R7		70-250A	42.00
SQUARE D		250A	
B100;BK-3R8	Pass	KA	3.95
B100;P-3R8		70-250A	42.00
SQUARE D		250A	
B100;BK-3R9	Pass	KA	3.95
B100;P-3R9		70-250A	42.00
SQUARE D		250A	
B100;BK-3WD1	Pass	QO-VH, 2-Pole	0.8
B100;P-3WD1		15-150A	22.00
SQUARE D		50A	
B100;BK-4R1	Pass	QOM2-VH	1.99
B100;P-4R1		100-225A	22.00
SQUARE D		QOM2-VH	
B100;BK-4R2	Pass	QOM2-VH	1.99
B100;P-4R2		100-225A	22.00
SQUARE D		QOM2-VH	
B100;BK-4R3	Pass	QOM2-VH	1.99
B100;P-4R3		100-225A	22.00
SQUARE D		QOM2-VH	
B100;BK-4R4	Pass	KA	2.45
B100;P-4R4		70-250A, DC	10.00
SQUARE D		KA	
B100;BK-4R5	Pass	KA	2.45
B100;P-4R5		70-250A, DC	10.00
SQUARE D		KA	
B100;BK-4R6	Pass	KA	2.45
B100;P-4R6		70-250A, DC	10.00

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SQUARE D		KA	
B100;BK-4R7	Pass	KA	4.78
B100;P-4R7		70-250A, DC	10.00
SQUARE D		KA	
B100;BK-4R8	Pass	KA	4.78
B100;P-4R8		70-250A, DC	10.00
SQUARE D		KA	
B100;BK-4R9	Pass	KA	4.78
B100;P-4R9		70-250A, DC	10.00
SQUARE D		KA	
B100;BK-5R1	Pass	LA	2.08
B100;P-5R1		125-400A	42.00
SQUARE D		225A	
B100;BK-5R2	Pass	LA	2.08
B100;P-5R2		125-400A	42.00
SQUARE D		225A	
B100;BK-5R3	Pass	LA	2.08
B100;P-5R3		125-400A	42.00
SQUARE D		225A	
B100;BK-5R4	Pass	LA	2.08
B100;P-5R4		125-400A	42.00
SQUARE D		225A	
B100;BK-5R5	Pass	LA	2.08
B100;P-5R5		125-400A	42.00
SQUARE D		225A	
B100;BK-5R6	Pass	LA	2.08
B100;P-5R6		125-400A	42.00
SQUARE D		225A	
B100;BK-5R7	Pass	LA	2.08
B100;P-5R7		125-400A	42.00
SQUARE D		225A	
B100;BK-BME	Pass	QO, 3-Pole	1.95
B100;P-BME		15-100A	10.00
SQUARE D		100A	
B100;BK-BR1	Pass	KA	2.07
B100;P-BR1		70-250A	25.00
SQUARE D		250A	

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B100;BK-BR10	Pass	KA	1.44
B100;P-BR10		70-250A	25.00
SQUARE D		250A	
B100;BK-BR11	Pass	A1, B/L/U	1.88
B100;P-BR10		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-BR10A	Pass	Q1 (Obs.)	1.72
B100;P-BR10A		15-150A	5.00
SQUARE D		Q1	
B100;BK-BR2	Pass	KA	2.07
B100;P-BR2		70-250A	25.00
SQUARE D		250A	
B100;BK-BR3	Pass	KA	2.07
B100;P-BR3		70-250A	25.00
SQUARE D		250A	
B100;BK-BR4	Pass	KA	3.79
B100;P-BR4		70-250A	25.00
SQUARE D		250A	
B100;BK-BR5	Pass	KA	3.79
B100;P-BR5		70-250A	25.00
SQUARE D		250A	
B100;BK-BR6	Pass	KA	3.79
B100;P-BR6		70-250A	25.00
SQUARE D		250A	
B100;BK-BR7	Pass	KA	3.79
B100;P-BR7		70-250A	25.00
SQUARE D		250A	
B100;BK-BR8	Pass	KA	3.79
B100;P-BR8		70-250A	25.00
SQUARE D		250A	
B100;BK-BR9	Pass	KA	3.79
B100;P-BR9		70-250A	25.00
SQUARE D		250A	
B100;BK-C1R1	Pass	KA	1.29
B100;P-C1R1		70-250A	25.00
SQUARE D		250A	

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B100;BK-C1R2	Pass	A1, B/L/U	1.7
B100;P-C1R2		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-C1R3	Pass	BLH, 2 & 3-Pole	1.68
B100;P-C1R3		15-100A	22.00
SIEMENS		BLH	
B100;BK-C2R1	Pass	KA	4.72
B100;P-C2R1		70-250A	25.00
SQUARE D		250A	
B100;BK-C2R2	Pass	KA	4.56
B100;P-C2R2		70-250A	25.00
SQUARE D		250A	
B100;BK-C2R3	Pass	KA	4.56
B100;P-C2R3		70-250A	25.00
SQUARE D		250A	
B100;BK-150A1	Pass	Q2M	4.72
B100;P-C2R4		100-225A	10.00
SQUARE D		Q2M	
B100;BK-150B2	Pass	Q2M	4.72
B100;P-C2R4		100-225A	10.00
SQUARE D		Q2M	
B100;BK-C2R4	Pass	KA	4.72
B100;P-C2R4		70-250A	25.00
SQUARE D		250A	
B100;BK-150C3	Pass	Q2M	4.72
B100;P-C2R5		100-225A	10.00
SQUARE D		Q2M	
B100;BK-C2R5	Pass	KA	4.72
B100;P-C2R5		70-250A	25.00
SQUARE D		250A	
B100;BK-C2W1	Pass	QO-VH, 3-Pole	2.03
B100;P-C2W1		15-150A	22.00
SQUARE D		125A	
B100;BK-C2W2	Pass	Q2-Q2L	2.03
B100;P-C2W1		100-225A	10.00
SQUARE D		150	
B100;BK-C4R1	Pass	KA	4.04

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B100;P-C4R1		70-250A	25.00
SQUARE D		250A	
B100;BK-C4R2	Pass	KA	4.04
B100;P-C4R2		70-250A	25.00
SQUARE D		250A	
B100;BK-C5R1	Pass	KA	1.26
B100;P-C5R1		70-250A	25.00
SQUARE D		250A	
B100;BK-C5R2	Pass	KA	1.26
B100;P-C5R2		70-250A	25.00
SQUARE D		250A	
B100;BK-E1R1	Pass	KA	3.79
B100;P-E1R1		70-250A	25.00
SQUARE D		250A	
B100;BK-E1R2	Pass	KA	3.67
B100;P-E1R2		70-250A	25.00
SQUARE D		250A	
B100;BK-TE1R3S	Pass	Q1L-Q1U	1.4
B100;P-E1R3		60-100A	10.00
SQUARE D		100	
B100;BK-E1R4	Pass	KA	3.67
B100;P-E1R4		70-250A	25.00
SQUARE D		250A	
B100;BK-E2R1	Pass	A1, B/L/U	1.74
B100;P-E2R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-E2R2	Pass	A1, B/L/U	1.74
B100;P-E2R2		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-E2R1-3	Pass	Q2L-H	3.87
B100;P-E2WD1		100-225A	42.00
SQUARE D		Q2L-H	
B100;BK-E3R1	Pass	A1, B/L/U	1.64
B100;P-E3R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-E3R2	Pass	A1, B/L/U	1.64
B100;P-E3R2		15-100A, 2-3 Pole	10.00

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SQUARE D		A1B, 3-Pole	
B100;BK-E4R1	Pass	A1, B/L/U	1.68
B100;P-E4R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-E4R2	Pass	A1, B/L/U	1.68
B100;P-E4R2		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-E5R1	Pass	A1, B/L/U	1.62
B100;P-E5R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-E5R2	Pass	A1, B/L/U	1.62
B100;P-E5R2		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-EBR11	Pass	LA	13.94
B100;P-EBDP7A		125-400A, Inst 5-10	22.00
SQUARE D		LA	
B100;BK-EBR11A	Pass	LA	13.94
B100;P-EBDP7A		125-400A	42.00
SQUARE D		400A	
B100;BK-EBR11B	Pass	LA	13.94
B100;P-EBDP7A		125-400A	42.00
SQUARE D		400A	
B100;BK-EBR11C	Pass	LA	13.94
B100;P-EBDP7A		125-400A	42.00
SQUARE D		400A	
B100;BK-EBR11C0	Pass	MA	13.94
B100;P-EBDP7A		125-1200A	30.00
SQUARE D		1000A	
B100;BK-EBR12	Pass	LA	13.94
B100;P-EBDP7A		125-400A, Inst 5-10	22.00
SQUARE D		LA	
B100;BK-KITCHEN	Pass	LA	13.94
B100;P-EBDP7A		125-400A	42.00
SQUARE D		400A	
B100;BK-EBDP9B	Pass	KA	3.46
B100;P-EBDP9B		70-250A	42.00
SQUARE D		250A	

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B100;BK-EBR1	Pass	KA	1.24
B100;P-EBR1		70-250A	25.00
SQUARE D		250A	
B100;BK-EBR10	Pass	FA	4.32
B100;P-EBR10		15-100A	18.00
SQUARE D		FA	
B100;BK-EBR2	Pass	KA	1.24
B100;P-EBR2		70-250A	25.00
SQUARE D		250A	
B100;BK-LS1R1	Pass	A1, B/L/U	1.65
B100;P-LS1R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-LS2R1	Pass	A1, B/L/U	1.6
B100;P-LS2R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-LS3R1	Pass	A1, B/L/U	1.59
B100;P-LS3R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-LS4R1	Pass	A1, B/L/U	1.58
B100;P-LS4R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-LS5R1	Pass	A1, B/L/U	1.58
B100;P-LS5R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B100;BK-RP1	Pass	QO, 3-Pole	2.91
B100;P-RP1		15-100A	10.00
SQUARE D		100A	
B100;BK-RP3	Pass	KA	2.66
B100;P-RP1		70-250A	42.00
SQUARE D		150A	
B100;BK-RP2	Pass	QO, 3-Pole	2.91
B100;P-RP2		15-100A	10.00
SQUARE D		100A	
B100;BK-RP4	Pass	KA	2.51
B100;P-RP3		70-250A	42.00
SQUARE D		150A	

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B100;BK-RP6,1	Pass	QO, 3-Pole	3.71
B100;P-RP6		15-100A	10.00
SQUARE D		100A	
B100;BK-RP6,2	Pass	QO, 3-Pole	3.71
B100;P-RP6		15-100A	10.00
SQUARE D		100A	
B100;BK-UNKNOW-M	Pass	A1, B/L/U	2.65
B100;P-UNKNOW		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 2-Pole	
B100;BK-UNNAM1-M	Pass	A1, B/L/U	2.65
B100;P-UNNAM1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 2-Pole	
B100;BK-UNNAM2-M	Pass	A1, B/L/U	2.64
B100;P-UNNAM2		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 2-Pole	
B100A;BK-1DLSR1	Pass	QO-VH, 3-Pole	1.49
B100A;P-1DLSR1		15-150A	22.00
SQUARE D		60A	
B100A;BK-1DR1	Pass	Q2L-H	6.07
B100A;P-1DR1		100-225A	42.00
SQUARE D		Q2L-H	
B100A;BK-1DRK3	Pass	QOB-AS	7.95
B100A;P-1DR1		15-30A	10.00
SQUARE D		QOB-AS	
B100A;BK-1DR2	Pass	QO, 3-Pole	6.43
B100A;P-1DR2		15-100A	10.00
SQUARE D		100A	
B100A;BK-2DCR1-M	Pass	CJ	1.49
B100A;P-2DCR1		110-400A	200.00
SIEMENS		CJ	
B100A;BK-2DCR2	Pass	BL, 2 & 3-Pole	1.95
B100A;P-2DCR1		15-125A	10.00
SIEMENS		BL	
B100A;BK-2DR1	Pass	FJ	3.96
B100A;P-2DRDP		70-225A	22.00
SIEMENS		FJ	
B100A;BK-2DR2	Pass	BL, 2 & 3-Pole	5.18

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B100A;P-2DRDP		15-125A	10.00
SIEMENS		BL	
B100A;BK-2DR3	Pass	BL, 2 & 3-Pole	5.18
B100A;P-2DRDP		15-125A	10.00
SIEMENS		BL	
B100A;BK-2DRDP-M	Pass	JXD6-A Sentron	3.96
B100A;P-2DRDP		200-400A	25.00
SIEMENS		JXD6-A	
B100A;BK-BDELV	Pass	BL, 2 & 3-Pole	1.17
B100A;P-BDELV		15-125A	10.00
SIEMENS		BL	
B100A;BK-BDLSR1	Pass	QO, 3-Pole	1.87
B100A;P-BDLSR1		15-100A	10.00
SQUARE D		60A	
B100A;BK-BDR1-M	Pass	A1, B/L/U	2.47
B100A;P-BDR1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B103;BK-N2D1-M	Pass	MA	6.18
B103;P-N2D1		125-1200A	42.00
SQUARE D		1000A	
B103;BK-N2R1	Pass	KA	6.18
B103;P-N2D1		70-250A	25.00
SQUARE D		150A	
B103;BK-N2R2	Pass	KA	6.18
B103;P-N2D1		70-250A	25.00
SQUARE D		150A	
B103;BK-N2R3	Pass	KA	6.18
B103;P-N2D1		70-250A	25.00
SQUARE D		150A	
B103;BK-N2R4	Pass	KA	6.18
B103;P-N2D1		70-250A	25.00
SQUARE D		150A	
B103;BK-N2R5	Pass	KA	6.18
B103;P-N2D1		70-250A	25.00
SQUARE D		150A	
B103;BK-N2R1-M	Pass	KA	5.57
B103;P-N2R1		70-250A	25.00

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SQUARE D		250A	
B103;BK-N2R3-M	Pass	KA	4.10
B103;P-N2R3		70-250A	25.00
SQUARE D		250A	
B103;BK-N2R4-M	Pass	KA	5.57
B103;P-N2R4		70-250A	25.00
SQUARE D		250A	
B103;BK-N2R5-M	Pass	KA	5.57
B103;P-N2R5		70-250A	25.00
SQUARE D		250A	
B103;BK-NC1R1-M	Pass	A1, B/L/U	2.53
B103;P-NC1R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B103;BK-NC2R1-M	Pass	A1, B/L/U	1.60
B103;P-NC2R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B103;BK-NC2R2-M	Pass	A1, B/L/U	1.04
B103;P-NC2R2		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B103;BK-NC2R3-M	Pass	A1, B/L/U	1.01
B103;P-NC2R3		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B103;BK-NE2R1	Pass	A1, B/L/U	2.94
B103;P-NE1R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B103;BK-NE2R1-M	Pass	A1, B/L/U	0.91
B103;P-NE2R1		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 2-Pole	
B106;BK-C2-E1A	Pass	EH	3.66
B106;P-EMDPL		15-100A	65.00
SQUARE D		EH	
B106;BK-C2-E1B	Pass	EH	3.66
B106;P-EMDPL		15-100A	65.00
SQUARE D		EH	
B106;BK-C2-E1C	Pass	EH	3.66
B106;P-EMDPL		15-100A	65.00
SQUARE D		EH	

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B106;BK-C2-E1D	Pass	EH	3.66
B106;P-EMDPL		15-100A	65.00
SQUARE D		EH	
B106;BK-C5-EKL	Pass	EH	3.66
B106;P-EMDPL		15-100A	65.00
SQUARE D		EH	
B106;BK-EMDPL	Pass	KA	3.66
B106;P-EMDPL		70-250A	25.00
SQUARE D		250A	
B106;BK-EV	Pass	QO-VH, 3-Pole	0.8
B106;P-EV		15-150A	22.00
SQUARE D		40A	
B106;BK-L2A	Pass	Q2-H/Q2L-H	11.09
B106;P-L1A		100-225A	22.00
SQUARE D		200	
B106;BK-R1A	Pass	Q2-H/Q2L-H	11.09
B106;P-L1A		100-225A	22.00
SQUARE D		100	
B106;BK-L2B	Pass	Q2-H/Q2L-H	6.10
B106;P-L1B		100-225A	22.00
SQUARE D		200	
B106;BK-R1B	Pass	QO-VH, 3-Pole	6.10
B106;P-L1B		15-150A	22.00
SQUARE D		150A	
B106;BK-L2C	Pass	LA	8.74
B106;P-L1C		125-400A	30.00
SQUARE D		400A	
B106;BK-R1C	Pass	Q2-H/Q2L-H	8.74
B106;P-L1C		100-225A	22.00
SQUARE D		150	
B106;BK-L2D	Pass	Q2-H/Q2L-H	5.21
B106;P-L1D		100-225A	22.00
SQUARE D		225	
B106;BK-R1D	Pass	QO-VH, 3-Pole	5.21
B106;P-L1D		15-150A	22.00
SQUARE D		100A	

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B106;BK-R2A	Pass	QO-VH, 3-Pole	9.18
B106;P-L2A		15-150A	22.00
SQUARE D		100A	
B106;BK-R2B	Pass	QO-VH, 3-Pole	5.43
B106;P-L2B		15-150A	22.00
SQUARE D		100A	
B106;BK-R2C	Pass	Q2-H/Q2L-H	7.89
B106;P-L2C		100-225A	22.00
SQUARE D		150	
B106;BK-R2D	Pass	QO-VH, 3-Pole	4.64
B106;P-L2D		15-150A	22.00
SQUARE D		150A	
B106;BK-KL	Pass	Q2-H/Q2L-H	17.06
B106;P-MDPL		100-225A	22.00
SQUARE D		200	
B106;BK-L1A	Pass	LA	17.06
B106;P-MDPL		125-400A, Inst 5-10	42.00
SQUARE D		LA	
B106;BK-L1B	Pass	LA	17.06
B106;P-MDPL		125-400A, Inst 5-10	42.00
SQUARE D		LA	
B106;BK-L1C	Pass	MA	17.06
B106;P-MDPL		125-1200A	42.00
SQUARE D		600A	
B106;BK-L1D	Pass	LA	17.06
B106;P-MDPL		125-400A, Inst 5-10	42.00
SQUARE D		LA	
B106;BK-MDPL-M	Pass	NA	17.06
B106;P-MDPL		600-1200A	100.00
SQUARE D		1200A	
B106;BK-PPL1	Pass	QO-VH, 3-Pole	0.77
B106;P-PPL1		15-150A	22.00
SQUARE D		40A	
B106;BK-PPL2-S	Pass	QO-VH, 3-Pole	0.8
B106;P-PPL2		15-150A	22.00
SQUARE D		40A	
B20;BK-20L11-1	Pass	LA	4.78

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B20;P-20L11		125-400A	42.00
SQUARE D		400A	
B20;BK-20L12	Pass	Q2-H/Q2L-H	4.78
B20;P-20L11		100-225A	22.00
SQUARE D		225	
B20;BK-20L14	Pass	Q1L-Q1U	4.78
B20;P-20L11		60-100A	10.00
SQUARE D		100	
B20;BK-20L15	Pass	Q1L-Q1U	4.78
B20;P-20L11		60-100A	10.00
SQUARE D		100	
B20;BK-20L12-L	Pass	QO, 2-Pole	5.79
B20;P-20L12		15-125A	10.00
SQUARE D		100A	
B20;BK-20L12-R	Pass	QO, 3-Pole	5.79
B20;P-20L12		15-100A	10.00
SQUARE D		60A	
B20;BK-20L14-M	Pass	QO, 3-Pole	3.38
B20;P-20L14		15-100A	10.00
SQUARE D		100A	
B20;BK-20L15-M	Pass	Q1 (Obs.)	3.61
B20;P-20L15		15-150A	5.00
SQUARE D		Q1	
B20;BK-E8PBJ1A1	Pass	FA	0.55
B20;P-E8PBJ1A1		15-100A	18.00
SQUARE D		FA	
B20;BK-E8PBJ1A2	Pass	A1, B/L/U	0.64
B20;P-E8PBJ1A2		60-100A, 1-3 Pole	10.00
SQUARE D		A1B	
B20;BK-P20L15	Pass	Q1L-Q1U	1.4
B20;P-P20L15		60-100A	10.00
SQUARE D		70	
B22;BK-M-ELE2	Pass	IK	5.16
B22;B-C-ELE2		110-250A	200.00
SQUARE D		225A	
B22;BK-M-TS1E	Pass	DA	1.67
B22;B-C-TS1E		250-400A	22.00

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CUTLER-HAMMER		DA	
B22;F-P1L	Pass	FRN-R, 250V Class RK5	4.21
B22;B-ELE_P1		1-600A	200.00
BUSSMANN		FRN-R	
B22;BK-EMER	Pass	FA	5.22
B22;B-EMER		15-100A	14.00
SQUARE D		FA	
B22;BK-M-ELE3	Pass	Q2M	5.17
B22;B-TS1-P1		100-225A	10.00
SQUARE D		Q2M	
B22;BK-ELE2	Pass	QO, 3-Pole	7.02
B22;P-EHB		15-100A	10.00
SQUARE D		100A	
B22;BK-GEN	Pass	QO, 3-Pole	7.02
B22;P-EHB		15-100A	10.00
SQUARE D		50A	
B22;BK-GEN-M	Pass	BAB, 3-Pole	2.79
B22;P-GEN		15-100A	10.00
CUTLER-HAMMER		BAB	
B22;BK-L1	Pass	QO, 3-Pole	6.2
B22;P-L1		15-100A	10.00
SQUARE D		100A	
B22;BK-L2	Pass	Q1L-Q1U	4.27
B22;P-L2		60-100A	10.00
SQUARE D		100	
B22;BK-L3	Pass	Q1L-Q1U	3.49
B22;P-L3		60-100A	10.00
SQUARE D		100	
B22;BK-L1,2,3	Pass	Q2	8.24
B22;P-LB1		100-225A	10.00
SQUARE D		Q2	
B22;BK-LB1-M	Pass	LA	6.29
B22;P-LB1		125-400A	22.00
SQUARE D		400A	
B22;BK-LB2	Pass	FA	7
B22;P-LB1		15-100A	18.00
SQUARE D		FA	

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B22;BK-TS1	Pass	FA	7
B22;P-LB1		15-100A	18.00
SQUARE D		FA	
B22;BK-TS2	Pass	Q2	8.24
B22;P-LB1		100-225A	10.00
SQUARE D		Q2	
B5;BK-EMER	Pass	FA	2.06
B5;P-EMER		15-100A	14.00
SQUARE D		FA	
B5;BK-L1	Pass	Q2-Q2L	3.92
B5;P-L1		100-225A	10.00
SQUARE D		225	
B5;BK-L1B	Pass	QO-VH	1.89
B5;P-L1B		110-150A	22.00
SQUARE D		150	
B7;BK-PP	Pass	Q2M	1.61
B7;P-PP		100-225A	10.00
SQUARE D		Q2M	
B8;F-1PB	Pass	LPS-RK, 600V Class RK1	1.99
B8;B-1PB		15-600A	200.00
BUSSMANN		LPS-RK	
B8;BK-1PB	Pass	QO, 3-Pole	1.79
B8;P-1PB		15-100A	10.00
SQUARE D		100A	
B8;BK-8L11-1	Pass	TQD	5.71
B8;P-8L11		100-225A	10.00
GE		TQD	
B8;BK-8L11-2	Pass	TQD	5.71
B8;P-8L11		100-225A	10.00
GE		TQD	
B8;BK-P-8LB1	Pass	QOM1-VH	1.29
B8;P-8LB1		50-125A	22.00
SQUARE D		QOM1-VH	
B8;BK-GR-1	Pass	TFK	4.96
B8;P-GR		70-225A	22.00
GE		TFK	

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B8;BK-GR-2L	Pass	TFJ	5.52
B8;P-GR		70-225A	18.00
GE		TFJ	
B8;BK-GR-2R	Pass	TEB	6.49
B8;P-GR		15-100A	10.00
GE		TEB	
B8;BK-GRA1	Pass	QOB-AS	5.56
B8;P-GRA		15-30A	10.00
SQUARE D		QOB-AS	
B8;BK-GRA2	Pass	QOB-AS	5.56
B8;P-GRA		15-30A	10.00
SQUARE D		QOB-AS	
B8;BK-MHC26-1	Pass	QO, 2-Pole	1.30
B8;P-MHC26		15-125A	10.00
SQUARE D		30A	
B9;F-9EL21	Pass	A6D, 600V Class RK1	2.39
B9;B-9EL21		15-600A	200.00
GOULD SHAWMUT		A6D	
B9;BK-9ELDP	Pass	CA	4.68
B9;P-9ELDP		125-225A	10.00
CUTLER-HAMMER		CA	
B9;BK-9L22-M	Pass	KA	3.86
B9;P-9L22		70-250A	25.00
SQUARE D		250A	
B9;BK-9L11	Pass	CA	7.55
B9;P-9LDP		125-225A	10.00
CUTLER-HAMMER		CA	
B9;BK-9L21	Pass	CA	7.55
B9;P-9LDP		125-225A	10.00
CUTLER-HAMMER		CA	
B9;BK-9L22	Pass	CA	7.55
B9;P-9LDP		125-225A	10.00
CUTLER-HAMMER		CA	
B9;BK-9LDP	Pass	DA	5.77
B9;P-9LDP		250-400A	22.00
CUTLER-HAMMER		DA	
B9A;BK-9ALDP	Pass	MA	7.62

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B9A;P-9ALDP		125-800A	42.00
CUTLER-HAMMER		MA	
B9A;BK-LVP	Pass	QBHW, 3-Pole	7.62
B9A;P-9ALDP		15-100A	22.00
CUTLER-HAMMER		QBHW	
B9A;BK-PP1	Pass	CAH	7.62
B9A;P-9ALDP		125-225A	22.00
CUTLER-HAMMER		CAH	
B9A;BK-PP2	Pass	CAH	7.62
B9A;P-9ALDP		125-225A	22.00
CUTLER-HAMMER		CAH	
B9A;BK-PP3	Pass	CAH	7.62
B9A;P-9ALDP		125-225A	22.00
CUTLER-HAMMER		CAH	
B9A;BK-EDP	Pass	FD	2.93
B9A;P-EDP		15-225A	25.00
CUTLER-HAMMER		FD	
B9A;BK-EDP1-L	Pass	Q2-Q2L	2.01
B9A;P-EDP1		100-225A	10.00
SQUARE D		100	
B9A;BK-EDP1-M	Pass	Q2-Q2L	2.01
B9A;P-EDP1		100-225A	10.00
SQUARE D		150	
BMRI;BK-EML-M	Pass	THHQB	0.78
BMRI;P-EML		15-100A	22.00
GE		THHQB	
BMRI;BK-L	Pass	TQD	5.02
BMRI;P-L		100-225A	10.00
GE		TQD	
BT25;BK-MSPP1	Pass	QO, 2-Pole	0.66
BT25;P-MSPP1		15-125A	10.00
SQUARE D		100A	
BT34;BK-T34A-L	Pass	QP, 2 & 3-Pole	1.67
BT34;P-T34A		15-125A	10.00
SIEMENS		QP	
BT36;BK-36P2	Pass	KD	2.62
BT36;P-36P2		100-250A	25.00

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SQUARE D		KD	
B105;BK-36L	Pass	QOM2-VH	1.62
B105;P-36L		100-225A	22.00
SQUARE D		QOM2-VH	
B105;BK-36P	Pass	BAB, 3-Pole	1.34
B105;P-36P		15-100A	10.00
CUTLER-HAMMER		BAB	
B20;F-T20A	Pass	NON, 250V Class K5	1.82
B20;P-T20A		1-60A	50.00
BUSSMANN		NON	
B5;BK-5L31	Pass	TJK	3.48
B5;B-5L31		125-600A	42.00
GE		TJK	
B5;BK-NORMAL	Pass	KA	3.48
B5;B-NORMAL		70-250A	42.00
SQUARE D		250A	
B5;F-PL21	Pass	FRS-R, 600V Class RK5	3.35
B5;B-PL21		1-600A	200.00
BUSSMANN		FRS-R	
B5;BK-PL22	Pass	TQD	4.6
B5;B-PL22		100-225A	10.00
GE		TQD	
B5;BK-WIREWAYS	Pass	TJK	3.74
B5;B-WIREWAY		125-600A	42.00
GE		TJK	
B5;BK-5L31-M	Pass	A1, B/L/U	2.78
B5;P-5L31		15-100A, 2-3 Pole	10.00
SQUARE D		A1B, 3-Pole	
B5;BK-NORMAL-M	Pass	TQD	2.84
B5;P-NORMAL		100-225A	10.00
GE		TQD	
B5;BK-PL21	Pass	TQD	2.34
B5;P-PL21		100-225A	10.00
GE		TQD	
B5;BK-PL22M	Pass	Q2M	2.62
B5;P-PL22		100-225A	10.00
SQUARE D		Q2M	

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B5;BK-X	Pass	Q1L-Q1U	3.19
B5;P-X		60-100A	10.00
SQUARE D		100	
B6;BK-6L11A1	Pass	Q2M	4.69
B6;P-6L11A		100-225A	10.00
SQUARE D		Q2M	
B6;BK-6L11A2	Pass	Q2	6.13
B6;P-6L11A		100-225A	10.00
SQUARE D		Q2	
B6;BK-6L11B1	Pass	Q2	4.71
B6;P-6L11B		100-225A	10.00
SQUARE D		Q2	
B6;BK-6LDP-1A	Pass	Q2	2.65
B6;P-6LDP-1A		100-225A	10.00
SQUARE D		Q2	
B6;BK-6LDP1-3	Pass	QJH	6.35
B6;P-6LDP1		125-225A	18.00
SIEMENS		QJH	
B6;BK-6LDP1-4	Pass	QJH	6.35
B6;P-6LDP1		125-225A	18.00
SIEMENS		QJH	
B6;BK-6LDP1-8	Pass	QJH2	5.71
B6;P-6LDP1		60-225A	22.00
SIEMENS		QJH2	
B6;BK-T-6B-S	Pass	KM	5.71
B6;P-6LDP1		250-800A	42.00
SIEMENS-ALLIS		KM	
B6;BK-6PDP1-3	Pass	JD2	8.3
B6;P-6PDP1		200-400A	22.00
SIEMENS		JD2	
B6;BK-6PDP1-4	Pass	JD2	8.3
B6;P-6PDP1		200-400A	22.00
SIEMENS		JD2	
B6;BK-T-6A-S	Pass	LL	8.3
B6;P-6PDP1		450-600A	42.00
SIEMENS		LL	

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B7;BK-P1	Pass	Q2M	2.81
B7;P-P1		100-225A	10.00
SQUARE D		Q2M	
B8;F-1PA-2	Pass	TR, 250V Class RK5	7.14
B8;B-1PA-2		15-600A	200.00
GOULD SHAWMUT		TR	
B8;F-6LDP1SAF	Pass	FRN-R, 250V Class RK5	3.36
B8;B-6LDP1SAF		1-600A	200.00
BUSSMANN		FRN-R	
B8;BK-A-1N	Pass	MA	11.42
B8;B-BK-A-1N		125-1200A	42.00
SQUARE D		600A	
B8;BK-A-1E	Pass	LAB, LA	3.61
B8;B-C-EP		125-600A	42.00
WESTINGHOUSE		LA	
B8;F-SAFETY	Pass	FRN-R, 250V Class RK5	4.73
B8;B-SAFETY		1-600A	200.00
BUSSMANN		FRN-R	
B8;BK-1PA-D	Pass	QOB-AS	6.59
B8;P-1PA		15-30A	10.00
SQUARE D		QOB-AS	
B8;BK-1PA-M	Pass	QO, 3-Pole	6.59
B8;P-1PA		15-100A	10.00
SQUARE D		100A	
B8;BK-8PB1	Pass	LAB, LA	8.62
B8;P-8PB1		125-600A	42.00
WESTINGHOUSE		LAB	
B8;BK-8PB1L	Pass	FB	8.62
B8;P-8PB1		15-150A	14.00
WESTINGHOUSE		FB	
B8;BK-8PB1R	Pass	FB	8.62
B8;P-8PB1		15-150A	14.00
WESTINGHOUSE		FB	
B8;BK-8PB1-2	Pass	THQL	9.92
B8;P-8PB1		15-125A	10.00
GE		THQL	
B8;BK-8PB1-3	Pass	THQL	9.92

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B8;P-8PBJ1		15-125A	10.00
GE		THQL	
B106;BK-B100EP	Pass	MA	18.06
B100;B-BK-EP		125-1200A	30.00
SQUARE D		600A	
B100;F-2A100	Pass	TRS, 600V Class RK5	16.05
B100;B-E2WO1M		15-600A	200.00
GOULD SHAWMUT		TRS	
B100;F-TE2DP3	Pass	TRS, 600V Class RK5	16.05
B100;B-E2WO1M		15-600A	200.00
GOULD SHAWMUT		TRS	
B100;F-M-P1	Pass	TRS, 600V Class RK5	25.69
B100;B-RCPP1		15-600A	200.00
GOULD SHAWMUT		TRS	
B100;F-M-P2	Pass	TRS, 600V Class RK5	25.69
B100;B-RCPP2		15-600A	200.00
GOULD SHAWMUT		TRS	
B100;F-M-P3	Pass	TRS, 600V Class RK5	25.69
B100;B-RCPP3		15-600A	200.00
GOULD SHAWMUT		TRS	
B100;F-M-P4	Pass	TRS, 600V Class RK5	25.69
B100;B-RCPP4		15-600A	200.00
GOULD SHAWMUT		TRS	
B100;F-M-S5	Pass	TRS, 600V Class RK5	25.69
B100;B-RCPS5		15-600A	200.00
GOULD SHAWMUT		TRS	
B100;F-M-S6	Pass	TRS, 600V Class RK5	25.69
B100;B-RCPS6		15-600A	200.00
GOULD SHAWMUT		TRS	
B100;F-M-S7	Pass	TRS, 600V Class RK5	25.69
B100;B-RCPS7		15-600A	200.00
GOULD SHAWMUT		TRS	
B100;F-M-S8	Pass	TRS, 600V Class RK5	25.69
B100;B-RCPS8		15-600A	200.00
GOULD SHAWMUT		TRS	
B100;BK-EMCC4	Pass	FB	10.64
B100;MC-EMCC4		15-150A	14.00

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WESTINGHOUSE		FB	
B100;BK-AC24	Pass	JDB, JD	21.79
B100;MC-EMCF1		70-250A	25.00
WESTINGHOUSE		JD	
B100;BK-T-BMEP	Pass	FB Tri-Pac	23.16
B100;MC-EMCFB		15-100A	200.00
CUTLER-HAMMER		FB	
B100;BK-BDP2A6	Pass	FA	10.59
B100;MC-MCCA3		15-100A	18.00
SQUARE D		FA	
B100;BK-100AC7	Pass	FB	12.56
B100;MC-MCCA4		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-MCCC2	Pass	FB	8.73
B100;MC-MCCC2		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-AC11	Pass	FB	12.86
B100;MC-MCCC4		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-CF55	Pass	FB	12.86
B100;MC-MCCC4		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-AC17	Pass	HKB	17.56
B100;MC-MCCCI		70-250A	22.00
WESTINGHOUSE		HKB	
B100;BK-AHU3	Pass	FB	9.52
B100;MC-MCCD2		15-150A	14.00
WESTINGHOUSE		FB	
B100;BK-100AC4	Pass	EH	5.89
B100;MC-MCCD3		15-100A	14.00
SQUARE D		EH	
B100;BK-3WD1-P	Pass	FDB SER C	5.89
B100;MC-MCCD3		15-45A	14.00
WESTINGHOUSE		FDB	
B100;BK-100AC2	Pass	FB	5.48
B100;MC-MCCD4		15-150A	14.00
WESTINGHOUSE		FB	

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;BK-VFDP1	Pass	FB Tri-Pac	23.35
B100;MC-MCCFB		15-100A	200.00
CUTLER-HAMMER		FB	
B100;BK-V100P1	Pass	LA Tri-Pac	44.32
B100;MC-MCEB1		70-400A	200.00
CUTLER-HAMMER		LA	200.00
B100;BK-V100P2	Pass	LA Tri-Pac	44.32
B100;MC-MCEB1		70-400A	200.00
CUTLER-HAMMER		LA	200.00
B100;BK-100P5	Pass	LA Tri-Pac	43.87
B100;MC-MCEB2		70-400A	200.00
CUTLER-HAMMER		LA	
B100;BK-100P8	Pass	FB Tri-Pac	27.86
B100;MC-MCEB3		15-100A	200.00
CUTLER-HAMMER		FB	
B100;BK-1DP1A3	Pass	KA	24.79
B100;P-1DP1		70-250A	25.00
SQUARE D		150A	
B100;BK-1DP1A4	Pass	KA	24.79
B100;P-1DP1		70-250A	25.00
SQUARE D		150A	
B100;BK-1DP3A2	Pass	LA	26.17
B100;P-1DP3		125-400A	30.00
SQUARE D		400A	
B100;BK-1DP4A1	Pass	KA	21.96
B100;P-1DP4		70-250A	25.00
SQUARE D		250A	
B100;BK-MCCCI	Pass	KA	21.96
B100;P-1DP4		70-250A	25.00
SQUARE D		250A	
B100;BK-2DPA2	Pass	KA	22.45
B100;P-2DP		70-250A	25.00
SQUARE D		250A	
B100;BK-2DPA4	Pass	KA	22.45
B100;P-2DP		70-250A	25.00
SQUARE D		250A	

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;BK-3DPA3	Pass	KA	21.54
B100;P-3DP		70-250A	25.00
SQUARE D		150A	
B100;BK-4DPA3	Pass	KA	20.49
B100;P-4DP		70-250A	22.00
SQUARE D		150A	
B100;BK-4DPA4	Pass	KA	20.49
B100;P-4DP		70-250A	22.00
SQUARE D		150A	
B100;BK-BDP1	Pass	LI	37.14
B100;P-BDP1		300-600A	200.00
SQUARE D		400A	
B100;BK-BYL2	Pass	IF I-LIM	37.14
B100;P-BDP1		60-100A	200.00
SQUARE D		100	
B100;BK-BDP2A3	Pass	IF I-LIM	37.19
B100;P-BDP2		60-100A	200.00
SQUARE D		100	
B100;BK-BDP2A4	Pass	IF I-LIM	37.19
B100;P-BDP2		60-100A	200.00
SQUARE D		100	
B100;BK-BDP2A5	Pass	IF I-LIM	37.19
B100;P-BDP2		60-100A	200.00
SQUARE D		100	
B100;BK-BDP3C2	Pass	IF I-LIM	32.43
B100;P-BDP3		60-100A	200.00
SQUARE D		100	
B100;BK-BDP3C3	Pass	IF I-LIM	32.43
B100;P-BDP3		60-100A	200.00
SQUARE D		100	
B100;BK-BDP3C4	Pass	IF I-LIM	32.43
B100;P-BDP3		60-100A	200.00
SQUARE D		100	
B100;BK-MCCD3	Pass	IF I-LIM	37.59
B100;P-BDP4		60-100A	100.00
SQUARE D		100	
B100;BK-MCCD4	Pass	IF I-LIM	37.59

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;P-BDP4		60-100A	100.00
SQUARE D		100	
B100;BK-MCCD5	Pass	IF I-LIM	37.59
B100;P-BDP4		60-100A	100.00
SQUARE D		100	
B100;BK-BDP5-R	Pass	IF I-LIM	36.8
B100;P-BDP5		20-50A	100.00
SQUARE D		45	
B100;BK-BDP6A2	Pass	KA	24.51
B100;P-BDP6		70-250A	25.00
SQUARE D		150A	
B100;BK-BDP6A3	Pass	KA	24.51
B100;P-BDP6		70-250A	25.00
SQUARE D		150A	
B100;BK-BDP8-9	Pass	MA	23.86
B100;P-BDP8		150-800 A	30.00
FUCHS		MA	30.00
B100;BK-C1L1	Pass	FA	12.88
B100;P-C1DP		15-100A	14.00
SQUARE D		FA	
B100;BK-T-C1R1,2	Pass	FA	12.88
B100;P-C1DP		15-100A	14.00
SQUARE D		FA	
B100;BK-T-C1R3,4	Pass	FA	12.88
B100;P-C1DP		15-100A	18.00
SQUARE D		FA	
B100;BK-T-C2R1-3P	Pass	KA	20.87
B100;P-C2DP		70-250A	25.00
SQUARE D		250A	
B100;BK-T-C2R4,5	Pass	KA	20.87
B100;P-C2DP		70-250A	25.00
SQUARE D		250A	
B100;BK-C2WDP-M	Pass	KA	8.58
B100;P-C2WDP		70-250A	25.00
SQUARE D		100A	
B100;BK-TC2WDP	Pass	ED	8.58
B100;P-C2WDP		15-125A	18.00

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SQUARE D		70A	
B100;BK-C3L1	Pass	FA	7.47
B100;P-C3DP		15-100A	18.00
SQUARE D		FA	
B100;BK-T-C3R1	Pass	FA	7.47
B100;P-C3DP		15-100A	18.00
SQUARE D		FA	
B100;BK-C5L1	Pass	FA	6.52
B100;P-C5DP		15-100A	14.00
SQUARE D		FA	
B100;BK-T-C5R1,2	Pass	FA	6.52
B100;P-C5DP		15-100A	14.00
SQUARE D		FA	
B100;BK-C2DP	Pass	LI	33.31
B100;P-CBDP1		300-600A	200.00
SQUARE D		500A	
B100;BK-C3DP	Pass	IF I-LIM	33.31
B100;P-CBDP1		60-100A	100.00
SQUARE D		100	
B100;BK-C1L2A	Pass	IF I-LIM	33.68
B100;P-CBDP2		60-100A	100.00
SQUARE D		100	
B100;BK-C5DP	Pass	IF I-LIM	33.68
B100;P-CBDP2		60-100A	100.00
SQUARE D		100	
B100;BK-E1L1	Pass	KA	12.67
B100;P-E1DP1		70-250A	25.00
SQUARE D		100A	
B100;BK-T-E1R124	Pass	FA	12.67
B100;P-E1DP1		15-100A	18.00
SQUARE D		FA	
B100;BK-EMCCF1	Pass	KA	24.00
B100;P-E1DP2		70-250A	25.00
SQUARE D		250A	
B100;BK-E2L1	Pass	IF I-LIM	14.51
B100;P-E2L1		60-100A	100.00
SQUARE D		100	

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;BK-E3L1	Pass	FA	7.41
B100;P-E3DP		15-100A	18.00
SQUARE D		FA	
B100;BK-T-E3R1,2P	Pass	FA	7.41
B100;P-E3DP		15-100A	18.00
SQUARE D		FA	
B100;BK-E4L1	Pass	FA	10.50
B100;P-E4DP		15-100A	14.00
SQUARE D		FA	
B100;BK-T-E4R1,2	Pass	FA	10.50
B100;P-E4DP		15-100A	14.00
SQUARE D		FA	
B100;BK-E5L1	Pass	FA	6.46
B100;P-E5DP		15-100A	14.00
SQUARE D		FA	
B100;BK-T-E5R12P	Pass	FA	6.46
B100;P-E5DP		15-100A	14.00
SQUARE D		FA	
B100;BK-E3DP	Pass	IK	31.37
B100;P-EBDP1		110-250A	100.00
SQUARE D		225A	
B100;BK-E4L1A	Pass	IF I-LIM	31.37
B100;P-EBDP1		60-100A	100.00
SQUARE D		100	
B100;BK-E5DP	Pass	IF I-LIM	31.37
B100;P-EBDP1		60-100A	100.00
SQUARE D		100	
B100;BK-EBDP6	Pass	IF I-LIM	31.37
B100;P-EBDP1		60-100A	100.00
SQUARE D		100	
B100;BK-EBL1A	Pass	IF I-LIM	31.37
B100;P-EBDP1		60-100A	100.00
SQUARE D		100	
B100;BK-EBL2A	Pass	IF I-LIM	31.37
B100;P-EBDP1		60-100A	100.00
SQUARE D		100	

South Carolina (Columbia) VA Medical Center - Protective Device: Pass / Fail Evaluation

B100;BK-E3L1A	Pass	IF I-LIM	31.37
B100;P-EBDP2		60-100A	200.00
SQUARE D		100	
B100;BK-E5L1A	Pass	IF I-LIM	31.37
B100;P-EBDP2		60-100A	200.00
SQUARE D		100	
B100;BK-E1DP2	Pass	LC	32.37
B100;P-EBDP3		300-600A	35.00
SQUARE D		500A	
B100;BK-MCCEB3	Pass	LC	32.37
B100;P-EBDP3		300-600A	35.00
SQUARE D		500A	
B100;BK-V100P3	Pass	KH	32.37
B100;P-EBDP3		70-250A	35.00
SQUARE D		250A	
B100;BK-1DP2A15	Pass	IF I-LIM	33.03
B100;P-EBDP4		60-100A	100.00
SQUARE D		100	
B100;BK-EMCCC3	Pass	IF I-LIM	33.03
B100;P-EBDP4		60-100A	100.00
SQUARE D		100	
B100;BK-EMCCC4	Pass	IF I-LIM	33.03
B100;P-EBDP4		60-100A	100.00
SQUARE D		100	
B100;BK-EMCCD5	Pass	IF I-LIM	33.03
B100;P-EBDP4		60-100A	100.00
SQUARE D		100	
B100;BK-EMCCDB	Pass	IF I-LIM	33.03
B100;P-EBDP4		60-100A	100.00
SQUARE D		100	
B100;BK-EMCCEB	Pass	IF I-LIM	33.03
B100;P-EBDP4		60-100A	100.00
SQUARE D		100	
B100;BK-EMCCFB	Pass	LI	33.03
B100;P-EBDP4		300-600A	100.00
SQUARE D		500A	
B100;BK-EBL1	Pass	FA	9.47

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B100;P-EBDP6		15-100A	14.00
SQUARE D		FA	
B100;BK-LA108	Pass	FA	9.47
B100;P-EBDP6		15-100A	14.00
SQUARE D		FA	
B100;BK-T-EBRP	Pass	FA	9.47
B100;P-EBDP6		15-100A	14.00
SQUARE D		FA	
B100;BK-EBDP9A2	Pass	FH	21.48
B100;P-EBDP9A		15-100A	25.00
SQUARE D		FH	30.00
B100;BK-MCC-CB	Pass	KA	21.48
B100;P-EBDP9A		70-250A	25.00
SQUARE D		250A	30.00
B100;BK-FIRE-PU	Pass	FXD6-A Sentron	26.90
B100;P-FIRE-P		70-250A	35.00
SIEMENS		FXD6-A	
B100;BK-LS1L1	Pass	FA	12.80
B100;P-LS1DP		15-100A	18.00
SQUARE D		FA	
B100;BK-T-LS1R1	Pass	FA	12.80
B100;P-LS1DP		15-100A	18.00
SQUARE D		FA	
B100;BK-LS2L1	Pass	FA	8.04
B100;P-LS2DP		15-100A	18.00
SQUARE D		FA	
B100;BK-LS2WL1	Pass	FA	8.04
B100;P-LS2DP		15-100A	18.00
SQUARE D		FA	
B100;BK-T-LS2R1	Pass	FA	8.04
B100;P-LS2DP		15-100A	18.00
SQUARE D		FA	
B100;BK-LS3L1	Pass	FA	7.45
B100;P-LS3DP		15-100A	14.00
SQUARE D		FA	
B100;BK-T-LS3R1	Pass	FA	7.45
B100;P-LS3DP		15-100A	14.00

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SQUARE D		FA	
B100;BK-LS4L1	Pass	FA	6.94
B100;P-LS4DP		15-100A	14.00
SQUARE D		FA	
B100;BK-T-LS4R1P	Pass	FA	6.94
B100;P-LS4DP		15-100A	14.00
SQUARE D		FA	
B100;BK-LS5L1	Pass	FA	6.49
B100;P-LS5DP		15-100A	14.00
SQUARE D		FA	
B100;BK-T-LS5R1P	Pass	FA	6.49
B100;P-LS5DP		15-100A	14.00
SQUARE D		FA	
B100;BK-LS1DP	Pass	IF I-LIM	32.52
B100;P-LSBDP1		60-100A	100.00
SQUARE D		100	
B100;BK-LS2DP	Pass	IF I-LIM	32.52
B100;P-LSBDP1		60-100A	100.00
SQUARE D		100	
B100;BK-LS3DP	Pass	IF I-LIM	32.52
B100;P-LSBDP1		60-100A	100.00
SQUARE D		100	
B100;BK-LS4DP	Pass	IF I-LIM	32.52
B100;P-LSBDP1		60-100A	100.00
SQUARE D		100	
B100;BK-LS5DP	Pass	IF I-LIM	32.52
B100;P-LSBDP1		60-100A	100.00
SQUARE D		100	
B100;BK-LSB2L1	Pass	FA	9.54
B100;P-LSBDP2		15-100A	14.00
SQUARE D		FA	
B100;BK-T-LSBR1P	Pass	FA	9.54
B100;P-LSBDP2		15-100A	14.00
SQUARE D		FA	
B100;BK-T-RL1,2P	Pass	FH	9.54
B100;P-LSBDP2		15-100A	18.00
SQUARE D		FH	

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B100;BK-EP-1C	Pass	LA, Static Trip II	17.88
B100;SG-EP		LSI, 80-4000A	42.00
SIEMENS-ALLIS		LA-1600	50.00
B100;BK-EP-2A	Pass	LA, Static Trip II	17.88
B100;SG-EP		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-EP-2B	Pass	AC-Pro Retrofit	17.88
B100;SG-EP		for Siemens-Allis LA	22.00
UTILITY RELAY CO.		LA-600B	200.00
B100;BK-EP-2C	Pass	LA, Static Trip II	17.88
B100;SG-EP		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-EP-2D	Pass	AC-Pro Retrofit	17.88
B100;SG-EP		for Siemens-Allis LA	22.00
UTILITY RELAY CO.		LA-600B	200.00
B100;BK-EP-3A	Pass	AC-Pro Retrofit	17.88
B100;SG-EP		for Siemens-Allis LA	22.00
UTILITY RELAY CO.		LA-600B	200.00
B100;BK-EP-3B	Pass	LA, Static Trip II	17.88
B100;SG-EP		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-EP-3C	Pass	LA, Static Trip II	17.88
B100;SG-EP		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-EP-3D	Pass	AC-Pro Retrofit	17.88
B100;SG-EP		for Siemens-Allis LA	22.00
UTILITY RELAY CO.		LA-600B	200.00
B100;F-EP-2A	Pass	A4BY, 600V Class L	17.88
B100;SG-EP		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-EP-2B	Pass	A4BY, 600V Class L	17.88
B100;SG-EP		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-EP-2C	Pass	A4BY, 600V Class L	17.88
B100;SG-EP		200-6000A	200.00
GOULD SHAWMUT		A4BY	

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B100;F-EP-2D	Pass	A4BY, 600V Class L	17.88
B100;SG-EP		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-EP-3A	Pass	A4BY, 600V Class L	17.88
B100;SG-EP		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-EP-3B	Pass	A4BY, 600V Class L	17.88
B100;SG-EP		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-EP-3C	Pass	A4BY, 600V Class L	17.88
B100;SG-EP		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-EP-3D	Pass	A4BY, 600V Class L	17.88
B100;SG-EP		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;BK-S1-2A	Pass	LA, Static Trip II	53.53
B100;SG-SS1-A		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S1-2B	Pass	LA, Static Trip II	53.53
B100;SG-SS1-A		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S1-2C	Pass	LA, Static Trip II	53.53
B100;SG-SS1-A		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S1-3C	Pass	AC-Pro Retrofit	53.53
B100;SG-SS1-A		for Siemens-Allis LA	22.00
UTILITY RELAY CO.		LA-600B	200.00
B100;BK-T1-A-S	Pass	AC-Pro Retrofit	53.53
B100;SG-SS1-A		for Siemens-Allis LA	85.00
UTILITY RELAY CO.		LA-4000A	85.00
B100;F-S1-2A	Pass	A4BY, 600V Class L	53.53
B100;SG-SS1-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S1-2B	Pass	A4BY, 600V Class L	53.53
B100;SG-SS1-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S1-2C	Pass	A4BY, 600V Class L	53.53

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B100;SG-SS1-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S1-3C	Pass	A4BY, 600V Class L	53.53
B100;SG-SS1-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;-S2-5C	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;BK-S2-2A	Pass	LA, Static Trip II	43.91
B100;SG-SS2-A		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-2B	Pass	AC-Pro Retrofit	43.91
B100;SG-SS2-A		for Siemens-Allis LA	22.00
UTILITY RELAY CO.		LA-600B	200.00
B100;BK-S2-2C	Pass	LA, Static Trip II	43.91
B100;SG-SS2-A		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-3A	Pass	LA, Static Trip II	43.91
B100;SG-SS2-A		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-3B	Pass	AC-Pro Retrofit	43.91
B100;SG-SS2-A		for Siemens-Allis LA	22.00
UTILITY RELAY CO.		LA-600B	200.00
B100;BK-S2-3C	Pass	AC-Pro Retrofit	43.91
B100;SG-SS2-A		for Siemens-Allis LA	22.00
UTILITY RELAY CO.		LA-600B	200.00
B100;BK-S2-4A	Pass	LA, Static Trip II	43.91
B100;SG-SS2-A		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-4B	Pass	LA, Static Trip II	43.91
B100;SG-SS2-A		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-4C	Pass	LA, Static Trip II	43.91
B100;SG-SS2-A		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-4D	Pass	LA, Static Trip II	43.91
B100;SG-SS2-A		LSI, 80-4000A	22.00

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SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-5A	Pass	LA, Static Trip II	43.91
B100;SG-SS2-A		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-5B	Pass	AC-Pro Retrofit	43.91
B100;SG-SS2-A		for Siemens-Allis LA	22.00
UTILITY RELAY CO.		LA-600B	200.00
B100;BK-S2-5C	Pass	LA, Static Trip II	43.91
B100;SG-SS2-A		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-5D	Pass	LA, Static Trip II	43.91
B100;SG-SS2-A		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-T2-A-S-1B	Pass	AC-Pro Retrofit	43.91
B100;SG-SS2-A		for Siemens-Allis LA	85.00
UTILITY RELAY CO.		LA-4000A	85.00
B100;F-S2-2A	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-2B	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-2C	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-3A	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-3B	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-3C	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-4A	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	

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B100;F-S2-4B	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-4C	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-4D	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-5A	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-5B	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-5D	Pass	A4BY, 600V Class L	43.91
B100;SG-SS2-A		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;BK-S2-10A	Pass	LA, Static Trip II	44.08
B100;SG-SS2-B		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-10B	Pass	LA, Static Trip II	44.08
B100;SG-SS2-B		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-7A	Pass	LA, Static Trip II	44.08
B100;SG-SS2-B		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-7B	Pass	AC-Pro Retrofit	44.08
B100;SG-SS2-B		for Siemens-Allis LA	22.00
UTILITY RELAY CO.		LA-600B	200.00
B100;BK-S2-8A	Pass	AC-Pro Retrofit	44.08
B100;SG-SS2-B		for Siemens-Allis LA	22.00
UTILITY RELAY CO.		LA-600B	200.00
B100;BK-S2-8C	Pass	LA, Static Trip II	44.08
B100;SG-SS2-B		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00

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B100;BK-S2-8D	Pass	LA, Static Trip II	44.08
B100;SG-SS2-B		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-9A	Pass	LA, Static Trip II	44.08
B100;SG-SS2-B		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-9B	Pass	AC-Pro Retrofit	44.08
B100;SG-SS2-B		for Siemens-Allis LA	22.00
UTILITY RELAY CO.		LA-600B	200.00
B100;BK-S2-9C	Pass	LA, Static Trip II	44.08
B100;SG-SS2-B		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-S2-9D	Pass	LA, Static Trip II	44.08
B100;SG-SS2-B		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;BK-T2B-S-11B	Pass	AC-Pro Retrofit	44.08
B100;SG-SS2-B		for Siemens-Allis LA	85.00
UTILITY RELAY CO.		LA-4000A	85.00
B100;BR-S2-8B	Pass	LA, Static Trip II	44.08
B100;SG-SS2-B		LSI, 80-4000A	22.00
SIEMENS-ALLIS		LA-600	200.00
B100;F-S2-10A	Pass	A4BY, 600V Class L	44.08
B100;SG-SS2-B		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-10B	Pass	A4BY, 600V Class L	44.08
B100;SG-SS2-B		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-7A	Pass	A4BY, 600V Class L	44.08
B100;SG-SS2-B		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-7B	Pass	A4BY, 600V Class L	44.08
B100;SG-SS2-B		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-8A	Pass	A4BY, 600V Class L	44.08
B100;SG-SS2-B		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-8B	Pass	A4BY, 600V Class L	44.08

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B100;SG-SS2-B		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-8C	Pass	A4BY, 600V Class L	44.08
B100;SG-SS2-B		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-8D	Pass	A4BY, 600V Class L	44.08
B100;SG-SS2-B		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-9A	Pass	A4BY, 600V Class L	44.08
B100;SG-SS2-B		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-9B	Pass	A4BY, 600V Class L	44.08
B100;SG-SS2-B		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-9C	Pass	A4BY, 600V Class L	44.08
B100;SG-SS2-B		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100;F-S2-9D	Pass	A4BY, 600V Class L	44.08
B100;SG-SS2-B		200-6000A	200.00
GOULD SHAWMUT		A4BY	
B100A;BK-1DT1P	Pass	KA	16.30
B100A;P-1DL1		70-250A	25.00
SQUARE D		150A	
B100A;BK-1DLST2	Pass	FA	4.44
B100A;P-1DLS1		15-100A	14.00
SQUARE D		FA	
B100A;BK-2DL1-M	Pass	ED4 Sentron, 2 & 3-Pole	14.30
B100A;P-2DL1		15-125A	18.00
SIEMENS		ED4	
B100A;BK-2DT1P	Pass	ED4 Sentron, 2 & 3-Pole	14.30
B100A;P-2DL1		15-125A	18.00
SIEMENS		ED4	
B100A;BK-2DCR1	Pass	ED6 Sentron, 2 & 3-Pole	9.61
B100A;P-BDC1		15-125A	18.00
SIEMENS		ED6, 3-Pole	
B100A;BK-BDC1-M	Pass	FXD6-A Sentron	9.61
B100A;P-BDC1		70-250A	22.00

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SIEMENS		FXD6-A	
B100A;BK-1DL1	Pass	LA	20.60
B100A;P-BDDP1		125-400A	30.00
SQUARE D		400A	
B100A;BK-2DL1	Pass	LA	20.60
B100A;P-BDDP1		125-400A	30.00
SQUARE D		400A	
B100A;BK-BDE1L	Pass	BQD	13.55
B100A;P-BDE1		15-100A	14.00
SIEMENS		BQD	
B100A;BK-BDE1M	Pass	HJ	13.55
B100A;P-BDE1		110-400A	25.00
SIEMENS		HJ	
B100A;BK-TBDE1	Pass	BQD	13.55
B100A;P-BDE1		15-100A	14.00
SIEMENS		BQD	
B100A;BK-1DLST1	Pass	FA	10.59
B100A;P-BDLS1		15-100A	14.00
SQUARE D		FA	
B100A;BK-BDLST1	Pass	FA	10.59
B100A;P-BDLS1		15-100A	14.00
SQUARE D		FA	
B103;BK-N2D2-M	Pass	FA	9.07
B103;P-N2D2		15-100A	14.00
SQUARE D		FA	
B103;BK-N2L1-M	Pass	FA	2.64
B103;P-N2L1		15-100A	14.00
SQUARE D		FA	
B103;BK-NC2L1-M	Pass	FA	2.31
B103;P-NC2L1		15-100A	14.00
SQUARE D		FA	
B103;BK-NE2L1-M	Pass	FA	4.83
B103;P-NE2L1		15-100A	14.00
SQUARE D		FA	
B103;BK-A-CE	Pass	KA	1.5
B103;P-NIG1		70-250A	22.00
SQUARE D		250A	

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B103;BK-A-EE	Pass	FA	1.66
B103;P-NIG1		15-100A	14.00
SQUARE D		FA	
B103;BK-DEG	Pass	LA	1.5
B103;P-NIG1		125-400A	30.00
SQUARE D		400A	
B105;BK-36H-P	Pass	EHB, 2 & 3-Pole	3.04
B105;P-36H		15-100A	14.00
CUTLER-HAMMER		EHB	
B105;BK-36P,H	Pass	EHB, 2 & 3-Pole	3.04
B105;P-36H		15-100A	14.00
CUTLER-HAMMER		EHB	
B105;BK-36P-P	Pass	EHB, 2 & 3-Pole	3.04
B105;P-36H		15-100A	14.00
CUTLER-HAMMER		EHB	
B106;F-A-1E	Pass	TRS, 600V Class RK5	10.25
B106;B-A-1,FP		15-600A	200.00
GOULD SHAWMUT		TRS	
B106;F-A-1,FP	Pass	TRS, 600V Class RK5	9.85
B106;B-A-FP,1		15-600A	200.00
GOULD SHAWMUT		TRS	
B106;BK-EL-P1	Pass	FA	6.02
B106;B-EL-P1		15-100A	18.00
SQUARE D		FA	
B106;BK-EL-S1	Pass	FA	6.02
B106;B-EL-S1		15-100A	18.00
SQUARE D		FA	
B106;F-EV	Pass	AJT, 600V Class J	4.63
B106;B-EV		2-12A	200.00
GOULD SHAWMUT		AJT	
B106;BK-EMDPH	Pass	MA	14.39
B106;P-EMDPH		125-1200A	22.00
SQUARE D		600A	
B106;BK-EMDPH1	Pass	KA	14.39
B106;P-EMDPH		70-250A	25.00
SQUARE D		150A	

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B106;BK-EMDPH2	Pass	LA	14.39
B106;P-EMDPH		125-400A	22.00
SQUARE D		400A	
B106;BK-EMDPH3	Pass	KA	14.39
B106;P-EMDPH		70-250A	25.00
SQUARE D		150A	
B106;BK-EMDPH4	Pass	FH	14.39
B106;P-EMDPH		15-100A	25.00
SQUARE D		FH	
B106;BK-KH	Pass	FH	15.92
B106;P-MDPH		15-100A	25.00
SQUARE D		FH	
B106;BK-OL	Pass	FH	15.92
B106;P-MDPH		15-100A	25.00
SQUARE D		FH	
B106;BK-PPH	Pass	KA	15.92
B106;P-MDPH		70-250A	22.00
SQUARE D		150A	
B106;BK-PPH1-L	Pass	EHB-AS	7.79
B106;P-PPH1		15-30A	14.00
SQUARE D		EHB-AS	
B106;BK-PPH1-M	Pass	KA	7.79
B106;P-PPH1		70-250A	22.00
SQUARE D		150A	
B106;BK-PPH2-R	Pass	EHB-AS	6.98
B106;P-PPH2-R		15-30A	14.00
SQUARE D		EHB-AS	
B106;BK-C2	Pass	ME, Micrologic	17.51
B106;SG-N		LSI, 100-800A	65.00
SQUARE D		ME	65.00
B106;BK-C3	Pass	ME, Micrologic	17.51
B106;SG-N		LSI, 100-800A	65.00
SQUARE D		ME	65.00
B106;BK-C5	Pass	ME, Micrologic	17.51
B106;SG-N		LSI, 100-800A	65.00
SQUARE D		ME	65.00
B106;BK-N	Pass	NE, Micrologic	17.51

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B106;SG-N		LSI, 300-1200A	100.00
SQUARE D		NE	100.00
B20;BK-20MDP	Pass	LA	7.65
B20;P-20MDP		125-400A	30.00
SQUARE D		400A	
B20;BK-20MDP-1	Pass	FA	8.51
B20;P-20MDP		15-100A	14.00
SQUARE D		FA	
B20;BK-20MDP-2	Pass	KA	7.65
B20;P-20MDP		70-250A	25.00
SQUARE D		250A	
B20;BK-20MDP-4	Pass	FA	8.51
B20;P-20MDP		15-100A	14.00
SQUARE D		FA	
B22;BK-41-P	Pass	TED (E-150 Line)	12.06
B22;B-C-41-P		15-150A	14.00
GE		TED	
B22;BK-AC1	Pass	TED (E-100 Line)	13.09
B22;P-ACD		15-100A	18.00
GE		TED	
B22;BK-AC2	Pass	TED (E-100 Line)	13.09
B22;P-ACD		15-100A	18.00
GE		TED	
B22;BK-AC3	Pass	TED (E-100 Line)	13.09
B22;P-ACD		15-100A	18.00
GE		TED	
B22;BK-H1	Pass	FA	10.25
B22;P-H1		15-100A	14.00
SQUARE D		FA	
B22;BK-H12-M	Pass	FA	11.66
B22;P-H12		15-100A	14.00
SQUARE D		FA	
B22;BK-H2	Pass	FA	8.61
B22;P-H2		15-100A	14.00
SQUARE D		FA	
B22;BK-H3	Pass	FA	7.53
B22;P-H3		15-100A	14.00

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SQUARE D		FA	
B22;BK-ACD	Pass	TKMA	12.59
B22;P-MDP		300-1200A	30.00
GE		TKMA	
B22;BK-H1,2,3	Pass	TED (E-100 Line)	14
B22;P-MDP		15-100A	18.00
GE		TED	
B22;BK-H12	Pass	TED (E-100 Line)	14
B22;P-MDP		15-100A	18.00
GE		TED	
B22;BK-HB	Pass	TFJ	12.59
B22;P-MDP		70-225A	22.00
GE		TFJ	
B22;BK-LB1	Pass	TFJ	12.59
B22;P-MDP		70-225A	22.00
GE		TFJ	
B22;BK-MDP	Pass	TKMA	12.59
B22;P-MDP		300-1200A	30.00
GE		TKMA	
B5;BK-5L205	Pass	FA	5.05
B5;P-5L205		15-100A	14.00
SQUARE D		FA	
B5;BK-5L21	Pass	KA	7.32
B5;P-5L21		70-250A	22.00
SQUARE D		250A	
B5;BK-5MDP	Pass	TKMA	11.46
B5;P-5MDP		300-1200A	30.00
GE		TKMA	
B5;BK-5MDP-1	Pass	TFJ	11.46
B5;P-5MDP		70-225A	22.00
GE		TFJ	
B5;BK-5MDP-3	Pass	TFJ	11.46
B5;P-5MDP		70-225A	22.00
GE		TFJ	
B5;BK-5MDP-4	Pass	TFJ	11.46
B5;P-5MDP		70-225A	22.00
GE		TFJ	

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B5;BK-5MDP-6	Pass	TFJ	11.46
B5;P-5MDP		70-225A	22.00
GE		TFJ	
B5;BK-5MDP-7	Pass	TFJ	11.46
B5;P-5MDP		70-225A	22.00
GE		TFJ	
B5;BK-5MDP-8	Pass	TFJ	11.46
B5;P-5MDP		70-225A	22.00
GE		TFJ	
B6;BK-6MDP	Pass	NB	11.8
B6;P-6MDP		800A	200.00
WESTINGHOUSE		NB	
B6;BK-T-6A-P	Pass	LAB, LA	11.8
B6;P-6MDP		125-600A	30.00
WESTINGHOUSE		LA	
B6;BK-T-6B-P	Pass	LD	11.8
B6;P-6MDP		300-600A	35.00
CUTLER-HAMMER		LD	
B6;F-SAFETY	Pass	DLS-R, 600V Class RK5	10.20
B6;P-6SL1		10-600A	200.00
BUSSMANN		DLS-R	
B9;BK-A-1E-B9A	Pass	FA	2.61
B9;B-A1-A2		15-100A	18.00
SQUARE D		FA	
B9;BK-A-1E-BST	Pass	FA	2.59
B9;B-A1-A3		15-100A	18.00
SQUARE D		FA	
B9;BK-G-A-1E	Pass	NSJ400, STR23SP	2.80
B9;B-G-A-1E		LS, 60-400A	35.00
MERLIN GERIN		NSJ400N	35.00
B9;BK-T9ELDP	Pass	EHB, 2 & 3-Pole	12.81
B9;P-9EHDP		15-100A	14.00
CUTLER-HAMMER		EHB	
B9;BK-TEL21	Pass	EHB, 2 & 3-Pole	12.81
B9;P-9EHDP		15-100A	14.00
CUTLER-HAMMER		EHB	

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B9;BK-TLDP	Pass	EHB, 2 & 3-Pole	12.81
B9;P-9EHDP		15-100A	14.00
CUTLER-HAMMER		EHB	
B9;BK-9MDP-1B	Pass	POW R-TP 7	14.22
B9;SG-9MDP		SPB 50	50.00
WESTINGHOUSE		SPB-50	50.00
B9;BK-9MDP-2B	Pass	POW R-TP 7	14.22
B9;SG-9MDP		SPB 50	50.00
WESTINGHOUSE		SPB-50	50.00
B9;BK-9MDP-2C	Pass	POW R-TP 7	14.22
B9;SG-9MDP		SPB 50	50.00
WESTINGHOUSE		SPB-50	50.00
B9A;F-ELEVATR	Pass	TRS, 600V Class RK5	4.42
B9A;B-ELEVATR		15-600A	200.00
GOULD SHAWMUT		TRS	
B9A;BK-A-2N	Pass	HFD	8.22
B9A;MC-MCC-9A		15-225A	65.00
CUTLER-HAMMER		HFD	
B9A;BK-A-3N	Pass	HFD	8.22
B9A;MC-MCC-9A		15-225A	65.00
CUTLER-HAMMER		HFD	
B9A;BK-ELEVATR	Pass	HFD	8.22
B9A;MC-MCC-9A		15-225A	65.00
CUTLER-HAMMER		HFD	
B9A;BK-LP	Pass	HFD	8.22
B9A;MC-MCC-9A		15-225A	65.00
CUTLER-HAMMER		HFD	
B9A;BK-T9A-1	Pass	HKD	8.22
B9A;MC-MCC-9A		100-400A	65.00
CUTLER-HAMMER		HKD	
B9A;BK-9AMDP	Pass	NC SELTRNC	8.52
B9A;P-9AMDP		800-1200A	30.00
WESTINGHOUSE		NC	
B9A;BK-MCC-9A	Pass	LC SELTRNC	8.52
B9A;P-9AMDP		300-600A	30.00
WESTINGHOUSE		LC	
B9A;BK-ELP-L	Pass	GHB	7.26

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B9A;P-ELP		15-100A	14.00
CUTLER-HAMMER		GHB	
B9A;BK-ELP-M	Pass	FD	6.63
B9A;P-ELP		15-225A	25.00
CUTLER-HAMMER		FD	
BMRI;BK-EMH	Pass	TEY, 2 & 3-Pole	1.34
BMRI;P-EMH		15-100A	14.00
GE		TEY	
BMRI;BK-EML	Pass	TEY, 2 & 3-Pole	1.34
BMRI;P-EMH		15-100A	14.00
GE		TEY	
B100;BK-MDP-H	Pass	SGHA, Spectra RMS	20.72
BMRI;P-H		125-600A	35.00
GE		SGHA	
BMRI;BK-CHILLER	Pass	THED	20.72
BMRI;P-H		15-150A	25.00
GE		THED	
BMRI;BK-H-P	Pass	SFPA, Spectra RMS	20.72
BMRI;P-H		70-250A	25.00
GE		SFPA	
BMRI;BK-UPS	Pass	SGHA, Spectra RMS	20.72
BMRI;P-H		125-600A	25.00
GE		SGHA	
BT36;BK-T36	Pass	NE & NEF, 3-Pole	2.84
BT36;B-T36		30-100A, Page 14	14.00
FEDERAL PACIFIC		NEF	
BT36;BK-36P1A	Pass	EH	1.76
BT36;P-36P1		15-100A	14.00
SQUARE D		EH	
BT36;BK-36P1B	Pass	EH	1.76
BT36;P-36P1		15-100A	14.00
SQUARE D		EH	
OD;BK-FD-A	Pass	Vista	3.25
OD;SG-1		Main Fault Interrupter	12.50
S&C		Main Fault Int.	
OD;BK-SG1-FD1	Pass	Vista	3.25
OD;SG-1		Tap Fault Interrupter	12.50

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S&C		Tap Fault Int.	
OD;BK-SG1-FD2	Pass	Vista	3.25
OD;SG-1		Tap Fault Interrupter	12.50
S&C		Tap Fault Int.	
OD;BK-SG2-F3	Pass	Vista	3.25
OD;SG-2		Tap Fault Interrupter	12.50
S&C		Tap Fault Int.	
OD;BK-SG2-F4	Pass	Vista	3.25
OD;SG-2		Tap Fault Interrupter	12.50
S&C		Tap Fault Int.	
OD;BK-SG3-FD5	Pass	Vista	3.26
OD;SG-3		Tap Fault Interrupter	12.50
S&C		Tap Fault Int.	
OD;BK-SG3-FD6	Pass	Vista	3.26
OD;SG-3		Tap Fault Interrupter	12.50
S&C		Tap Fault Int.	
OD;BK-SG3-FD7	Pass	Vista	3.26
OD;SG-3		Tap Fault Interrupter	12.50
S&C		Tap Fault Int.	
OD;BK-FD-B	Pass	Vista	3.26
OD;SG-4		Main Fault Interrupter	12.50
S&C		Main Fault Int.	
OD;BK-SG4-FD8	Pass	Vista	3.26
OD;SG-4		Tap Fault Interrupter	12.50
S&C		Tap Fault Int.	
OD;BK-SG4-FD9	Pass	Vista	3.26
OD;SG-4		Tap Fault Interrupter	12.50
S&C		Tap Fault Int.	

Equipment/Breaker Identification	Equipment/Breaker Type	Estimated Cost (\$)
B100;MC-EMCBP	MCC	\$80,000.00
B100;MC-EMCFB	MCC	\$80,000.00
B100;MC-MCCDB	MCC	\$80,000.00
B100;MC-MCCFB	MCC	\$120,000.00
B100;MC-MCEB1	MCC	\$160,000.00
B100;MC-MCEB2	MCC	\$160,000.00
B100;P-1R13	Panel	\$3,000.00
B100;P-1R15	Panel	Included in Table 7.1
B100;P-1R15A	Panel	Included in Table 7.1
B100;P-4DP	Panel	\$5,000.00
B100;P-4DP6	Panel	\$5,000.00
B100;P-BDP4	Panel	\$7,500.00
B100;P-BDP5	Panel	\$7,500.00
B100;P-BYL2	Panel	\$5,000.00
B100;P-C2DP	Panel	\$5,000.00
B100;P-C4DP	Panel	\$5,000.00
B100;P-E1DP2A	Panel	\$5,000.00
B100;P-E2DP	Panel	\$7,500.00
B100;EBDPRI	Panel	\$7,500.00
B100A;P-1DL1	Panel	\$5,000.00
B100A;P-2DL1	Panel	\$5,000.00
B100A;P-BDDP1	Panel	\$10,000.00
B8;P-8PBJ	Panel	Included in Table 7.1
BMRI;PH	Panel	\$2,500.00
B8;BK-8PBJ-CK1	Breaker	Included in Table 7.1
B8;BK-8PBJ-CK11	Breaker	Included in Table 7.1
B8;BK-8PBJ-CK2	Breaker	Included in Table 7.1
B8;BK-8PBJ-CK5	Breaker	Included in Table 7.1
B8;BK-8PBJ-CK7	Breaker	Included in Table 7.1
B8;BK-8PBJ-CK9	Breaker	Included in Table 7.1
B100;BK-EBDPRIM	Breaker	Included above
B100;BK-100P10	Enclosed Breaker	\$2,000.00
B100;BK-100P11	Enclosed Breaker	\$945.00
B100;BK-100P12	Enclosed Breaker	\$945.00
B100;BK-100P9	Enclosed Breaker	\$2,000.00
B100;BK-AC-10	Breaker	Included above in B100;MC-EMCBP
B100;BK-EBPR1	Breaker	Included above in B100;MC-EMCBP
B100;BK-EMCEB	Breaker	\$1,025.00
B100;BK-MED-V1	Breaker	Included above in B100;MC-EMCFB
B100;BK-AC8	Breaker	\$1,025.00
B100;BK-AC5	Breaker	Included above in B100;MC-MCCDB
B100;BK-BR13	Breaker	Included above in B100;MC-MCCDB
B100;BK-BYL1	Breaker	Included above in B100;MC-MCCFB
B100;BK-100P7	Breaker	Included above in B100;MC-MCEB1

Equipment/Breaker Identification	Equipment/Breaker Type	Estimated Cost (\$)
B100;BK-CT1FAN	Breaker	Included above in B100;MC-MCEB1
B100;BK-100P6	Breaker	Included above in B100;MC-MCEB2
B100;BK-CT2FAN	Breaker	\$1,025.00
B100;BK-100P1A	Breaker	\$1,025.00
B100;BK-100P2A	Breaker	\$1,025.00
B100;BK-100P4A	Breaker	\$1,025.00
B100;BK-100P5A	Breaker	\$1,025.00
B100;BK-1DP1A1	Breaker	\$345.00
B100;BK-1DP1A2	Breaker	\$345.00
B100;BK-1DP2A1	Breaker	\$1,100.00
B100;BK-1DP2A10	Breaker	\$1,100.00
B100;BK-1DP2A2	Breaker	\$1,100.00
B100;BK-1DP2A3	Breaker	\$1,100.00
B100;BK-1DP2A4	Breaker	\$1,100.00
B100;BK-1DP2A5	Breaker	\$1,100.00
B100;BK-1DP2A6	Breaker	\$1,100.00
B100;BK-1DP2A7	Breaker	\$1,100.00
B100;BK-1DP2A8	Breaker	\$1,100.00
B100;BK-1DP2A9	Breaker	\$1,100.00
B100;BK-1DP3A1	Breaker	\$345.00
B100;BK-2DPA1	Breaker	Included above in B100;P-2DP
B100;BK-2DPA3	Breaker	Included above in B100;P-2DP
B100;BK-3DPA1	Breaker	\$345.00
B100;BK-3DPA2	Breaker	\$345.00
B100;BK-4DPA1	Breaker	Included above in B100;P-4DP
B100;BK-4DPA2	Breaker	Included above in B100;P-4DP
B100;BK-5DP1A	Breaker	\$345.00
B100;BK-5DP2A	Breaker	\$345.00
B100;BK-BDP10A	Breaker	\$345.00
B100;BK-BDP10D	Breaker	\$345.00
B100;BK-BDP2A2	Breaker	\$1,100.00
B100;BK-BDP8	Breaker	\$1,100.00
B100;BK-MCCD2	Breaker	Included above in B100;P-BDP4
B100;BK-MCCDB	Breaker	Included above in B100;P-BDP4
B100;BK-BDP5A	Breaker	Included above in B100;P-BDP5
B100;BK-BDP6A1	Breaker	\$345.00
B100;BK-C1315L2	Breaker	\$1,100.00
B100;BK-C1315R2	Breaker	\$1,100.00
B100;BK-C2L1	Breaker	Included above in B100;P-C2DP
B100;BK-C2WDP	Breaker	Included above in B100;P-C2DP
B100;BK-C4L1	Breaker	Included above in B100;P-C2DP
B100;BK-T-C4R1,2P	Breaker	Included above in B100;P-C2DP
B100;BK-BDC1	Breaker	\$1,100.00
B100;BK-C1DP	Breaker	\$1,100.00
B100;BK-C1L1A	Breaker	\$1,100.00

Equipment/Breaker Identification	Equipment/Breaker Type	Estimated Cost (\$)
B100;BK-C4DP	Breaker	\$1,100.00
B100;BK-C1315L1	Breaker	\$1,100.00
B100;BK-C1315R1	Breaker	\$1,100.00
B100;BK-E1DP2A	Breaker	\$1,100.00
B100;BK-E1R16	Breaker	\$1,100.00
B100;BK-E1R3	Breaker	\$1,100.00
B100;BK-E2L1A	Breaker	Included above in B100;P-E2DP
B100;BK-E2WDP2	Breaker	Included above in B100;P-E2DP
B100;BK-E2WO1	Breaker	Included above in B100;P-E2DP
B100;BK-EMCCF2	Breaker	Included above in B100;P-E2DP
B100;BK-T-E2RP	Breaker	Included above in B100;P-E2DP
B100;BK-E1DP1	Breaker	\$1,100.00
B100;BK-E4DP	Breaker	\$1,100.00
B100;BK-EBDP2	Breaker	\$3,000.00
B100;BK-EMH	Breaker	\$345.00
B100;BK-BDE1	Breaker	\$1,100.00
B100;BK-EBDP7A	Breaker	\$3,000.00
B100;BK-EBDP9A	Breaker	\$3,000.00
B100;BK-EMCBP	Breaker	\$3,000.00
B100;BK-EMCC2	Breaker	\$1,100.00
B100;BK-EBDPM3	Breaker	\$345.00
B100;BK-M-P1	Breaker	\$345.00
B100;BK-M-P2	Breaker	\$345.00
B100;BK-M-P3	Breaker	\$345.00
B100;BK-M-P4	Breaker	\$345.00
B100;BK-M-S5	Breaker	\$1,100.00
B100;BK-M-S6	Breaker	\$1,100.00
B100;BK-M-S7	Breaker	\$1,100.00
B100;BK-M-S8	Breaker	\$1,100.00
B100;BK-BDLS1	Breaker	\$1,100.00
B100;BK-LSBDP2	Breaker	\$345.00
B100;BK-LSMCC-G	Breaker	\$1,100.00
B100;BK-CCU1-3A	Breaker	\$10,000.00
B100;BK-CCU2-3B	Breaker	\$10,000.00
B100;BK-S2-10D	Breaker	\$10,000.00
B100A;BK-BDR1	Breaker	Included above in B100;P-BDDP1
B100A;BK-VFDP1	Breaker	Included above in B100;P-BDDP1
B100A;BK-VFDP2	Breaker	Included above in B100;P-BDDP1
B9A;F-T-9N-P	FUSES	\$3,000.00

4 PROTECTIVE DEVICE COORDINATION STUDY

4.1 Introduction:

The protective device coordination study examines the ratings and settings of the existing overcurrent protective relays, fuses and breakers. In order to improve the existing system coordination, we have recommended new settings for existing overcurrent devices. In some cases, because of the existing protective device limitations, it may not be possible to improve on selective coordination of the protective overcurrent devices.

In a coordinated system, devices protect equipment from damaging overload and short circuit currents. Associated with such a condition, the device closest to the fault should interrupt the current and isolate the circuit. A coordinated power system results in minimal disruption of electrical service to the Medical Center and also reduces the potential damage to equipment.

In a system lacking coordination, a device may not adequately protect equipment from overloads or short circuits, or a device upstream or the device closest to a fault may interrupt the circuit. In either case, there will be disruption to the Medical Center that could have been avoided. Associated with this disruption there may be costs that could also have been avoided.

The study includes the entire medium voltage distribution system, the distribution transformers, and the secondary protective devices. For the smaller buildings, the devices downstream of the transformer secondary protection are not adjustable and have not been included in this study.

4.1.1 Software:

SKM Power Tools was used to perform the study. Specifically, the SKM Power Tools' CAPTOR module was used for performing the protective device coordination study.

The study begins with the topology developed for the short circuit study (Section 3). Additional data defining the overcurrent protective devices and settings is modeled in the program. With this information, time-current characteristic curves on log-log paper are developed for selected portions of the system. The curves show overcurrent protective device time/current characteristics, transformer damage points, transformer inrush, motor starting curves, feeder damage curves and other information required to perform coordination.

Additional information related to the software can be found at www.skm.com.

4.2 Analysis and Recommendations:

Time-Current Characteristic (TCC) Curves showing the existing coordination status of the system are in Section 4.4. The revised curves are given in Section 4.6. The existing and proposed device settings used in generating the coordination curves for the distribution system are given in Sections 4.3 and 4.5 respectively. Section 4.7 depicts the net proposed device settings of only the devices that require modifications.

4.2.1 Curve name: TCC-01

4.2.1.1 Description: Phase overcurrent TCC curves for: utility bank #1 source to Vista Switchgear SG-1.

4.2.1.2 Comments: The phase settings of utility relay OD;R-BANK1 does not protect utility transformer OD;T-UTIL1 against mechanical damage.

4.2.1.3 Recommendation: Reduce pickup setting and modify time dial setting of utility relay OD;R-BANK1.

4.2.2 Curve name: TCC-02

4.2.2.1 Description: Phase overcurrent TCC curves for: utility bank #2 source to Vista switchgear SG-4.

4.2.2.2 Comments: The phase settings of utility relay OD;R-BANK2 does not protect utility transformer OD;T-UTIL2 against mechanical damage.

4.2.2.3 Recommendation: Reduce pickup setting and modify time dial setting of utility relay OD;R-BANK2.

4.2.3 Curve name: TCC-03

4.2.3.1 Description: Phase overcurrent TCC curves for: Vista switchgear SG-1 to Building 100, Substation SS2-B.

4.2.3.2 Comments: The phase settings of breakers at Vista Switchgear OD;BK-FD-A and OD;BK-SG1-FD2 do not coordinate with substation SS2-B main breaker B100;BK-T2B-S-11B. Breaker B100;BK-T2B-S-11B does not adequately protect substation transformer B100;T-SS2-B against overload damage.

4.2.3.3 Recommendation: Reduce long time delay setting and short time pickup setting of breaker B100;BK-T2B-S-11B. Increase sensor settings of breakers at Vista Switchgear OD;BK-FD-A and OD;BK-SG1-FD2. Adjust remaining protective device settings to maintain coordination with the system.

4.2.4 Curve name: TCC-04

- 4.2.4.1 Description: Phase overcurrent TCC curves for: Vista Switchgear SG-2 to Building 100, Substation SS2-A.
- 4.2.4.2 Comments: The phase settings of breakers at Vista Switchgear OD;BK-FD-A and OD;BK-SG2-F3 do not coordinate with substation SS2-A main breaker B100;BK-T2A-S-1B.
- 4.2.4.3 Recommendation: Reduce short time pickup setting and short time pickup setting of breaker B100;BK-T2A-S-1B. Increase sensor settings of breakers at Vista Switchgear OD;BK-FD-A and OD;BK-SG1-FD3. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.5 Curve name: TCC-05
- 4.2.5.1 Description: Phase overcurrent TCC curves for: Building 100, Substation SS2-A main breaker, tie breaker, largest feeder, and smallest feeder.
- 4.2.5.2 Comments: The phase settings of tie breaker B100;BK-TIE-S2-6B does not coordinate with main breaker B100;BK-T2B-S-1B. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.5.3 Recommendation: Reduce short time pickup setting of tie breaker B100;BK-TIE-S2-6B. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.6 Curve name: TCC-06
- 4.2.6.1 Description: Phase overcurrent TCC curves for: Building 100, Substation SS2-B main breaker, tie breaker, largest feeder, and smallest feeder.
- 4.2.6.2 Comments: The phase settings of tie breaker B100;BK-TIE-S2-6B does not coordinate with main breaker B100;BK-T2A-S-1B.
- 4.2.6.3 Recommendation: Reduce long time delay setting of tie breaker B100;BK-TIE-S2-6B. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.7 Curve name: TCC-07
- 4.2.7.1 Description: Phase overcurrent TCC curves for: Building 100, Switchgear EP, main breaker, largest feeder, and smallest feeder. Note: Settings for generator main breaker could not be determined since the trip unit did not have a control power source at the time of survey.

- 4.2.7.2 Comments: The phase settings of generator main breaker B100;BK-EP-1C does not protect the generator against thermal overload damage.
- 4.2.7.3 Recommendation: Reduce short time pickup setting of tie breaker B100;BK-EP-1C. Accordingly reduce, the short time pickup setting of feeder breaker B100;BK-EP-3B.
- 4.2.8 Curve name: TCC-08
 - 4.2.8.1 Description: Phase overcurrent TCC curves for: Vista Switchgear SG-3 to Building 100, Substation SS1-A.
 - 4.2.8.2 Comments: The phase settings of breakers at Vista Switchgear OD;BK-FD-B and OD;BK-SG3-FD5 do not coordinate with substation SS1-A main breaker B100;BK-T1-A-S.
 - 4.2.8.3 Recommendation: Reduce short time pickup setting and long time delay setting of breaker B100;BK-T1-A-S. Increase sensor settings of breakers at Vista Switchgear OD;BK-FD-B and OD;BK-SG3-FD5. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.9 Curve name: TCC-09
 - 4.2.9.1 Description: Phase overcurrent TCC curves for: Building 100, Substation SS1-A main breaker, largest feeder, and smallest feeder.
 - 4.2.9.2 Comments: The phase overcurrent settings are adequately coordinated, as shown.
 - 4.2.9.3 Recommendation: No corrective measures are needed.
- 4.2.10 Curve name: TCC-10
 - 4.2.10.1 Description: Phase overcurrent TCC curves for: Substation SS1-A to Chiller CCU-1.
 - 4.2.10.2 Comments: The phase settings of breaker B100;BK-CCU1-3A does not protect cable B100;C-CCU1 feeding motor B100;M-CCU13A.
 - 4.2.10.3 Recommendation: Reduce long time pickup setting and short time pickup setting of breaker B100;BK-CCU1-3A to meet motor starting requirements and to protect the motor cable.
- 4.2.11 Curve name: TCC-11
 - 4.2.11.1 Description: Phase overcurrent TCC curves for: Substation SS1-A to Chiller CCU-2.

- 4.2.11.2 Comments: The phase settings of breaker B100;BK-CCU2-3B does not protect cable B100;C-CCU2 feeding motor B100;M-CCU23B.
- 4.2.11.3 Recommendation: Reduce long time pickup setting, short time pickup setting, instantaneous setting of breaker B100;BK-CCU2-3B to meet motor starting requirements and to protect the motor cable.
- 4.2.12 Curve name: TCC-12
 - 4.2.12.1 Description: Ground overcurrent TCC curves for: Building 100, SS2-B main breaker, tie breaker, largest feeder, and smallest feeder.
 - 4.2.12.2 Comments: The ground fault settings of tie breaker B100;BK-TIE-S2-6B are not properly coordinated with outgoing feeder breaker B100;BK-S2-9B.
 - 4.2.12.3 Recommendation: Increase ground fault delay of tie breaker B100;BK-TIE-S2-6B.
- 4.2.13 Curve name: TCC-13
 - 4.2.13.1 Description: Ground overcurrent TCC curves for: Building 100, SS2-A main breaker, tie breaker, largest feeder, and smallest feeder.
 - 4.2.13.2 Comments: The ground fault settings of tie breaker B100;BK-TIE-S2-6B are not properly coordinated with outgoing feeder breaker B100;BK-S2-9B.
 - 4.2.13.3 Recommendation: Increase ground fault delay of tie breaker B100;BK-TIE-S2-6B.
- 4.2.14 Curve name: TCC-14
 - 4.2.14.1 Description: Ground overcurrent TCC curves for: Building 100, SS1-A main breaker, largest feeder, smallest feeder.
 - 4.2.14.2 Comments: The ground fault settings of main breaker B100;BK-T1-A-S are not properly coordinated with outgoing feeder breakers B100;BK-CCU2-3B and B100;BK-S1-1C.
 - 4.2.14.3 Recommendation: Increase pickup and increase ground fault delay of main breaker B100;BK-T1-A-S.
- 4.2.15 Curve Name: TCC-15
 - 4.2.15.1 Description: Phase overcurrent TCC curves for Vista switchgear SG-4 to Building 103 transformer. Note: This facility was under construction at the

time of the survey and breaker detail information of main distribution panel Building 103 was not available at the time.

- 4.2.15.2 Comments: Breaker OD;BK-FD-B does not adequately with breaker OD;BK-SG4-FD9.
- 4.2.15.3 Recommendation: Adjust sensor settings of breaker OD;BK-FD-B and OD;BK-SG4-FD-9. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.16 Curve Name: TCC-16
 - 4.2.16.1 Description: Phase overcurrent TCC curves for Vista switchgear SG-1 to main distribution panel in Building 20.
 - 4.2.16.2 Comments: Breaker OD;BK-FD-A does not adequately coordinate with breaker OD;BK-SG1-FD1. Breaker B20; BK-20MDP does not coordinate with fuse B20; F-T-20-P. Fuse B20; F-T-20-P does not protect transformer B20;T-20 against mechanical damage.
 - 4.2.16.3 Recommendation: Adjust sensor settings of breaker OD;BK-FD-B and OD;BK-SG1-FD-1. Replace breaker B20;BK-20MDP with solid state tripping breaker. Reduce size rating of fuse B20;F-T20-P. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.17 Curve Name: TCC-17
 - 4.2.17.1 Description: Phase overcurrent TCC curves for Vista switchgear SG-3 to main distribution panel in Building 106.
 - 4.2.17.2 Comments: Breaker OD;BK-FD-B does not adequately coordinate with breaker OD;BK-SG3-FD6. Breaker B106; BK-N does not coordinate with fuse B106; F-T106, OD;BK-SG3-FD6, and OD;BK-FD-B. Fuse B106; F-T-106 does not protect transformer B106;T-106 against mechanical damage. Cable B106;C-FP is not protected by any overcurrent devices.
 - 4.2.17.3 Recommendation: Adjust sensor settings of breaker OD;BK-FD-B and OD;BK-SG3-FD6. Reduce long time pickup, long time delay, and short time pickup of breaker B106;BK-N. Reduce size rating of fuse B106;F-T106. Install new thermal magnetic circuit breaker on fire pump circuit. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.18 Curve Name: TCC-18
 - 4.2.18.1 Description: Phase overcurrent TCC curves for Vista switchgear SG-2 to main distribution panel in Building 22.

- 4.2.18.2 Comments: Breaker OD;BK-FD-A does not adequately coordinate with breaker OD;BK-SG2-F4. Breaker B22; BK-MDP does not coordinate with fuse B22; F-T22-P, OD;BK-SG2-F4, and OD;BK-FD-A. Fuse B22; F-T22-P does not protect transformer B22;T-22 against mechanical damage.
- 4.2.18.3 Recommendation: Adjust sensor settings of breaker OD;BK-FD-A and OD;BK-SG2-F4. Replace breaker B22;BK-MDP with solid state tripping breaker. Reduce size rating of fuse B22;F-T22-P. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.19 Curve Name: TCC-19
- 4.2.19.1 Description: Phase overcurrent TCC curves for Vista switchgear SG-2 to main distribution panel in Building 5.
- 4.2.19.2 Comments: Breaker OD;BK-FD-A does not adequately coordinate with breaker OD;BK-SG2-F4. Breaker B5; BK-5MDP does not coordinate with fuse B5; F-T-5-P.
- 4.2.19.3 Recommendation: Adjust sensor settings of breaker OD;BK-FD-A and OD;BK-SG2-F4. Replace breaker B5;BK-MDP with solid state tripping breaker. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.20 Curve Name: TCC-20
- 4.2.20.1 Description: Phase overcurrent TCC curves for Vista switchgear SG-1 to main panel in Building 6.
- 4.2.20.2 Comments: Breaker OD;BK-FD-A does not adequately coordinate with breaker OD;BK-SG1-FD1. Breaker B6; BK-6MDP does not coordinate with fuse B6; F-T-6-P.
- 4.2.20.3 Recommendation: Adjust sensor settings of breaker OD;BK-FD-A and OD;BK-SG1-FD1. Reduce long time pickup and instantaneous setting of breaker B6;BK-6MDP. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.21 Curve Name: TCC-21
- 4.2.21.1 Description: Phase overcurrent TCC curves for Vista switchgear SG-1 to main distribution panel in Building 8.

- 4.2.21.2 Comments: Breaker OD;BK-FD-A does not adequately coordinate with breaker OD;BK-SG1-FD1. Breaker B8; BK-A-1N does not coordinate with fuse B8; F-T-8-P.
- 4.2.21.3 Recommendation: Adjust sensor settings of breaker OD;BK-FD-A and OD;BK-SG1-FD1. Replace breaker B6;BK-6MDP with solid state tripping breaker. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.22 Curve Name: TCC-22
- 4.2.22.1 Description: Phase overcurrent TCC curves for Vista switchgear SG-2 to main distribution panel in Building 9.
- 4.2.22.2 Comments: Breaker OD;BK-FD-A does not adequately coordinate with breaker OD;BK-SG2-F4. Breaker B9; BK-9MDP-1B does not coordinate with fuse B9; F-T9S-P, OD;BK-SG2-F4, and OD;BK-FD-A. Fuse B9; F-T9S-P does not protect transformer B9;T-9S against mechanical damage.
- 4.2.22.3 Recommendation: Adjust sensor settings of breaker OD;BK-FD-A and OD;BK-SG2-F4. Reduce long time pickup, short time pickup, and long time delay of breaker B9;BK-9MDP-1B. Reduce size rating of fuse B9;F-T9S-P. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.23 Curve Name: TCC-23
- 4.2.23.1 Description: Phase overcurrent TCC curves for 9MDP located in Building 9.
- 4.2.23.2 Comments: Breaker OD;BK-9MDP-2B does not provide adequate protection for the outgoing feeder cable B9-C9HDP.
- 4.2.23.3 Recommendation: Reduce short time pickup settings of breaker OD;BK-9MDP-2B. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.24 Curve Name: TCC-24
- 4.2.24.1 Description: Phase overcurrent TCC curves for Vista switchgear SG-2 to main distribution panel in Building 9A.
- 4.2.24.2 Comments: Breaker OD;BK-FD-A does not adequately coordinate with breaker OD;BK-SG2-F4. Breaker B9A;BK-9AMDP does not coordinate with fuse B9A; F-T9N-P, OD;BK-SG2-F4, and OD;BK-FD-A. Fuse B9A; F-T9N-P does not protect transformer B9;T-9S against mechanical damage.

- 4.2.24.3 Recommendation: Adjust sensor settings of breaker OD;BK-FD-A and OD;BK-SG2-F4. Reduce long time pickup, short time pickup, and long time delay of breaker B9A;BK-9MDP-1B. Reduce size rating of fuse B9A;F-T9N-P. Since incoming transformer is rated very small kVA, there no possibility to perform coordination for such a case. Adjust remaining protective device settings to maintain coordination with the system.
- 4.2.25 Curve Name: TCC-25
- 4.2.25.1 Description: Ground overcurrent TCC curves for switchgear 9MDP located in Building 9.
- 4.2.25.2 Comments: There is inadequate coordination separation time between B106;BK-N and B10; B106;BK-C2.
- 4.2.25.3 Recommendation: Reduce ground fault delay setting of breaker B106;BK-N. Adjust remaining protective device settings to maintain coordination with the system.

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100A;BK-1DL1	SQUARE D	400A	400A	Thermal Curve
	LA		400A	INST HI (4000A)
	125-400A			
B100A;BK-1DLSR1	SQUARE D	60A	60A	Fixed (730-13)
	QO-VH, 3-Pole		60A	
	15-150A			
B100A;BK-1DLST1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100A;BK-1DLST2	SQUARE D	FA	20A	Fixed
	FA		20A	
	15-100A			
B100A;BK-1DR1	SQUARE D	Q2L-H	225A	Fixed
	Q2L-H		225A	
	100-225A			
B100A;BK-1DR2	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 3-Pole		100A	
	15-100A			
B100A;BK-1DRK3	SQUARE D	QOB-AS	20A	Fixed
	QOB-AS		20A	
	15-30A			
B100A;BK-1DT1P	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100A;BK-2DCR1	SIEMENS	ED6, 3-Pole	125A	Thermal Curve (Fixed)
	ED6 Sentron, 2 & 3-Pole		125A	INST Fixed (800A)
	15-125A			
B100A;BK-2DCR1-M	SIEMENS	CJ	225A	Thermal Curve (Fixed)
	CJ		225A	INST (960-2000A) HI (2000A)
	110-400A			
B100A;BK-2DCR2	SIEMENS	BL	100A	Thermal Curve (Fixed)
	BL, 2 & 3-Pole		100A	INST Fixed (750A)
	15-125A			
B100A;BK-2DL1	SQUARE D	400A	400A	Thermal Curve
	LA		300A	INST HI (3000A)
	125-400A			
B100A;BK-2DL1-M	SIEMENS	ED4	125A	Thermal Curve (Fixed)
	ED4 Sentron, 2 & 3-Pole		125A	INST Fixed (800A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	15-125A			
B100A;BK-2DR1	SIEMENS	FJ	175A	Thermal Curve (Fixed)
	FJ		175A	INST Fixed (1275A)
	70-225A			
B100A;BK-2DR2	SIEMENS	BL	100A	Thermal Curve (Fixed)
	BL, 2 & 3-Pole		100A	INST Fixed (750A)
	15-125A			
B100A;BK-2DR3	SIEMENS	BL	100A	Thermal Curve (Fixed)
	BL, 2 & 3-Pole		100A	INST Fixed (750A)
	15-125A			
B100A;BK-2DRDP-M	SIEMENS	JXD6-A	400A	Thermal Curve (Fixed)
	JXD6-A Sentron		400A	INST (LO-HI) LO (2000A)
	200-400A			
B100A;BK-2DT1P	SIEMENS	ED4	125A	Thermal Curve (Fixed)
	ED4 Sentron, 2 & 3-Pole		125A	INST Fixed (800A)
	15-125A			
B100A;BK-BDC1-M	SIEMENS	FXD6-A	200A	Thermal Curve (Fixed)
	FXD6-A Sentron		200A	INST (LO-HI) HI (2000A)
	70-250A			
B100A;BK-BDE1L	SIEMENS	BQD	100A	Fixed
	BQD		100A	
	15-100A			
B100A;BK-BDE1M	SIEMENS	HJ	175A	Thermal Curve (Fixed)
	HJ		175A	INST (750-1600A) HI (1600A)
	110-400A			
B100A;BK-BDELV	SIEMENS	BL	70A	Thermal Curve (Fixed)
	BL, 2 & 3-Pole		60A	INST Fixed (687.5A)
	15-125A			
B100A;BK-BDLSR1	SQUARE D	60A	60A	Fixed (730-6, 60A)
	QO, 3-Pole		60A	
	15-100A			
B100A;BK-BDLST1	SQUARE D	FA	30A	Fixed
	FA		30A	
	15-100A			
B100A;BK-BDR1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100A;BK-BDR1-M	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B100A;BK-TBDE1	SIEMENS	BQD	25A	Fixed
	BQD		25A	
	15-100A			
B100A;BK-VFDP1	SQUARE D	FA	30A	Fixed
	FA		30A	
	15-100A			
B100A;BK-VFDP2	SQUARE D	FA	30A	Fixed
	FA		30A	
	15-100A			
B100;BK-100AC2	WESTINGHOUSE	FB	70A	Opening Clearing Curve
	FB		70A	
	15-150A			
B100;BK-100AC4	SQUARE D	EH	70A	Fixed
	EH		70A	
	15-100A			
B100;BK-100AC7	WESTINGHOUSE	FB	70A	Opening Clearing Curve
	FB		70A	
	15-150A			
B100;BK-100P10	SQUARE D	250A	250A	Thermal Curve
	KA		200A	INST HI (2000A)
	70-250A			
B100;BK-100P11	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B100;BK-100P12	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B100;BK-100P1A	SIEMENS	ED6	100A	Thermal Curve (Fixed)
	ED6 Sentron, 2 & 3-Pole		100A	INST Fixed (800A)
	15-125A			
B100;BK-100P2A	SIEMENS	ED6	100A	Thermal Curve (Fixed)
	ED6 Sentron, 2 & 3-Pole		100A	INST Fixed (800A)
	15-125A			
B100;BK-100P4A	SIEMENS	ED6	100A	Thermal Curve (Fixed)
	ED6 Sentron, 2 & 3-Pole		50A	INST Fixed (800A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	15-125A			
B100;BK-100P5	CUTLER-HAMMER	LA	400A	Thermal Curve (Fixed)
	LA Tri-Pac		400A	INST (2000-4000A) HI (4000A)
	70-400A			
B100;BK-100P5A	SIEMENS	ED6	100A	Thermal Curve (Fixed)
	ED6 Sentron, 2 & 3-Pole		45A	INST Fixed (800A)
	15-125A			
B100;BK-100P6	WESTINGHOUSE	FB	150A	Opening Clearing Curve
	FB		150A	
	15-150A			
B100;BK-100P7	WESTINGHOUSE	FB	150A	Opening Clearing Curve
	FB		150A	
	15-150A			
B100;BK-100P8	CUTLER-HAMMER	FB	50A	Fixed
	FB Tri-Pac		50A	
	15-100A			
B100;BK-100P9	SQUARE D	250A	250A	Thermal Curve
	KA		200A	INST HI (2000A)
	70-250A			
B100;BK-150A1	SQUARE D	Q2M	150A	Fixed
	Q2M		150A	
	100-225A			
B100;BK-150A1S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-150B2	SQUARE D	Q2M	150A	Fixed
	Q2M		150A	
	100-225A			
B100;BK-150B2S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-150C3	SQUARE D	Q2M	150A	Fixed
	Q2M		150A	
	100-225A			
B100;BK-150C3S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-164A1S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-164B2S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-164C3S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-166A1S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-166B2S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-166C3S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-168A1S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-168B2S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-168BS	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-168C3S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-169A1S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-169B2S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	
	15-50A, Page 7			
B100;BK-169C3S	FPE	NB	50A	Thermal Curve
	NB, 1 Pole		50A	

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	15-50A, Page 7			
B100;BK-IDP1A1	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-IDP1A2	SQUARE D	FA	45A	Fixed
	FA		45A	
	15-100A			
B100;BK-IDP1A3	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-IDP1A4	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-IDP1B1	GE	TQD	225A	Fixed
	TQD		175A	
	100-225A			
B100;BK-IDP1B3	FPE	NJL	400A	Thermal Curve
	NJL, HJL		300A	Instantaneous 10 (3000A)
	70-400A			
B100;BK-IDP1B4	FPE	NJL	400A	Thermal Curve
	NJL, HJL		300A	Instantaneous 10 (3000A)
	70-400A			
B100;BK-IDP2A1	SQUARE D	100A	100A	Thermal Curve
	KA		100A	INST HI (1000A)
	70-250A			
B100;BK-IDP2A10	SQUARE D	250A	250A	Thermal Curve
	KA		200A	INST HI (2000A)
	70-250A			
B100;BK-IDP2A15	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-IDP2A2	SQUARE D	100A	100A	Thermal Curve
	KA		100A	INST HI (1000A)
	70-250A			
B100;BK-IDP2A3	SQUARE D	100A	100A	Thermal Curve
	KA		100A	INST HI (1000A)
	70-250A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-IDP2A4	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-IDP2A5	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-IDP2A6	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-IDP2A7	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-IDP2A8	SQUARE D	100A	100A	Thermal Curve
	KA		100A	INST HI (1000A)
	70-250A			
B100;BK-IDP2A9	SQUARE D	150A	150A	Thermal Curve
	KA		150A	INST HI (1500A)
	70-250A			
B100;BK-IDP3A1	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-IDP3A2	SQUARE D	400A	400A	Thermal Curve
	LA		300A	INST HI (3000A)
	125-400A			
B100;BK-IDP3B1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-IDP4A1	SQUARE D	250A	250A	Thermal Curve
	KA		175A	INST HI (1750A)
	70-250A			
B100;BK-IDP4B1	AMERICAN	NN	1000A	Thermal Curve (Fixed)
	NN		1000A	INST 7.2 (7200A)
	800-1200A			
B100;BK-1R1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-1R10	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	70-250A			
B100;BK-1R11	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-1R16	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-1R16B	SQUARE D	60	60A	Opening Clearing Curve
	IF I-LIM		60A	
	60-100A			
B100;BK-1R17	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-1R2	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-1R3	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-1R4	SQUARE D	Q2	200A	Fixed
	Q2		200A	
	100-225A			
B100;BK-1R5	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-1R6	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-1R7	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-1R8	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-1R9	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-2DPA1	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-2DPA2	SQUARE D	250A	250A	Thermal Curve
	KA		175A	INST HI (1750A)
	70-250A			
B100;BK-2DPA3	SQUARE D	FA	45A	Fixed
	FA		45A	
	15-100A			
B100;BK-2DPA4	SQUARE D	250A	250A	Thermal Curve
	KA		175A	INST HI (1750A)
	70-250A			
B100;BK-2DPB1	GE	TQD	225A	Fixed
	TQD		175A	
	100-225A			
B100;BK-2DPB2	GE	TQD	225A	Fixed
	TQD		175A	
	100-225A			
B100;BK-2DPB3	FEDERAL PACIFIC	NE	100A	Opening Clearing Curve
	NE & NEF, 3-Pole		100A	
	30-100A			
B100;BK-2WRDP	SQUARE D	400A	400A	Thermal Curve
	LA		350A	INST HI (3500A)
	125-400A			
B100;BK-3DPA1	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-3DPA2	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-3DPA3	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-3DPB1	FPE	NEJ	225A	Thermal-Magnetic Curve
	NEJ/HEJ		175A	
	125-225A			
B100;BK-3DPB2	FPE	NEJ	225A	Thermal-Magnetic Curve
	NEJ/HEJ		175A	

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	125-225A			
B100;BK-3DPB3	FPE	HJL	400A	Thermal Curve
	NJL, HJL		300A	Instantaneous 10 (3000A)
	70-400A			
B100;BK-3ED1	SQUARE D	50A	50A	Fixed (730-12)
	QO-VH, 2-Pole		50A	
	15-150A			
B100;BK-3R1	SQUARE D	Q2	225A	Fixed
	Q2		225A	
	100-225A			
B100;BK-3R10	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-3R2	SQUARE D	Q2	225A	Fixed
	Q2		225A	
	100-225A			
B100;BK-3R3	SQUARE D	Q2	225A	Fixed
	Q2		225A	
	100-225A			
B100;BK-3R4	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-3R5	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-3R6	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-3R7	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-3R8	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-3R9	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-3WD1	SQUARE D	50A	50A	Fixed (730-12)
	QO-VH, 2-Pole		50A	
	15-150A			
B100;BK-3WD1-P	WESTINGHOUSE	FDB	30A	Opening Clearing Curve
	FDB SER C		30A	
	15-45A			
B100;BK-4DPA1	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-4DPA2	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-4DPA3	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-4DPA4	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-4DPB1	GE	TQD	225A	Fixed
	TQD		175A	
	100-225A			
B100;BK-4DPB2	FPE	NJL	225A	Thermal Curve
	NJL, HJL		175A	Instantaneous 10 (1750A)
	70-400A			
B100;BK-4DPB3	FPE	HJL	400A	Thermal Curve
	NJL, HJL		300A	Instantaneous 10 (3000A)
	70-400A			
B100;BK-4R1	SQUARE D	QOM2-VH	225A	Fixed
	QOM2-VH		225A	
	100-225A			
B100;BK-4R2	SQUARE D	QOM2-VH	225A	Fixed
	QOM2-VH		225A	
	100-225A			
B100;BK-4R3	SQUARE D	QOM2-VH	225A	Fixed
	QOM2-VH		225A	
	100-225A			
B100;BK-4R4	SQUARE D	KA	250A	Thermal Curve (Fixed)
	KA		225A	INST (5-10 x Trip) 10.0 (2250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	70-250A, DC			
B100;BK-4R5	SQUARE D	KA	250A	Thermal Curve (Fixed)
	KA		225A	INST (5-10 x Trip) 10.0 (2250A)
	70-250A, DC			
B100;BK-4R6	SQUARE D	KA	250A	Thermal Curve (Fixed)
	KA		225A	INST (5-10 x Trip) 10.0 (2250A)
	70-250A, DC			
B100;BK-4R7	SQUARE D	KA	250A	Thermal Curve (Fixed)
	KA		225A	INST (5-10 x Trip) 10.0 (2250A)
	70-250A, DC			
B100;BK-4R8	SQUARE D	KA	250A	Thermal Curve (Fixed)
	KA		225A	INST (5-10 x Trip) 10.0 (2250A)
	70-250A, DC			
B100;BK-4R9	SQUARE D	KA	250A	Thermal Curve (Fixed)
	KA		225A	INST (5-10 x Trip) 10.0 (2250A)
	70-250A, DC			
B100;BK-5DP1A	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-5DP1B	GE	TQD	225A	Fixed
	TQD		175A	
	100-225A			
B100;BK-5DP2A	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-5DP2B	GE	TQD	225A	Fixed
	TQD		175A	
	100-225A			
B100;BK-5R1	SQUARE D	225A	225A	Thermal Curve
	LA		225A	INST HI (2250A)
	125-400A			
B100;BK-5R2	SQUARE D	225A	225A	Thermal Curve
	LA		225A	INST HI (2250A)
	125-400A			
B100;BK-5R3	SQUARE D	225A	225A	Thermal Curve
	LA		225A	INST HI (2250A)
	125-400A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-5R4	SQUARE D	225A	225A	Thermal Curve
	LA		225A	INST HI (2250A)
	125-400A			
B100;BK-5R5	SQUARE D	225A	225A	Thermal Curve
	LA		225A	INST HI (2250A)
	125-400A			
B100;BK-5R6	SQUARE D	225A	225A	Thermal Curve
	LA		225A	INST HI (2250A)
	125-400A			
B100;BK-5R7	SQUARE D	225A	225A	Thermal Curve
	LA		225A	INST HI (2250A)
	125-400A			
B100;BK-AC-10	WESTINGHOUSE	HKB	250A	LTD
	HKB		250A	INST 10.0 (2500A)
	70-250A			
B100;BK-AC11	WESTINGHOUSE	FB	150A	Opening Clearing Curve
	FB		100A	
	15-150A			
B100;BK-AC17	WESTINGHOUSE	HKB	250A	LTD
	HKB		250A	INST 10.0 (2500A)
	70-250A			
B100;BK-AC24	WESTINGHOUSE	JD	250A	LTD
	JDB, JD		250A	INST 10.0 (2500A)
	70-250A			
B100;BK-AC5	WESTINGHOUSE	FB	150A	Opening Clearing Curve
	FB		100A	
	15-150A			
B100;BK-AC8	WESTINGHOUSE	FB	150A	Opening Clearing Curve
	FB		100A	
	15-150A			
B100;BK-AHU3	WESTINGHOUSE	FB	150A	Opening Clearing Curve
	FB		100A	
	15-150A			
B100;BK-BDC1	SQUARE D	250A	250A	Thermal Curve
	KA		200A	INST HI (2000A)
	70-250A			
B100;BK-BDE1	SQUARE D	250A	250A	Thermal Curve
	KA		175A	INST HI (1750A)

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LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	70-250A			
B100;BK-BDLS1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-BDP1	SQUARE D	400A	400A	Thermal Curve
	LI		400A	INST HI (4000A)
	300-600A			
B100;BK-BDP10A	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-BDP10B	FPE	NJL	225A	Thermal Curve
	NJL, HJL		150A	Instantaneous 10 (1500A)
	70-400A			
B100;BK-BDP10D	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-BDP10E	FPE	NJL	225A	Thermal Curve
	NJL, HJL		150A	Instantaneous 10 (1500A)
	70-400A			
B100;BK-BDP2A2	SQUARE D	150A	150A	Thermal Curve
	KA		150A	INST HI (1500A)
	70-250A			
B100;BK-BDP2A3	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-BDP2A4	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-BDP2A5	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-BDP2A6	SQUARE D	FA	30A	Fixed
	FA		30A	
	15-100A			
B100;BK-BDP3C2	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-BDP3C3	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-BDP3C4	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-BDP5A	SQUARE D	600A	600A	
	MA		500A	
	125-1200A			
B100;BK-BDP5B	FEDERAL PIONEER	NN	1200A	Thermal Curve
	NN, HN, 2-3 Pole		1200A	INST 6 (7200A)
	1000-1200A			
B100;BK-BDP5-R	SQUARE D	45	45A	Opening Clearing Curve
	IF I-LIM		45A	
	20-50A			
B100;BK-BDP6A1	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-BDP6A2	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-BDP6A3	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-BDP6B1	GE	TQD	225A	Fixed
	TQD		175A	
	100-225A			
B100;BK-BDP6B2	FPE	HJL	400A	Thermal Curve
	NJL, HJL		300A	Instantaneous 10 (3000A)
	70-400A			
B100;BK-BDP6B3	FPE	HJL	400A	Thermal Curve
	NJL, HJL		300A	Instantaneous 10 (3000A)
	70-400A			
B100;BK-BDP8	SQUARE D	250A	250A	Thermal Curve
	KA		200A	INST HI (2000A)
	70-250A			
B100;BK-BDP8-9	FUCHS	MA	600A	LTD
	MA		500A	INST 10.0 (5000A)

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LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	150-800 A			
B100;BK-BME	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 3-Pole		100A	
	15-100A			
B100;BK-BR1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-BR10	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-BR10A	SQUARE D	Q1	35A	Fixed
	Q1 (Obs.)		35A	
	15-150A			
B100;BK-BR11	SQUARE D	A1B, 3-Pole	50A	Fixed
	A1, B/L/U		50A	
	15-100A, 2-3 Pole			
B100;BK-BR13	WESTINGHOUSE	FDB	45A	Opening Clearing Curve
	FDB SER C		45A	
	15-45A			
B100;BK-BR2	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-BR3	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-BR4	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-BR5	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-BR6	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-BR7	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-BR8	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-BR9	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-BYL1	WESTINGHOUSE	FB	150A	Opening Clearing Curve
	FB		125A	
	15-150A			
B100;BK-BYL2	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-C1315L1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-C1315L2	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-C1315R1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-C1315R2	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-C1DP	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-C1L1	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B100;BK-C1L1A	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-C1L2A	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-C1R1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	70-250A			
B100;BK-C1R1,2	FPE	NE	100A	Fixed
	NE, 2-Pole		100A	
	30-100A			
B100;BK-C1R2	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B100;BK-C1R3	SIEMENS	BLH	100A	Thermal Curve (Fixed)
	BLH, 2 & 3-Pole		100A	INST Fixed (1100A)
	15-100A			
B100;BK-C2DP	SQUARE D	500A	500A	
	LI		450A	
	300-600A			
B100;BK-C2L1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-C2R1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-C2R1-3	AMERICAN	NN	1000A	Thermal Curve (Fixed)
	NN		1000A	INST 7.2 (7200A)
	800-1200A			
B100;BK-C2R2	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-C2R3	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-C2R4	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-C2R4,5	AMERICAN	NN	1000A	Thermal Curve (Fixed)
	NN		1000A	INST 7.2 (7200A)
	800-1200A			
B100;BK-C2R5	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			

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LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-C2W1	SQUARE D	125A	125A	Fixed (730-10, 125A)
	QO-VH, 3-Pole		125A	
	15-150A			
B100;BK-C2W2	SQUARE D	150	150A	Opening Clearing Curve
	Q2-Q2L		150A	
	100-225A			
B100;BK-C2WDP	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B100;BK-C2WDP-M	SQUARE D	100A	100A	Thermal Curve
	KA		70A	INST HI (700A)
	70-250A			
B100;BK-C3DP	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-C3L1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-C4DP	SQUARE D	250A	250A	Thermal Curve
	KA		175A	INST HI (1750A)
	70-250A			
B100;BK-C4L1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-C4R1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-C4R1,2	FPE	NJL	400A	Thermal Curve
	NJL, HJL		300A	Instantaneous 10 (3000A)
	70-400A			
B100;BK-C4R2	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-C5DP	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-C5L1	SQUARE D	FA	60A	Fixed
	FA		60A	

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	15-100A			
B100;BK-C5R1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-C5R1,2	FPE	NE	100A	Opening Clearing Curve
	NE/NEF		100A	
	30-100A			
B100;BK-C5R2	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-CCU1-3A	SIEMENS-ALLIS	1600	1600A	Ground
	LA, II		1600A	GFPU 0.37 (592A)
	GF, 80-4000A		1600A	GFD MIN
				Phase
				LTPU C (1200A)
				LTD 4
				INST 6 (7200A)
B100;BK-CCU2-3B	UTILITY RELAY CO.	LA-1600B	1600A	Ground
	AC-Pro Retrofit		1600A	GFPU 0.37 (592A)
	for Siemens-Allis LA		1600A	GFD 0.2(I ² T Out)
				Phase
				LTPU 100 % (1600A)
				LTD 20
				STPU 4 (6400A)
				STD 0.2(I ² T Out)
				INST 6 (9600A)
B100;BK-CF55	WESTINGHOUSE	FB	40A	Opening Clearing Curve
	FB		15A	
	15-150A			
B100;BK-CT1FAN	WESTINGHOUSE	FB	150A	Opening Clearing Curve
	FB		125A	
	15-150A			
B100;BK-CT2FAN	CUTLER-HAMMER	FB, 3 Pole	125A	Fixed
	FB, 2 & 3-Pole		125A	
	15-150A			
B100;BK-E1DP1	SQUARE D	250A	250A	Thermal Curve
	KA		200A	INST HI (2000A)
	70-250A			
B100;BK-E1DP2	SQUARE D	500A	500A	Thermal Curve
	LC		500A	INST HI (5000A)

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LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	300-600A			
B100;BK-E1DP2A	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-E1L1	SQUARE D	100A	100A	Thermal Curve
	KA		100A	INST HI (1000A)
	70-250A			
B100;BK-E1R1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-E1R124	FPE	HJL	400A	Thermal Curve
	NJL, HJL		300A	Instantaneous 10 (3000A)
	70-400A			
B100;BK-E1R16	SQUARE D	FA	45A	Fixed
	FA		45A	
	15-100A			
B100;BK-E1R2	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-E1R3	SQUARE D	FA	45A	Fixed
	FA		45A	
	15-100A			
B100;BK-E1R4	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-E2L1	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-E2L1A	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-E2R1	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B100;BK-E2R1-2	FPE	NE	100A	Fixed
	NE, 2-Pole		100A	
	30-100A			

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-E2R1-3	SQUARE D	Q2L-H	200A	Fixed
	Q2L-H		200A	
	100-225A			
B100;BK-E2R2	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B100;BK-E2WDP2	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-E2WO1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-E3DP	SQUARE D	225A	225A	Thermal Curve
	IK		200A	INST HI (2000A)
	110-250A			
B100;BK-E3L1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-E3L1A	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-E3R1	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B100;BK-E3R1,2	FEDERAL PACIFIC	NEF	100A	Opening Clearing Curve
	NE & NEF, 3-Pole		100A	
	30-100A			
B100;BK-E3R2	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B100;BK-E4DP	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-E4L1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-E4L1A	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	60-100A			
B100;BK-E4R1	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B100;BK-E4R1,2	FPE	NE	100A	Fixed
	NE, 2-Pole		100A	
	30-100A			
B100;BK-E4R2	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B100;BK-E5DP	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-E5L1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-E5L1A	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-E5R1	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B100;BK-E5R1,2	FPE	NE	100A	Fixed
	NE, 2-Pole		100A	
	30-100A			
B100;BK-E5R2	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B100;BK-EBDP2	SQUARE D	600A	600A	Thermal Curve
	MA		600A	INST HI (6000A)
	125-1200A			
B100;BK-EBDP6	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-EBDP7A	SQUARE D	600A	600A	Thermal Curve
	MA		500A	INST HI (5000A)
	125-1200A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-EBDP9A	SQUARE D	600A	600A	Thermal Curve
	MA		500A	INST HI (5000A)
	125-1200A			
B100;BK-EBDP9A2	SQUARE D	FH	100A	Fixed
	FH		100A	
	15-100A			
B100;BK-EBDP9B	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-EBDPM3	SQUARE D	FD	100A	Fixed
	FD, 2 & 3-Pole		100A	
	15-100A			
B100;BK-EBDPRIM	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-EBL1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-EBL1A	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-EBL2A	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-EBPR1	WESTINGHOUSE	FB	40A	Opening Clearing Curve
	FB		30A	
	15-150A			
B100;BK-EBR1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-EBR10	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B100;BK-EBR11	SQUARE D	LA	225A	Thermal Curve (Fixed)
	LA		200A	INST (5-10 x Trip) 10.0 (2000A)
	125-400A, Inst 5-10			
B100;BK-EBR11A	SQUARE D	400A	400A	Thermal Curve
	LA		300A	INST HI (3000A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	125-400A			
B100;BK-EBR11B	SQUARE D	400A	400A	Thermal Curve
	LA		300A	INST HI (3000A)
	125-400A			
B100;BK-EBR11C	SQUARE D	400A	400A	Thermal Curve
	LA		300A	INST HI (3000A)
	125-400A			
B100;BK-EBR11C0	SQUARE D	1000A	1000A	Thermal Curve
	MA		1000A	INST HI (10000A)
	125-1200A			
B100;BK-EBR12	SQUARE D	LA	225A	Thermal Curve (Fixed)
	LA		200A	INST (5-10 x Trip) 10.0 (2000A)
	125-400A, Inst 5-10			
B100;BK-EBR2	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-EMCBP	SQUARE D	450A	450A	Thermal Curve
	MA		350A	INST HI (3500A)
	125-1200A			
B100;BK-EMCC4	WESTINGHOUSE	FB	40A	Opening Clearing Curve
	FB		15A	
	15-150A			
B100;BK-EMCCC2	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-EMCCC3	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-EMCCC4	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-EMCCD5	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-EMCCDB	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-EMCCEB	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-EMCCF1	SQUARE D	250A	250A	Thermal Curve
	KA		250A	INST HI (2500A)
	70-250A			
B100;BK-EMCCF2	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-EMCCFB	SQUARE D	500A	500A	Thermal Curve
	LI		500A	INST HI (5000A)
	300-600A			
B100;BK-EMCEB	WESTINGHOUSE	FB	150A	Opening Clearing Curve
	FB		150A	
	15-150A			
B100;BK-EMH	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-EP-1C	SIEMENS-ALLIS	LA-1600	1600A	Phase
	LA, II		1600A	LTPU D (1400A)
	LSI, 80-4000A		1600A	LTD 3
				INST 5.0 (7000A)
				Ground
				GFPU 15 % (240A)
				GFD MAX
B100;BK-EP-2A	SIEMENS-ALLIS	LA-600	600A	Phase
	LA, II		600A	LTPU C (450A)
	LSI, 80-4000A		600A	LTD 3
				INST 5.0 (2250A)
				Ground
				GFPU 50 % (300A)
				GFD MIN
B100;BK-EP-2B	UTILITY RELAY CO.	LA-600B	600A	Phase
	AC-Pro Retrofit		600A	LTPU 100 % (600A)
	for Siemens-Allis LA		600A	LTD 5.5
				INST 5 (3000A)
				Ground
				GFPU 20 % (120A)
				GFD 0.1(I ² T Out)
B100;BK-EP-2C	SIEMENS-ALLIS	LA-600	600A	Phase
	LA, II		600A	LTPU E (600A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	LSI, 80-4000A		600A	LTD 3
				INST 5.0 (3000A)
				Ground
				GFPU 15 % (90A)
				GFD MAX
B100;BK-EP-2D	UTILITY RELAY CO.	LA-600B	600A	Phase
	AC-Pro Retrofit		600A	LTPU 100 % (600A)
	for Siemens-Allis LA		600A	LTD 10
				STPU 4 (2400A)
				STD 0.2(I ² T Out)
				INST 6 (3600A)
				Ground
				GFPU 20 % (120A)
				GFD 0.2(I ² T Out)
B100;BK-EP-3A	UTILITY RELAY CO.	LA-600B	600A	Phase
	AC-Pro Retrofit		600A	LTPU 100 % (600A)
	for Siemens-Allis LA		600A	
B100;BK-EP-3B	SIEMENS-ALLIS	LA-600	600A	Phase
	LA, II		600A	LTPU G (750A)
	LSI, 80-4000A		600A	LTD 3
				INST 5.0 (3750A)
				Ground
				GFPU 0.2 (120A)
				GFD INT
B100;BK-EP-3C	SIEMENS-ALLIS	LA-600	600A	Phase
	LA, II		600A	LTPU E (600A)
	LSI, 80-4000A		600A	LTD 3
				INST 5.0 (3000A)
				Ground
				GFPU 0.2 (120A)
				GFD MIN
B100;BK-EP-3D	UTILITY RELAY CO.	LA-600B	600A	Phase
	AC-Pro Retrofit		600A	LTPU 100 % (600A)
	for Siemens-Allis LA		600A	LTD 4.5
				STPU 4 (2400A)
				STD 0.1(I ² T Out)
				INST 8 (4800A)
				Ground
				GFPU 20 % (120A)
				GFD 0.1(I ² T Out)
B100;BK-FIRE-PU	SIEMENS	FXD6-A	250A	Phase
	FXD6-A Sentron		225A	Thermal Curve (Fixed)
	70-250A			INST (LO-HI) HI (2500A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-KITCHEN	SQUARE D	400A	400A	Thermal Curve
	LA		300A	INST HI (3000A)
	125-400A			
B100;BK-LA108	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-LS1DP	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-LS1L1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-LS1R1	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		60A	
	15-100A, 2-3 Pole			
B100;BK-LS2DP	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-LS2L1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-LS2R1	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		60A	
	15-100A, 2-3 Pole			
B100;BK-LS2WL1	SQUARE D	FA	20A	Fixed
	FA		20A	
	15-100A			
B100;BK-LS3DP	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-LS3L1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-LS3R1	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		60A	
	15-100A, 2-3 Pole			
B100;BK-LS4DP	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	60-100A			
B100;BK-LS4L1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-LS4R1	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		60A	
	15-100A, 2-3 Pole			
B100;BK-LS5DP	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-LS5L1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-LS5R1	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		60A	
	15-100A, 2-3 Pole			
B100;BK-LSB2L1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-LSBDP2	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B100;BK-LSMCC-G	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-MCCC2	WESTINGHOUSE	FB	40A	Opening Clearing Curve
	FB		15A	
	15-150A			
B100;BK-MCC-CB	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-MCCCI	SQUARE D	250A	250A	Thermal Curve
	KA		200A	INST HI (2000A)
	70-250A			
B100;BK-MCCD2	SQUARE D	150A	150A	Thermal Curve
	KA		125A	
	70-250A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-MCCD3	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-MCCD4	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-MCCD5	SQUARE D	100	100A	Opening Clearing Curve
	IF I-LIM		100A	
	60-100A			
B100;BK-MCCDB	SQUARE D	LA	400A	Thermal Curve (Fixed)
	LA		300A	INST (5-10 x Trip) 10.0 (3000A)
	125-400A, Inst 5-10			
B100;BK-MCCEB3	SQUARE D	500A	500A	Thermal Curve
	LC		500A	INST HI (5000A)
	300-600A			
B100;BK-MDP-H	GE	SGHA	600A	MAX
	SGHA, Spectra RMS		500A	
	125-600A			
B100;BK-MED-V1	WESTINGHOUSE	FB	40A	Opening Clearing Curve
	FB		30A	
	15-150A			
B100;BK-M-P1	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B100;BK-M-P2	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B100;BK-M-P3	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B100;BK-M-P4	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B100;BK-M-S5	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-M-S6	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)

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LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	70-250A			
B100;BK-M-S7	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-M-S8	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-P-2R1	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-P-2R2	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-P-2R3	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-P-2R4	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-P-2R5	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-P-2R6	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-P-2R7	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-P-2R8	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B100;BK-RP1	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 3-Pole		100A	
	15-100A			
B100;BK-RP1,2	SQUARE D	250A	250A	Thermal Curve
	KA		250A	INST HI (2500A)
	70-250A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-RP2	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 3-Pole		100A	
	15-100A			
B100;BK-RP3	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-RP4	SQUARE D	150A	150A	Thermal Curve
	KA		150A	INST HI (1500A)
	70-250A			
B100;BK-RP6,1	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 3-Pole		100A	
	15-100A			
B100;BK-RP6,2	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 3-Pole		100A	
	15-100A			
B100;BK-S1-2A	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPU 0.2 (120A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU E (600A)
				LTD 2
				INST 5.0 (3000A)
B100;BK-S1-2B	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPU 25 % (150A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU D (525A)
				LTD 3
				INST 5.0 (2625A)
B100;BK-S1-2C	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPU 25 % (150A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU D (525A)
				LTD 3
				INST 5.0 (2625A)
B100;BK-S1-3C	UTILITY RELAY CO.	LA-600B	600A	Ground
	AC-Pro Retrofit		600A	GFPU 20 % (120A)
	for Siemens-Allis LA		600A	GFD 0.2(I ² T Out)
				Phase
				LTPU 100 % (600A)
				LTD 8

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LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
				STPU 4 (2400A)
				STD 0.2(I ² T Out)
				INST 1200 % (7200A)
B100;BK-S2-10A	SIEMENS-ALLIS	LA-600	600A	Phase
	LA, II		600A	LTPU E (600A)
	LSI, 80-4000A		600A	LTD 3
				INST 5.0 (3000A)
				Ground
				GFPU 0.2 (120A)
				GFD MIN
B100;BK-S2-10B	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPU 25 % (150A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU F (675A)
				LTD 3
				INST 5.0 (3375A)
B100;BK-S2-10D	UTILITY RELAY CO.	LA-1600B	1600A	Phase
	AC-Pro Retrofit		800A	LTPU 100 % (800A)
	for Siemens-Allis LA			
B100;BK-S2-2A	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPU 0.2 (120A)
	GF, 80-4000A		600A	GFD INT
				Phase
				LTPU E (600A)
				LTD 2
				INST 3.0 (1800A)
B100;BK-S2-2B	UTILITY RELAY CO.	LA-600B	600A	Ground
	AC-Pro Retrofit		600A	GFPU 0.3 (180A)
	for Siemens-Allis LA		600A	GFD 0.1(I ² T Out)
				Phase
				LTPU 100 % (600A)
				LTD 10
				STPU 6 (3600A)
				STD 0.1(I ² T Out)
				INST 9 (5400A)
B100;BK-S2-2C	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPU 15 % (90A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU D (525A)
				LTD 3
				INST 4 (2100A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-S2-3A	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 15 % (90A)
	GF, 80-4000A		600A	GFD INT
				Phase
				LTPU C (450A)
				LTD 3
				INST 3.0 (1350A)
B100;BK-S2-3B	UTILITY RELAY CO.	LA-600B	600A	LTPU 100 % (600A)
	AC-Pro Retrofit		600A	LTD 5
	for Siemens-Allis LA		600A	INST 5 (3000A)
B100;BK-S2-3C	UTILITY RELAY CO.	LA-600B	600A	Ground
	AC-Pro Retrofit		600A	GFPD 0.5 (300A)
	for Siemens-Allis LA		600A	GFD 0.2(I ² T Out)
				Phase
				LTPU 100 % (600A)
				LTD 20
				STPU 4 (2400A)
				STD 0.2(I ² T Out)
				INST 6 (3600A)
B100;BK-S2-4A	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 15 % (90A)
	GF, 80-4000A		600A	GFD INT
				Phase
				LTPU E (600A)
				LTD 3
				INST 4.45 (2670A)
B100;BK-S2-4B	SIEMENS-ALLIS	LA-600	600A	Phase
	LA, II		600A	LTPU E (600A)
	LSI, 80-4000A		600A	LTD 3
				INST 4 (2400A)
				Ground
				GFPD 15 % (90A)
				GFD MIN
B100;BK-S2-4C	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 15 % (90A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU E (600A)
				LTD 3
				INST 5.0 (3000A)
B100;BK-S2-4D	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 15 % (90A)
	GF, 80-4000A		600A	GFD MIN
				Phase

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
				LTPU E (600A)
				LTD 3
				INST 5.0 (3000A)
B100;BK-S2-5A	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 0.4 (240A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU G (750A)
				LTD 3
				INST 5.0 (3750A)
B100;BK-S2-5B	UTILITY RELAY CO.	LA-600B	600A	LTPU 100 % (600A)
	AC-Pro Retrofit		600A	LTD 8
	for Siemens-Allis LA		600A	STPU 4.5 (2700A)
				STD 0.1(I ² T Out)
				INST 6 (3600A)
B100;BK-S2-5C	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 15 % (90A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU F (675A)
				LTD 3
				INST 3.0 (2025A)
B100;BK-S2-5D	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 0.2 (120A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU E (600A)
				LTD 3
				INST 6 (3600A)
B100;BK-S2-7A	SIEMENS-ALLIS	LA-600	600A	Phase
	LA, II		600A	LTPU G (750A)
	LSI, 80-4000A		600A	LTD 4
				INST 6 (4500A)
				Ground
				GFPD 0.2 (120A)
				GFD INT
B100;BK-S2-7B	UTILITY RELAY CO.	LA-600B	600A	Ground
	AC-Pro Retrofit		600A	GFPD 0.25 (150A)
	for Siemens-Allis LA		600A	GFD 0.1(I ² T Out)
				Phase
				LTPU 0.67 (402A)
				LTD 12
				INST 3 (1206A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-S2-8A	UTILITY RELAY CO.	LA-600B	600A	Ground
	AC-Pro Retrofit		600A	GFPD 0.5 (300A)
	for Siemens-Allis LA		600A	GFD 0.2(I ² T Out)
				Phase
				LTPU 100 % (600A)
				LTD 20
				STPU 4 (2400A)
				STD 0.2(I ² T Out)
				INST 6 (3600A)
B100;BK-S2-8C	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 0.2 (120A)
	GF, 80-4000A		600A	GFD MAX
				Phase
				LTPU C (450A)
				LTD 3
				INST 5.0 (2250A)
B100;BK-S2-8D	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 0.2 (120A)
	GF, 80-4000A		600A	GFD INT
				Phase
				LTPU A (300A)
				LTD 3
				INST 5.0 (1500A)
B100;BK-S2-9A	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 0.2 (120A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU E (600A)
				LTD 3
				INST 5.0 (3000A)
B100;BK-S2-9B	UTILITY RELAY CO.	LA-600B	600A	Ground
	AC-Pro Retrofit		600A	GFPD 0.5 (300A)
	for Siemens-Allis LA		600A	GFD 0.2(I ² T Out)
				Phase
				LTPU 100 % (600A)
				LTD 20
				STPU 4 (2400A)
				STD 0.2(I ² T Out)
				INST 6 (3600A)
B100;BK-S2-9C	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 15 % (90A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU D (525A)
				LTD 3

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
				INST 4 (2100A)
B100;BK-S2-9D	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 15 % (90A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU B (375A)
				LTD 3
				INST 5.0 (1875A)
B100;BK-T1-A-S	UTILITY RELAY CO.	LA-4000A	4000A	Phase
	AC-Pro Retrofit		4000A	LTPU 100 % (4000A)
	for Siemens-Allis LA			LTD 2.5
				STPU 5 (20000A)
				STD 0.2(I ² T Out)
				Ground
				GFPD 20 % (800A)
				GFD 0.5(I ² T Out)
B100;BK-T2-A-S-1B	UTILITY RELAY CO.	LA-4000A	4000A	Ground
	AC-Pro Retrofit		4000A	GFPD 20 % (800A)
	for Siemens-Allis LA			GFD 0.4(I ² T Out)
				Phase
				LTPU 100 % (4000A)
				LTD 2.5
				STPU 5 (20000A)
				STD 0.2(I ² T Out)
B100;BK-T2B-S-11B	UTILITY RELAY CO.	LA-4000A	4000A	Ground
	AC-Pro Retrofit		4000A	GFPD 0.3 (1200A)
	for Siemens-Allis LA			GFD 0.5(I ² T Out)
				Phase
				LTPU 100 % (4000A)
				LTD 7.5
				STPU 4 (16000A)
				STD 0.2(I ² T Out)
B100;BK-T-BMEP	CUTLER-HAMMER	FB	50A	Fixed
	FB Tri-Pac		50A	
	15-100A			
B100;BK-T-C1R1,2	SQUARE D	FA	45A	Fixed
	FA		45A	
	15-100A			
B100;BK-T-C1R3,4	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B100;BK-T-C2R1-3P	SQUARE D	250A	250A	Thermal Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	KA		175A	INST HI (1750A)
	70-250A			
B100;BK-T-C2R4,5	SQUARE D	250A	250A	Thermal Curve
	KA		175A	INST HI (1750A)
	70-250A			
B100;BK-TC2WDP	SQUARE D	70A	70A	Fixed
	ED		70A	
	15-125A			
B100;BK-T-C3R1	SQUARE D	FA	25A	Fixed
	FA		25A	
	15-100A			
B100;BK-T-C4R1,2P	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B100;BK-T-C5R1,2	SQUARE D	FA	45A	Fixed
	FA		45A	
	15-100A			
B100;BK-T-E1R124	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B100;BK-TE1R3S	SQUARE D	100	100A	Opening Clearing Curve
	Q1L-Q1U		100A	
	60-100A			
B100;BK-T-E2RP	SQUARE D	FA	45A	Fixed
	FA		45A	
	15-100A			
B100;BK-T-E3R1,2P	SQUARE D	FA	45A	Fixed
	FA		45A	
	15-100A			
B100;BK-T-E4R1,2	SQUARE D	FA	45A	Fixed
	FA		45A	
	15-100A			
B100;BK-T-E5R12P	SQUARE D	FA	45A	Fixed
	FA		45A	
	15-100A			
B100;BK-T-EBRP	SQUARE D	FA	45A	Fixed
	FA		45A	
	15-100A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-T-EBRS	FEDERAL PACIFIC	NEF	100A	Opening Clearing Curve
	NE & NEF, 3-Pole		100A	
	30-100A			
B100;BK-TIE-S2-6B	UTILITY RELAY CO.	LA-4000A	4000A	Ground
	AC-Pro Retrofit		4000A	GFPD 20 % (800A)
	for Siemens-Allis LA			GFD 0.2(I ² T Out)
				Phase
				LTPU 100 % (4000A)
				LTD 8
				STPU 3 (12000A)
				STD 0.2(I ² T Out)
				INST 4 (16000A)
B100;BK-T-LS1R1	SQUARE D	FA	25A	Fixed
	FA		25A	
	15-100A			
B100;BK-T-LS2R1	SQUARE D	FA	25A	Fixed
	FA		25A	
	15-100A			
B100;BK-T-LS3R1	SQUARE D	FA	25A	Fixed
	FA		25A	
	15-100A			
B100;BK-T-LS4R1P	SQUARE D	FA	25A	Fixed
	FA		25A	
	15-100A			
B100;BK-T-LS5R1P	SQUARE D	FA	25A	Fixed
	FA		25A	
	15-100A			
B100;BK-T-LSBR1P	SQUARE D	FA	25A	Fixed
	FA		25A	
	15-100A			
B100;BK-T-RL1,2P	SQUARE D	FH	100A	Fixed
	FH		100A	
	15-100A			
B100;BK-U-EBDPRI	SQUARE D	FD	100A	Fixed
	FD, 2 & 3-Pole		100A	
	15-100A			
B100;BK-UNKNOW	SQUARE D	A1B, 2-Pole	100A	Fixed
	A1, B/L/U		60A	
	15-100A, 2-3 Pole			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B100;BK-UNKNOW-M	SQUARE D	A1B, 2-Pole	100A	Fixed
	A1, B/L/U		60A	
	15-100A, 2-3 Pole			
B100;BK-UNNAM1	SQUARE D	A1B, 2-Pole	100A	Fixed
	A1, B/L/U		60A	
	15-100A, 2-3 Pole			
B100;BK-UNNAM1-M	SQUARE D	A1B, 2-Pole	100A	Fixed
	A1, B/L/U		60A	
	15-100A, 2-3 Pole			
B100;BK-UNNAM2	SQUARE D	A1B, 2-Pole	50A	Fixed
	A1, B/L/U		50A	
	15-100A, 2-3 Pole			
B100;BK-UNNAM2-M	SQUARE D	A1B, 2-Pole	50A	Fixed
	A1, B/L/U		50A	
	15-100A, 2-3 Pole			
B100;BK-V100P1	CUTLER-HAMMER	LA	400A	Thermal Curve (Fixed)
	LA Tri-Pac		400A	INST (2000-4000A) HI (4000A)
	70-400A			
B100;BK-V100P2	CUTLER-HAMMER	LA	400A	Thermal Curve (Fixed)
	LA Tri-Pac		400A	INST (2000-4000A) HI (4000A)
	70-400A			
B100;BK-V100P3	SQUARE D	250A	250A	Thermal Curve
	KH		200A	INST 6 (1880A)
	70-250A			
B100;BK-VFDP1	CUTLER-HAMMER	FB	70A	Fixed
	FB Tri-Pac		70A	
	15-100A			
B100;BR-S2-8B	SIEMENS-ALLIS	600	600A	Ground
	LA, II		600A	GFPD 0.2 (120A)
	GF, 80-4000A		600A	GFD MIN
				Phase
				LTPU C (450A)
				LTD 3
				INST 5.0 (2250A)
B103;BK-A-CE	SQUARE D	250A	250A	Thermal Curve
	KA		200A	INST HI (2000A)
	70-250A			
B103;BK-A-EE	SQUARE D	FA	60A	Fixed

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LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	FA		60A	
	15-100A			
B103;BK-DEG	SQUARE D	400A	400A	Thermal Curve
	LA		300A	INST HI (3000A)
	125-400A			
B103;BK-N2D1-M	SQUARE D	1000A	1000A	Thermal Curve
	MA		1000A	INST HI (10000A)
	125-1200A			
B103;BK-N2D2-M	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B103;BK-N2L1-M	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B103;BK-N2R1	SQUARE D	150A	150A	Thermal Curve
	KA		150A	INST HI (1500A)
	70-250A			
B103;BK-N2R1-M	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B103;BK-N2R2	SQUARE D	150A	150A	Thermal Curve
	KA		150A	INST HI (1500A)
	70-250A			
B103;BK-N2R3	SQUARE D	150A	150A	Thermal Curve
	KA		150A	INST HI (1500A)
	70-250A			
B103;BK-N2R3-M	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B103;BK-N2R4	SQUARE D	150A	150A	Thermal Curve
	KA		150A	INST HI (1500A)
	70-250A			
B103;BK-N2R4-M	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B103;BK-N2R5	SQUARE D	150A	150A	Thermal Curve
	KA		150A	INST HI (1500A)
	70-250A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B103;BK-N2R5-M	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B103;BK-NC1R1-M	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B103;BK-NC2L1-M	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B103;BK-NC2R1-M	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B103;BK-NC2R2-M	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B103;BK-NC2R3-M	SQUARE D	A1B, 3-Pole	100A	Fixed
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B103;BK-NE2L1-M	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B103;BK-NE2R1	SQUARE D	A1B, 3-Pole	50A	Fixed
	A1, B/L/U		50A	
	15-100A, 2-3 Pole			
B103;BK-NE2R1-M	SQUARE D	A1B, 2-Pole	25A	Fixed
	A1, B/L/U		20A	
	15-100A, 2-3 Pole			
B105;BK-36H-P	CUTLER-HAMMER	EHB	50A	Fixed
	EHB, 2 & 3-Pole		50A	
	15-100A			
B105;BK-36L	SQUARE D	QOM2-VH	100A	Fixed
	QOM2-VH		100A	
	100-225A			
B105;BK-36P	CUTLER-HAMMER	BAB	100A	Fixed
	BAB, 3-Pole		100A	
	15-100A			
B105;BK-36P,H	CUTLER-HAMMER	EHB	50A	Fixed

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	EHB, 2 & 3-Pole		50A	
	15-100A			
B105;BK-36P-P	CUTLER-HAMMER	EHB	50A	Fixed
	EHB, 2 & 3-Pole		50A	
	15-100A			
B106;BK-B100EP	SQUARE D	600A	600A	Thermal Curve
	MA		500A	INST LO (2500A)
	125-1200A			
B106;BK-C2	SQUARE D	ME	400A	Ground
	ME, Micrologic		400A	GFPU (0.2-0.75 x S) 0.35 (140A)
	GF, 400-800A		400A	GFD (0.1-0.5 Sec.) 0.32(I ² T Out)
				Phase
				LTPU (0.5-1.0 x P) 1.0 (400A)
				LTD (2-24 Sec.) 24
				STPU (2-10 x P) 4.0 (1600A)
				STD (0.1-0.5 Sec.) .1(I ² T Out)
				INST (3-12 x P) 8.0 (3200A)
B106;BK-C2-E1A	SQUARE D	EH	100A	Fixed
	EH		100A	
	15-100A			
B106;BK-C2-E1B	SQUARE D	EH	100A	Fixed
	EH		100A	
	15-100A			
B106;BK-C2-E1C	SQUARE D	EH	100A	Fixed
	EH		100A	
	15-100A			
B106;BK-C2-E1D	SQUARE D	EH	100A	Fixed
	EH		100A	
	15-100A			
B106;BK-C3	SQUARE D	ME	800A	Ground
	ME, Micrologic		800A	GFPU (0.2-0.75 x S) 0.25 (200A)
	GF, 400-800A		600A	GFD (0.1-0.5 Sec.) 0.1(I ² T Out)
				Phase
				LTPU (0.5-1.0 x P) 1.0 (800A)
				LTD (2-24 Sec.) 16
				STPU (2-10 x P) 6.0 (4800A)
				STD (0.1-0.5 Sec.) .1(I ² T Out)
				INST (3-12 x P) 8.0 (6400A)
B106;BK-C5	SQUARE D	ME	800A	Ground
	ME, Micrologic		800A	GFPU (0.2-0.75 x S) 0.25 (200A)
	GF, 400-800A		800A	GFD (0.1-0.5 Sec.) 0.1(I ² T Out)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
				Phase
				LTPU (0.5-1.0 x P) 1.0 (800A)
				LTD (2-24 Sec.) 2
				STPU (2-10 x P) 4.0 (3200A)
				STD (0.1-0.5 Sec.) .1(I ² T Out)
				INST (3-12 x P) 8.0 (6400A)
B106;BK-C5-EKL	SQUARE D	EH	70A	Fixed
	EH		70A	
	15-100A			
B106;BK-EL-P1	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B106;BK-EL-S1	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B106;BK-EMDPH	SQUARE D	600A	600A	Thermal Curve
	MA		600A	INST HI (6000A)
	125-1200A			
B106;BK-EMDPH1	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B106;BK-EMDPH2	SQUARE D	400A	400A	Thermal Curve
	LA		300A	INST HI (3000A)
	125-400A			
B106;BK-EMDPH3	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B106;BK-EMDPH4	SQUARE D	FH	50A	Fixed
	FH		50A	
	15-100A			
B106;BK-EMDPL	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B106;BK-EV	SQUARE D	40A	40A	Fixed (730-12)
	QO-VH, 3-Pole		40A	
	15-150A			
B106;BK-KH	SQUARE D	FH	100A	Fixed
	FH		100A	
	15-100A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B106;BK-KL	SQUARE D	200	200A	Opening Clearing Curve
	Q2-H/Q2L-H		200A	
	100-225A			
B106;BK-L1A	SQUARE D	LA	400A	Thermal Curve (Fixed)
	LA		400A	INST (5-10 x Trip) 10.0 (4000A)
	125-400A, Inst 5-10			
B106;BK-L1B	SQUARE D	LA	400A	Thermal Curve (Fixed)
	LA		400A	INST (5-10 x Trip) 10.0 (4000A)
	125-400A, Inst 5-10			
B106;BK-L1C	SQUARE D	600A	600A	Thermal Curve
	MA		600A	INST HI (6000A)
	125-1200A			
B106;BK-L1D	SQUARE D	LA	400A	Thermal Curve (Fixed)
	LA		400A	INST (5-10 x Trip) 10.0 (4000A)
	125-400A, Inst 5-10			
B106;BK-L2A	SQUARE D	200	200A	Opening Clearing Curve
	Q2-H/Q2L-H		200A	
	100-225A			
B106;BK-L2B	SQUARE D	200	200A	Opening Clearing Curve
	Q2-H/Q2L-H		200A	
	100-225A			
B106;BK-L2C	SQUARE D	400A	400A	Thermal Curve
	LA		400A	INST HI (4000A)
	125-400A			
B106;BK-L2D	SQUARE D	225	225A	Opening Clearing Curve
	Q2-H/Q2L-H		225A	
	100-225A			
B106;BK-MDPL-M	SQUARE D	1200A	1200A	Thermal Curve
	NA		1200A	INST HI (9996A)
	600-1200A			
B106;BK-N	SQUARE D	NE	1200A	Ground
	NE, Micrologic		1200A	GFPU (0.2-0.75 x S) 0.45 (540A)
	GF, 600-1200A		1200A	GFD (0.1-0.5 Sec.) 0.32(I ² T Out)
				Phase
				LTPU (0.5-1.0 x P) 1.0 (1200A)
				LTD (2-24 Sec.) 16
				STPU (2-10 x P) 6 (7200A)
				STD (0.1-0.5) 0.32(I ² T Out)
				INST (3-12 x P) 8.0 (9600A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B106;BK-OL	SQUARE D	FH	100A	Fixed
	FH		100A	
	15-100A			
B106;BK-PPH	SQUARE D	150A	150A	Thermal Curve
	KA		150A	INST HI (1500A)
	70-250A			
B106;BK-PPH1-L	SQUARE D	EHB-AS	20A	Fixed
	EHB-AS		20A	
	15-30A			
B106;BK-PPH1-M	SQUARE D	150A	150A	Thermal Curve
	KA		125A	INST HI (1250A)
	70-250A			
B106;BK-PPH2-R	SQUARE D	EHB-AS	20A	Fixed
	EHB-AS		20A	
	15-30A			
B106;BK-PPL1	SQUARE D	40A	40A	Fixed (730-12)
	QO-VH, 3-Pole		40A	
	15-150A			
B106;BK-PPL2-S	SQUARE D	40A	40A	Fixed (730-12)
	QO-VH, 3-Pole		40A	
	15-150A			
B106;BK-R1A	SQUARE D	100	100A	Opening Clearing Curve
	Q2-H/Q2L-H		100A	
	100-225A			
B106;BK-R1B	SQUARE D	150A	150A	Fixed (730-10, 150A)
	QO-VH, 3-Pole		150A	
	15-150A			
B106;BK-R1C	SQUARE D	150	150A	Opening Clearing Curve
	Q2-H/Q2L-H		150A	
	100-225A			
B106;BK-R1D	SQUARE D	100A	100A	Fixed (730-8)
	QO-VH, 3-Pole		100A	
	15-150A			
B106;BK-R2A	SQUARE D	100A	100A	Fixed (730-8)
	QO-VH, 3-Pole		100A	
	15-150A			
B106;BK-R2B	SQUARE D	100A	100A	Fixed (730-8)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	QO-VH, 3-Pole		100A	
	15-150A			
B106;BK-R2C	SQUARE D	150	150A	Opening Clearing Curve
	Q2-H/Q2L-H		150A	
	100-225A			
B106;BK-R2D	SQUARE D	150A	150A	Fixed (730-10, 150A)
	QO-VH, 3-Pole		150A	
	15-150A			
B20;BK-20L11-1	SQUARE D	400A	400A	Thermal Curve
	LA		400A	INST HI (4000A)
	125-400A			
B20;BK-20L12	SQUARE D	225	225A	Opening Clearing Curve
	Q2-H/Q2L-H		225A	
	100-225A			
B20;BK-20L12-L	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 2-Pole		100A	
	15-125A			
B20;BK-20L12-R	SQUARE D	60A	60A	Fixed (730-6, 60A)
	QO, 3-Pole		60A	
	15-100A			
B20;BK-20L14	SQUARE D	100	100A	Opening Clearing Curve
	Q1L-Q1U		100A	
	60-100A			
B20;BK-20L14-M	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 3-Pole		100A	
	15-100A			
B20;BK-20L15	SQUARE D	100	100A	Opening Clearing Curve
	Q1L-Q1U		100A	
	60-100A			
B20;BK-20L15-M	SQUARE D	Q1	70A	Fixed
	Q1 (Obs.)		70A	
	15-150A			
B20;BK-20MDP	SQUARE D	400A	400A	Thermal Curve
	LA		400A	INST HI (4000A)
	125-400A			
B20;BK-20MDP-1	SQUARE D	FA	40A	Fixed
	FA		40A	
	15-100A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B20;BK-20MDP-2	SQUARE D	250A	250A	Thermal Curve
	KA		200A	INST HI (2000A)
	70-250A			
B20;BK-20MDP-4	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B20;BK-E8PBJ1A1	SQUARE D	FA	60A	Fixed
	FA		60A	
	15-100A			
B20;BK-E8PBJ1A2	SQUARE D	A1B	100A	Fixed
	A1, B/L/U		60A	
	60-100A, 1-3 Pole			
B20;BK-P20L15	SQUARE D	70	70A	Opening Clearing Curve
	Q1L-Q1U		70A	
	60-100A			
B22;BK-41-P	GE	TED	150A	Fixed
	TED (E-150 Line)		150A	
	15-150A			
B22;BK-AC1	GE	TED	100A	Fixed
	TED (E-100 Line)		100A	
	15-100A			
B22;BK-AC2	GE	TED	100A	Fixed
	TED (E-100 Line)		100A	
	15-100A			
B22;BK-AC3	GE	TED	100A	Fixed
	TED (E-100 Line)		100A	
	15-100A			
B22;BK-ACD	GE	TKMA	600A	Thermal Curve (Fixed)
	TKMA		300A	INST (3-10 x Trip) HI (3000A)
	300-1200A			
B22;BK-ELE2	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 3-Pole		100A	
	15-100A			
B22;BK-EMER	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B22;BK-GEN	SQUARE D	50A	50A	Fixed (730-6, 50A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	QO, 3-Pole		50A	
	15-100A			
B22;BK-GEN-M	CUTLER-HAMMER	BAB	50A	Fixed
	BAB, 3-Pole		50A	
	15-100A			
B22;BK-H1	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B22;BK-H12	GE	TED	80A	Fixed
	TED (E-100 Line)		70A	
	15-100A			
B22;BK-H1,2,3	GE	TED	100A	Fixed
	TED (E-100 Line)		100A	
	15-100A			
B22;BK-H12-M	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B22;BK-H2	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B22;BK-H3	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B22;BK-HB	GE	TFJ	225A	Thermal Curve (Fixed)
	TFJ		225A	INST (4.5-10 x Trip) HI (2250A)
	70-225A			
B22;BK-L1	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 3-Pole		100A	
	15-100A			
B22;BK-L1,2,3	SQUARE D	Q2	225A	Fixed
	Q2		225A	
	100-225A			
B22;BK-L2	SQUARE D	100	100A	Opening Clearing Curve
	Q1L-Q1U		100A	
	60-100A			
B22;BK-L3	SQUARE D	100	100A	Opening Clearing Curve
	Q1L-Q1U		100A	
	60-100A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B22;BK-LB1	GE	TFJ	225A	Thermal Curve (Fixed)
	TFJ		200A	INST (4.5-10 x Trip) HI (2000A)
	70-225A			
B22;BK-LB1-M	SQUARE D	400A	400A	Thermal Curve
	LA		300A	INST HI (3000A)
	125-400A			
B22;BK-LB2	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B22;BK-MDP	GE	TKMA	800A	Thermal Curve (Fixed)
	TKMA		800A	INST (3-8 x Trip) HI (6400A)
	300-1200A			
B22;BK-M-ELE2	SQUARE D	225A	225A	Thermal Curve
	IK		200A	INST HI (2000A)
	110-250A			
B22;BK-M-ELE3	SQUARE D	Q2M	200A	Fixed
	Q2M		200A	
	100-225A			
B22;BK-M-TS1E	CUTLER-HAMMER	DA	400A	Fixed
	DA		300A	
	250-400A			
B22;BK-TS1	SQUARE D	FA	70A	Fixed
	FA		70A	
	15-100A			
B22;BK-TS2	SQUARE D	Q2	225A	Fixed
	Q2		225A	
	100-225A			
B5;BK-5L205	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B5;BK-5L21	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B5;BK-5L31	GE	TJK	400A	Thermal Curve (Fixed)
	TJK		225A	INST (3-10 x Trip) HI (2250A)
	125-600A			
B5;BK-5L31-M	SQUARE D	A1B, 3-Pole	100A	Fixed

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	A1, B/L/U		100A	
	15-100A, 2-3 Pole			
B5;BK-5MDP	GE	TKMA	600A	Thermal Curve (Fixed)
	TKMA		450A	INST (3-10 x Trip) 7 (3150A)
	300-1200A			
B5;BK-5MDP-1	GE	TFJ	225A	Thermal Curve (Fixed)
	TFJ		225A	INST (4.5-10 x Trip) HI (2250A)
	70-225A			
B5;BK-5MDP-3	GE	TFJ	80A	Thermal Curve (Fixed)
	TFJ		70A	INST (8.6-12.5 x Trip) HI (875A)
	70-225A			
B5;BK-5MDP-4	GE	TFJ	225A	Thermal Curve (Fixed)
	TFJ		200A	INST (4.5-10 x Trip) HI (2000A)
	70-225A			
B5;BK-5MDP-6	GE	TFJ	110A	Thermal Curve (Fixed)
	TFJ		100A	INST (6-12.5 x Trip) HI (1250A)
	70-225A			
B5;BK-5MDP-7	GE	TFJ	110A	Thermal Curve (Fixed)
	TFJ		100A	INST (6-12.5 x Trip) HI (1250A)
	70-225A			
B5;BK-5MDP-8	GE	TFJ	225A	Thermal Curve (Fixed)
	TFJ		225A	INST (4.5-10 x Trip) HI (2250A)
	70-225A			
B5;BK-EMER	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B5;BK-L1	SQUARE D	225	225A	Opening Clearing Curve
	Q2-Q2L		225A	
	100-225A			
B5;BK-L1B	SQUARE D	150	150A	Opening Clearing Curve
	QO-VH		150A	
	110-150A			
B5;BK-NORMAL	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B5;BK-NORMAL-M	GE	TQD	225A	Fixed
	TQD		200A	
	100-225A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B5;BK-PL21	GE	TQD	225A	Fixed
	TQD		150A	
	100-225A			
B5;BK-PL22	GE	TQD	225A	Fixed
	TQD		150A	
	100-225A			
B5;BK-PL22M	SQUARE D	Q2M	225A	Fixed
	Q2M		225A	
	100-225A			
B5;BK-WIREWAYS	GE	TJK	400A	Thermal Curve (Fixed)
	TJK		400A	INST (3-10 x Trip) HI (4000A)
	125-600A			
B5;BK-X	SQUARE D	100	100A	Opening Clearing Curve
	Q1L-Q1U		100A	
	60-100A			
B6;BK-6L11A1	SQUARE D	Q2M	150A	Fixed
	Q2M		150A	
	100-225A			
B6;BK-6L11A2	SQUARE D	Q2	100A	Fixed
	Q2		100A	
	100-225A			
B6;BK-6L11B1	SQUARE D	Q2	100A	Fixed
	Q2		100A	
	100-225A			
B6;BK-6LDP1-3	SIEMENS	QJH	225A	Thermal Curve (Fixed)
	QJH		225A	INST Fixed (1500A)
	125-225A			
B6;BK-6LDP1-4	SIEMENS	QJH	225A	Thermal Curve (Fixed)
	QJH		200A	INST Fixed (1500A)
	125-225A			
B6;BK-6LDP1-8	SIEMENS	QJH2	150A	Thermal Curve (Fixed)
	QJH2		150A	INST Fixed (1750A)
	60-225A			
B6;BK-6LDP1-A	SQUARE D	Q2	150A	Fixed
	Q2		150A	
	100-225A			
B6;BK-6MDP	WESTINGHOUSE	NB	800A	LTD

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	NB		800A	INST 6.0 (4800A)
	800A			
B6;BK-6PDP1-3	SIEMENS	JD2	300A	Thermal Curve (Fixed)
	JD2		250A	INST (1250-2500A) HI (2500A)
	200-400A			
B6;BK-6PDP1-4	SIEMENS	JD2	300A	Thermal Curve (Fixed)
	JD2		250A	INST (1250-2500A) HI (2500A)
	200-400A			
B6;BK-T-6A-P	WESTINGHOUSE	LA	225A	LTD
	LAB, LA		225A	INST 10.0 (2250A)
	125-600A			
B6;BK-T-6A-S	SIEMENS	LL	600A	Thermal Curve (Fixed)
	LL		500A	INST (1900-3500A) HI (3500A)
	450-600A			
B6;BK-T-6B-P	CUTLER-HAMMER	LD	600A	Thermal Curve (Fixed)
	LD		450A	INST (5-10 x Trip) 10 (4500A)
	300-600A			
B6;BK-T-6B-S	SIEMENS-ALLIS	KM	800A	Thermal Curve (Fixed)
	KM		800A	INST (3200-5600A) HI (5600A)
	250-800A			
B7;BK-P1	SQUARE D	Q2M	200A	Fixed
	Q2M		200A	
	100-225A			
B7;BK-PP	SQUARE D	Q2M	150A	Fixed
	Q2M		150A	
	100-225A			
B8;BK-1PA-D	SQUARE D	QOB-AS	20A	Fixed
	QOB-AS		20A	
	15-30A			
B8;BK-1PA-M	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 3-Pole		100A	
	15-100A			
B8;BK-1PB	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 3-Pole		100A	
	15-100A			
B8;BK-8L11-1	GE	TQD	225A	Fixed
	TQD		200A	
	100-225A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B8;BK-8L11-2	GE	TQD	225A	Fixed
	TQD		200A	
	100-225A			
B8;BK-8PB1	WESTINGHOUSE	LAB	225A	LTD
	LAB, LA		200A	INST 10.0 (2000A)
	125-600A			
B8;BK-8PB1L	WESTINGHOUSE	FB	70A	Opening Clearing Curve
	FB		70A	
	15-150A			
B8;BK-8PB1R	WESTINGHOUSE	FB	40A	Opening Clearing Curve
	FB		30A	
	15-150A			
B8;BK-8PBJ1-2	GE	THQL	100A	Fixed
	THQL		80A	
	15-125A			
B8;BK-8PBJ1-3	GE	THQL	100A	Fixed
	THQL		80A	
	15-125A			
B8;BK-8PBJ-CK1	GE	TQD	225A	Fixed
	TQD		200A	
	100-225A			
B8;BK-8PBJ-CK11	GE	TEB	50A	Fixed
	TEB		30A	
	15-100A			
B8;BK-8PBJ-CK2	GE	TQD	225A	Fixed
	TQD		200A	
	100-225A			
B8;BK-8PBJ-CK5	GE	TQD	225A	Fixed
	TQD		200A	
	100-225A			
B8;BK-8PBJ-CK7	GE	TEB	100A	Fixed
	TEB		100A	
	15-100A			
B8;BK-8PBJ-CK9	GE	TEB	50A	Fixed
	TEB		30A	
	15-100A			
B8;BK-A-1E	WESTINGHOUSE	LA	600A	LTD

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	LAB, LA		500A	INST 10.0 (5000A)
	125-600A			
B8;BK-A-1N	SQUARE D	600A	600A	Thermal Curve
	MA		600A	INST HI (6000A)
	125-1200A			
B8;BK-GR-1	GE	TFK	225A	Thermal Curve (Fixed)
	TFK		225A	INST (4.5-10 x Trip) HI (2250A)
	70-225A			
B8;BK-GR-2L	GE	TFJ	225A	Thermal Curve (Fixed)
	TFJ		200A	INST (4.5-10 x Trip) HI (2000A)
	70-225A			
B8;BK-GR-2R	GE	TEB	80A	Fixed
	TEB		80A	
	15-100A			
B8;BK-GRA1	SQUARE D	QOB-AS	30A	Fixed
	QOB-AS		30A	
	15-30A			
B8;BK-GRA2	SQUARE D	QOB-AS	30A	Fixed
	QOB-AS		30A	
	15-30A			
B8;BK-MHC26-1	SQUARE D	30A	30A	Fixed (730-5, 30A)
	QO, 2-Pole		30A	
	15-125A			
B8;BK-P-8LB1	SQUARE D	QOM1-VH	100A	Fixed
	QOM1-VH		100A	
	50-125A			
B9A;BK-9ALDP	CUTLER-HAMMER	MA	800A	Thermal Curve (Fixed)
	MA		800A	INST (3000-6000A) 6000 (6000A)
	125-800A			
B9A;BK-9AMDP	WESTINGHOUSE	NC	1200A	Phase
	NC SELTRNC		1200A	LTPU 1.0 (1200A)
	800-1200A			LTD LTD
				STPU 2.0 (2400A)
				STD-I2T STD(I ² T In)
				Ground
				GFPD (120-1200A) 240 (240A)
				GFD (3.5-30 Cycles) 0.098
B9A;BK-A-2N	CUTLER-HAMMER	HFD	100A	Fixed
	HFD		100A	

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LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
	15-225A			
B9A;BK-A-3N	CUTLER-HAMMER	HFD	150A	Fixed
	HFD		150A	
	15-225A			
B9A;BK-EDP	CUTLER-HAMMER	FD	100A	Fixed
	FD		100A	
	15-225A			
B9A;BK-EDP1-L	SQUARE D	100	100A	Opening Clearing Curve
	Q2-Q2L		100A	
	100-225A			
B9A;BK-EDP1-M	SQUARE D	150	150A	Opening Clearing Curve
	Q2-Q2L		150A	
	100-225A			
B9A;BK-ELEVATR	CUTLER-HAMMER	HFD	100A	Fixed
	HFD		100A	
	15-225A			
B9A;BK-ELP-L	CUTLER-HAMMER	GHB	100A	Fixed
	GHB		70A	
	15-100A			
B9A;BK-ELP-M	CUTLER-HAMMER	FD	100A	Fixed
	FD		100A	
	15-225A			
B9A;BK-LP	CUTLER-HAMMER	HFD	100A	Fixed
	HFD		100A	
	15-225A			
B9A;BK-LVP	CUTLER-HAMMER	QBHW	30A	Fixed
	QBHW, 3-Pole		30A	
	15-100A			
B9A;BK-MCC-9A	WESTINGHOUSE	LC	600A	LTPU 1.0 (600A)
	LC SELTRNC		600A	LTD LTD
	300-600A			STPU 10.0 (6000A)
				STD-I2T STD(I ² T In)
B9A;BK-PP1	CUTLER-HAMMER	CAH	225A	Fixed
	CAH		225A	
	125-225A			
B9A;BK-PP2	CUTLER-HAMMER	CAH	225A	Fixed
	CAH		225A	
	125-225A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B9A;BK-PP3	CUTLER-HAMMER	CAH	225A	Fixed
	CAH		225A	
	125-225A			
B9A;BK-T9A-1	CUTLER-HAMMER	HKD	400A	Thermal Curve (Fixed)
	HKD		400A	INST (5-10 x Trip) 10 (4000A)
	100-400A			
B9;BK-9ELDP	CUTLER-HAMMER	CA	225A	Fixed
	CA		175A	
	125-225A			
B9;BK-9L11	CUTLER-HAMMER	CA	225A	Fixed
	CA		150A	
	125-225A			
B9;BK-9L21	CUTLER-HAMMER	CA	225A	Fixed
	CA		225A	
	125-225A			
B9;BK-9L22	CUTLER-HAMMER	CA	225A	Fixed
	CA		225A	
	125-225A			
B9;BK-9L22-M	SQUARE D	250A	250A	Thermal Curve
	KA		225A	INST HI (2250A)
	70-250A			
B9;BK-9LDP	CUTLER-HAMMER	DA	400A	Fixed
	DA		400A	
	250-400A			
B9;BK-9MDP-1B	WESTINGHOUSE	SPB-50	800A	LTPU 1.0 (800A)
	POW R-TP 7		800A	LTD 7.0
	SPB 50			STPU 8.0 (6400A)
				STD 0.1
				INST 10.0 (8000A)
B9;BK-9MDP-2B	WESTINGHOUSE	SPB-50	250A	LTPU 1.0 (200A)
	POW R-TP 7		200A	LTD 24.0
	SPB 50			STPU 8.0 (1600A)
				STD 0.3
				INST 10.0 (2000A)
B9;BK-9MDP-2C	WESTINGHOUSE	SPB-50	250A	LTPU 0.9 (180A)
	POW R-TP 7		200A	LTD 24.0
	SPB 50			STPU 8.0 (1600A)
				STD 0.2
				INST 10.0 (2000A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
B9;BK-A-1E-B9A	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B9;BK-A-1E-BST	SQUARE D	FA	100A	Fixed
	FA		100A	
	15-100A			
B9;BK-G-A-1E	MERLIN GERIN	NSJ400N	400A	Io, Ir 1; 0.8 (320A)
	NSJ400, STR23SP		400A	LTD Fixed
	LS, 60-400A			STPU, Im 6 (1920A)
				STD Fixed
				INST (OR) Fixed (3600A)
B9;BK-T9ELDP	CUTLER-HAMMER	EHB	70A	Fixed
	EHB, 2 & 3-Pole		70A	
	15-100A			
B9;BK-TEL21	CUTLER-HAMMER	EHB	70A	Fixed
	EHB, 2 & 3-Pole		70A	
	15-100A			
B9;BK-TLDP	CUTLER-HAMMER	EHB	100A	Fixed
	EHB, 2 & 3-Pole		100A	
	15-100A			
BMRI;BK-CHILLER	GE	THED	100A	Fixed
	THED		100A	
	15-150A			
BMRI;BK-EMH	GE	TEY	70A	Fixed
	TEY, 2 & 3-Pole		70A	
	15-100A			
BMRI;BK-EML	GE	TEY	40A	Fixed
	TEY, 2 & 3-Pole		40A	
	15-100A			
BMRI;BK-EML-M	GE	THHQB	50A	Fixed
	THHQB		50A	
	15-100A			
BMRI;BK-H-P	GE	SFPA	250A	MAX
	SFPA, Spectra RMS		125A	
	70-250A			
BMRI;BK-L	GE	TQD	225A	Fixed
	TQD		225A	
	100-225A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

LV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
BMRI;BK-UPS	GE	SGHA	600A	MAX
	SGHA, Spectra RMS		350A	
	125-600A			
BT25;BK-MSPP1	SQUARE D	100A	100A	Fixed (730-7, 100A)
	QO, 2-Pole		100A	
	15-125A			
BT34;BK-T34A	SIEMENS	ED4	100A	Thermal Curve (Fixed)
	ED4 Sentron, 1-Pole		100A	INST Fixed (800A)
	15-100A			
BT34;BK-T34A-L	SIEMENS	QP	70A	Thermal Curve (Fixed)
	QP, 2 & 3-Pole		60A	INST Fixed (687.5A)
	15-125A			
BT36;BK-36P1A	SQUARE D	EH	50A	Fixed
	EH		50A	
	15-100A			
BT36;BK-36P1B	SQUARE D	EH	50A	Fixed
	EH		50A	
	15-100A			
BT36;BK-36P2	SQUARE D	KD	200A	Fixed
	KD		200A	
	100-250A			
BT36;BK-T36	FEDERAL PACIFIC	NEF	100A	Opening Clearing Curve
	NE & NEF, 3-Pole		50A	
	30-100A, Page 14			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

HV/MV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
OD;BK-FD-A	S&C	Main Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Main Fault Interrupter			
OD;BK-FD-B	S&C	Main Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Main Fault Interrupter			
OD;BK-SG1-FD1	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG1-FD2	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG2-F3	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG2-F4	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG3-FD5	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG3-FD6	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG3-FD7	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG4-FD8	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG4-FD9	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
Relays				
Name/Type	Description	Frame/Model	CT Ratio (A)	Settings
OD;R-BANK1	GE	IAC 77	800 / 5	Phase
Electro-Mechanical	IAC 77, 5A CT			Tap (4-16A) 7 (1120A)
	50/51, 10-30/4-16A			Time Dial (0.5-10) 3.0
				INST-Hi Dropout (10-30A) 18 (2880A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

HV/MV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
				Ground
				Tap (0.5-4A) 0.5 (80A)
				Time Dial (0.5-10) 2.5
				INST-Low (10-40A) 10 (1600A)
OD;R-BANK2	GE	IAC 77	800 / 5	Phase
Electro-Mechanical	IAC 77, 5A CT			Tap (4-16A) 7 (1120A)
	50/51, 10-30/4-16A			Time Dial (0.5-10) 3.0
				INST-Hi Dropout (10-30A) 18 (2880A)
				Ground
				Tap (0.5-4A) 0.5 (80A)
				Time Dial (0.5-10) 2.5
				INST-Low (10-40A) 10 (1600A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
B100;F-2A100	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-EP-2A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-2B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-2C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-2D	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-3A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-3B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-3C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-3D	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-M-P1	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-M-P2	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-M-P3	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-M-P4	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
	15-600A			
B100;F-M-S5	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-M-S6	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-M-S7	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-M-S8	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-RP1,2	BUSSMANN	FRN-R	250A	
Low Voltage	FRN-R, 250V Class RK5		250A	
	1-600A			
B100;F-S1-2A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S1-2B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S1-2C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S1-3C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-10A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-10B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-2A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
B100;F-S2-2B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-2C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-3A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-3B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-3C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-4A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-4B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-4C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-4D	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-5A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-5B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-5D	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-7A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
	200-6000A			
B100;F-S2-7B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-8A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-8B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-8C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-8D	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-9A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-9B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-9C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-9D	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-TE2DP3	GOULD SHAWMUT	TRS	200A	
Low Voltage	TRS, 600V Class RK5		125A	
	15-600A			
B100;-S2-5C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B103;F-T103-P	ABB	DO-III	25A	
High Voltage	DO-III Dual Element		25A	
	5-50A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
B106;F-A-1E	GOULD SHAWMUT	TRS	600A	
Low Voltage	TRS, 600V Class RK5		500A	
	15-600A			
B106;F-A-1,FP	GOULD SHAWMUT	TRS	400A	
Low Voltage	TRS, 600V Class RK5		350A	
	15-600A			
B106;F-EV	GOULD SHAWMUT	AJT	9A	
Low Voltage	AJT, 600V Class J		9A	
	2-12A			
B106;F-T106	ABB	DO-III	50A	
High Voltage	DO-III Dual Element		50A	
	5-50A			
B20;F-T20A	BUSSMANN	NON	25A	
Low Voltage	NON, 250V Class K5		25A	
	1-60A			
B20;F-T-20-P	ABB	DO-III	25A	
High Voltage	DO-III Dual Element		25A	
	5-50A			
B22;F-PIL	BUSSMANN	FRN-R	150A	
Low Voltage	FRN-R, 250V Class RK5		150A	
	1-600A			
B22;F-T22-P	ABB	DO-III	25A	
High Voltage	DO-III Dual Element		25A	
	5-50A			
B5;F-PL21	BUSSMANN	FRS-R	100A	
Low Voltage	FRS-R, 600V Class RK5		100A	
	1-600A			
B5;F-T-5-P	ABB	DO-III	25A	
High Voltage	DO-III Dual Element		25A	
	5-50A			
B6;F-SAFETY	BUSSMANN	DLS-R	100A	
Low Voltage	DLS-R, 600V Class RK5		100A	
	10-600A			
B6;F-T-6-P	ABB	DO-III	25A	
High Voltage	DO-III Dual Element		25A	
	5-50A			
B8;F-1PA-2	GOULD SHAWMUT	TR	100A	
Low Voltage	TR, 250V Class RK5		100A	

South Carolina (Columbia) VA Medical Center - Coordination Study - Existing Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
	15-600A			
B8;F-1PB	BUSSMANN	LPS-RK	30A	
Low Voltage	LPS-RK, 600V Class RK1		30A	
	15-600A			
B8;F-6LDP1SAF	BUSSMANN	FRN-R	200A	
Low Voltage	FRN-R, 250V Class RK5		200A	
	1-600A			
B8;F-SAFETY	BUSSMANN	FRN-R	150A	
Low Voltage	FRN-R, 250V Class RK5		150A	
	1-600A			
B8;F-T8-P	ABB	DO-III	15A	
High Voltage	DO-III Dual Element		15A	
	5-50A			
B9A;F-ELEVATR	GOULD SHAWMUT	TRS	80A	
Low Voltage	TRS, 600V Class RK5		80A	
	15-600A			
B9A;F-T-9N-P	COOPER	108C7	15A	
High Voltage	Bay-O-Net Dual Element Fuse Link, 23kV		15A	
	C3-C12			
B9;F-9EL21	GOULD SHAWMUT	A6D	150A	
Low Voltage	A6D, 600V Class RK1		150A	
	15-600A			
B9;F-T-9S-P	ABB	DO-III	25A	
High Voltage	DO-III Dual Element		25A	
	5-50A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100A;BK-1DL1	SQUARE D	400A	400A
	LA		400A
	125-400A		
B100A;BK-1DLSR1	SQUARE D	60A	60A
	QO-VH, 3-Pole		60A
	15-150A		
B100A;BK-1DLST1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100A;BK-1DLST2	SQUARE D	FA	20A
	FA		20A
	15-100A		
B100A;BK-1DR1	SQUARE D	Q2L-H	225A
	Q2L-H		225A
	100-225A		
B100A;BK-1DR2	SQUARE D	100A	100A
	QO, 3-Pole		100A
	15-100A		
B100A;BK-1DRK3	SQUARE D	QOB-AS	20A
	QOB-AS		20A
	15-30A		
B100A;BK-1DT1P	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100A;BK-2DCR1	SIEMENS	ED6, 3-Pole	125A
	ED6 Sentron, 2 & 3-Pole		125A
	15-125A		
B100A;BK-2DCR1-M	SIEMENS	CJ	225A
	CJ		225A
	110-400A		
B100A;BK-2DCR2	SIEMENS	BL	100A
	BL, 2 & 3-Pole		100A
	15-125A		
B100A;BK-2DL1	SQUARE D	400A	400A
	LA		300A
	125-400A		
B100A;BK-2DL1-M	SIEMENS	ED4	125A
	ED4 Sentron, 2 & 3-Pole		125A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	15-125A		
B100A;BK-2DR1	SIEMENS	FJ	175A
	FJ		175A
	70-225A		
B100A;BK-2DR2	SIEMENS	BL	100A
	BL, 2 & 3-Pole		100A
	15-125A		
B100A;BK-2DR3	SIEMENS	BL	100A
	BL, 2 & 3-Pole		100A
	15-125A		
B100A;BK-2DRDP-M	SIEMENS	JXD6-A	400A
	JXD6-A Sentron		400A
	200-400A		
B100A;BK-2DT1P	SIEMENS	ED4	125A
	ED4 Sentron, 2 & 3-Pole		125A
	15-125A		
B100A;BK-BDC1-M	SIEMENS	FXD6-A	200A
	FXD6-A Sentron		200A
	70-250A		
B100A;BK-BDE1L	SIEMENS	BQD	100A
	BQD		100A
	15-100A		
B100A;BK-BDE1M	SIEMENS	HJ	175A
	HJ		175A
	110-400A		
B100A;BK-BDEL V	SIEMENS	BL	70A
	BL, 2 & 3-Pole		60A
	15-125A		
B100A;BK-BDLSR1	SQUARE D	60A	60A
	QO, 3-Pole		60A
	15-100A		
B100A;BK-BDLST1	SQUARE D	FA	30A
	FA		30A
	15-100A		
B100A;BK-BDR1	SQUARE D	FA	60A
	FA		60A
	15-100A		

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100A;BK-BDR1-M	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B100A;BK-TBDE1	SIEMENS	BQD	25A
	BQD		25A
	15-100A		
B100A;BK-VFDP1	SQUARE D	FA	30A
	FA		30A
	15-100A		
B100A;BK-VFDP2	SQUARE D	FA	30A
	FA		30A
	15-100A		
B100;BK-100AC2	WESTINGHOUSE	FB	70A
	FB		70A
	15-150A		
B100;BK-100AC4	SQUARE D	EH	70A
	EH		70A
	15-100A		
B100;BK-100AC7	WESTINGHOUSE	FB	70A
	FB		70A
	15-150A		
B100;BK-100P10	SQUARE D	250A	250A
	KA		200A
	70-250A		
B100;BK-100P11	SQUARE D	FA	100A
	FA		100A
	15-100A		
B100;BK-100P12	SQUARE D	FA	100A
	FA		100A
	15-100A		
B100;BK-100P1A	SIEMENS	ED6	100A
	ED6 Sentron, 2 & 3-Pole		100A
	15-125A		
B100;BK-100P2A	SIEMENS	ED6	100A
	ED6 Sentron, 2 & 3-Pole		100A
	15-125A		
B100;BK-100P4A	SIEMENS	ED6	100A
	ED6 Sentron, 2 & 3-Pole		50A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	15-125A		
B100;BK-100P5	CUTLER-HAMMER	LA	400A
	LA Tri-Pac		400A
	70-400A		
B100;BK-100P5A	SIEMENS	ED6	100A
	ED6 Sentron, 2 & 3-Pole		45A
	15-125A		
B100;BK-100P6	WESTINGHOUSE	FB	150A
	FB		150A
	15-150A		
B100;BK-100P7	WESTINGHOUSE	FB	150A
	FB		150A
	15-150A		
B100;BK-100P8	CUTLER-HAMMER	FB	50A
	FB Tri-Pac		50A
	15-100A		
B100;BK-100P9	SQUARE D	250A	250A
	KA		200A
	70-250A		
B100;BK-150A1	SQUARE D	Q2M	150A
	Q2M		150A
	100-225A		
B100;BK-150A1S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-150B2	SQUARE D	Q2M	150A
	Q2M		150A
	100-225A		
B100;BK-150B2S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-150C3	SQUARE D	Q2M	150A
	Q2M		150A
	100-225A		
B100;BK-150C3S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-164A1S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-164B2S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-164C3S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-166A1S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-166B2S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-166C3S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-168A1S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-168B2S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-168BS	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-168C3S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-169A1S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-169B2S	FPE	NB	50A
	NB, 1 Pole		50A
	15-50A, Page 7		
B100;BK-169C3S	FPE	NB	50A
	NB, 1 Pole		50A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	15-50A, Page 7		
B100;BK-IDP1A1	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-IDP1A2	SQUARE D	FA	45A
	FA		45A
	15-100A		
B100;BK-IDP1A3	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-IDP1A4	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-IDP1B1	GE	TQD	225A
	TQD		175A
	100-225A		
B100;BK-IDP1B3	FPE	NJL	400A
	NJL, HJL		300A
	70-400A		
B100;BK-IDP1B4	FPE	NJL	400A
	NJL, HJL		300A
	70-400A		
B100;BK-IDP2A1	SQUARE D	100A	100A
	KA		100A
	70-250A		
B100;BK-IDP2A10	SQUARE D	250A	250A
	KA		200A
	70-250A		
B100;BK-IDP2A15	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-IDP2A2	SQUARE D	100A	100A
	KA		100A
	70-250A		
B100;BK-IDP2A3	SQUARE D	100A	100A
	KA		100A
	70-250A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-IDP2A4	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-IDP2A5	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-IDP2A6	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-IDP2A7	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-IDP2A8	SQUARE D	100A	100A
	KA		100A
	70-250A		
B100;BK-IDP2A9	SQUARE D	150A	150A
	KA		150A
	70-250A		
B100;BK-IDP3A1	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-IDP3A2	SQUARE D	400A	400A
	LA		300A
	125-400A		
B100;BK-IDP3B1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-IDP4A1	SQUARE D	250A	250A
	KA		175A
	70-250A		
B100;BK-IDP4B1	AMERICAN	NN	1000A
	NN		1000A
	800-1200A		
B100;BK-1R1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-1R10	SQUARE D	250A	250A
	KA		225A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	70-250A		
B100;BK-1R11	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-1R16	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-1R16B	SQUARE D	60	60A
	IF I-LIM		60A
	60-100A		
B100;BK-1R17	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-1R2	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-1R3	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-1R4	SQUARE D	Q2	200A
	Q2		200A
	100-225A		
B100;BK-1R5	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-1R6	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-1R7	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-1R8	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-1R9	SQUARE D	250A	250A
	KA		225A
	70-250A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-2DPA1	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-2DPA2	SQUARE D	250A	250A
	KA		175A
	70-250A		
B100;BK-2DPA3	SQUARE D	FA	45A
	FA		45A
	15-100A		
B100;BK-2DPA4	SQUARE D	250A	250A
	KA		175A
	70-250A		
B100;BK-2DPB1	GE	TQD	225A
	TQD		175A
	100-225A		
B100;BK-2DPB2	GE	TQD	225A
	TQD		175A
	100-225A		
B100;BK-2DPB3	FEDERAL PACIFIC	NE	100A
	NE & NEF, 3-Pole		100A
	30-100A		
B100;BK-2WRDP	SQUARE D	400A	400A
	LA		350A
	125-400A		
B100;BK-3DPA1	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-3DPA2	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-3DPA3	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-3DPB1	FPE	NEJ	225A
	NEJ/HEJ		175A
	125-225A		
B100;BK-3DPB2	FPE	NEJ	225A
	NEJ/HEJ		175A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	125-225A		
B100;BK-3DPB3	FPE	HJL	400A
	NJL, HJL		300A
	70-400A		
B100;BK-3ED1	SQUARE D	50A	50A
	QO-VH, 2-Pole		50A
	15-150A		
B100;BK-3R1	SQUARE D	Q2	225A
	Q2		225A
	100-225A		
B100;BK-3R10	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-3R2	SQUARE D	Q2	225A
	Q2		225A
	100-225A		
B100;BK-3R3	SQUARE D	Q2	225A
	Q2		225A
	100-225A		
B100;BK-3R4	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-3R5	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-3R6	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-3R7	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-3R8	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-3R9	SQUARE D	250A	250A
	KA		225A
	70-250A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-3WD1	SQUARE D	50A	50A
	QO-VH, 2-Pole		50A
	15-150A		
B100;BK-3WD1-P	WESTINGHOUSE	FDB	30A
	FDB SER C		30A
	15-45A		
B100;BK-4DPA1	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-4DPA2	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-4DPA3	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-4DPA4	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-4DPB1	GE	TQD	225A
	TQD		175A
	100-225A		
B100;BK-4DPB2	FPE	NJL	225A
	NJL, HJL		175A
	70-400A		
B100;BK-4DPB3	FPE	HJL	400A
	NJL, HJL		300A
	70-400A		
B100;BK-4R1	SQUARE D	QOM2-VH	225A
	QOM2-VH		225A
	100-225A		
B100;BK-4R2	SQUARE D	QOM2-VH	225A
	QOM2-VH		225A
	100-225A		
B100;BK-4R3	SQUARE D	QOM2-VH	225A
	QOM2-VH		225A
	100-225A		
B100;BK-4R4	SQUARE D	KA	250A
	KA		225A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	70-250A, DC		
B100;BK-4R5	SQUARE D	KA	250A
	KA		225A
	70-250A, DC		
B100;BK-4R6	SQUARE D	KA	250A
	KA		225A
	70-250A, DC		
B100;BK-4R7	SQUARE D	KA	250A
	KA		225A
	70-250A, DC		
B100;BK-4R8	SQUARE D	KA	250A
	KA		225A
	70-250A, DC		
B100;BK-4R9	SQUARE D	KA	250A
	KA		225A
	70-250A, DC		
B100;BK-5DP1A	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-5DP1B	GE	TQD	225A
	TQD		175A
	100-225A		
B100;BK-5DP2A	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-5DP2B	GE	TQD	225A
	TQD		175A
	100-225A		
B100;BK-5R1	SQUARE D	225A	225A
	LA		225A
	125-400A		
B100;BK-5R2	SQUARE D	225A	225A
	LA		225A
	125-400A		
B100;BK-5R3	SQUARE D	225A	225A
	LA		225A
	125-400A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-5R4	SQUARE D	225A	225A
	LA		225A
	125-400A		
B100;BK-5R5	SQUARE D	225A	225A
	LA		225A
	125-400A		
B100;BK-5R6	SQUARE D	225A	225A
	LA		225A
	125-400A		
B100;BK-5R7	SQUARE D	225A	225A
	LA		225A
	125-400A		
B100;BK-AC-10	WESTINGHOUSE	HKB	250A
	HKB		250A
	70-250A		
B100;BK-AC11	WESTINGHOUSE	FB	150A
	FB		100A
	15-150A		
B100;BK-AC17	WESTINGHOUSE	HKB	250A
	HKB		250A
	70-250A		
B100;BK-AC24	WESTINGHOUSE	JD	250A
	JDB, JD		250A
	70-250A		
B100;BK-AC5	WESTINGHOUSE	FB	150A
	FB		100A
	15-150A		
B100;BK-AC8	WESTINGHOUSE	FB	150A
	FB		100A
	15-150A		
B100;BK-AHU3	WESTINGHOUSE	FB	150A
	FB		100A
	15-150A		
B100;BK-BDC1	SQUARE D	250A	250A
	KA		200A
	70-250A		
B100;BK-BDE1	SQUARE D	250A	250A
	KA		175A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	70-250A		
B100;BK-BDLS1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-BDP1	SQUARE D	400A	400A
	LI		400A
	300-600A		
B100;BK-BDP10A	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-BDP10B	FPE	NJL	225A
	NJL, HJL		150A
	70-400A		
B100;BK-BDP10D	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-BDP10E	FPE	NJL	225A
	NJL, HJL		150A
	70-400A		
B100;BK-BDP2A2	SQUARE D	150A	150A
	KA		150A
	70-250A		
B100;BK-BDP2A3	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-BDP2A4	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-BDP2A5	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-BDP2A6	SQUARE D	FA	30A
	FA		30A
	15-100A		
B100;BK-BDP3C2	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-BDP3C3	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-BDP3C4	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-BDP5A	SQUARE D	600A	600A
	MA		500A
	125-1200A		
B100;BK-BDP5B	FEDERAL PIONEER	NN	1200A
	NN, HN, 2-3 Pole		1200A
	1000-1200A		
B100;BK-BDP5-R	SQUARE D	45	45A
	IF I-LIM		45A
	20-50A		
B100;BK-BDP6A1	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-BDP6A2	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-BDP6A3	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-BDP6B1	GE	TQD	225A
	TQD		175A
	100-225A		
B100;BK-BDP6B2	FPE	HJL	400A
	NJL, HJL		300A
	70-400A		
B100;BK-BDP6B3	FPE	HJL	400A
	NJL, HJL		300A
	70-400A		
B100;BK-BDP8	SQUARE D	250A	250A
	KA		200A
	70-250A		
B100;BK-BDP8-9	FUCHS	MA	600A
	MA		500A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	150-800 A		
B100;BK-BME	SQUARE D	100A	100A
	QO, 3-Pole		100A
	15-100A		
B100;BK-BR1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-BR10	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-BR10A	SQUARE D	Q1	35A
	Q1 (Obs.)		35A
	15-150A		
B100;BK-BR11	SQUARE D	A1B, 3-Pole	50A
	A1, B/L/U		50A
	15-100A, 2-3 Pole		
B100;BK-BR13	WESTINGHOUSE	FDB	45A
	FDB SER C		45A
	15-45A		
B100;BK-BR2	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-BR3	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-BR4	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-BR5	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-BR6	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-BR7	SQUARE D	250A	250A
	KA		225A
	70-250A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-BR8	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-BR9	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-BYL1	WESTINGHOUSE	FB	150A
	FB		125A
	15-150A		
B100;BK-BYL2	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-C1315L1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-C1315L2	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-C1315R1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-C1315R2	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-C1DP	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-C1L1	SQUARE D	FA	100A
	FA		100A
	15-100A		
B100;BK-C1L1A	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-C1L2A	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-C1R1	SQUARE D	250A	250A
	KA		225A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	70-250A		
B100;BK-C1R1,2	FPE	NE	100A
	NE, 2-Pole		100A
	30-100A		
B100;BK-C1R2	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B100;BK-C1R3	SIEMENS	BLH	100A
	BLH, 2 & 3-Pole		100A
	15-100A		
B100;BK-C2DP	SQUARE D	500A	500A
	LI		450A
	300-600A		
B100;BK-C2L1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-C2R1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-C2R1-3	AMERICAN	NN	1000A
	NN		1000A
	800-1200A		
B100;BK-C2R2	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-C2R3	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-C2R4	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-C2R4,5	AMERICAN	NN	1000A
	NN		1000A
	800-1200A		
B100;BK-C2R5	SQUARE D	250A	250A
	KA		225A
	70-250A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-C2W1	SQUARE D	125A	125A
	QO-VH, 3-Pole		125A
	15-150A		
B100;BK-C2W2	SQUARE D	150	150A
	Q2-Q2L		150A
	100-225A		
B100;BK-C2WDP	SQUARE D	FA	70A
	FA		70A
	15-100A		
B100;BK-C2WDP-M	SQUARE D	100A	100A
	KA		70A
	70-250A		
B100;BK-C3DP	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-C3L1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-C4DP	SQUARE D	250A	250A
	KA		175A
	70-250A		
B100;BK-C4L1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-C4R1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-C4R1,2	FPE	NJL	400A
	NJL, HJL		300A
	70-400A		
B100;BK-C4R2	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-C5DP	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-C5L1	SQUARE D	FA	60A
	FA		60A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	15-100A		
B100;BK-C5R1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-C5R1,2	FPE	NE	100A
	NE/NEF		100A
	30-100A		
B100;BK-C5R2	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-CCU1-3A	SIEMENS-ALLIS	1600	1600A
	LA, II		200A
	GF, 80-4000A		200A
B100;BK-CCU2-3B	UTILITY RELAY CO.	LA-1600B	1600A
	AC-Pro Retrofit		1600A
	for Siemens-Allis LA		1600A
B100;BK-CF55	WESTINGHOUSE	FB	40A
	FB		15A
	15-150A		
B100;BK-CT1FAN	WESTINGHOUSE	FB	150A
	FB		125A
	15-150A		
B100;BK-CT2FAN	CUTLER-HAMMER	FB, 3 Pole	125A
	FB, 2 & 3-Pole		125A
	15-150A		
B100;BK-E1DP1	SQUARE D	250A	250A
	KA		200A
	70-250A		
B100;BK-E1DP2	SQUARE D	500A	500A
	LC		500A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	300-600A		
B100;BK-E1DP2A	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-E1L1	SQUARE D	100A	100A
	KA		100A
	70-250A		
B100;BK-E1R1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-E1R124	FPE	HJL	400A
	NJL, HJL		300A
	70-400A		
B100;BK-E1R16	SQUARE D	FA	45A
	FA		45A
	15-100A		
B100;BK-E1R2	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-E1R3	SQUARE D	FA	45A
	FA		45A
	15-100A		
B100;BK-E1R4	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-E2L1	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-E2L1A	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-E2R1	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B100;BK-E2R1-2	FPE	NE	100A
	NE, 2-Pole		100A
	30-100A		

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-E2R1-3	SQUARE D	Q2L-H	200A
	Q2L-H		200A
	100-225A		
B100;BK-E2R2	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B100;BK-E2WDP2	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-E2WO1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-E3DP	SQUARE D	225A	225A
	IK		200A
	110-250A		
B100;BK-E3L1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-E3L1A	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-E3R1	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B100;BK-E3R1,2	FEDERAL PACIFIC	NEF	100A
	NE & NEF, 3-Pole		100A
	30-100A		
B100;BK-E3R2	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B100;BK-E4DP	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-E4L1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-E4L1A	SQUARE D	100	100A
	IF I-LIM		100A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	60-100A		
B100;BK-E4R1	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B100;BK-E4R1,2	FPE	NE	100A
	NE, 2-Pole		100A
	30-100A		
B100;BK-E4R2	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B100;BK-E5DP	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-E5L1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-E5L1A	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-E5R1	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B100;BK-E5R1,2	FPE	NE	100A
	NE, 2-Pole		100A
	30-100A		
B100;BK-E5R2	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B100;BK-EBDP2	SQUARE D	600A	600A
	MA		600A
	125-1200A		
B100;BK-EBDP6	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-EBDP7A	SQUARE D	600A	600A
	MA		500A
	125-1200A		

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-EBDP9A	SQUARE D	600A	600A
	MA		500A
	125-1200A		
B100;BK-EBDP9A2	SQUARE D	FH	100A
	FH		100A
	15-100A		
B100;BK-EBDP9B	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-EBDPM3	SQUARE D	FD	100A
	FD, 2 & 3-Pole		100A
	15-100A		
B100;BK-EBDPRIM	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-EBL1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-EBL1A	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-EBL2A	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-EBPR1	WESTINGHOUSE	FB	40A
	FB		30A
	15-150A		
B100;BK-EBR1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-EBR10	SQUARE D	FA	100A
	FA		100A
	15-100A		
B100;BK-EBR11	SQUARE D	LA	225A
	LA		200A
	125-400A, Inst 5-10		
B100;BK-EBR11A	SQUARE D	400A	400A
	LA		300A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	125-400A		
B100;BK-EBR11B	SQUARE D	400A	400A
	LA		300A
	125-400A		
B100;BK-EBR11C	SQUARE D	400A	400A
	LA		300A
	125-400A		
B100;BK-EBR11C0	SQUARE D	1000A	1000A
	MA		1000A
	125-1200A		
B100;BK-EBR12	SQUARE D	LA	225A
	LA		200A
	125-400A, Inst 5-10		
B100;BK-EBR2	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-EMCBP	SQUARE D	450A	450A
	MA		350A
	125-1200A		
B100;BK-EMCC4	WESTINGHOUSE	FB	40A
	FB		15A
	15-150A		
B100;BK-EMCCC2	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-EMCCC3	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-EMCCC4	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-EMCCD5	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-EMCCDB	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-EMCCEB	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-EMCCF1	SQUARE D	250A	250A
	KA		250A
	70-250A		
B100;BK-EMCCF2	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-EMCCFB	SQUARE D	500A	500A
	LI		500A
	300-600A		
B100;BK-EMCEB	WESTINGHOUSE	FB	150A
	FB		150A
	15-150A		
B100;BK-EMH	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-EP-1C	SIEMENS-ALLIS	LA-1600	1600A
	LA, II		1600A
	LSI, 80-4000A		1600A
B100;BK-EP-2A	SIEMENS-ALLIS	LA-600	600A
	LA, II		600A
	LSI, 80-4000A		600A
B100;BK-EP-2B	UTILITY RELAY CO.	LA-600B	600A
	AC-Pro Retrofit		600A
	for Siemens-Allis LA		600A
B100;BK-EP-2C	SIEMENS-ALLIS	LA-600	600A
	LA, II		600A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	LSI, 80-4000A		600A
B100;BK-EP-2D	UTILITY RELAY CO.	LA-600B	600A
	AC-Pro Retrofit		600A
	for Siemens-Allis LA		600A
B100;BK-EP-3A	UTILITY RELAY CO.	LA-600B	600A
	AC-Pro Retrofit		600A
	for Siemens-Allis LA		600A
B100;BK-EP-3B	SIEMENS-ALLIS	LA-600	600A
	LA, II		600A
	LSI, 80-4000A		600A
B100;BK-EP-3C	SIEMENS-ALLIS	LA-600	600A
	LA, II		600A
	LSI, 80-4000A		600A
B100;BK-EP-3D	UTILITY RELAY CO.	LA-600B	600A
	AC-Pro Retrofit		600A
	for Siemens-Allis LA		600A
B100;BK-FIRE-PU	SIEMENS	FXD6-A	250A
	FXD6-A Sentron		225A
	70-250A		

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-KITCHEN	SQUARE D	400A	400A
	LA		300A
	125-400A		
B100;BK-LA108	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-LS1DP	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-LS1L1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-LS1R1	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		60A
	15-100A, 2-3 Pole		
B100;BK-LS2DP	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-LS2L1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-LS2R1	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		60A
	15-100A, 2-3 Pole		
B100;BK-LS2WL1	SQUARE D	FA	20A
	FA		20A
	15-100A		
B100;BK-LS3DP	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-LS3L1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-LS3R1	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		60A
	15-100A, 2-3 Pole		
B100;BK-LS4DP	SQUARE D	100	100A
	IF I-LIM		100A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	60-100A		
B100;BK-LS4L1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-LS4R1	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		60A
	15-100A, 2-3 Pole		
B100;BK-LS5DP	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-LS5L1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-LS5R1	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		60A
	15-100A, 2-3 Pole		
B100;BK-LSB2L1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-LSBDP2	SQUARE D	FA	100A
	FA		100A
	15-100A		
B100;BK-LSMCC-G	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-MCCC2	WESTINGHOUSE	FB	40A
	FB		15A
	15-150A		
B100;BK-MCC-CB	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-MCCCI	SQUARE D	250A	250A
	KA		200A
	70-250A		
B100;BK-MCCD2	SQUARE D	150A	150A
	KA		125A
	70-250A		

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-MCCD3	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-MCCD4	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-MCCD5	SQUARE D	100	100A
	IF I-LIM		100A
	60-100A		
B100;BK-MCCDB	SQUARE D	LA	400A
	LA		300A
	125-400A, Inst 5-10		
B100;BK-MCCEB3	SQUARE D	500A	500A
	LC		500A
	300-600A		
B100;BK-MDP-H	GE	SGHA	600A
	SGHA, Spectra RMS		500A
	125-600A		
B100;BK-MED-V1	WESTINGHOUSE	FB	40A
	FB		30A
	15-150A		
B100;BK-M-P1	SQUARE D	FA	100A
	FA		100A
	15-100A		
B100;BK-M-P2	SQUARE D	FA	100A
	FA		100A
	15-100A		
B100;BK-M-P3	SQUARE D	FA	100A
	FA		100A
	15-100A		
B100;BK-M-P4	SQUARE D	FA	100A
	FA		100A
	15-100A		
B100;BK-M-S5	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-M-S6	SQUARE D	150A	150A
	KA		125A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	70-250A		
B100;BK-M-S7	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-M-S8	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-P-2R1	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-P-2R2	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-P-2R3	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-P-2R4	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-P-2R5	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-P-2R6	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-P-2R7	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-P-2R8	SQUARE D	250A	250A
	KA		225A
	70-250A		
B100;BK-RP1	SQUARE D	100A	100A
	QO, 3-Pole		100A
	15-100A		
B100;BK-RP1,2	SQUARE D	250A	250A
	KA		250A
	70-250A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-RP2	SQUARE D	100A	100A
	QO, 3-Pole		100A
	15-100A		
B100;BK-RP3	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-RP4	SQUARE D	150A	150A
	KA		150A
	70-250A		
B100;BK-RP6,1	SQUARE D	100A	100A
	QO, 3-Pole		100A
	15-100A		
B100;BK-RP6,2	SQUARE D	100A	100A
	QO, 3-Pole		100A
	15-100A		
B100;BK-S1-2A	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S1-2B	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S1-2C	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S1-3C	UTILITY RELAY CO.	LA-600B	600A
	AC-Pro Retrofit		600A
	for Siemens-Allis LA		600A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-S2-10A	SIEMENS-ALLIS	LA-600	600A
	LA, II		600A
	LSI, 80-4000A		600A
B100;BK-S2-10B	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S2-10D	UTILITY RELAY CO.	LA-1600B	1600A
	AC-Pro Retrofit		800A
	for Siemens-Allis LA		
B100;BK-S2-2A	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S2-2B	UTILITY RELAY CO.	LA-600B	600A
	AC-Pro Retrofit		600A
	for Siemens-Allis LA		600A
B100;BK-S2-2C	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-S2-3A	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S2-3B	UTILITY RELAY CO.	LA-600B	600A
	AC-Pro Retrofit		600A
	for Siemens-Allis LA		600A
B100;BK-S2-3C	UTILITY RELAY CO.	LA-600B	600A
	AC-Pro Retrofit		600A
	for Siemens-Allis LA		600A
B100;BK-S2-4A	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S2-4B	SIEMENS-ALLIS	LA-600	600A
	LA, II		600A
	LSI, 80-4000A		600A
B100;BK-S2-4C	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S2-4D	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-S2-5A	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S2-5B	UTILITY RELAY CO.	LA-600B	600A
	AC-Pro Retrofit		600A
	for Siemens-Allis LA		600A
B100;BK-S2-5C	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S2-5D	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S2-7A	SIEMENS-ALLIS	LA-600	600A
	LA, II		600A
	LSI, 80-4000A		600A
B100;BK-S2-7B	UTILITY RELAY CO.	LA-600B	600A
	AC-Pro Retrofit		600A
	for Siemens-Allis LA		600A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-S2-8A	UTILITY RELAY CO.	LA-600B	600A
	AC-Pro Retrofit		600A
	for Siemens-Allis LA		600A
B100;BK-S2-8C	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S2-8D	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S2-9A	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-S2-9B	UTILITY RELAY CO.	LA-600B	600A
	AC-Pro Retrofit		600A
	for Siemens-Allis LA		600A
B100;BK-S2-9C	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-S2-9D	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B100;BK-T1-A-S	UTILITY RELAY CO.	LA-4000A	4000A
	AC-Pro Retrofit		4000A
	for Siemens-Allis LA		
B100;BK-T2-A-S-1B	UTILITY RELAY CO.	LA-4000A	4000A
	AC-Pro Retrofit		4000A
	for Siemens-Allis LA		
B100;BK-T2B-S-11B	UTILITY RELAY CO.	LA-4000A	4000A
	AC-Pro Retrofit		4000A
	for Siemens-Allis LA		
B100;BK-T-BMEP	CUTLER-HAMMER	FB	50A
	FB Tri-Pac		50A
	15-100A		
B100;BK-T-C1R1,2	SQUARE D	FA	45A
	FA		45A
	15-100A		
B100;BK-T-C1R3,4	SQUARE D	FA	100A
	FA		100A
	15-100A		
B100;BK-T-C2R1-3P	SQUARE D	250A	250A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	KA		175A
	70-250A		
B100;BK-T-C2R4,5	SQUARE D	250A	250A
	KA		175A
	70-250A		
B100;BK-TC2WDP	SQUARE D	70A	70A
	ED		70A
	15-125A		
B100;BK-T-C3R1	SQUARE D	FA	25A
	FA		25A
	15-100A		
B100;BK-T-C4R1,2P	SQUARE D	150A	150A
	KA		125A
	70-250A		
B100;BK-T-C5R1,2	SQUARE D	FA	45A
	FA		45A
	15-100A		
B100;BK-T-E1R124	SQUARE D	FA	60A
	FA		60A
	15-100A		
B100;BK-TE1R3S	SQUARE D	100	100A
	Q1L-Q1U		100A
	60-100A		
B100;BK-T-E2RP	SQUARE D	FA	45A
	FA		45A
	15-100A		
B100;BK-T-E3R1,2P	SQUARE D	FA	45A
	FA		45A
	15-100A		
B100;BK-T-E4R1,2	SQUARE D	FA	45A
	FA		45A
	15-100A		
B100;BK-T-E5R12P	SQUARE D	FA	45A
	FA		45A
	15-100A		
B100;BK-T-EBRP	SQUARE D	FA	45A
	FA		45A
	15-100A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-T-EBRS	FEDERAL PACIFIC	NEF	100A
	NE & NEF, 3-Pole		100A
	30-100A		
B100;BK-TIE-S2-6B	UTILITY RELAY CO.	LA-4000A	4000A
	AC-Pro Retrofit		4000A
	for Siemens-Allis LA		
B100;BK-T-LS1R1	SQUARE D	FA	25A
	FA		25A
	15-100A		
B100;BK-T-LS2R1	SQUARE D	FA	25A
	FA		25A
	15-100A		
B100;BK-T-LS3R1	SQUARE D	FA	25A
	FA		25A
	15-100A		
B100;BK-T-LS4R1P	SQUARE D	FA	25A
	FA		25A
	15-100A		
B100;BK-T-LS5R1P	SQUARE D	FA	25A
	FA		25A
	15-100A		
B100;BK-T-LSBR1P	SQUARE D	FA	25A
	FA		25A
	15-100A		
B100;BK-T-RL1,2P	SQUARE D	FH	100A
	FH		100A
	15-100A		
B100;BK-U-EBDPRI	SQUARE D	FD	100A
	FD, 2 & 3-Pole		100A
	15-100A		
B100;BK-UNKNOW	SQUARE D	A1B, 2-Pole	100A
	A1, B/L/U		60A
	15-100A, 2-3 Pole		

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-UNKNOW-M	SQUARE D	A1B, 2-Pole	100A
	A1, B/L/U		60A
	15-100A, 2-3 Pole		
B100;BK-UNNAM1	SQUARE D	A1B, 2-Pole	100A
	A1, B/L/U		60A
	15-100A, 2-3 Pole		
B100;BK-UNNAM1-M	SQUARE D	A1B, 2-Pole	100A
	A1, B/L/U		60A
	15-100A, 2-3 Pole		
B100;BK-UNNAM2	SQUARE D	A1B, 2-Pole	50A
	A1, B/L/U		50A
	15-100A, 2-3 Pole		
B100;BK-UNNAM2-M	SQUARE D	A1B, 2-Pole	50A
	A1, B/L/U		50A
	15-100A, 2-3 Pole		
B100;BK-V100P1	CUTLER-HAMMER	LA	400A
	LA Tri-Pac		400A
	70-400A		
B100;BK-V100P2	CUTLER-HAMMER	LA	400A
	LA Tri-Pac		400A
	70-400A		
B100;BK-V100P3	SQUARE D	250A	250A
	KH		200A
	70-250A		
B100;BK-VFDP1	CUTLER-HAMMER	FB	70A
	FB Tri-Pac		70A
	15-100A		
B100;BR-S2-8B	SIEMENS-ALLIS	600	600A
	LA, II		600A
	GF, 80-4000A		600A
B103;BK-A-CE	SQUARE D	250A	250A
	KA		200A
	70-250A		
B103;BK-A-EE	SQUARE D	FA	60A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	FA		60A
	15-100A		
B103;BK-DEG	SQUARE D	400A	400A
	LA		300A
	125-400A		
B103;BK-N2D1-M	SQUARE D	1000A	1000A
	MA		1000A
	125-1200A		
B103;BK-N2D2-M	SQUARE D	FA	100A
	FA		100A
	15-100A		
B103;BK-N2L1-M	SQUARE D	FA	100A
	FA		100A
	15-100A		
B103;BK-N2R1	SQUARE D	150A	150A
	KA		150A
	70-250A		
B103;BK-N2R1-M	SQUARE D	250A	250A
	KA		225A
	70-250A		
B103;BK-N2R2	SQUARE D	150A	150A
	KA		150A
	70-250A		
B103;BK-N2R3	SQUARE D	150A	150A
	KA		150A
	70-250A		
B103;BK-N2R3-M	SQUARE D	250A	250A
	KA		225A
	70-250A		
B103;BK-N2R4	SQUARE D	150A	150A
	KA		150A
	70-250A		
B103;BK-N2R4-M	SQUARE D	250A	250A
	KA		225A
	70-250A		
B103;BK-N2R5	SQUARE D	150A	150A
	KA		150A
	70-250A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B103;BK-N2R5-M	SQUARE D	250A	250A
	KA		225A
	70-250A		
B103;BK-NC1R1-M	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B103;BK-NC2L1-M	SQUARE D	FA	100A
	FA		100A
	15-100A		
B103;BK-NC2R1-M	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B103;BK-NC2R2-M	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B103;BK-NC2R3-M	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B103;BK-NE2L1-M	SQUARE D	FA	100A
	FA		100A
	15-100A		
B103;BK-NE2R1	SQUARE D	A1B, 3-Pole	50A
	A1, B/L/U		50A
	15-100A, 2-3 Pole		
B103;BK-NE2R1-M	SQUARE D	A1B, 2-Pole	25A
	A1, B/L/U		20A
	15-100A, 2-3 Pole		
B105;BK-36H-P	CUTLER-HAMMER	EHB	50A
	EHB, 2 & 3-Pole		50A
	15-100A		
B105;BK-36L	SQUARE D	QOM2-VH	100A
	QOM2-VH		100A
	100-225A		
B105;BK-36P	CUTLER-HAMMER	BAB	100A
	BAB, 3-Pole		100A
	15-100A		
B105;BK-36P,H	CUTLER-HAMMER	EHB	50A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	EHB, 2 & 3-Pole		50A
	15-100A		
B105;BK-36P-P	CUTLER-HAMMER	EHB	50A
	EHB, 2 & 3-Pole		50A
	15-100A		
B106;BK-B100EP	SQUARE D	600A	600A
	MA		500A
	125-1200A		
B106;BK-C2	SQUARE D	ME	400A
	ME, Micrologic		400A
	GF, 400-800A		400A
B106;BK-C2-E1A	SQUARE D	EH	100A
	EH		100A
	15-100A		
B106;BK-C2-E1B	SQUARE D	EH	100A
	EH		100A
	15-100A		
B106;BK-C2-E1C	SQUARE D	EH	100A
	EH		100A
	15-100A		
B106;BK-C2-E1D	SQUARE D	EH	100A
	EH		100A
	15-100A		
B106;BK-C3	SQUARE D	ME	800A
	ME, Micrologic		800A
	GF, 400-800A		600A
B106;BK-C5	SQUARE D	ME	800A
	ME, Micrologic		800A
	GF, 400-800A		800A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B106;BK-C5-EKL	SQUARE D	EH	70A
	EH		70A
	15-100A		
B106;BK-EL-P1	SQUARE D	FA	70A
	FA		70A
	15-100A		
B106;BK-EL-S1	SQUARE D	FA	70A
	FA		70A
	15-100A		
B106;BK-EMDPH	SQUARE D	600A	600A
	MA		600A
	125-1200A		
B106;BK-EMDPH1	SQUARE D	150A	150A
	KA		125A
	70-250A		
B106;BK-EMDPH2	SQUARE D	400A	400A
	LA		300A
	125-400A		
B106;BK-EMDPH3	SQUARE D	150A	150A
	KA		125A
	70-250A		
B106;BK-EMDPH4	SQUARE D	FH	50A
	FH		50A
	15-100A		
B106;BK-EMDPL	SQUARE D	250A	250A
	KA		225A
	70-250A		
B106;BK-EV	SQUARE D	40A	40A
	QO-VH, 3-Pole		40A
	15-150A		
B106;BK-FP-PRO	SQUARE D	150A	150A
	KA		125A
	70-250A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B106;BK-KH	SQUARE D	FH	100A
	FH		100A
	15-100A		
B106;BK-KL	SQUARE D	200	200A
	Q2-H/Q2L-H		200A
	100-225A		
B106;BK-L1A	SQUARE D	LA	400A
	LA		400A
	125-400A, Inst 5-10		
B106;BK-L1B	SQUARE D	LA	400A
	LA		400A
	125-400A, Inst 5-10		
B106;BK-L1C	SQUARE D	600A	600A
	MA		600A
	125-1200A		
B106;BK-L1D	SQUARE D	LA	400A
	LA		400A
	125-400A, Inst 5-10		
B106;BK-L2A	SQUARE D	200	200A
	Q2-H/Q2L-H		200A
	100-225A		
B106;BK-L2B	SQUARE D	200	200A
	Q2-H/Q2L-H		200A
	100-225A		
B106;BK-L2C	SQUARE D	400A	400A
	LA		400A
	125-400A		
B106;BK-L2D	SQUARE D	225	225A
	Q2-H/Q2L-H		225A
	100-225A		
B106;BK-MDPL-M	SQUARE D	1200A	1200A
	NA		1200A
	600-1200A		
B106;BK-N	SQUARE D	NE	1200A
	NE, Micrologic		1200A
	GF, 600-1200A		1200A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B106;BK-OL	SQUARE D	FH	100A
	FH		100A
	15-100A		
B106;BK-PPH	SQUARE D	150A	150A
	KA		150A
	70-250A		
B106;BK-PPH1-L	SQUARE D	EHB-AS	20A
	EHB-AS		20A
	15-30A		
B106;BK-PPH1-M	SQUARE D	150A	150A
	KA		125A
	70-250A		
B106;BK-PPH2-R	SQUARE D	EHB-AS	20A
	EHB-AS		20A
	15-30A		
B106;BK-PPL1	SQUARE D	40A	40A
	QO-VH, 3-Pole		40A
	15-150A		
B106;BK-PPL2-S	SQUARE D	40A	40A
	QO-VH, 3-Pole		40A
	15-150A		
B106;BK-R1A	SQUARE D	100	100A
	Q2-H/Q2L-H		100A
	100-225A		
B106;BK-R1B	SQUARE D	150A	150A
	QO-VH, 3-Pole		150A
	15-150A		
B106;BK-R1C	SQUARE D	150	150A
	Q2-H/Q2L-H		150A
	100-225A		
B106;BK-R1D	SQUARE D	100A	100A
	QO-VH, 3-Pole		100A
	15-150A		
B106;BK-R2A	SQUARE D	100A	100A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	QO-VH, 3-Pole		100A
	15-150A		
B106;BK-R2B	SQUARE D	100A	100A
	QO-VH, 3-Pole		100A
	15-150A		
B106;BK-R2C	SQUARE D	150	150A
	Q2-H/Q2L-H		150A
	100-225A		
B106;BK-R2D	SQUARE D	150A	150A
	QO-VH, 3-Pole		150A
	15-150A		
B20;BK-20L11-1	SQUARE D	400A	400A
	LA		400A
	125-400A		
B20;BK-20L12	SQUARE D	225	225A
	Q2-H/Q2L-H		225A
	100-225A		
B20;BK-20L12-L	SQUARE D	100A	100A
	QO, 2-Pole		100A
	15-125A		
B20;BK-20L12-R	SQUARE D	60A	60A
	QO, 3-Pole		60A
	15-100A		
B20;BK-20L14	SQUARE D	100	100A
	Q1L-Q1U		100A
	60-100A		
B20;BK-20L14-M	SQUARE D	100A	100A
	QO, 3-Pole		100A
	15-100A		
B20;BK-20L15	SQUARE D	100	100A
	Q1L-Q1U		100A
	60-100A		
B20;BK-20L15-M	SQUARE D	Q1	70A
	Q1 (Obs.)		70A
	15-150A		
B20;BK-20MDP	CUTLER-HAMMER	HKD	250A
	HKD, RMS 310		250A
	LS, 125-250A Adj Plug		250A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B20;BK-20MDP-1	SQUARE D	FA	40A
	FA		40A
	15-100A		
B20;BK-20MDP-2	SQUARE D	250A	250A
	KA		200A
	70-250A		
B20;BK-20MDP-4	SQUARE D	FA	70A
	FA		70A
	15-100A		
B20;BK-E8PBJ1A1	SQUARE D	FA	60A
	FA		60A
	15-100A		
B20;BK-E8PBJ1A2	SQUARE D	A1B	100A
	A1, B/L/U		60A
	60-100A, 1-3 Pole		
B20;BK-P20L15	SQUARE D	70	70A
	Q1L-Q1U		70A
	60-100A		
B22;BK-41-P	GE	TED	150A
	TED (E-150 Line)		150A
	15-150A		
B22;BK-AC1	GE	TED	100A
	TED (E-100 Line)		100A
	15-100A		
B22;BK-AC2	GE	TED	100A
	TED (E-100 Line)		100A
	15-100A		
B22;BK-AC3	GE	TED	100A
	TED (E-100 Line)		100A
	15-100A		
B22;BK-ACD	GE	TKMA	600A
	TKMA		300A
	300-1200A		
B22;BK-ELE2	SQUARE D	100A	100A
	QO, 3-Pole		100A
	15-100A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B22;BK-EMER	SQUARE D	FA	100A
	FA		100A
	15-100A		
B22;BK-GEN	SQUARE D	50A	50A
	QO, 3-Pole		50A
	15-100A		
B22;BK-GEN-M	CUTLER-HAMMER	BAB	50A
	BAB, 3-Pole		50A
	15-100A		
B22;BK-H1	SQUARE D	FA	100A
	FA		100A
	15-100A		
B22;BK-H12	GE	TED	80A
	TED (E-100 Line)		70A
	15-100A		
B22;BK-H1,2,3	GE	TED	100A
	TED (E-100 Line)		100A
	15-100A		
B22;BK-H12-M	SQUARE D	FA	100A
	FA		100A
	15-100A		
B22;BK-H2	SQUARE D	FA	100A
	FA		100A
	15-100A		
B22;BK-H3	SQUARE D	FA	100A
	FA		100A
	15-100A		
B22;BK-HB	GE	TFJ	225A
	TFJ		225A
	70-225A		
B22;BK-L1	SQUARE D	100A	100A
	QO, 3-Pole		100A
	15-100A		
B22;BK-L1,2,3	SQUARE D	Q2	225A
	Q2		225A
	100-225A		
B22;BK-L2	SQUARE D	100	100A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	Q1L-Q1U		100A
	60-100A		
B22;BK-L3	SQUARE D	100	100A
	Q1L-Q1U		100A
	60-100A		
B22;BK-LB1	GE	TFJ	225A
	TFJ		200A
	70-225A		
B22;BK-LB1-M	SQUARE D	400A	400A
	LA		300A
	125-400A		
B22;BK-LB2	SQUARE D	FA	100A
	FA		100A
	15-100A		
B22;BK-MDP	GE	SGLA	400A
	SG, Spectra RMS Mag-Break		300A
	125-600A		
B22;BK-M-ELE2	SQUARE D	225A	225A
	IK		200A
	110-250A		
B22;BK-M-ELE3	SQUARE D	Q2M	200A
	Q2M		200A
	100-225A		
B22;BK-M-TS1E	CUTLER-HAMMER	DA	400A
	DA		300A
	250-400A		
B22;BK-TS1	SQUARE D	FA	70A
	FA		70A
	15-100A		
B22;BK-TS2	SQUARE D	Q2	225A
	Q2		225A
	100-225A		
B5;BK-5L205	SQUARE D	FA	100A
	FA		100A
	15-100A		
B5;BK-5L21	SQUARE D	250A	250A
	KA		225A
	70-250A		

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B5;BK-5L31	GE	TJK	400A
	TJK		225A
	125-600A		
B5;BK-5L31-M	SQUARE D	A1B, 3-Pole	100A
	A1, B/L/U		100A
	15-100A, 2-3 Pole		
B5;BK-5MDP	GE	TKMA	600A
	TKMA		350A
	300-1200A		
B5;BK-5MDP-1	GE	TFJ	225A
	TFJ		225A
	70-225A		
B5;BK-5MDP-3	GE	TFJ	80A
	TFJ		70A
	70-225A		
B5;BK-5MDP-4	GE	TFJ	225A
	TFJ		200A
	70-225A		
B5;BK-5MDP-6	GE	TFJ	110A
	TFJ		100A
	70-225A		
B5;BK-5MDP-7	GE	TFJ	110A
	TFJ		100A
	70-225A		
B5;BK-5MDP-8	GE	TFJ	225A
	TFJ		225A
	70-225A		
B5;BK-EMER	SQUARE D	FA	100A
	FA		100A
	15-100A		
B5;BK-L1	SQUARE D	225	225A
	Q2-Q2L		225A
	100-225A		
B5;BK-L1B	SQUARE D	150	150A
	QO-VH		150A
	110-150A		
B5;BK-NORMAL	SQUARE D	250A	250A

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LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	KA		225A
	70-250A		
B5;BK-NORMAL-M	GE	TQD	225A
	TQD		200A
	100-225A		
B5;BK-PL21	GE	TQD	225A
	TQD		150A
	100-225A		
B5;BK-PL22	GE	TQD	225A
	TQD		150A
	100-225A		
B5;BK-PL22M	SQUARE D	Q2M	225A
	Q2M		225A
	100-225A		
B5;BK-WIREWAYS	GE	TJK	400A
	TJK		400A
	125-600A		
B5;BK-X	SQUARE D	100	100A
	Q1L-Q1U		100A
	60-100A		
B6;BK-6L11A1	SQUARE D	Q2M	150A
	Q2M		150A
	100-225A		
B6;BK-6L11A2	SQUARE D	Q2	100A
	Q2		100A
	100-225A		
B6;BK-6L11B1	SQUARE D	Q2	100A
	Q2		100A
	100-225A		
B6;BK-6LDP1-3	SIEMENS	QJH	225A
	QJH		225A
	125-225A		
B6;BK-6LDP1-4	SIEMENS	QJH	225A
	QJH		200A
	125-225A		
B6;BK-6LDP1-8	SIEMENS	QJH2	150A
	QJH2		150A
	60-225A		

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B6;BK-6LDP-1A	SQUARE D	Q2	150A
	Q2		150A
	100-225A		
B6;BK-6MDP	CUTLER-HAMMER	CMDL	800A
	CNDC Optim 550/750/1050		800A
	LSI, 400-800A		800A
B6;BK-6PDP1-3	SIEMENS	JD2	300A
	JD2		250A
	200-400A		
B6;BK-6PDP1-4	SIEMENS	JD2	300A
	JD2		250A
	200-400A		
B6;BK-T-6A-P	WESTINGHOUSE	LA	225A
	LAB, LA		225A
	125-600A		
B6;BK-T-6A-S	SIEMENS	LL	600A
	LL		500A
	450-600A		
B6;BK-T-6B-P	CUTLER-HAMMER	LD	600A
	LD		450A
	300-600A		
B6;BK-T-6B-S	SIEMENS-ALLIS	KM	800A
	KM		800A
	250-800A		
B7;BK-P1	SQUARE D	Q2M	200A
	Q2M		200A
	100-225A		
B7;BK-PP	SQUARE D	Q2M	150A
	Q2M		150A
	100-225A		
B8;BK-1PA-D	SQUARE D	QOB-AS	20A
	QOB-AS		20A
	15-30A		
B8;BK-1PA-M	SQUARE D	100A	100A
	QO, 3-Pole		100A
	15-100A		

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B8;BK-1PB	SQUARE D	100A	100A
	QO, 3-Pole		100A
	15-100A		
B8;BK-8L11-1	GE	TQD	225A
	TQD		200A
	100-225A		
B8;BK-8L11-2	GE	TQD	225A
	TQD		200A
	100-225A		
B8;BK-8PB1	WESTINGHOUSE	LAB	225A
	LAB, LA		200A
	125-600A		
B8;BK-8PB1L	WESTINGHOUSE	FB	70A
	FB		70A
	15-150A		
B8;BK-8PB1R	WESTINGHOUSE	FB	40A
	FB		30A
	15-150A		
B8;BK-8PBJ1-2	GE	THQL	100A
	THQL		80A
	15-125A		
B8;BK-8PBJ1-3	GE	THQL	100A
	THQL		80A
	15-125A		
B8;BK-8PBJ-CK1	GE	TQD	225A
	TQD		200A
	100-225A		
B8;BK-8PBJ-CK11	GE	TEB	50A
	TEB		30A
	15-100A		
B8;BK-8PBJ-CK2	GE	TQD	225A
	TQD		200A
	100-225A		
B8;BK-8PBJ-CK5	GE	TQD	225A
	TQD		200A
	100-225A		
B8;BK-8PBJ-CK7	GE	TEB	100A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	TEB		100A
	15-100A		
B8;BK-8PBJ-CK9	GE	TEB	50A
	TEB		30A
	15-100A		
B8;BK-A-1E	WESTINGHOUSE	LA	600A
	LAB, LA		500A
	125-600A		
B8;BK-A-1N	SQUARE D	PG	1200A
	Powerpact P-Frame, 6.0A/P/H		600A
	LSI, 250-1200A, UL		
B8;BK-GR-1	GE	TFK	225A
	TFK		225A
	70-225A		
B8;BK-GR-2L	GE	TFJ	225A
	TFJ		200A
	70-225A		
B8;BK-GR-2R	GE	TEB	80A
	TEB		80A
	15-100A		
B8;BK-GRA1	SQUARE D	QOB-AS	30A
	QOB-AS		30A
	15-30A		
B8;BK-GRA2	SQUARE D	QOB-AS	30A
	QOB-AS		30A
	15-30A		
B8;BK-MHC26-1	SQUARE D	30A	30A
	QO, 2-Pole		30A
	15-125A		
B8;BK-P-8LB1	SQUARE D	QOM1-VH	100A
	QOM1-VH		100A
	50-125A		
B9A;BK-9ALDP	CUTLER-HAMMER	MA	800A
	MA		800A
	125-800A		
B9A;BK-9AMDP	WESTINGHOUSE	NC	1200A
	NC SELTRNC		1200A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	800-1200A		
B9A;BK-A-2N	CUTLER-HAMMER	HFD	100A
	HFD		100A
	15-225A		
B9A;BK-A-3N	CUTLER-HAMMER	HFD	150A
	HFD		150A
	15-225A		
B9A;BK-EDP	CUTLER-HAMMER	FD	100A
	FD		100A
	15-225A		
B9A;BK-EDP1-L	SQUARE D	100	100A
	Q2-Q2L		100A
	100-225A		
B9A;BK-EDP1-M	SQUARE D	150	150A
	Q2-Q2L		150A
	100-225A		
B9A;BK-ELEVATR	CUTLER-HAMMER	HFD	100A
	HFD		100A
	15-225A		
B9A;BK-ELP-L	CUTLER-HAMMER	GHB	100A
	GHB		70A
	15-100A		
B9A;BK-ELP-M	CUTLER-HAMMER	FD	100A
	FD		100A
	15-225A		
B9A;BK-LP	CUTLER-HAMMER	HFD	100A
	HFD		100A
	15-225A		
B9A;BK-LVP	CUTLER-HAMMER	QBHW	30A
	QBHW, 3-Pole		30A
	15-100A		
B9A;BK-MCC-9A	WESTINGHOUSE	LC	600A
	LC SELTRNC		600A
	300-600A		

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B9A;BK-PP1	CUTLER-HAMMER	CAH	225A
	CAH		225A
	125-225A		
B9A;BK-PP2	CUTLER-HAMMER	CAH	225A
	CAH		225A
	125-225A		
B9A;BK-PP3	CUTLER-HAMMER	CAH	225A
	CAH		225A
	125-225A		
B9A;BK-T9A-1	CUTLER-HAMMER	HKD	400A
	HKD		400A
	100-400A		
B9;BK-9ELDP	CUTLER-HAMMER	CA	225A
	CA		175A
	125-225A		
B9;BK-9L11	CUTLER-HAMMER	CA	225A
	CA		150A
	125-225A		
B9;BK-9L21	CUTLER-HAMMER	CA	225A
	CA		225A
	125-225A		
B9;BK-9L22	CUTLER-HAMMER	CA	225A
	CA		225A
	125-225A		
B9;BK-9L22-M	SQUARE D	250A	250A
	KA		225A
	70-250A		
B9;BK-9LDP	CUTLER-HAMMER	DA	400A
	DA		400A
	250-400A		
B9;BK-9MDP-1B	WESTINGHOUSE	SPB-50	800A
	POW R-TP 7		800A
	SPB 50		
B9;BK-9MDP-2B	WESTINGHOUSE	SPB-50	250A
	POW R-TP 7		200A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	SPB 50		
B9;BK-9MDP-2C	WESTINGHOUSE	SPB-50	800A
	POW R-TP 7		300A
	SPB 50		
B9;BK-A-1E-B9A	SQUARE D	FA	100A
	FA		100A
	15-100A		
B9;BK-A-1E-BST	SQUARE D	FA	100A
	FA		100A
	15-100A		
B9;BK-G-A-1E	MERLIN GERIN	NSJ400N	400A
	NSJ400, STR23SP		400A
	LS, 60-400A		
B9;BK-T9ELDP	CUTLER-HAMMER	EHB	70A
	EHB, 2 & 3-Pole		70A
	15-100A		
B9;BK-TEL21	CUTLER-HAMMER	EHB	70A
	EHB, 2 & 3-Pole		70A
	15-100A		
B9;BK-TLDP	CUTLER-HAMMER	EHB	100A
	EHB, 2 & 3-Pole		100A
	15-100A		
BMRI;BK-CHILLER	GE	THED	100A
	THED		100A
	15-150A		
BMRI;BK-EMH	GE	TEY	70A
	TEY, 2 & 3-Pole		70A
	15-100A		
BMRI;BK-EML	GE	TEY	40A
	TEY, 2 & 3-Pole		40A
	15-100A		
BMRI;BK-EML-M	GE	THHQB	50A
	THHQB		50A

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
	15-100A		
BMRI;BK-H-P	GE	SFPA	250A
	SFPA, Spectra RMS		125A
	70-250A		
BMRI;BK-L	GE	TQD	225A
	TQD		225A
	100-225A		
BMRI;BK-UPS	GE	SGHA	600A
	SGHA, Spectra RMS		350A
	125-600A		
BT25;BK-MSPP1	SQUARE D	100A	100A
	QO, 2-Pole		100A
	15-125A		
BT34;BK-T34A	SIEMENS	ED4	100A
	ED4 Sentron, 1-Pole		100A
	15-100A		
BT34;BK-T34A-L	SIEMENS	QP	70A
	QP, 2 & 3-Pole		60A
	15-125A		
BT36;BK-36P1A	SQUARE D	EH	50A
	EH		50A
	15-100A		
BT36;BK-36P1B	SQUARE D	EH	50A
	EH		50A
	15-100A		
BT36;BK-36P2	SQUARE D	KD	200A
	KD		200A
	100-250A		
BT36;BK-T36	FEDERAL PACIFIC	NEF	100A
	NE & NEF, 3-Pole		50A
	30-100A, Page 14		

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (4000A)
Fixed (730-13)
Fixed
Fixed
Fixed
Fixed (730-7, 100A)
Fixed
Thermal Curve
INST HI (1250A)
Thermal Curve (Fixed)
INST Fixed (800A)
Thermal Curve (Fixed)
INST (960-2000A) HI (2000A)
Thermal Curve (Fixed)
INST Fixed (750A)
Thermal Curve
INST HI (3000A)
Thermal Curve (Fixed)
INST Fixed (800A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve (Fixed)
INST Fixed (1275A)
Thermal Curve (Fixed)
INST Fixed (750A)
Thermal Curve (Fixed)
INST Fixed (750A)
Thermal Curve (Fixed)
INST (LO-HI) LO (2000A)
Thermal Curve (Fixed)
INST Fixed (800A)
Thermal Curve (Fixed)
INST (LO-HI) HI (2000A)
Fixed
Thermal Curve (Fixed)
INST (750-1600A) HI (1600A)
Thermal Curve (Fixed)
INST Fixed (687.5A)
Fixed (730-6, 60A)
Fixed
Fixed

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
Fixed
Fixed
Fixed
Opening Clearing Curve
Fixed
Opening Clearing Curve
Thermal Curve
INST HI (2000A)
Fixed
Fixed
Thermal Curve (Fixed)
INST Fixed (800A)
Thermal Curve (Fixed)
INST Fixed (800A)
Thermal Curve (Fixed)
INST Fixed (800A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve (Fixed)
INST (2000-4000A) HI (4000A)
Thermal Curve (Fixed)
INST Fixed (800A)
Opening Clearing Curve
Opening Clearing Curve
Fixed
Thermal Curve
INST HI (2000A)
Fixed
Thermal Curve
Fixed
Thermal Curve
Fixed
Thermal Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
Thermal Curve
Thermal Curve
Thermal Curve
Thermal Curve
Thermal Curve
Thermal Curve
Thermal Curve
Fixed
Thermal Curve
Thermal Curve
Thermal Curve
Thermal Curve
Thermal Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
Fixed
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (1250A)
Fixed
Thermal Curve
Instantaneous 10 (3000A)
Thermal Curve
Instantaneous 10 (3000A)
Thermal Curve
INST HI (1000A)
Thermal Curve
INST HI (2000A)
Opening Clearing Curve
Thermal Curve
INST HI (1000A)
Thermal Curve
INST HI (1000A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (1000A)
Thermal Curve
INST HI (1500A)
Fixed
Thermal Curve
INST HI (3000A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (1750A)
Thermal Curve (Fixed)
INST 7.2 (7200A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Opening Clearing Curve
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Fixed
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
Thermal Curve
INST HI (1750A)
Fixed
Thermal Curve
INST HI (1750A)
Fixed
Fixed
Opening Clearing Curve
Thermal Curve
INST HI (3500A)
Fixed
Fixed
Thermal Curve
INST HI (1250A)
Thermal-Magnetic Curve
Thermal-Magnetic Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
Instantaneous 10 (3000A)
Fixed (730-12)
Fixed
Thermal Curve
INST HI (2250A)
Fixed
Fixed
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed (730-12)
Opening Clearing Curve
Fixed
Fixed
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (1250A)
Fixed
Thermal Curve
Instantaneous 10 (1750A)
Thermal Curve
Instantaneous 10 (3000A)
Fixed
Fixed
Fixed
Thermal Curve (Fixed)
INST (5-10 x Trip) 10.0 (2250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve (Fixed)
INST (5-10 x Trip) 10.0 (2250A)
Thermal Curve (Fixed)
INST (5-10 x Trip) 10.0 (2250A)
Thermal Curve (Fixed)
INST (5-10 x Trip) 10.0 (2250A)
Thermal Curve (Fixed)
INST (5-10 x Trip) 10.0 (2250A)
Thermal Curve (Fixed)
INST (5-10 x Trip) 10.0 (2250A)
Fixed
Fixed
Fixed
Fixed
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
LTD
INST 10.0 (2500A)
Opening Clearing Curve
LTD
INST 10.0 (2500A)
LTD
INST 10.0 (2500A)
Opening Clearing Curve
Opening Clearing Curve
Opening Clearing Curve
Thermal Curve
INST HI (2000A)
Thermal Curve
INST HI (1750A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (4000A)
Fixed
Thermal Curve
Instantaneous 10 (1500A)
Fixed
Thermal Curve
Instantaneous 10 (1500A)
Thermal Curve
INST HI (1500A)
Opening Clearing Curve
Opening Clearing Curve
Opening Clearing Curve
Fixed
Opening Clearing Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Opening Clearing Curve
Opening Clearing Curve
Thermal Curve
INST 6 (7200A)
Opening Clearing Curve
Fixed
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (1250A)
Fixed
Thermal Curve
Instantaneous 10 (3000A)
Thermal Curve
Instantaneous 10 (3000A)
Thermal Curve
INST HI (2000A)
LTD
INST 10.0 (5000A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed (730-7, 100A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Fixed
Fixed
Opening Clearing Curve
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Opening Clearing Curve
Opening Clearing Curve
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (1250A)
Fixed
Thermal Curve
INST HI (2250A)
Opening Clearing Curve
Thermal Curve
INST HI (2250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
Fixed
Thermal Curve (Fixed)
INST Fixed (1100A)
Fixed
Thermal Curve
INST HI (2250A)
Thermal Curve (Fixed)
INST 7.2 (7200A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve (Fixed)
INST 7.2 (7200A)
Thermal Curve
INST HI (2250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed (730-10, 125A)
Opening Clearing Curve
Fixed
Thermal Curve
INST HI (700A)
Opening Clearing Curve
Fixed
Thermal Curve
INST HI (1750A)
Fixed
Thermal Curve
INST HI (2250A)
Thermal Curve
Instantaneous 10 (3000A)
Thermal Curve
INST HI (2250A)
Opening Clearing Curve
Fixed

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (2250A)
Opening Clearing Curve
Thermal Curve
INST HI (2250A)
Ground
GFPD 0.37 (74A)
GFD MIN
Phase
LTPU A (100A)
LTD 1
INST 6 (600A)
Ground
GFPD 0.37 (592A)
GFD 0.2(I ² T Out)
Phase
LTPU 0.31 (62A)
LTD 20
STPU 4 (248A)
STD 0.2(I ² T Out)
INST 4 (248A)
Opening Clearing Curve
Opening Clearing Curve
Fixed
Thermal Curve
INST HI (2000A)
Thermal Curve
INST HI (5000A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (1000A)
Thermal Curve
INST HI (2250A)
Thermal Curve
Instantaneous 10 (3000A)
Fixed
Thermal Curve
INST HI (2250A)
Fixed
Thermal Curve
INST HI (2250A)
Opening Clearing Curve
Thermal Curve
INST HI (2250A)
Fixed
Fixed

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
Fixed
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2000A)
Fixed
Opening Clearing Curve
Fixed
Opening Clearing Curve
Fixed
Thermal Curve
INST HI (2250A)
Fixed
Opening Clearing Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
Fixed
Fixed
Opening Clearing Curve
Fixed
Opening Clearing Curve
Fixed
Fixed
Fixed
Thermal Curve
INST HI (6000A)
Opening Clearing Curve
Thermal Curve
INST HI (5000A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (5000A)
Fixed
Thermal Curve
INST HI (2250A)
Fixed
Thermal Curve
INST HI (2250A)
Fixed
Opening Clearing Curve
Opening Clearing Curve
Opening Clearing Curve
Thermal Curve
INST HI (2250A)
Fixed
Thermal Curve (Fixed)
INST (5-10 x Trip) 10.0 (2000A)
Thermal Curve
INST HI (3000A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (3000A)
Thermal Curve
INST HI (3000A)
Thermal Curve
INST HI (10000A)
Thermal Curve (Fixed)
INST (5-10 x Trip) 10.0 (2000A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (3500A)
Opening Clearing Curve
Thermal Curve
INST HI (2250A)
Opening Clearing Curve
Opening Clearing Curve
Opening Clearing Curve
Opening Clearing Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Opening Clearing Curve
Thermal Curve
INST HI (2500A)
Fixed
Thermal Curve
INST HI (5000A)
Opening Clearing Curve
Fixed
Phase
LTPU C (1200A)
LTD 3
INST 5.0 (6000A)
Ground
GFPU 15 % (240A)
GFD MAX
Phase
LTPU C (450A)
LTD 3
INST 5.0 (2250A)
Ground
GFPU 50 % (300A)
GFD MIN
Phase
LTPU 100 % (600A)
LTD 5.5
INST 5 (3000A)
Ground
GFPU 20 % (120A)
GFD 0.1(I^2 T Out)
Phase
LTPU E (600A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
LTD 3
INST 5.0 (3000A)
Ground
GFPD 15 % (90A)
GFD MAX
Phase
LTPU 100 % (600A)
LTD 10
STPU 4 (2400A)
STD 0.2(I ² T Out)
INST 6 (3600A)
Ground
GFPD 20 % (120A)
GFD 0.2(I ² T Out)
Phase
LTPU 100 % (600A)
Phase
LTPU G (750A)
LTD 3
INST 5 (3750A)
Ground
GFPD 0.2 (120A)
GFD INT
Phase
LTPU E (600A)
LTD 3
INST 5.0 (3000A)
Ground
GFPD 0.2 (120A)
GFD MIN
Phase
LTPU 100 % (600A)
LTD 4.5
STPU 4 (2400A)
STD 0.1(I ² T Out)
INST 8 (4800A)
Ground
GFPD 20 % (120A)
GFD 0.1(I ² T Out)
Phase
Thermal Curve (Fixed)
INST (LO-HI) HI (2500A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (3000A)
Fixed
Opening Clearing Curve
Fixed
Fixed
Opening Clearing Curve
Fixed
Fixed
Fixed
Opening Clearing Curve
Fixed
Fixed
Opening Clearing Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
Fixed
Opening Clearing Curve
Fixed
Fixed
Fixed
Fixed
Fixed
Thermal Curve
INST HI (1250A)
Opening Clearing Curve
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2000A)
Thermal Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Opening Clearing Curve
Opening Clearing Curve
Opening Clearing Curve
Thermal Curve (Fixed)
INST (5-10 x Trip) 10.0 (3000A)
Thermal Curve
INST HI (5000A)
MAX
Opening Clearing Curve
Fixed
Fixed
Fixed
Fixed
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (1250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (2250A)
Fixed (730-7, 100A)
Thermal Curve
INST HI (2500A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed (730-7, 100A)
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (1500A)
Fixed (730-7, 100A)
Fixed (730-7, 100A)
Ground
GFPD 0.2 (120A)
GFD MIN
Phase
LTPU E (600A)
LTD 2
INST 5.0 (3000A)
Ground
GFPD 25 % (150A)
GFD MIN
Phase
LTPU D (525A)
LTD 3
INST 5.0 (2625A)
Ground
GFPD 25 % (150A)
GFD MIN
Phase
LTPU D (525A)
LTD 3
INST 5.0 (2625A)
Ground
GFPD 20 % (120A)
GFD 0.2(I ² T Out)
Phase
LTPU 100 % (600A)
LTD 8

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
STPU 4 (2400A)
STD 0.2(I ² T Out)
INST 1200 % (7200A)
Phase
LTPU E (600A)
LTD 3
INST 5.0 (3000A)
Ground
GFPU 0.2 (120A)
GFD MIN
Ground
GFPU 25 % (150A)
GFD MIN
Phase
LTPU F (675A)
LTD 3
INST 5.0 (3375A)
Phase
LTPU 100 % (800A)
Ground
GFPU 0.2 (120A)
GFD INT
Phase
LTPU E (600A)
LTD 2
INST 3.0 (1800A)
Ground
GFPU 0.3 (180A)
GFD 0.1(I ² T Out)
Phase
LTPU 100 % (600A)
LTD 10
STPU 6 (3600A)
STD 0.1(I ² T Out)
INST 9 (5400A)
Ground
GFPU 15 % (90A)
GFD MIN
Phase
LTPU D (525A)
LTD 3
INST 4 (2100A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Ground
GFPU 15 % (90A)
GFD MIN
Phase
LTPU C (450A)
LTD 3
INST 3.0 (1350A)
LTPU 100 % (600A)
LTD 5
INST 5 (3000A)
Ground
GFPU 0.5 (300A)
GFD 0.2(I ² T Out)
Phase
LTPU 100 % (600A)
LTD 20
STPU 4 (2400A)
STD 0.2(I ² T Out)
INST 6 (3600A)
Ground
GFPU 15 % (90A)
GFD INT
Phase
LTPU E (600A)
LTD 3
INST 4.45 (2670A)
Phase
LTPU E (600A)
LTD 3
INST 4 (2400A)
Ground
GFPU 15 % (90A)
GFD MIN
Ground
GFPU 15 % (90A)
GFD MIN
Phase
LTPU E (600A)
LTD 3
INST 5.0 (3000A)
Ground
GFPU 15 % (90A)
GFD MIN
Phase

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
LTPU E (600A)
LTD 3
INST 5.0 (3000A)
Ground
GFPU 0.4 (240A)
GFD MIN
Phase
LTPU G (750A)
LTD 3
INST 5.0 (3750A)
LTPU 100 % (600A)
LTD 8
STPU 4.5 (2700A)
STD 0.1(I ² T Out)
INST 6 (3600A)
Ground
GFPU 15 % (90A)
GFD MIN
Phase
LTPU F (675A)
LTD 3
INST 3.0 (2025A)
Ground
GFPU 0.2 (120A)
GFD MIN
Phase
LTPU E (600A)
LTD 3
INST 6 (3600A)
Phase
LTPU G (750A)
LTD 4
INST 6 (4500A)
Ground
GFPU 0.2 (120A)
GFD INT
Ground
GFPU 0.25 (150A)
GFD 0.1(I ² T Out)
Phase
LTPU 0.67 (402A)
LTD 12
INST 3 (1206A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Ground
GFPD 0.5 (300A)
GFD 0.2(I ² T Out)
Phase
LTPU 100 % (600A)
LTD 20
STPU 4 (2400A)
STD 0.2(I ² T Out)
INST 6 (3600A)
Ground
GFPD 0.2 (120A)
GFD MAX
Phase
LTPU C (450A)
LTD 3
INST 5.0 (2250A)
Ground
GFPD 0.2 (120A)
GFD INT
Phase
LTPU A (300A)
LTD 3
INST 5.0 (1500A)
Ground
GFPD 0.2 (120A)
GFD MIN
Phase
LTPU E (600A)
LTD 3
INST 5.0 (3000A)
Ground
GFPD 0.5 (300A)
GFD 0.1(I ² T Out)
Phase
LTPU 100 % (600A)
LTD 20
STPU 4 (2400A)
STD 0.2(I ² T Out)
INST 6 (3600A)
Ground
GFPD 15 % (90A)
GFD MIN
Phase
LTPU D (525A)
LTD 3

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
INST 4 (2100A)
Ground
GFPU 15 % (90A)
GFD MIN
Phase
LTPU B (375A)
LTD 3
INST 5.0 (1875A)
Phase
LTPU 0.86 (3440A)
LTD 2.5
STPU 2.03 (6983.2A)
STD 0.2(I ² T Out)
Ground
GFPU 20 % (800A)
GFD 0.4(I ² T Out)
Ground
GFPU 0.3 (1200A)
GFD 0.3(I ² T Out)
Phase
LTPU 0.92 (3680A)
LTD 4.2
STPU 2.2 (8096A)
STD 0.2(I ² T Out)
Ground
GFPU 0.3 (1200A)
GFD 0.4(I ² T Out)
Phase
LTPU 0.92 (3680A)
LTD 4.2
STPU 2.2 (8096A)
STD 0.2(I ² T Out)
Fixed
Fixed
Fixed
Thermal Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
INST HI (1750A)
Thermal Curve
INST HI (1750A)
Fixed
Fixed
Thermal Curve
INST HI (1250A)
Fixed
Fixed
Opening Clearing Curve
Fixed
Fixed
Fixed
Fixed
Fixed

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

[illegible]

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
Fixed
Fixed
Fixed
Fixed
Thermal Curve (Fixed)
INST (2000-4000A) HI (4000A)
Thermal Curve (Fixed)
INST (2000-4000A) HI (4000A)
Thermal Curve
INST 6 (1880A)
Fixed
Ground
GFPD 0.2 (120A)
GFD MIN
Phase
LTPU C (450A)
LTD 3
INST 5.0 (2250A)
Thermal Curve
INST HI (2000A)
Fixed

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve
INST HI (3000A)
Thermal Curve
INST HI (10000A)
Fixed
Fixed
Thermal Curve
INST HI (1500A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (1500A)
Thermal Curve
INST HI (1500A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (1500A)
Thermal Curve
INST HI (2250A)
Thermal Curve
INST HI (1500A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

[illegible]

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
Thermal Curve
INST LO (2500A)
Ground
GFP (0.2-0.75 x S) 0.35 (140A)
GFD (0.1-0.5 Sec.) 0.1(I ² T Out)
Phase
LTPU (0.5-1.0 x P) 1.0 (400A)
LTD (2-24 Sec.) 24
STPU (2-10 x P) 4.0 (1600A)
STD (0.1-0.5 Sec.) .1(I ² T Out)
INST (3-12 x P) 8.0 (3200A)
Fixed
Fixed
Fixed
Fixed
Ground
GFP (0.2-0.75 x S) 0.25 (200A)
GFD (0.1-0.5 Sec.) 0.1(I ² T Out)
Phase
LTPU (0.5-1.0 x P) 1.0 (800A)
LTD (2-24 Sec.) 16
STPU (2-10 x P) 6.0 (4800A)
STD (0.1-0.5 Sec.) .1(I ² T Out)
INST (3-12 x P) 8.0 (6400A)
Ground
GFP (0.2-0.75 x S) 0.25 (200A)
GFD (0.1-0.5 Sec.) 0.1(I ² T Out)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Phase
LTPU (0.5-1.0 x P) 1.0 (800A)
LTD (2-24 Sec.) 2
STPU (2-10 x P) 4.0 (3200A)
STD (0.1-0.5 Sec.) .1(I ² T Out)
INST (3-12 x P) 8.0 (6400A)
Fixed
Fixed
Fixed
Thermal Curve
INST HI (6000A)
Thermal Curve
INST HI (1250A)
Thermal Curve
INST HI (3000A)
Thermal Curve
INST HI (1250A)
Fixed
Thermal Curve
INST HI (2250A)
Fixed (730-12)
Thermal Curve
INST LO (625A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
Opening Clearing Curve
Thermal Curve (Fixed)
INST (5-10 x Trip) 10.0 (4000A)
Thermal Curve (Fixed)
INST (5-10 x Trip) 10.0 (4000A)
Thermal Curve
INST HI (6000A)
Thermal Curve (Fixed)
INST (5-10 x Trip) 10.0 (4000A)
Opening Clearing Curve
Opening Clearing Curve
Thermal Curve
INST HI (4000A)
Opening Clearing Curve
Thermal Curve
INST HI (9996A)
Ground
GFPD (0.2-0.75 x S) 0.45 (540A)
GFD (0.1-0.5 Sec.) 0.32(I ² T Out)
Phase
LTPD (0.5-1.0 x P) 0.7 (700A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
LTD (2-24 Sec.) 2
STPU (2-10 x P) 2 (2000A)
STD (0.1-0.5) 0.1(I ² T Out)
INST (3-12 x P) 5.0 (5000A)
Fixed
Thermal Curve
INST HI (1500A)
Fixed
Thermal Curve
INST HI (1250A)
Fixed
Fixed (730-12)
Fixed (730-12)
Opening Clearing Curve
Fixed (730-10, 150A)
Opening Clearing Curve
Fixed (730-8)
Fixed (730-8)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed (730-8)
Opening Clearing Curve
Fixed (730-10, 150A)
Thermal Curve
INST HI (4000A)
Opening Clearing Curve
Fixed (730-7, 100A)
Fixed (730-6, 60A)
Opening Clearing Curve
Fixed (730-7, 100A)
Opening Clearing Curve
Fixed
Plug Adj (125-250A) 200A (200A)
LTD (Fixed) Fixed
STPU (2-8 x LTPU) 3 (600A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
STD (Fixed) Fixed(I ² T In)
INST (4000A) Fixed (4000A)
Fixed
Thermal Curve
INST HI (2000A)
Fixed
Fixed
Fixed
Opening Clearing Curve
Fixed
Fixed
Fixed
Fixed
Thermal Curve (Fixed)
INST (3-10 x Trip) HI (3000A)
Fixed (730-7, 100A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
Fixed (730-6, 50A)
Fixed
Fixed
Fixed
Fixed
Fixed
Fixed
Fixed
Fixed
Thermal Curve (Fixed)
INST (4.5-10 x Trip) HI (2250A)
Fixed (730-7, 100A)
Fixed
Opening Clearing Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Opening Clearing Curve
Thermal Curve (Fixed)
INST (4.5-10 x Trip) HI (2000A)
Thermal Curve
INST HI (3000A)
Fixed
Setting: 2
Thermal Curve
INST HI (2000A)
Fixed
Fixed
Fixed
Fixed
Fixed
Thermal Curve
INST HI (2250A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Thermal Curve (Fixed)
INST (3-10 x Trip) HI (2250A)
Fixed
Thermal Curve (Fixed)
INST (3-10 x Trip) LO (1050A)
Thermal Curve (Fixed)
INST (4.5-10 x Trip) HI (2250A)
Thermal Curve (Fixed)
INST (8.6-12.5 x Trip) HI (875A)
Thermal Curve (Fixed)
INST (4.5-10 x Trip) HI (2000A)
Thermal Curve (Fixed)
INST (6-12.5 x Trip) HI (1250A)
Thermal Curve (Fixed)
INST (6-12.5 x Trip) HI (1250A)
Thermal Curve (Fixed)
INST (4.5-10 x Trip) HI (2250A)
Fixed
Opening Clearing Curve
Opening Clearing Curve
Thermal Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
INST HI (2250A)
Fixed
Fixed
Fixed
Fixed
Thermal Curve (Fixed)
INST (3-10 x Trip) HI (4000A)
Opening Clearing Curve
Fixed
Fixed
Fixed
Thermal Curve (Fixed)
INST Fixed (1500A)
Thermal Curve (Fixed)
INST Fixed (1500A)
Thermal Curve (Fixed)
INST Fixed (1750A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
LTPU 0.9 (360A)
LTD 1
STPU 3 (1080A)
STD 0.5
INST 7 (2800A)
Thermal Curve (Fixed)
INST (1250-2500A) HI (2500A)
Thermal Curve (Fixed)
INST (1250-2500A) HI (2500A)
LTD
INST 10.0 (2250A)
Thermal Curve (Fixed)
INST (1900-3500A) HI (3500A)
Thermal Curve (Fixed)
INST (5-10 x Trip) 10 (4500A)
Thermal Curve (Fixed)
INST (3200-5600A) HI (5600A)
Fixed
Fixed
Fixed
Fixed (730-7, 100A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed (730-7, 100A)
Fixed
Fixed
LTD
INST 10.0 (2000A)
Opening Clearing Curve
Opening Clearing Curve
Fixed
Fixed
Fixed
Fixed
Fixed
Fixed
Fixed
Fixed
Fixed

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
Fixed
LTD
INST 10.0 (5000A)
LTPU/LTD (A 0.4-1.0 x S) 0.7 (420A); 2
STPU (1.5-10 x LTPU) 3 (1260A)
STD (0-0.4) 0.3(I ² T Out)
INST (2-15 x S) 2 (1200A)
Thermal Curve (Fixed)
INST (4.5-10 x Trip) HI (2250A)
Thermal Curve (Fixed)
INST (4.5-10 x Trip) HI (2000A)
Fixed
Fixed
Fixed
Fixed (730-5, 30A)
Fixed
Thermal Curve (Fixed)
INST (3000-6000A) 6000 (6000A)
Phase
LTPU 1.0 (1200A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
LTD LTD
STPU 2.0 (2400A)
STD-I2T STD(I ² T In)
Ground
GFPU (120-1200A) 240 (240A)
GFD (3.5-30 Cycles) 0.098
Fixed
Fixed
Fixed
Opening Clearing Curve
Opening Clearing Curve
Fixed
Fixed
Fixed
Fixed
Fixed
Fixed
LTPU 1.0 (600A)
LTD LTD
STPU 3.0 (1800A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
STD-I2T STD(I ² T In)
Fixed
Fixed
Fixed
Thermal Curve (Fixed)
INST (5-10 x Trip) 10 (4000A)
Fixed
Fixed
Fixed
Fixed
Thermal Curve
INST HI (2250A)
Fixed
LTPU 1.0 (800A)
LTD 7.0
STPU 8.0 (6400A)
STD 0.1
INST 10.0 (8000A)
LTPU 1.0 (200A)
LTD 24.0

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
STPU 6.0 (1200A)
STD 0.3
INST 10.0 (2000A)
LTPU 1.0 (300A)
LTD 24.0
STPU 4.0 (1200A)
STD 0.3
INST 10.0 (3000A)
Fixed
Fixed
Io, Ir 1; 0.8 (320A)
LTD Fixed
STPU, Im 6 (1920A)
STD Fixed
INST (OR) Fixed (3600A)
Fixed
Fixed
Fixed
Fixed
Fixed
Fixed
Fixed

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Settings
MAX
Fixed
MAX
Fixed (730-7, 100A)
Thermal Curve (Fixed)
INST Fixed (800A)
Thermal Curve (Fixed)
INST Fixed (687.5A)
Fixed
Fixed
Fixed
Opening Clearing Curve

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

HV/MV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
OD;BK-FD-A	S&C	Main Fault Int.	600A	400A
HV/MV with Trip-Unit	Vista		600A	
	Main Fault Interrupter			
OD;BK-FD-B	S&C	Main Fault Int.	600A	400A
HV/MV with Trip-Unit	Vista		600A	
	Main Fault Interrupter			
OD;BK-SG1-FD1	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG1-FD2	S&C	Tap Fault Int.	600A	300A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG2-F3	S&C	Tap Fault Int.	600A	300A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG2-F4	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG3-FD5	S&C	Tap Fault Int.	600A	300A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG3-FD6	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG3-FD7	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG4-FD8	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG4-FD9	S&C	Tap Fault Int.	600A	200A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
Relays				
Name/Type	Description	Frame/Model	CT Ratio (A)	Settings
OD;R-BANK1	GE	IAC 77	400 / 5	Phase
Electro-Mechanical	IAC 77, 5A CT			Tap (4-16A) 4 (320A)
	50/51, 10-30/4-16A			Time Dial (0.5-10) 1.28
				INST-Hi Dropout (10-30A) 25.1 (2008A)
				Ground
				Tap (0.5-4A) 0.5 (80A)
				Time Dial (0.5-10) 2.5
				INST-Low (10-40A) 10 (1600A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

HV/MV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
OD;R-BANK2	GE	IAC 77	400 / 5	Phase
Electro-Mechanical	IAC 77, 5A CT			Tap (4-16A) 4 (320A)
	50/51, 10-30/4-16A			Time Dial (0.5-10) 1.28
				INST-Hi Dropout (10-30A) 25.1 (2008A)
				Ground
				Tap (0.5-4A) 0.5 (80A)
				Time Dial (0.5-10) 2.5
				INST-Low (10-40A) 10 (1600A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
B100;F-2A100	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-EP-2A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-2B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-2C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-2D	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-3A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-3B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-3C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-EP-3D	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-M-P1	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-M-P2	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-M-P3	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-M-P4	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-M-S5	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
	15-600A			
B100;F-M-S6	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-M-S7	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-M-S8	GOULD SHAWMUT	TRS	100A	
Low Voltage	TRS, 600V Class RK5		100A	
	15-600A			
B100;F-RP1,2	BUSSMANN	FRN-R	250A	
Low Voltage	FRN-R, 250V Class RK5		250A	
	1-600A			
B100;F-S1-2A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S1-2B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S1-2C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S1-3C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-10A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-10B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-2A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-2B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-2C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
B100;F-S2-3A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-3B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-3C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-4A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-4B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-4C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-4D	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-5A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-5B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-5D	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-7A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-7B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-8A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-8B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
	200-6000A			
B100;F-S2-8C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-8D	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-9A	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-9B	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-9C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-S2-9D	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B100;F-TE2DP3	GOULD SHAWMUT	TRS	200A	
Low Voltage	TRS, 600V Class RK5		125A	
	15-600A			
B100;-S2-5C	GOULD SHAWMUT	A4BY	1200A	
Low Voltage	A4BY, 600V Class L		1200A	
	200-6000A			
B103;F-T103-P	ABB	DO-III	25A	
High Voltage	DO-III Dual Element		25A	
	5-50A			
B106;F-A-1E	GOULD SHAWMUT	TRS	600A	
Low Voltage	TRS, 600V Class RK5		500A	
	15-600A			
B106;F-A-1,FP	GOULD SHAWMUT	TRS	400A	
Low Voltage	TRS, 600V Class RK5		350A	
	15-600A			
B106;F-EV	GOULD SHAWMUT	AJT	9A	
Low Voltage	AJT, 600V Class J		9A	
	2-12A			
B106;F-T106	ABB	DO-III	25A	
High Voltage	DO-III Dual Element		25A	
	5-50A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
B20;F-T20A	BUSSMANN	NON	25A	
Low Voltage	NON, 250V Class K5		25A	
	1-60A			
B20;F-T-20-P	ABB	DO-III	8A	
High Voltage	DO-III Dual Element		8A	
	5-50A			
B22;F-P1L	BUSSMANN	FRN-R	150A	
Low Voltage	FRN-R, 250V Class RK5		150A	
	1-600A			
B22;F-T22-P	ABB	DO-III	15A	
High Voltage	DO-III Dual Element		15A	
	5-50A			
B5;F-PL21	BUSSMANN	FRS-R	100A	
Low Voltage	FRS-R, 600V Class RK5		100A	
	1-600A			
B5;F-T-5-P	ABB	DO-III	25A	
High Voltage	DO-III Dual Element		25A	
	5-50A			
B6;F-SAFETY	BUSSMANN	DLS-R	100A	
Low Voltage	DLS-R, 600V Class RK5		100A	
	10-600A			
B6;F-T-6-P	ABB	DO-III	15A	
High Voltage	DO-III Dual Element		15A	
	5-50A			
B8;F-1PA-2	GOULD SHAWMUT	TR	100A	
Low Voltage	TR, 250V Class RK5		100A	
	15-600A			
B8;F-1PB	BUSSMANN	LPS-RK	30A	
Low Voltage	LPS-RK, 600V Class RK1		30A	
	15-600A			
B8;F-6LDP1SAF	BUSSMANN	FRN-R	200A	
Low Voltage	FRN-R, 250V Class RK5		200A	
	1-600A			
B8;F-SAFETY	BUSSMANN	FRN-R	150A	
Low Voltage	FRN-R, 250V Class RK5		150A	
	1-600A			
B8;F-T8-P	ABB	DO-III	8A	
High Voltage	DO-III Dual Element		8A	
	5-50A			
B9A;F-ELEVATR	GOULD SHAWMUT	TRS	80A	
Low Voltage	TRS, 600V Class RK5		80A	

South Carolina (Columbia) VA Medical Center - Coordination Study - Proposed Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
	15-600A			
B9A;F-T-9N-P	COOPER	108C4	6A	
High Voltage	Bay-O-Net Dual Element Fuse Link, 23kV		6A	
	C3-C12			
B9;F-9EL21	GOULD SHAWMUT	A6D	150A	
Low Voltage	A6D, 600V Class RK1		150A	
	15-600A			
B9;F-T-9S-P	ABB	DO-III	15A	
High Voltage	DO-III Dual Element		15A	
	5-50A			

South Carolina (Columbia) VA Medical Center - Coordination Study - Net Device Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-CCU1-3A	SIEMENS-ALLIS	1600	1600A
	LA, II		200A
	GF, 80-4000A		200A
B100;BK-CCU2-3B	UTILITY RELAY CO.	LA-1600B	1600A
	AC-Pro Retrofit		1600A
	for Siemens-Allis LA		1600A
B100;BK-EP-1C	SIEMENS-ALLIS	LA-1600	1600A
	LA, II		1600A
	LSI, 80-4000A		1600A
B100;BK-EP-3B	SIEMENS-ALLIS	LA-600	600A
	LA, II		600A
	LSI, 80-4000A		600A
B100;BK-T1-A-S	UTILITY RELAY CO.	LA-4000A	4000A
	AC-Pro Retrofit		4000A
	for Siemens-Allis LA		
B100;BK-T2-A-S-1B	UTILITY RELAY CO.	LA-4000A	4000A
	AC-Pro Retrofit		4000A
	for Siemens-Allis LA		

South Carolina (Columbia) VA Medical Center - Coordination Study - Net Device Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B100;BK-T2B-S-11B	UTILITY RELAY CO.	LA-4000A	4000A
	AC-Pro Retrofit		4000A
	for Siemens-Allis LA		
B100;BK-TIE-S2-6B	UTILITY RELAY CO.	LA-4000A	4000A
	AC-Pro Retrofit		4000A
	for Siemens-Allis LA		
B106;BK-C2	SQUARE D	ME	400A
	ME, Micrologic		400A
	GF, 400-800A		400A
B106;BK-N	SQUARE D	NE	1200A
	NE, Micrologic		1200A
	GF, 600-1200A		1200A
B20;BK-20MDP	CUTLER-HAMMER	HKD	250A
	HKD, RMS 310		250A
	LS, 125-250A Adj Plug		250A
B22;BK-MDP	GE	SGLA	400A
	SG, Spectra RMS Mag-Break		300A
	125-600A		

South Carolina (Columbia) VA Medical Center - Coordination Study - Net Device Settings

LV Breakers			
Device Name	Description	Frame/Model	Frame/Sensor/Plug
B5;BK-5MDP	GE	TKMA	600A
	TKMA		350A
	300-1200A		
B6;BK-6MDP	CUTLER-HAMMER	CNDC	800A
	CNDC Optim 550/750/1050		800A
	LSI, 400-800A Adj Plug		400A
B8;BK-A-1N	SQUARE D	PG	1200A
	Powerpact P-Frame, 6.0A/P/H		600A
	LSI, 250-1200A, UL		
B9A;BK-MCC-9A	WESTINGHOUSE	LC	600A
	LC SELTRNC		600A
	300-600A		
B9;BK-9MDP-2B	WESTINGHOUSE	SPB-50	250A
	POW R-TP 7		200A
	SPB 50		
B9;BK-9MDP-2C	WESTINGHOUSE	SPB-50	800A
	POW R-TP 7		300A
	SPB 50		

South Carolina (Columbia) VA Medical Center - Coordination Study - Net Device Settings

Settings
Ground
GFPD 0.37 (74A)
GFD MIN
Phase
LTPU A (100A)
LTD 1
INST 6 (600A)
Ground
GFPD 0.37 (592A)
GFD 0.2(I ² T Out)
Phase
LTPU 0.31 (62A)
LTD 20
STPU 4 (248A)
STD 0.2(I ² T Out)
INST 4 (248A)
Phase
LTPU C (1200A)
LTD 3
INST 5.0 (6000A)
Ground
GFPD 15 % (240A)
GFD MAX
Phase
LTPU G (750A)
LTD 3
INST 5 (3750A)
Ground
GFPD 0.2 (120A)
GFD INT
Phase
LTPU 0.86 (3440A)
LTD 2.5
STPU 2.03 (6983.2A)
STD 0.2(I ² T Out)
Ground
GFPD 20 % (800A)
GFD 0.4(I ² T Out)
Ground
GFPD 0.3 (1200A)
GFD 0.3(I ² T Out)
Phase
LTPU 0.92 (3680A)
LTD 4.2
STPU 2.2 (8096A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Net Device Settings

Settings
STD 0.2(I ² T Out)
Ground
GFPD 0.3 (1200A)
GFD 0.4(I ² T Out)
Phase
LTPU 0.92 (3680A)
LTD 4.2
STPU 2.2 (8096A)
STD 0.2(I ² T Out)
Ground
GFPD 0.3 (1200A)
GFD 0.2(I ² T Out)
Phase
LTPU 0.92 (3680A)
LTD 2.5
STPU 2.2 (8096A)
STD 0.2(I ² T Out)
INST 8 (29440A)
Ground
GFPD (0.2-0.75 x S) 0.35 (140A)
GFD (0.1-0.5 Sec.) 0.1(I ² T Out)
Phase
LTPU (0.5-1.0 x P) 1.0 (400A)
LTD (2-24 Sec.) 24
STPU (2-10 x P) 4.0 (1600A)
STD (0.1-0.5 Sec.) .1(I ² T Out)
INST (3-12 x P) 8.0 (3200A)
Ground
GFPD (0.2-0.75 x S) 0.45 (540A)
GFD (0.1-0.5 Sec.) 0.32(I ² T Out)
Phase
LTPU (0.5-1.0 x P) 0.7 (700A)
LTD (2-24 Sec.) 2
STPU (2-10 x P) 2 (2000A)
STD (0.1-0.5) 0.1(I ² T Out)
INST (3-12 x P) 5.0 (5000A)
Plug Adj (125-250A) 200A (200A)
LTD (Fixed) Fixed
STPU (2-8 x LTPU) 3 (600A)
STD (Fixed) Fixed(I ² T In)
INST (4000A) Fixed (4000A)
Setting: 2

South Carolina (Columbia) VA Medical Center - Coordination Study - Net Device Settings

Settings
Thermal Curve (Fixed)
INST (3-10 x Trip) LO (1050A)
LTPU 0.9 (360A)
LTD 1
STPU 3.0 (1080A)
STD 0.5
INST 7.0 (2800A)
LTPU/LTD (A 0.4-1.0 x S) 0.7 (420A); 2
STPU (1.5-10 x LTPU) 3 (1260A)
STD (0-0.4) 0.3(I ² T Out)
INST (2-15 x S) 2 (1200A)
LTPU 1.0 (600A)
LTD LTD
STPU 3.0 (1800A)
STD-I2T STD(I ² T In)
LTPU 1.0 (200A)
LTD 24.0
STPU 6.0 (1200A)
STD 0.3
INST 10.0 (2000A)
LTPU 1.0 (300A)
LTD 24.0
STPU 4.0 (1200A)
STD 0.3
INST 10.0 (3000A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Net Device Settings

HV/MV Breakers				
Device Name	Description	Frame/Model	Frame/Sensor/Plug	Settings
OD;BK-FD-A	S&C	Main Fault Int.	600A	400A
HV/MV with Trip-Unit	Vista		600A	
	Main Fault Interrupter			
OD;BK-FD-B	S&C	Main Fault Int.	600A	400A
HV/MV with Trip-Unit	Vista		600A	
	Main Fault Interrupter			
OD;BK-SG1-FD2	S&C	Tap Fault Int.	600A	300A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG2-F3	S&C	Tap Fault Int.	600A	300A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
OD;BK-SG3-FD5	S&C	Tap Fault Int.	600A	300A
HV/MV with Trip-Unit	Vista		600A	
	Tap Fault Interrupter			
Relays				
Name/Type	Description	Frame/Model	CT Ratio (A)	Settings
OD;R-BANK1	GE	IAC 77	400 / 5	Phase
Electro-Mechanical	IAC 77, 5A CT			Tap (4-16A) 4 (320A)
	50/51, 10-30/4-16A			Time Dial (0.5-10) 1.28
				INST-Hi Dropout (10-30A) 25.1 (2008A)
				Ground
				Tap (0.5-4A) 0.5 (80A)
				Time Dial (0.5-10) 2.5
				INST-Low (10-40A) 10 (1600A)
OD;R-BANK2	GE	IAC 77	400 / 5	Phase
Electro-Mechanical	IAC 77, 5A CT			Tap (4-16A) 4 (320A)
	50/51, 10-30/4-16A			Time Dial (0.5-10) 1.28
				INST-Hi Dropout (10-30A) 25.1 (2008A)
				Ground
				Tap (0.5-4A) 0.5 (80A)
				Time Dial (0.5-10) 2.5
				INST-Low (10-40A) 10 (1600A)

South Carolina (Columbia) VA Medical Center - Coordination Study - Net Device Settings

Fuses				
Device Name	Description	Frame/Model	Cartridge/Trip	
B106;F-T106	ABB	DO-III	25A	
High Voltage	DO-III Dual Element		25A	
	5-50A			
B20;F-T-20-P	ABB	DO-III	8A	
High Voltage	DO-III Dual Element		8A	
	5-50A			
B22;F-T22-P	ABB	DO-III	15A	
High Voltage	DO-III Dual Element		15A	
	5-50A			
B6;F-T-6-P	ABB	DO-III	15A	
High Voltage	DO-III Dual Element		15A	
	5-50A			
B8;F-T8-P	ABB	DO-III	8A	
High Voltage	DO-III Dual Element		8A	
	5-50A			
B9A;F-T-9N-P	COOPER	108C4	6A	
High Voltage	Bay-O-Net Dual Element Fuse Link, 23kV		6A	
	C3-C12			
B9;F-T-9S-P	ABB	DO-III	15A	
High Voltage	DO-III Dual Element		15A	
	5-50A			

5 VOLTAGE DROP ANALYSIS

5.1 Introduction:

The voltage drop analysis calculates the voltage drops in the electrical distribution system and compares the calculated values against National Electrical Code (NEC) recommended values. NEC 210.19 (A) (1) FPN No. 4 recommends a maximum voltage drop of 3% for branch circuits and maximum voltage drop of 5% for the combination of both branch circuit and corresponding upstream feeders.

The voltage drops are calculated based on system topology and associated branch impedances developed for the short circuit study (Section 3) and assumed load data. The transformers are assumed to be loaded to 80% of capacity. This load is assumed to be proportionately distributed downstream to the branch circuit panelboards. The approach of assumed loading is somewhat limited as this may not be an accurate reflection of operating conditions. SKM Power Tools was used to perform the voltage drop analysis.

5.2 Analysis and Recommendations:

The voltage drop calculation results are depicted in Section 5.3. No instances of excessive voltage drops were observed on the primary distribution system (34.5kV and 13.09kV equipment). A maximum voltage drop of 3.78% was observed on 15kV Vista Switchgear SG-1. There were several locations within the secondary distribution system (480V, 208V, 240V equipment) in which the maximum voltage drops exceeded the 5% voltage level recommend by NEC. Such equipment consisted of the equipment located Building 100, 100A, and MRI. The highest voltage drop (11.0%) was observed at Panel 2R3 in Building 100. The maximum voltage drops were within NEC recommendations for the remaining building equipment within VAMC's secondary distribution system. No instances of excessive feeder branch circuit voltage drops were observed within VAMC's electrical distribution system.

The excessive voltage drop levels observed at equipment in Building 100, 100A, and MRI can be corrected by adjusting transformer taps. By applying a lower primary tap setting of the 2500kVA transformers feeding unit substation SS-2A, SS-2B, and SS-1A, the voltage drops can be reduced for the distribution system feeding Building 100, 100A, and MRI.

Because the analysis was performed using 80% of the capacity, as discussed in Section 5.1, further field investigations of actual load demands over an extended period of time would be required to confirm voltage drop issues before recommending any corrective action for the busses over 5% voltage drops.

Load Flow Summary Report

Project: VAMC - Columbia, South Carolina

Load Flow Study Settings

Include Source Impedance	Yes	Load Acceleration Factor	1.00
Solution Method	Exact (Iterative)	Bus Voltage Drop %	5.00
Load Specification	Connected Load	Branch Voltage Drop %	3.00
Generation Acceleration Factor	1.00		

Swing Generators

Source	In/Out Service	Vpu	Angle	kW	kvar	VD%	Utility Impedance
OD;UT-BANK1	In	1.00	0.00	5,065.4	2,403.6	0.85	0.01 +j 0.31
OD;UT-BANK2	In	1.00	0.00	2,671.8	1,117.4	0.39	0.01 +j 0.32

Buses

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;B-100AC2	In	480	446	-7.31	0.93	7.06
B100;B-100AC4	In	480	445	-7.29	0.93	7.32
B100;B-100AC7	In	480	450	-7.42	0.94	6.32
B100;B-100AC8	In	480	450	-7.41	0.94	6.27
B100;B-100P1	In	480	462	-4.97	0.96	3.68
B100;B-100P10	In	480	462	-4.97	0.96	3.68
B100;B-100P11	In	480	462	-4.97	0.96	3.68
B100;B-100P12	In	480	462	-4.97	0.96	3.68
B100;B-100P1A	In	480	462	-4.97	0.96	3.68
B100;B-100P2	In	480	462	-4.97	0.96	3.68
B100;B-100P2A	In	480	462	-4.97	0.96	3.68
B100;B-100P4A	In	480	462	-4.97	0.96	3.68
B100;B-100P5	In	480	462	-4.97	0.96	3.68
B100;B-100P5A	In	480	462	-4.97	0.96	3.68

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;B-100P6	In	480	462	-4.97	0.96	3.68
B100;B-100P7	In	480	462	-4.97	0.96	3.68
B100;B-100P8	In	480	452	-7.36	0.94	5.94
B100;B-100P9	In	480	462	-4.97	0.96	3.68
B100;B-150A1P	In	208	189	-10.61	0.91	9.00
B100;B-150A1S	In	120	109	-11.12	0.91	9.32
B100;B-150B2P	In	208	188	-10.50	0.90	9.73
B100;B-150B2S	In	120	108	-11.03	0.90	10.06
B100;B-150C3P	In	208	188	-10.50	0.90	9.51
B100;B-150C3S	In	120	108	-11.03	0.90	9.83
B100;B-164A1P	In	208	189	-10.62	0.91	9.09
B100;B-164A1S	In	120	109	-11.14	0.91	9.41
B100;B-164B2P	In	208	187	-10.48	0.90	10.05
B100;B-164B2S	In	120	108	-11.01	0.90	10.38
B100;B-164C3P	In	208	188	-10.49	0.90	9.76
B100;B-164C3S	In	120	108	-11.01	0.90	10.09
B100;B-166A1P	In	208	189	-10.63	0.91	9.15
B100;B-166A1S	In	120	109	-11.15	0.91	9.48
B100;B-166B2P	In	208	187	-10.46	0.90	10.31
B100;B-166B2S	In	120	107	-11.00	0.89	10.64
B100;B-166C3P	In	208	187	-10.47	0.90	9.95
B100;B-166C3S	In	120	108	-11.00	0.90	10.28
B100;B-168A1P	In	208	189	-10.64	0.91	9.22
B100;B-168A1S	In	120	109	-11.16	0.90	9.55
B100;B-168B2P	In	208	186	-10.44	0.89	10.63
B100;B-168B2S	In	120	107	-10.98	0.89	10.96
B100;B-168BP	In	208	186	-10.44	0.89	10.69
B100;B-168BS	In	120	107	-10.98	0.89	11.02
B100;B-168C3P	In	208	187	-10.46	0.90	10.15
B100;B-168C3S	In	120	107	-10.99	0.90	10.48
B100;B-169A1P	In	208	189	-10.64	0.91	9.20
B100;B-169A1S	In	120	109	-11.16	0.90	9.53
B100;B-169B2P	In	208	186	-10.45	0.90	10.50
B100;B-169B2S	In	120	107	-10.99	0.89	10.83
B100;B-169C3P	In	208	187	-10.47	0.90	10.08
B100;B-169C3S	In	120	108	-11.00	0.90	10.41
B100;B-1DP1A1	In	480	451	-7.38	0.94	6.09
B100;B-1DP1A2	In	480	451	-7.39	0.94	6.02
B100;B-1DP1A3	In	480	451	-7.39	0.94	6.08
B100;B-1DP1A4	In	480	451	-7.39	0.94	6.08
B100;B-1DP1B1	In	208	194	-8.59	0.93	6.88
B100;B-1DP1B2	In	208	194	-8.25	0.93	6.58

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;B-1DP1B3	In	208	193	-8.77	0.93	6.99
B100;B-1DP1B4	In	208	193	-8.77	0.93	6.99
B100;B-1DP1C1	In	208	194	-8.59	0.93	6.90
B100;B-1DP1C3	In	208	193	-8.78	0.93	7.03
B100;B-1DP1C4	In	208	193	-8.77	0.93	7.00
B100;B-1DP2-9	In	480	451	-7.36	0.94	5.97
B100;B-1DP3A1	In	480	451	-7.36	0.94	6.01
B100;B-1DP3B1	In	208	191	-10.61	0.92	8.25
B100;B-1DP3C1	In	208	191	-10.61	0.92	8.27
B100;B-1DP4A1	In	480	451	-7.39	0.94	6.02
B100;B-1DP4B1	In	208	193	-8.86	0.93	6.99
B100;B-1DP4C1	In	208	193	-8.88	0.93	7.04
B100;B-1R1-2	In	208	193	-8.80	0.93	7.10
B100;B-1R1-4	In	208	193	-8.79	0.93	7.07
B100;B-1R1617	In	208	191	-10.62	0.92	8.30
B100;B-1R1819	In	208	193	-8.91	0.93	7.10
B100;B-1R1822	In	208	193	-8.90	0.93	7.08
B100;B-1R2021	In	208	193	-8.91	0.93	7.10
B100;B-1R3-4	In	208	193	-8.80	0.93	7.10
B100;B-1R5-6	In	208	193	-8.79	0.93	7.07
B100;B-1R5-8	In	208	193	-8.78	0.93	7.05
B100;B-1R7-8	In	208	193	-8.79	0.93	7.07
B100;B-1R9-11	In	208	194	-8.60	0.93	6.95
B100;B-2DP1	In	208	185	-13.29	0.89	10.97
B100;B-2DP2	In	208	189	-11.23	0.91	9.37
B100;B-2DP3	In	208	188	-11.14	0.90	9.59
B100;B-2DPC1	In	208	186	-13.27	0.89	10.80
B100;B-2DPC2	In	208	189	-11.21	0.91	9.20
B100;B-2DPC3	In	208	188	-11.15	0.91	9.49
B100;B-2DPT1P	In	480	449	-7.46	0.94	6.46
B100;B-2DPT1S	In	208	186	-13.24	0.89	10.63
B100;B-2DPT2P	In	480	449	-7.46	0.94	6.46
B100;B-2DPT2S	In	208	189	-11.18	0.91	9.04
B100;B-2DPT3P	In	480	448	-7.43	0.93	6.60
B100;B-2DPT3S	In	208	189	-11.16	0.91	9.17
B100;B-2DPT4P	In	480	449	-7.48	0.94	6.43
B100;B-2DPT4S	In	208	192	-9.29	0.92	7.64
B100;B-3DP1	In	208	189	-11.19	0.91	9.27
B100;B-3DP2	In	208	189	-11.19	0.91	9.27
B100;B-3DP3	In	208	191	-9.86	0.92	8.22
B100;B-3DPC1	In	208	189	-11.19	0.91	9.21
B100;B-3DPC2	In	208	189	-11.19	0.91	9.21
B100;B-3DPC3	In	208	191	-9.84	0.92	8.17

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;B-3DPT1P	In	480	449	-7.45	0.94	6.47
B100;B-3DPT1S	In	208	189	-11.16	0.91	9.04
B100;B-3DPT2P	In	480	449	-7.45	0.94	6.47
B100;B-3DPT2S	In	208	189	-11.16	0.91	9.04
B100;B-3DPT3P	In	480	449	-7.46	0.94	6.45
B100;B-3DPT3S	In	208	191	-9.79	0.92	8.03
B100;B-3ED1TP	In	480	448	-7.37	0.93	6.74
B100;B-3ED1TS	In	208	191	-9.77	0.92	8.35
B100;B-3WD1TP	In	480	444	-7.27	0.93	7.45
B100;B-3WD1TS	In	208	189	-9.71	0.91	9.08
B100;B-4DP1	In	208	188	-11.24	0.91	9.43
B100;B-4DP2	In	208	188	-11.20	0.90	9.72
B100;B-4DP3	In	208	192	-9.29	0.92	7.85
B100;B-4DPC1	In	208	189	-11.21	0.91	9.26
B100;B-4DPC2	In	208	188	-11.20	0.91	9.41
B100;B-4DPC3	In	208	192	-9.26	0.92	7.74
B100;B-4DPT1P	In	480	449	-7.46	0.93	6.52
B100;B-4DPT1S	In	208	189	-11.18	0.91	9.10
B100;B-4DPT2P	In	480	449	-7.46	0.93	6.52
B100;B-4DPT2S	In	208	189	-11.20	0.91	9.10
B100;B-4DPT3P	In	480	449	-7.47	0.94	6.47
B100;B-4DPT3S	In	208	192	-9.22	0.92	7.63
B100;B-5DP15R	In	208	186	-12.51	0.90	10.34
B100;B-5DP1C	In	208	187	-12.48	0.90	10.12
B100;B-5DP1TP	In	480	450	-7.44	0.94	6.33
B100;B-5DP1TS	In	208	187	-12.44	0.90	9.89
B100;B-5DP25R	In	208	189	-11.20	0.91	9.22
B100;B-5DP2C	In	208	189	-11.17	0.91	9.05
B100;B-5DP2TP	In	480	450	-7.44	0.94	6.32
B100;B-5DP2TS	In	208	190	-11.15	0.91	8.89
B100;B-A-1L	In	480	451	-7.38	0.94	5.98
B100;B-A-1N	In	480	451	-7.36	0.94	5.97
B100;B-A-2L	In	480	451	-7.38	0.94	5.97
B100;B-A-2N	In	480	451	-7.36	0.94	5.96
B100;B-A-3L	In	480	452	-7.34	0.94	5.87
B100;B-A-3N	In	480	452	-7.33	0.94	5.87
B100;B-A-4L	In	480	451	-7.39	0.94	6.00
B100;B-A-4N	In	480	451	-7.37	0.94	5.99
B100;B-A-5L	In	480	452	-7.35	0.94	5.90
B100;B-A-5N	In	480	452	-7.34	0.94	5.89
B100;B-A-6L	In	480	452	-7.35	0.94	5.90
B100;B-A-6N	In	480	452	-7.34	0.94	5.90

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;B-A-7L	In	480	451	-7.42	0.94	6.08
B100;B-A-7N	In	480	451	-7.40	0.94	6.07
B100;B-A-8L	In	480	452	-7.32	0.94	5.83
B100;B-A-8N	In	480	452	-7.32	0.94	5.83
B100;B-A-9L	In	480	452	-7.32	0.94	5.83
B100;B-A-9N	In	480	452	-7.32	0.94	5.83
B100;B-AC-10	In	480	451	-7.44	0.94	6.13
B100;B-AC11	In	480	449	-7.41	0.94	6.36
B100;B-AC17	In	480	451	-7.41	0.94	6.05
B100;B-AC24	In	480	451	-7.40	0.94	6.03
B100;B-AC5	In	480	451	-7.40	0.94	6.09
B100;B-AHU3	In	480	449	-7.37	0.93	6.52
B100;B-BDP10A	In	480	451	-7.35	0.94	6.06
B100;B-BDP10B	In	208	192	-9.53	0.92	7.52
B100;B-BDP10C	In	208	192	-9.53	0.92	7.57
B100;B-BDP10D	In	480	451	-7.35	0.94	6.06
B100;B-BDP10E	In	208	192	-9.53	0.92	7.52
B100;B-BDP10F	In	208	192	-9.53	0.92	7.57
B100;B-BDP5A	In	480	451	-7.36	0.94	6.02
B100;B-BDP5B	In	208	195	-8.03	0.94	6.45
B100;B-BDP5C	In	208	195	-8.04	0.94	6.47
B100;B-BDP5D	In	208	194	-8.06	0.93	6.53
B100;B-BDP5RT	In	480	451	-7.33	0.94	6.08
B100;B-BDP6B1	In	208	189	-11.13	0.91	9.09
B100;B-BDP6B2	In	208	192	-9.19	0.92	7.57
B100;B-BDP6B3	In	208	192	-9.19	0.92	7.57
B100;B-BK-C4R	In	208	195	-8.04	0.94	6.46
B100;B-BK-C5R	In	208	191	-9.56	0.92	8.15
B100;B-BK-E1R	In	208	193	-8.48	0.93	7.08
B100;B-BK-E2R	In	208	192	-9.58	0.92	7.72
B100;B-BK-E3R	In	208	191	-9.61	0.92	8.27
B100;B-BK-E4R	In	208	191	-9.65	0.92	8.06
B100;B-BK-E5R	In	208	191	-9.62	0.92	8.37
B100;B-BK-EBR	In	208	190	-9.63	0.91	8.68
B100;B-BR10-T	In	208	191	-10.30	0.92	8.11
B100;B-BR123	In	208	189	-11.14	0.91	9.18
B100;B-BR13TP	In	480	450	-7.37	0.94	6.22
B100;B-BR13TS	In	208	193	-9.04	0.93	7.33
B100;B-BR456	In	208	192	-9.23	0.92	7.67
B100;B-BR789	In	208	192	-9.23	0.92	7.67
B100;B-C1R1,2	In	208	191	-9.64	0.92	8.16
B100;B-C2R1-3	In	208	194	-8.41	0.93	6.95

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;B-C2R2,3	In	208	194	-8.42	0.93	6.97
B100;B-C2R4,5	In	208	190	-10.55	0.91	8.60
B100;B-C4R1,2	In	208	195	-8.05	0.94	6.48
B100;B-C5R1,2	In	208	191	-9.56	0.92	8.24
B100;B-CC1R12	In	208	191	-9.64	0.92	8.07
B100;B-C-C2R1	In	208	194	-8.40	0.93	6.93
B100;B-C-C2R4	In	208	190	-10.51	0.91	8.51
B100;B-CCU1	In	480	463	-4.93	0.96	3.55
B100;B-CCU2	In	480	463	-4.93	0.96	3.55
B100;B-CF55	In	480	449	-7.41	0.94	6.36
B100;B-CT1FAN	In	480	462	-4.97	0.96	3.68
B100;B-CT2FAN	In	480	452	-7.36	0.94	5.94
B100;B-C-URP6	In	208	190	-9.59	0.91	8.71
B100;B-E1R124	In	208	193	-8.49	0.93	7.11
B100;B-E1R16AP	In	480	451	-7.39	0.94	6.03
B100;B-E1R16AS	In	208	194	-8.49	0.93	6.75
B100;B-E1R2,4	In	208	193	-8.50	0.93	7.13
B100;B-E2R1-2	In	208	192	-9.58	0.92	7.81
B100;B-E2WO1M	In	480	451	-7.40	0.94	6.05
B100;B-E3R1,2	In	208	191	-9.61	0.92	8.37
B100;B-E4R1,2	In	208	191	-9.64	0.92	8.15
B100;B-E5R1,2	In	208	190	-9.61	0.92	8.46
B100;B-EBDPA3	In	480	452	-7.32	0.94	5.86
B100;B-EBPR1S	In	208	194	-8.47	0.93	6.81
B100;B-EBR10P	In	480	451	-7.44	0.94	6.14
B100;B-EBR10S	In	208	195	-7.84	0.94	6.40
B100;B-EBR1-2	In	208	190	-9.62	0.91	8.78
B100;B-EMCC4	In	480	449	-7.47	0.94	6.37
B100;B-EMCEB	In	480	450	-7.43	0.94	6.26
B100;B-FD2	In	13,090	12,591	-4.63	0.96	3.81
B100;B-FD3	In	13,090	12,591	-4.63	0.96	3.81
B100;B-FD5	In	13,090	12,869	-2.40	0.98	1.69
B100;B-FIRE-P	In	480	452	-7.32	0.94	5.85
B100;B-JYP	In	480	452	-7.32	0.94	5.85
B100;B-LA108	In	480	446	-7.35	0.93	7.15
B100;B-MCCC2	In	480	448	-7.38	0.93	6.57
B100;B-MED-V1	In	480	450	-7.46	0.94	6.17
B100;B-RCPP1	In	480	452	-7.32	0.94	5.83
B100;B-RCPP2	In	480	452	-7.32	0.94	5.83
B100;B-RCPP3	In	480	452	-7.32	0.94	5.83
B100;B-RCPP4	In	480	452	-7.32	0.94	5.83
B100;B-RCPS5	In	480	452	-7.32	0.94	5.83

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;B-RCPS6	In	480	452	-7.32	0.94	5.83
B100;B-RCPS7	In	480	452	-7.32	0.94	5.83
B100;B-RCPS8	In	480	452	-7.32	0.94	5.83
B100;B-RL1,2	In	208	193	-8.24	0.93	7.28
B100;B-RP1,2	In	208	190	-9.55	0.91	8.62
B100;B-RP6	In	208	190	-9.61	0.91	8.82
B100;B-SF-16	In	480	450	-7.47	0.94	6.31
B100;B-T1-A-P	In	13,090	12,869	-2.40	0.98	1.69
B100;B-T1-A-S	In	480	463	-4.92	0.96	3.51
B100;B-T2-A-P	In	13,090	12,591	-4.63	0.96	3.82
B100;B-T2-A-S	In	480	452	-7.33	0.94	5.87
B100;B-T2-B-P	In	13,090	12,591	-4.63	0.96	3.81
B100;B-T2-B-S	In	480	452	-7.31	0.94	5.78
B100;B-T456P	In	480	450	-7.42	0.94	6.30
B100;B-T456S	In	208	192	-9.16	0.93	7.46
B100;B-T789P	In	480	450	-7.42	0.94	6.30
B100;B-T789S	In	208	192	-9.16	0.93	7.46
B100;B-T-BMEP	In	480	449	-7.43	0.94	6.36
B100;B-T-BMES	In	208	194	-7.99	0.93	6.72
B100;B-TBR123S	In	208	189	-11.10	0.91	8.93
B100;B-TBR13P	In	480	449	-7.40	0.94	6.36
B100;B-TC1R1P	In	480	449	-7.41	0.94	6.48
B100;B-TC1R1S	In	208	191	-9.65	0.92	7.98
B100;B-TC1R3P	In	480	449	-7.43	0.94	6.37
B100;B-TC1R3S	In	208	192	-9.27	0.92	7.59
B100;B-TC2R1P	In	480	450	-7.51	0.94	6.32
B100;B-TC2R1S	In	208	194	-8.39	0.93	6.90
B100;B-TC2R4P	In	480	449	-7.52	0.94	6.37
B100;B-TC2R4S	In	208	190	-10.47	0.92	8.43
B100;B-TC2WDP	In	480	448	-7.47	0.93	6.62
B100;B-TC2WDS	In	208	192	-9.01	0.92	7.63
B100;B-TC3R1P	In	480	449	-7.37	0.94	6.48
B100;B-TC3R1S	In	208	193	-8.40	0.93	7.15
B100;B-T-C4RP	In	480	451	-7.35	0.94	5.99
B100;B-T-C4RS	In	208	195	-8.03	0.94	6.44
B100;B-T-C5RP	In	480	449	-7.32	0.93	6.56
B100;B-T-C5RS	In	208	191	-9.57	0.92	8.06
B100;B-TE1R1P	In	480	449	-7.43	0.94	6.36
B100;B-TE1R1S	In	208	193	-8.47	0.93	7.05
B100;B-TE1R3P	In	480	451	-7.39	0.94	6.05
B100;B-TE1R3S	In	208	194	-8.49	0.93	6.77
B100;B-TE2DP3	In	208	195	-7.80	0.94	6.30

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;B-T-E2RP	In	480	451	-7.36	0.94	6.13
B100;B-T-E2RS	In	208	192	-9.59	0.92	7.62
B100;B-T-E3RP	In	480	448	-7.37	0.93	6.68
B100;B-T-E3RS	In	208	191	-9.62	0.92	8.18
B100;B-T-E4RP	In	480	449	-7.41	0.94	6.46
B100;B-T-E4RS	In	208	191	-9.65	0.92	7.96
B100;B-T-E5RP	In	480	448	-7.37	0.93	6.77
B100;B-T-E5RS	In	208	191	-9.62	0.92	8.27
B100;B-TEB7AP	In	480	450	-7.45	0.94	6.17
B100;B-TEB7AS	In	208	194	-8.14	0.93	6.62
B100;B-TEB9BP	In	480	450	-7.46	0.94	6.24
B100;B-TEB9BS	In	208	194	-7.88	0.93	6.51
B100;B-T-EBR	In	480	446	-7.37	0.93	6.99
B100;B-T-EBRS	In	208	190	-9.64	0.92	8.50
B100;B-TLS1RP	In	480	450	-7.40	0.94	6.26
B100;B-TLS1RS	In	208	194	-8.43	0.93	6.94
B100;B-TLS2RP	In	480	449	-7.37	0.93	6.56
B100;B-TLS2RS	In	208	193	-8.41	0.93	7.24
B100;B-TLS3RP	In	480	449	-7.37	0.94	6.48
B100;B-TLS3RS	In	208	193	-8.41	0.93	7.15
B100;B-TLS4RP	In	480	449	-7.37	0.93	6.51
B100;B-TLS4RS	In	208	193	-8.41	0.93	7.19
B100;B-TLS5RP	In	480	449	-7.37	0.93	6.54
B100;B-TLS5RS	In	208	193	-8.41	0.93	7.22
B100;B-TLSBRP	In	480	449	-7.37	0.93	6.54
B100;B-TLSBRS	In	208	193	-8.41	0.93	7.22
B100;B-TRL12P	In	480	448	-7.38	0.93	6.60
B100;B-TRL12S	In	208	193	-8.24	0.93	7.16
B100;B-U-RP6	In	208	190	-9.61	0.91	8.81
B100;B-VFDP1	In	480	451	-7.39	0.94	6.05
B100;MC-CT2	In	480	462	-4.97	0.96	3.68
B100;MC-ELES9	In	480	450	-7.36	0.94	6.26
B100;MC-EMCBP	In	480	451	-7.44	0.94	6.13
B100;MC-EMCC2	In	480	450	-7.47	0.94	6.31
B100;MC-EMCC3	In	480	449	-7.44	0.93	6.54
B100;MC-EMCC4	In	480	449	-7.47	0.94	6.37
B100;MC-EMCD5	In	480	449	-7.44	0.93	6.56
B100;MC-EMCDB	In	480	450	-7.46	0.94	6.29
B100;MC-EMCEB	In	480	450	-7.43	0.94	6.26
B100;MC-EMCF1	In	480	451	-7.40	0.94	6.03
B100;MC-EMCFB	In	480	450	-7.46	0.94	6.17
B100;MC-LSMCG	In	480	449	-7.33	0.93	6.55

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;MC-MCCA2	In	480	450	-7.41	0.94	6.27
B100;MC-MCCA3	In	480	448	-7.40	0.93	6.58
B100;MC-MCCA4	In	480	450	-7.42	0.94	6.32
B100;MC-MCCA5	In	480	449	-7.42	0.94	6.36
B100;MC-MCCBP	In	480	451	-7.39	0.94	6.03
B100;MC-MCCC2	In	480	448	-7.38	0.93	6.57
B100;MC-MCCC3	In	480	448	-7.36	0.93	6.60
B100;MC-MCCC4	In	480	449	-7.41	0.94	6.36
B100;MC-MCCCB	In	480	450	-7.46	0.94	6.30
B100;MC-MCCCI	In	480	451	-7.41	0.94	6.05
B100;MC-MCCD2	In	480	449	-7.37	0.93	6.52
B100;MC-MCCD3	In	480	445	-7.29	0.93	7.32
B100;MC-MCCD4	In	480	446	-7.31	0.93	7.06
B100;MC-MCCD5	In	480	446	-7.31	0.93	7.06
B100;MC-MCCDB	In	480	451	-7.40	0.94	6.09
B100;MC-MCCF1	In	480	451	-7.38	0.94	5.99
B100;MC-MCCFB	In	480	451	-7.39	0.94	6.05
B100;MC-MCEB1	In	480	462	-4.97	0.96	3.68
B100;MC-MCEB2	In	480	462	-4.97	0.96	3.68
B100;MC-MCEB3	In	480	452	-7.36	0.94	5.94
B100;MC-MCEB4	In	480	462	-4.97	0.96	3.68
B100;P-150A1	In	120	109	-11.13	0.91	9.35
B100;P-150B2	In	120	108	-11.02	0.90	10.12
B100;P-150C3	In	120	108	-11.02	0.90	9.90
B100;P-164A1	In	120	109	-11.14	0.91	9.44
B100;P-164B2	In	120	107	-11.00	0.90	10.44
B100;P-164C3	In	120	108	-11.01	0.90	10.15
B100;P-166A1	In	120	109	-11.15	0.90	9.50
B100;P-166B2	In	120	107	-10.99	0.89	10.70
B100;P-166C3	In	120	108	-11.00	0.90	10.35
B100;P-168A1	In	120	109	-11.16	0.90	9.57
B100;P-168B	In	120	107	-10.97	0.89	11.09
B100;P-168B2R	In	120	107	-10.97	0.89	11.02
B100;P-168C3	In	120	107	-10.99	0.89	10.54
B100;P-169A1	In	120	109	-11.16	0.90	9.55
B100;P-169B2	In	120	107	-10.98	0.89	10.89
B100;P-169C3	In	120	107	-10.99	0.90	10.48
B100;P-1C90	In	480	451	-7.47	0.94	6.03
B100;P-1DP1	In	480	451	-7.39	0.94	6.01
B100;P-1DP2	In	480	452	-7.36	0.94	5.94
B100;P-1DP2S1	In	480	451	-7.36	0.94	5.99
B100;P-1DP2S2	In	480	451	-7.36	0.94	5.99

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;P-1DP2S3	In	480	451	-7.36	0.94	5.99
B100;P-1DP2S4	In	480	451	-7.36	0.94	5.99
B100;P-1DP2S5	In	480	451	-7.36	0.94	5.99
B100;P-1DP2S6	In	480	451	-7.36	0.94	5.99
B100;P-1DP2S7	In	480	451	-7.36	0.94	5.99
B100;P-1DP3	In	480	451	-7.37	0.94	5.95
B100;P-1DP4	In	480	451	-7.39	0.94	6.01
B100;P-1R1	In	208	193	-8.80	0.93	7.11
B100;P-1R10	In	208	193	-8.60	0.93	6.98
B100;P-1R11	In	208	193	-8.60	0.93	6.98
B100;P-1R12	In	208	194	-8.24	0.93	6.67
B100;P-1R13	In	208	194	-8.08	0.93	6.57
B100;P-1R14	In	208	194	-8.08	0.93	6.57
B100;P-1R15	In	208	194	-8.08	0.93	6.57
B100;P-1R15A	In	208	194	-8.08	0.93	6.57
B100;P-1R16	In	208	191	-10.62	0.92	8.34
B100;P-1R16B	In	208	191	-10.61	0.92	8.36
B100;P-1R17	In	208	191	-10.62	0.92	8.39
B100;P-1R18	In	208	193	-8.92	0.93	7.14
B100;P-1R19	In	208	193	-8.91	0.93	7.12
B100;P-1R2	In	208	193	-8.80	0.93	7.11
B100;P-1R20	In	208	193	-8.91	0.93	7.11
B100;P-1R21	In	208	193	-8.91	0.93	7.11
B100;P-1R22	In	208	193	-8.90	0.93	7.25
B100;P-1R3	In	208	193	-8.80	0.93	7.11
B100;P-1R4	In	208	193	-8.80	0.93	7.11
B100;P-1R5	In	208	193	-8.79	0.93	7.10
B100;P-1R6	In	208	193	-8.79	0.93	7.10
B100;P-1R7	In	208	193	-8.79	0.93	7.10
B100;P-1R8	In	208	193	-8.79	0.93	7.10
B100;P-1R9	In	208	194	-8.60	0.93	6.96
B100;P-2A100	In	480	451	-7.40	0.94	6.05
B100;P-2DP	In	480	449	-7.47	0.94	6.37
B100;P-2R1	In	208	185	-13.30	0.89	11.00
B100;P-2R2	In	208	185	-13.30	0.89	11.00
B100;P-2R3	In	208	185	-13.30	0.89	11.00
B100;P-2R4	In	208	188	-11.24	0.91	9.40
B100;P-2R5	In	208	188	-11.24	0.91	9.40
B100;P-2R6	In	208	188	-11.24	0.91	9.40
B100;P-2R7	In	208	188	-11.14	0.90	9.67
B100;P-2R8	In	208	188	-11.14	0.90	9.67
B100;P-2WR1	In	208	192	-9.29	0.92	7.88

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;P-2WR2	In	208	192	-9.29	0.92	7.88
B100;P-2WR3	In	208	192	-9.30	0.92	7.87
B100;P-2WRDP	In	208	192	-9.30	0.92	7.81
B100;P-3DP	In	480	450	-7.47	0.94	6.34
B100;P-3ED1	In	208	190	-9.77	0.92	8.42
B100;P-3R1	In	208	189	-11.19	0.91	9.32
B100;P-3R10	In	208	191	-9.86	0.92	8.25
B100;P-3R2	In	208	189	-11.19	0.91	9.32
B100;P-3R3	In	208	189	-11.19	0.91	9.32
B100;P-3R4	In	208	189	-11.19	0.91	9.32
B100;P-3R5	In	208	189	-11.19	0.91	9.32
B100;P-3R6	In	208	189	-11.19	0.91	9.32
B100;P-3R7	In	208	191	-9.86	0.92	8.25
B100;P-3R8	In	208	191	-9.86	0.92	8.25
B100;P-3R9	In	208	191	-9.86	0.92	8.25
B100;P-3WD1	In	208	188	-9.67	0.91	9.39
B100;P-4DP	In	480	449	-7.48	0.94	6.38
B100;P-4DP6	In	480	449	-7.48	0.94	6.40
B100;P-4R1	In	208	188	-11.24	0.91	9.48
B100;P-4R2	In	208	188	-11.24	0.91	9.48
B100;P-4R3	In	208	188	-11.24	0.91	9.48
B100;P-4R4	In	208	188	-11.20	0.90	9.77
B100;P-4R5	In	208	188	-11.20	0.90	9.77
B100;P-4R6	In	208	188	-11.20	0.90	9.77
B100;P-4R7	In	208	192	-9.29	0.92	7.90
B100;P-4R8	In	208	192	-9.29	0.92	7.90
B100;P-4R9	In	208	192	-9.29	0.92	7.90
B100;P-5DP	In	480	450	-7.45	0.94	6.29
B100;P-5R1	In	208	186	-12.51	0.90	10.35
B100;P-5R2	In	208	186	-12.51	0.90	10.35
B100;P-5R3	In	208	186	-12.51	0.90	10.35
B100;P-5R4	In	208	186	-12.51	0.90	10.35
B100;P-5R5	In	208	189	-11.20	0.91	9.23
B100;P-5R6	In	208	189	-11.20	0.91	9.23
B100;P-5R7	In	208	189	-11.20	0.91	9.23
B100;P-BDP1	In	480	451	-7.35	0.94	5.94
B100;P-BDP10	In	480	451	-7.36	0.94	5.99
B100;P-BDP2	In	480	451	-7.37	0.94	6.00
B100;P-BDP3	In	480	451	-7.37	0.94	6.01
B100;P-BDP4	In	480	451	-7.37	0.94	6.00
B100;P-BDP5	In	480	451	-7.35	0.94	5.94
B100;P-BDP6	In	480	450	-7.42	0.94	6.19

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;P-BDP8	In	480	450	-7.37	0.94	6.15
B100;P-BDPCRM	In	208	192	-9.53	0.92	7.62
B100;P-BME	In	208	193	-7.94	0.93	7.19
B100;P-BR1	In	208	189	-11.15	0.91	9.21
B100;P-BR10	In	208	191	-10.29	0.92	8.30
B100;P-BR10A	In	208	190	-10.27	0.92	8.45
B100;P-BR13	In	208	192	-9.03	0.93	7.48
B100;P-BR2	In	208	189	-11.15	0.91	9.21
B100;P-BR3	In	208	189	-11.15	0.91	9.21
B100;P-BR4	In	208	192	-9.23	0.92	7.70
B100;P-BR5	In	208	192	-9.23	0.92	7.70
B100;P-BR6	In	208	192	-9.23	0.92	7.70
B100;P-BR7	In	208	192	-9.23	0.92	7.70
B100;P-BR8	In	208	192	-9.23	0.92	7.70
B100;P-BR9	In	208	192	-9.23	0.92	7.70
B100;P-BYL1	In	480	451	-7.38	0.94	6.10
B100;P-BYL2	In	480	451	-7.35	0.94	6.02
B100;P-C1315L	In	480	451	-7.39	0.94	6.01
B100;P-C1315R	In	480	451	-7.39	0.94	6.01
B100;P-C1DP	In	480	450	-7.43	0.94	6.34
B100;P-C1L1	In	480	449	-7.43	0.94	6.36
B100;P-C1L1A	In	480	451	-7.34	0.94	5.99
B100;P-C1L2A	In	480	451	-7.34	0.94	5.99
B100;P-C1R1	In	208	191	-9.63	0.92	8.21
B100;P-C1R2	In	208	191	-9.63	0.92	8.21
B100;P-C1R3	In	208	192	-9.27	0.92	7.71
B100;P-C1R4	In	208	192	-9.27	0.92	7.77
B100;P-C2DP	In	480	450	-7.51	0.94	6.31
B100;P-C2L1	In	480	450	-7.50	0.94	6.35
B100;P-C2R1	In	208	194	-8.42	0.93	6.97
B100;P-C2R2	In	208	193	-8.42	0.93	6.98
B100;P-C2R3	In	208	193	-8.42	0.93	6.98
B100;P-C2R4	In	208	190	-10.56	0.91	8.70
B100;P-C2R5	In	208	190	-10.56	0.91	8.66
B100;P-C2W1	In	208	192	-9.01	0.92	7.65
B100;P-C2W2	In	208	192	-9.01	0.92	7.71
B100;P-C2WDP	In	480	448	-7.48	0.93	6.59
B100;P-C3DP	In	480	449	-7.38	0.94	6.38
B100;P-C3L1	In	480	449	-7.38	0.94	6.41
B100;P-C3R1	In	208	193	-8.37	0.93	7.38
B100;P-C4DP	In	480	451	-7.35	0.94	5.95
B100;P-C4L1	In	480	451	-7.35	0.94	5.98

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;P-C4R1	In	208	194	-8.05	0.94	6.49
B100;P-C4R2	In	208	194	-8.05	0.94	6.49
B100;P-C5DP	In	480	449	-7.34	0.94	6.49
B100;P-C5L1	In	480	449	-7.33	0.93	6.53
B100;P-C5R1	In	208	191	-9.55	0.92	8.29
B100;P-C5R2	In	208	191	-9.55	0.92	8.29
B100;P-CBDP1	In	480	451	-7.38	0.94	5.99
B100;P-CBDP2	In	480	452	-7.34	0.94	5.88
B100;P-CCTV	In	208	192	-9.53	0.92	7.62
B100;P-E1DP1	In	480	450	-7.44	0.94	6.31
B100;P-E1DP2	In	480	451	-7.39	0.94	6.01
B100;P-E1DP2A	In	480	451	-7.39	0.94	6.01
B100;P-E1L1	In	480	450	-7.44	0.94	6.33
B100;P-E1R1	In	208	193	-8.50	0.93	7.12
B100;P-E1R16A	In	208	194	-8.49	0.93	6.78
B100;P-E1R2	In	208	193	-8.50	0.93	7.15
B100;P-E1R3	In	208	194	-8.48	0.93	6.87
B100;P-E1R4	In	208	193	-8.50	0.93	7.15
B100;P-E2DP	In	480	451	-7.39	0.94	6.00
B100;P-E2L1	In	480	451	-7.38	0.94	6.04
B100;P-E2L1A	In	480	451	-7.39	0.94	6.00
B100;P-E2R1	In	208	192	-9.57	0.92	7.86
B100;P-E2R2	In	208	192	-9.57	0.92	7.86
B100;P-E2WD1	In	208	195	-7.80	0.94	6.31
B100;P-E2WDP2	In	480	451	-7.39	0.94	6.02
B100;P-E3DP	In	480	449	-7.39	0.93	6.54
B100;P-E3L1	In	480	448	-7.39	0.93	6.59
B100;P-E3L1A	In	480	451	-7.35	0.94	6.04
B100;P-E3R1	In	208	190	-9.60	0.92	8.42
B100;P-E3R2	In	208	190	-9.60	0.92	8.42
B100;P-E4DP	In	480	450	-7.44	0.94	6.33
B100;P-E4L1	In	480	449	-7.43	0.94	6.37
B100;P-E4L1A	In	480	450	-7.40	0.94	6.16
B100;P-E4R1	In	208	191	-9.64	0.92	8.20
B100;P-E4R2	In	208	191	-9.64	0.92	8.20
B100;P-E5DP	In	480	448	-7.39	0.93	6.64
B100;P-E5L1	In	480	448	-7.39	0.93	6.68
B100;P-E5L1A	In	480	451	-7.35	0.94	6.06
B100;P-E5R1	In	208	190	-9.61	0.91	8.51
B100;P-E5R2	In	208	190	-9.61	0.91	8.51
B100;P-EBDP1	In	480	451	-7.40	0.94	6.02
B100;P-EBDP1A	In	480	452	-7.32	0.94	5.86

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;P-EBDP2	In	480	452	-7.35	0.94	5.91
B100;P-EBDP3	In	480	452	-7.35	0.94	5.91
B100;P-EBDP4	In	480	451	-7.44	0.94	6.12
B100;P-EBDP6	In	480	447	-7.38	0.93	6.90
B100;P-EBDP7A	In	208	194	-8.15	0.93	6.65
B100;P-EBDP9A	In	480	450	-7.46	0.94	6.22
B100;P-EBDP9B	In	208	194	-7.89	0.93	6.55
B100;P-EBDPRI	In	480	452	-7.32	0.94	5.85
B100;P-EBL1	In	480	447	-7.38	0.93	6.93
B100;P-EBL1A	In	480	451	-7.40	0.94	6.13
B100;P-EBL2A	In	480	451	-7.40	0.94	6.13
B100;P-EBPR1	In	208	194	-8.47	0.93	6.85
B100;P-EBR1	In	208	190	-9.62	0.91	8.83
B100;P-EBR10	In	208	195	-7.84	0.94	6.41
B100;P-EBR11	In	208	194	-8.16	0.93	6.72
B100;P-EBR11A	In	208	194	-8.17	0.93	6.70
B100;P-EBR11B	In	208	194	-8.16	0.93	6.68
B100;P-EBR11C	In	208	194	-8.17	0.93	6.71
B100;P-EBR12	In	208	194	-8.16	0.93	6.71
B100;P-EBR2	In	208	190	-9.62	0.91	8.83
B100;P-EPDP	In	480	452	-7.32	0.94	5.83
B100;P-FIRE-P	In	480	452	-7.32	0.94	5.85
B100;P-KITCHE	In	208	194	-8.17	0.93	6.69
B100;P-LS1DP	In	480	450	-7.41	0.94	6.17
B100;P-LS1L1	In	480	450	-7.41	0.94	6.21
B100;P-LS1R1	In	208	193	-8.40	0.93	7.16
B100;P-LS2DP	In	480	449	-7.39	0.94	6.47
B100;P-LS2L1	In	480	449	-7.38	0.93	6.51
B100;P-LS2R1	In	208	192	-8.38	0.93	7.46
B100;P-LS2WL1	In	480	445	-7.26	0.93	7.29
B100;P-LS3DP	In	480	449	-7.39	0.94	6.38
B100;P-LS3L1	In	480	449	-7.38	0.94	6.42
B100;P-LS3R1	In	208	193	-8.38	0.93	7.38
B100;P-LS4DP	In	480	449	-7.39	0.94	6.41
B100;P-LS4L1	In	480	449	-7.38	0.94	6.44
B100;P-LS4R1	In	208	193	-8.38	0.93	7.41
B100;P-LS5DP	In	480	449	-7.39	0.94	6.45
B100;P-LS5L1	In	480	449	-7.38	0.94	6.49
B100;P-LS5R1	In	208	193	-8.38	0.93	7.45
B100;P-LSB2	In	480	449	-7.38	0.93	6.52
B100;P-LSBDP1	In	480	451	-7.39	0.94	5.99
B100;P-LSBDP2	In	480	449	-7.39	0.94	6.47

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100;P-LSBL1	In	480	449	-7.38	0.93	6.51
B100;P-LSBR1	In	208	193	-8.39	0.93	7.39
B100;P-MSI850	In	480	451	-7.36	0.94	5.99
B100;P-PBLOAD	In	480	451	-7.36	0.94	5.99
B100;P-RL1	In	208	193	-8.22	0.93	7.43
B100;P-RL2	In	208	193	-8.24	0.93	7.34
B100;P-RP1	In	208	189	-9.60	0.91	9.23
B100;P-RP2	In	208	189	-9.60	0.91	9.23
B100;P-RP3	In	208	189	-9.60	0.91	9.32
B100;P-RP5	In	208	189	-9.59	0.91	9.35
B100;P-RP6	In	208	189	-9.62	0.91	8.94
B100;P-UNKNOW	In	208	190	-10.61	0.92	8.45
B100;P-UNNAM1	In	208	190	-10.61	0.92	8.45
B100;P-UNNAM2	In	208	190	-10.61	0.92	8.45
B100;SG-SS1-A	In	480	463	-4.93	0.96	3.55
B100;SG-SS2-A	In	480	452	-7.34	0.94	5.91
B100;SG-SS2-B	In	480	452	-7.32	0.94	5.82
B100;V-100P1	In	480	462	-4.97	0.96	3.68
B100;V-100P2	In	480	462	-4.97	0.96	3.68
B100;V-100P3	In	480	452	-7.35	0.94	5.91
B100A;B-1DLSP	In	480	448	-7.38	0.93	6.65
B100A;B-1DLSS	In	208	193	-8.27	0.93	7.22
B100A;B-1DT1P	In	480	449	-7.51	0.94	6.46
B100A;B-1DT1S	In	208	193	-8.52	0.93	7.12
B100A;B-2DCRP	In	480	450	-7.39	0.94	6.35
B100A;B-2DCRS	In	208	193	-8.76	0.93	7.26
B100A;B-2DT1P	In	480	449	-7.52	0.93	6.52
B100A;B-2DT1S	In	208	192	-9.45	0.92	7.81
B100A;B-BDE1P	In	480	450	-7.45	0.94	6.22
B100A;B-BDE1S	In	208	195	-7.45	0.94	6.22
B100A;B-BDLSP	In	480	450	-7.43	0.94	6.34
B100A;B-BDLSS	In	208	194	-8.31	0.93	6.92
B100A;B-BDT1P	In	480	449	-7.46	0.94	6.40
B100A;B-BDT1S	In	208	193	-8.76	0.93	7.25
B100A;B-TBDEP	In	480	449	-7.42	0.94	6.42
B100A;B-TBDES	In	208	192	-9.10	0.92	7.53
B100A;P-1DL1	In	480	449	-7.51	0.94	6.41
B100A;P-1DLS1	In	480	448	-7.39	0.93	6.61
B100A;P-1DLSR1	In	208	193	-8.24	0.93	7.45
B100A;P-1DR1	In	208	193	-8.53	0.93	7.23
B100A;P-1DR1S	In	208	193	-8.54	0.93	7.29
B100A;P-1DR2	In	208	193	-8.51	0.93	7.28

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B100A;P-2DCR1	In	208	193	-8.77	0.93	7.28
B100A;P-2DCR2	In	208	193	-8.76	0.93	7.30
B100A;P-2DL1	In	480	449	-7.52	0.94	6.48
B100A;P-2DR1	In	208	192	-9.47	0.92	7.88
B100A;P-2DR2	In	208	192	-9.46	0.92	7.93
B100A;P-2DR3	In	208	192	-9.46	0.92	7.93
B100A;P-2DRDP	In	208	192	-9.47	0.92	7.85
B100A;P-BDC1	In	480	450	-7.41	0.94	6.22
B100A;P-BDDP1	In	480	450	-7.47	0.94	6.33
B100A;P-BDE1	In	480	450	-7.45	0.94	6.22
B100A;P-BDELV	In	208	192	-9.09	0.92	7.65
B100A;P-BDLS1	In	480	450	-7.43	0.94	6.30
B100A;P-BDLSR1	In	208	193	-8.28	0.93	7.14
B100A;P-BDR1	In	208	193	-8.75	0.93	7.40
B100A;V-VFDP1	In	480	450	-7.47	0.94	6.33
B100A;V-VFDP2	In	480	450	-7.47	0.94	6.33
B103;B-103S	In	480	490	-3.79	1.02	-2.14
B103;B-A-CL	In	480	489	-3.86	1.02	-1.87
B103;B-A-CN	In	480	489	-3.86	1.02	-1.88
B103;B-A-EL	In	480	489	-3.83	1.02	-1.86
B103;B-A-EN	In	480	489	-3.83	1.02	-1.86
B103;B-NC1D2P	In	480	488	-3.86	1.02	-1.63
B103;B-NC1D2S	In	208	207	-6.73	1.00	0.48
B103;B-NE1R1P	In	480	487	-3.80	1.02	-1.55
B103;B-NE1R1S	In	208	209	-5.00	1.01	-0.70
B103;B-T103P	In	13,090	12,871	-2.39	0.98	1.67
B103;B-T-M	In	480	489	-3.88	1.02	-1.82
B103;B-T-S	In	208	209	-5.51	1.01	-0.64
B103;MC-NCMC1	In	480	487	-3.86	1.02	-1.51
B103;MC-NMCC1	In	480	489	-3.86	1.02	-1.89
B103;P-MDP	In	480	490	-3.84	1.02	-2.01
B103;P-N1D1	In	208	208	-5.64	1.00	-0.09
B103;P-N1L1	In	480	490	-3.84	1.02	-1.98
B103;P-N1R1	In	208	208	-5.63	1.00	0.01
B103;P-N1R2	In	208	206	-5.59	0.99	0.78
B103;P-N1R3	In	208	206	-5.59	0.99	0.86
B103;P-N1R4	In	208	208	-5.63	1.00	0.04
B103;P-N2D1	In	208	207	-5.73	1.00	0.40
B103;P-N2D2	In	480	489	-3.84	1.02	-1.93
B103;P-N2L1	In	480	487	-3.77	1.02	-1.55
B103;P-N2R1	In	208	207	-5.73	1.00	0.48
B103;P-N2R2	In	208	206	-5.73	0.99	0.81

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B103;P-N2R3	In	208	206	-5.73	0.99	0.74
B103;P-N2R4	In	208	207	-5.73	1.00	0.48
B103;P-N2R5	In	208	207	-5.73	1.00	0.48
B103;P-NC1D1	In	480	489	-3.87	1.02	-1.78
B103;P-NC1D2	In	208	206	-6.78	0.99	0.78
B103;P-NC1L1	In	480	488	-3.87	1.02	-1.76
B103;P-NC1R1	In	208	205	-6.70	0.99	1.28
B103;P-NC1R2	In	208	204	-6.72	0.98	1.82
B103;P-NC1R3	In	208	204	-6.72	0.98	1.82
B103;P-NC2L1	In	480	486	-3.79	1.01	-1.18
B103;P-NC2R1	In	208	203	-6.57	0.98	2.21
B103;P-NC2R2	In	208	201	-6.40	0.97	3.37
B103;P-NC2R3	In	208	201	-6.39	0.97	3.48
B103;P-NE1D1	In	480	488	-3.83	1.02	-1.74
B103;P-NE1L1	In	480	488	-3.83	1.02	-1.71
B103;P-NE1R1	In	208	209	-4.99	1.00	-0.44
B103;P-NE2L1	In	480	487	-3.81	1.02	-1.56
B103;P-NE2R1	In	208	205	-4.73	0.99	1.40
B105;B-36H-P	In	480	473	-5.47	0.99	1.36
B105;B-36H-S	In	240	236	-6.03	0.98	1.74
B105;B-36P-P	In	480	473	-5.47	0.99	1.36
B105;B-36P-S	In	240	235	-6.40	0.98	2.00
B105;P-36H	In	480	474	-5.47	0.99	1.33
B105;P-36L	In	240	236	-6.03	0.98	1.78
B105;P-36P	In	240	235	-6.39	0.98	2.06
B105;P-36P,H	In	480	474	-5.47	0.99	1.33
B106;B-106S	In	480	490	-3.82	1.02	-2.13
B106;B-A-1L	In	480	489	-3.88	1.02	-1.93
B106;B-A-1N	In	480	489	-3.87	1.02	-1.94
B106;B-EL-P1	In	480	489	-3.88	1.02	-1.78
B106;B-EL-S1	In	480	489	-3.88	1.02	-1.78
B106;B-ELV	In	480	489	-3.88	1.02	-1.78
B106;B-EMDPLP	In	480	488	-3.88	1.02	-1.76
B106;B-EMDPLS	In	208	207	-6.78	1.00	0.38
B106;B-EV	In	480	488	-3.88	1.02	-1.73
B106;B-EV-P	In	480	488	-3.87	1.02	-1.67
B106;B-EV-S	In	208	210	-5.12	1.01	-0.78
B106;B-FIRE-P	In	480	490	-3.82	1.02	-2.13
B106;B-FP	In	480	490	-3.82	1.02	-2.13
B106;B-FP-L	In	480	490	-3.82	1.02	-2.13
B106;B-FP-N	In	480	490	-3.82	1.02	-2.13
B106;B-JB-PPH	In	480	488	-3.86	1.02	-1.68

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B106;B-MDPL-P	In	480	490	-3.86	1.02	-1.99
B106;B-MDPL-S	In	208	210	-5.02	1.01	-1.15
B106;B-PPL1-P	In	480	487	-3.84	1.02	-1.53
B106;B-PPL1-S	In	208	209	-5.11	1.01	-0.64
B106;B-PPL2-P	In	480	487	-3.85	1.01	-1.49
B106;B-PPL2-S	In	208	209	-5.11	1.01	-0.59
B106;B-T106P	In	13,090	12,873	-2.39	0.98	1.66
B106;P-E1A	In	208	206	-6.79	0.99	0.88
B106;P-E1B	In	208	203	-6.71	0.98	2.35
B106;P-E1C	In	208	204	-6.73	0.98	2.02
B106;P-E1D	In	208	202	-6.68	0.97	2.92
B106;P-E2A	In	208	206	-6.78	0.99	1.02
B106;P-E2B	In	208	203	-6.71	0.98	2.49
B106;P-E2C	In	208	204	-6.72	0.98	2.14
B106;P-E2D	In	208	202	-6.68	0.97	3.08
B106;P-EKL	In	208	204	-6.66	0.98	1.78
B106;P-EMDPH	In	480	489	-3.89	1.02	-1.89
B106;P-EMDPL	In	208	207	-6.81	0.99	0.56
B106;P-EPPH1	In	480	485	-3.79	1.01	-1.05
B106;P-EPPH2	In	480	488	-3.88	1.02	-1.57
B106;P-EV	In	208	209	-5.11	1.01	-0.65
B106;P-KH	In	480	489	-3.85	1.02	-1.88
B106;P-KL	In	208	209	-5.05	1.00	-0.44
B106;P-L1A	In	208	210	-5.11	1.01	-0.90
B106;P-L1B	In	208	208	-5.39	1.00	-0.19
B106;P-L1C	In	208	209	-5.18	1.01	-0.62
B106;P-L1D	In	208	208	-5.50	1.00	0.07
B106;P-L2A	In	208	210	-5.12	1.01	-0.76
B106;P-L2B	In	208	208	-5.40	1.00	-0.06
B106;P-L2C	In	208	209	-5.20	1.01	-0.55
B106;P-L2D	In	208	208	-5.51	1.00	0.23
B106;P-MDPH	In	480	490	-3.86	1.02	-2.00
B106;P-MDPL	In	208	210	-5.05	1.01	-1.05
B106;P-OL	In	480	489	-3.86	1.02	-1.98
B106;P-PPH1	In	480	488	-3.86	1.02	-1.62
B106;P-PPH2-L	In	480	487	-3.85	1.02	-1.53
B106;P-PPH2-R	In	480	487	-3.85	1.02	-1.51
B106;P-PPL1	In	208	209	-5.07	1.00	-0.38
B106;P-PPL2	In	208	209	-5.08	1.00	-0.40
B106;P-R1A	In	208	210	-5.11	1.01	-0.85
B106;P-R1B	In	208	208	-5.39	1.00	-0.13
B106;P-R1C	In	208	209	-5.18	1.01	-0.56

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B106;P-R1D	In	208	208	-5.49	1.00	0.17
B106;P-R2A	In	208	209	-5.12	1.01	-0.66
B106;P-R2B	In	208	208	-5.40	1.00	0.04
B106;P-R2C	In	208	209	-5.20	1.00	-0.49
B106;P-R2D	In	208	207	-5.51	1.00	0.29
B106;SG-N	In	480	490	-3.85	1.02	-2.02
B20;B-20A1-P	In	240	233	-5.76	0.97	2.81
B20;B-20A1-S	In	208	201	-6.81	0.96	3.52
B20;B-20A2-P	In	240	233	-5.76	0.97	2.81
B20;B-20A2-S	In	208	201	-6.81	0.96	3.52
B20;B-20L1S-P	In	480	481	-5.61	1.00	-0.13
B20;B-20L1S-S	In	208	207	-6.36	1.00	0.39
B20;B-20-P	In	13,090	12,593	-4.63	0.96	3.80
B20;B-T-20A-P	In	480	481	-5.62	1.00	-0.13
B20;B-T-20A-S	In	208	206	-7.13	0.99	0.93
B20;B-T-20-P	In	13,090	12,593	-4.63	0.96	3.80
B20;B-T-20-S	In	480	481	-5.60	1.00	-0.27
B20;P-20L11	In	208	206	-7.16	0.99	1.00
B20;P-20L12	In	208	206	-7.17	0.99	1.08
B20;P-20L14	In	208	205	-7.15	0.99	1.22
B20;P-20L15	In	208	206	-7.15	0.99	1.19
B20;P-20MDP	In	480	481	-5.62	1.00	-0.17
B20;P-E8PBJ1A1	In	208	200	-6.79	0.96	3.63
B20;P-E8PBJ1A2	In	208	200	-6.79	0.96	3.63
B20;P-P20L15	In	208	207	-6.35	1.00	0.47
B20;P-T20A	In	240	233	-5.77	0.97	2.73
B22;B-22-P	In	13,090	12,589	-4.63	0.96	3.83
B22;B-41-P	In	480	478	-5.90	1.00	0.35
B22;B-41-S	In	208	203	-8.67	0.98	2.35
B22;B-C-41-P	In	480	479	-5.90	1.00	0.29
B22;B-C-ELE2	In	208	202	-8.80	0.97	2.90
B22;B-ELE P1	In	208	202	-8.77	0.97	2.65
B22;B-EMER	In	208	202	-8.79	0.97	2.93
B22;B-JB-H1	In	480	479	-5.88	1.00	0.24
B22;B-JB-H2	In	480	478	-5.88	1.00	0.34
B22;B-L1,2,3	In	208	202	-8.80	0.97	2.87
B22;B-L2,3	In	208	201	-8.77	0.97	3.42
B22;B-L3	In	208	200	-8.75	0.96	3.70
B22;B-M-ELE P1	In	208	202	-8.77	0.97	2.65
B22;B-M-ELE2	In	208	202	-8.80	0.97	2.90
B22;B-P1E	In	208	202	-8.80	0.97	2.90
B22;B-P1L	In	208	202	-8.77	0.97	2.65

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B22;B-P1N	In	208	202	-8.77	0.97	2.65
B22;B-T-22-P	In	13,090	12,589	-4.63	0.96	3.83
B22;B-T-22-S	In	480	480	-5.78	1.00	-0.09
B22;B-TS1L	In	208	202	-8.79	0.97	2.80
B22;B-TS1N	In	208	202	-8.79	0.97	2.80
B22;B-TS1-P1	In	208	202	-8.80	0.97	2.90
B22;P-AC1	In	480	479	-5.89	1.00	0.22
B22;P-AC2	In	480	479	-5.89	1.00	0.25
B22;P-AC3	In	480	479	-5.89	1.00	0.29
B22;P-ACD	In	480	479	-5.90	1.00	0.19
B22;P-EHB	In	208	202	-8.80	0.97	2.90
B22;P-GEN	In	208	200	-8.68	0.96	3.91
B22;P-H1	In	480	479	-5.88	1.00	0.25
B22;P-H12	In	480	479	-5.89	1.00	0.19
B22;P-H2	In	480	478	-5.88	1.00	0.35
B22;P-H3	In	480	478	-5.88	1.00	0.39
B22;P-HB	In	480	479	-5.89	1.00	0.19
B22;P-L1	In	208	202	-8.79	0.97	2.94
B22;P-L2	In	208	201	-8.76	0.97	3.49
B22;P-L3	In	208	200	-8.75	0.96	3.77
B22;P-LB1	In	208	202	-8.77	0.97	2.65
B22;P-LB2	In	208	202	-8.75	0.97	2.86
B22;P-MDP	In	480	479	-5.89	1.00	0.16
B5;B-5L31	In	240	235	-8.03	0.98	1.91
B5;B-5-P	In	13,090	12,591	-4.63	0.96	3.81
B5;B-5PB1-P	In	480	481	-5.57	1.00	-0.11
B5;B-5PB1-S	In	240	240	-5.83	1.00	0.07
B5;B-L1B-P	In	480	480	-5.55	1.00	0.00
B5;B-L1B-S	In	208	206	-6.74	0.99	0.83
B5;B-L1-P	In	480	480	-5.56	1.00	-0.08
B5;B-L1-S	In	208	207	-6.08	1.00	0.28
B5;B-NORMAL	In	240	235	-8.03	0.98	1.91
B5;B-PL21	In	240	235	-8.02	0.98	1.93
B5;B-PL22	In	240	235	-8.03	0.98	1.92
B5;B-T-5-P	In	13,090	12,591	-4.63	0.96	3.81
B5;B-T-5-S	In	480	481	-5.54	1.00	-0.29
B5;B-WIREWAY	In	240	235	-8.02	0.98	1.88
B5;B-WIREWAYP	In	480	480	-5.58	1.00	-0.04
B5;B-WIREWAYS	In	240	236	-7.94	0.98	1.66
B5;P-5L205	In	480	479	-5.56	1.00	0.18
B5;P-5L21	In	480	480	-5.58	1.00	-0.02
B5;P-5L31	In	240	234	-8.07	0.98	2.35

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B5;P-5MDP	In	480	481	-5.56	1.00	-0.13
B5;P-5PB1	In	240	240	-5.84	1.00	0.11
B5;P-EMER	In	208	198	-8.70	0.95	4.61
B5;P-L1	In	208	207	-6.09	1.00	0.37
B5;P-L1B	In	208	206	-6.74	0.99	1.01
B5;P-NORMAL	In	240	234	-8.09	0.98	2.32
B5;P-PL21	In	240	234	-7.99	0.97	2.50
B5;P-PL22	In	240	235	-8.06	0.98	2.27
B5;P-X	In	240	235	-8.03	0.98	1.97
B6;B-6LDP1-JB	In	240	234	-8.71	0.97	2.59
B6;B-T-6A-P	In	480	479	-5.84	1.00	0.20
B6;B-T-6A-S	In	240	238	-6.57	0.99	0.72
B6;B-T-6B-P	In	480	479	-5.84	1.00	0.19
B6;B-T-6B-S	In	240	235	-8.49	0.98	2.11
B6;B-T6-P	In	13,090	12,594	-4.62	0.96	3.79
B6;B-T-6-P	In	13,090	12,594	-4.62	0.96	3.79
B6;B-T-6-S	In	480	481	-5.70	1.00	-0.15
B6;B-T-7-JB	In	240	237	-6.76	0.99	1.21
B6;P-6L11A	In	240	234	-8.56	0.98	2.41
B6;P-6L11B	In	240	234	-8.54	0.97	2.67
B6;P-6LDP1	In	240	235	-8.53	0.98	2.21
B6;P-6LDP-1A	In	240	231	-8.59	0.96	3.56
B6;P-6MDP	In	480	479	-5.83	1.00	0.14
B6;P-6P11	In	240	238	-6.60	0.99	0.86
B6;P-6PDP1	In	240	238	-6.59	0.99	0.82
B6;P-6SL1	In	480	479	-5.83	1.00	0.17
B7;B-T-7-P	In	240	236	-6.82	0.98	1.66
B7;B-T-7-S	In	208	202	-8.61	0.97	2.91
B7;P-P1	In	240	233	-8.78	0.97	3.07
B7;P-PP	In	208	202	-8.61	0.97	3.01
B8;B-1PA-1	In	208	205	-6.80	0.98	1.61
B8;B-1PA-2	In	240	238	-6.06	0.99	0.68
B8;B-1PB	In	208	204	-6.96	0.98	2.05
B8;B-6LDP1SAF	In	240	234	-8.72	0.97	2.64
B8;B-8LB1-P	In	240	238	-6.02	0.99	0.95
B8;B-8LB1-S	In	208	205	-6.74	0.99	1.44
B8;B-8-P	In	13,090	12,593	-4.62	0.96	3.80
B8;B-8PB1R	In	240	238	-6.04	0.99	0.81
B8;B-A-1L	In	240	239	-6.04	1.00	0.39
B8;B-A-1N	In	240	239	-6.03	1.00	0.39
B8;B-BFWP1	In	240	239	-6.07	0.99	0.51
B8;B-BFWP2	In	240	239	-6.07	0.99	0.51

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B8;B-BK-A-1N	In	240	239	-6.00	1.00	0.29
B8;B-SAFETY	In	240	237	-6.77	0.99	1.24
B8;B-T-1PA-1P	In	240	237	-6.01	0.99	1.06
B8;B-T-8L11-P	In	240	239	-6.07	0.99	0.56
B8;B-T-8L11-S	In	208	205	-7.05	0.99	1.24
B8;B-T-8-P	In	13,090	12,593	-4.62	0.96	3.80
B8;B-T-8-S	In	240	240	-5.90	1.00	-0.06
B8;B-TMHC265P	In	240	238	-6.04	0.99	0.66
B8;B-TMHC265S	In	208	206	-6.62	0.99	1.06
B8;P-1PA	In	240	238	-6.06	0.99	0.73
B8;P-1PA-1	In	208	204	-6.79	0.98	1.69
B8;P-1PB	In	208	203	-6.94	0.98	2.17
B8;P-8L11	In	208	205	-7.06	0.99	1.34
B8;P-8L11A	In	208	205	-7.04	0.98	1.67
B8;P-8LB1	In	208	205	-6.73	0.99	1.49
B8;P-8PB1	In	240	239	-6.08	0.99	0.59
B8;P-8PBJ	In	240	239	-6.06	1.00	0.47
B8;P-8PBJ1	In	240	239	-6.07	0.99	0.51
B8;P-BL12	In	208	204	-6.99	0.98	2.06
B8;P-GR	In	208	205	-7.06	0.99	1.29
B8;P-GRA	In	208	205	-7.05	0.99	1.34
B8;P-MACHSHOP	In	240	238	-6.07	0.99	0.72
B8;P-MHC26	In	208	205	-6.55	0.98	1.58
B9;B-9EL21	In	208	205	-7.57	0.98	1.58
B9;B-9S-P	In	13,090	12,587	-4.63	0.96	3.84
B9;B-A-1L	In	480	480	-5.76	1.00	0.01
B9;B-A-1N	In	480	480	-5.75	1.00	0.01
B9;B-T9ELDP-P	In	480	479	-5.76	1.00	0.18
B9;B-T9ELDP-S	In	208	206	-6.89	0.99	0.97
B9;B-T-9S-P	In	13,090	12,587	-4.63	0.96	3.84
B9;B-T-9S-S	In	480	481	-5.71	1.00	-0.13
B9;B-TEL21-P	In	480	479	-5.76	1.00	0.21
B9;B-TEL21-S	In	208	205	-7.57	0.99	1.49
B9;B-TLDP-P	In	480	479	-5.75	1.00	0.30
B9;B-TLDP-S	In	208	205	-7.65	0.98	1.66
B9;P-9EHDP	In	480	479	-5.77	1.00	0.12
B9;P-9EL21	In	208	203	-7.57	0.97	2.61
B9;P-9ELDP	In	208	206	-6.90	0.99	1.04
B9;P-9HDP	In	480	480	-5.74	1.00	0.06
B9;P-9L11	In	208	203	-7.79	0.97	2.60
B9;P-9L21	In	208	203	-7.85	0.98	2.46
B9;P-9L22	In	208	203	-7.82	0.98	2.34

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
B9;P-9LDP	In	208	204	-7.71	0.98	1.80
B9;SG-9MDP	In	480	480	-5.74	1.00	-0.07
B9A;B-A-2L	In	480	481	-5.67	1.00	-0.13
B9A;B-A-2N	In	480	481	-5.66	1.00	-0.13
B9A;B-A-3L	In	480	481	-5.66	1.00	-0.11
B9A;B-A-3N	In	480	481	-5.66	1.00	-0.11
B9A;B-ELEVATR	In	480	481	-5.66	1.00	-0.15
B9A;B-M-ELEVA	In	480	481	-5.66	1.00	-0.15
B9A;B-P-TR-9N	In	13,090	12,587	-4.63	0.96	3.84
B9A;B-T9A-1P	In	480	481	-5.67	1.00	-0.13
B9A;B-T9A-1S	In	208	207	-6.33	1.00	0.33
B9A;B-T-9N-P	In	13,090	12,587	-4.63	0.96	3.84
B9A;B-T-9N-S	In	480	481	-5.65	1.00	-0.21
B9A;B-TEDP1-P	In	480	480	-5.66	1.00	-0.08
B9A;B-TEDP1-S	In	208	206	-6.93	0.99	0.81
B9A;B-TEDP-P	In	480	480	-5.66	1.00	-0.07
B9A;B-TEDP-S	In	208	208	-5.99	1.00	0.16
B9A;MC-MCC-9A	In	480	481	-5.66	1.00	-0.15
B9A;P-9ALDP	In	208	207	-6.35	1.00	0.37
B9A;P-9AMDP	In	480	481	-5.66	1.00	-0.18
B9A;P-EDP	In	208	208	-5.99	1.00	0.23
B9A;P-EDP1	In	208	206	-6.93	0.99	0.91
B9A;P-EDP2	In	208	205	-6.89	0.98	1.61
B9A;P-ELP	In	480	481	-5.67	1.00	-0.11
B9A;P-LP	In	480	481	-5.66	1.00	-0.11
B9A;P-LVP	In	208	206	-6.32	0.99	0.78
B9A;P-PP1	In	208	207	-6.38	0.99	0.59
B9A;P-PP2	In	208	207	-6.38	0.99	0.62
B9A;P-PP3	In	208	207	-6.38	0.99	0.59
BMRI;B-EMH-P	In	480	444	-7.12	0.92	7.56
BMRI;B-EMH-S	In	208	190	-8.91	0.91	8.73
BMRI;B-H-P	In	480	451	-7.38	0.94	6.05
BMRI;B-H-S	In	208	195	-8.04	0.94	6.48
BMRI;MC-CHILL	In	480	451	-7.38	0.94	6.06
BMRI;P-EMH	In	480	444	-7.12	0.92	7.53
BMRI;P-EML	In	208	189	-8.88	0.91	8.96
BMRI;P-H	In	480	451	-7.38	0.94	6.03
BMRI;P-L	In	208	194	-8.04	0.93	6.51
BMRI;U-UPS	In	480	451	-7.38	0.94	6.03
BT25;P-MSPP1	In	208	197	-6.64	0.95	5.50
BT34;P-T34A	In	208	201	-6.97	0.97	3.26
BT34;P-T34B	In	208	204	-7.07	0.98	2.11

Bus Name	In/Out Service	Design Volts	LF Volts	Angle Degree	PU Volts	%VD
BT36;B-36P2-P	In	480	471	-5.42	0.98	1.85
BT36;B-36P2-S	In	208	204	-5.72	0.98	2.06
BT36;B-T36	In	480	473	-5.47	0.99	1.38
BT36;P-36P1	In	480	471	-5.42	0.98	1.83
BT36;P-36P2	In	208	204	-5.73	0.98	2.11
OD;B-FD-A	In	13,090	12,597	-4.62	0.96	3.77
OD;B-FD-B	In	13,090	12,874	-2.39	0.98	1.65
OD;B-TRU1P	In	34,500	34,208	-0.90	0.99	0.85
OD;B-TRU2P	In	34,500	34,364	-0.48	1.00	0.40
OD;B-T-U1-P	In	34,500	34,207	-0.90	0.99	0.85
OD;B-T-U1-S	In	13,090	12,598	-4.62	0.96	3.76
OD;B-T-U2-P	In	34,500	34,363	-0.48	1.00	0.40
OD;B-T-U2-S	In	13,090	12,875	-2.39	0.98	1.64
OD;B-UTIL1	In	34,500	34,208	-0.90	0.99	0.85
OD;B-UTIL-2	In	34,500	34,364	-0.48	1.00	0.39
OD;SG-1	In	13,090	12,595	-4.62	0.96	3.78
OD;SG-2	In	13,090	12,595	-4.62	0.96	3.78
OD;SG-3	In	13,090	12,873	-2.39	0.98	1.66
OD;SG-4	In	13,090	12,873	-2.39	0.98	1.66

Cables

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-150A1P	B100;C-164A1	In	0.09	15.2	5.2	16.1	49.1	0.95
B100;B-164A1P				0.0	0.0	0.0	18.9	
B100;B-150A1S	B100;C-150A1S	In	0.02	3.8	1.2	4.0	21.2	0.95
B100;P-150A1				0.0	0.0	0.0	8.2	
B100;B-150B2P	B100;C-164B2	In	0.32	19.2	6.5	20.2	62.3	0.95
B100;B-164B2P				0.1	0.0	0.1	47.9	
B100;B-150B2S	B100;C-150B2S	In	0.06	3.8	1.2	4.0	21.4	0.95
B100;P-150B2				0.0	0.0	0.0	16.5	
B100;B-150C3P	B100;C-164B3	In	0.26	15.3	5.2	16.2	49.6	0.95
B100;B-164C3P				0.0	0.0	0.0	38.1	
B100;B-150C3S	B100;C-150C3S	In	0.06	3.8	1.2	4.0	21.4	0.95
B100;P-150C3				0.0	0.0	0.0	16.4	
B100;B-164A1P	B100;C-166A1	In	0.07	11.4	3.9	12.1	36.8	0.95
B100;B-166A1P				0.0	0.0	0.0	14.2	
B100;B-164A1S	B100;C-164A1S	In	0.02	3.8	1.2	4.0	21.2	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;P-164A1				0.0	0.0	0.0	8.2	
B100;B-164B2P B100;B-166B2P	B100;C-166B2	In	0.26	15.3 0.0	5.2 0.0	16.2 0.0	49.9 38.4	0.95
B100;B-164B2S B100;P-164B2	B100;C-164B2S	In	0.06	3.8 0.0	1.2 0.0	4.0 0.0	21.5 16.5	0.95
B100;B-164C3P B100;B-166C3P	B100;C-166C3	In	0.19	11.5 0.0	3.9 0.0	12.1 0.0	37.2 28.6	0.95
B100;B-164C3S B100;P-164C3	B100;C-164C3S	In	0.06	3.8 0.0	1.2 0.0	4.0 0.0	21.4 16.5	0.95
B100;B-166A1P B100;B-169A1P	B100;C-169A1	In	0.04	7.6 0.0	2.6 0.0	8.0 0.0	24.6 9.4	0.95
B100;B-166A1S B100;P-166A1	B100;C-166A1S	In	0.02	3.8 0.0	1.2 0.0	4.0 0.0	21.3 8.2	0.95
B100;B-166B2P B100;B-169B2P	B100;C-169B2	In	0.19	11.5 0.0	3.9 0.0	12.1 0.0	37.4 28.8	0.95
B100;B-166B2S B100;P-166B2	B100;C-166B2S	In	0.06	3.8 0.0	1.2 0.0	4.0 0.0	21.6 16.6	0.95
B100;B-166C3P B100;B-169C3P	B100;C-169C3	In	0.13	7.6 0.0	2.6 0.0	8.0 0.0	24.8 19.1	0.95
B100;B-166C3S B100;P-166C3	B100;C-166C3S	In	0.06	3.8 0.0	1.2 0.0	4.0 0.0	21.5 16.5	0.95
B100;B-168A1S B100;P-168A1	B100;C-168A1S	In	0.02	3.8 0.0	1.2 0.0	4.0 0.0	21.3 8.2	0.95
B100;B-168B2P B100;B-168BP	B100;C-168	In	0.06	3.8 0.0	1.3 0.0	4.0 0.0	12.5 9.6	0.95
B100;B-168B2S B100;P-168B2R	B100;C-168B2S	In	0.06	3.8 0.0	1.2 0.0	4.0 0.0	21.6 16.6	0.95
B100;B-168BS B100;P-168B	B100;C-168BS	In	0.06	3.8 0.0	1.2 0.0	4.0 0.0	21.6 16.6	0.95
B100;B-168C3S B100;P-168C3	B100;C-168C3S	In	0.06	3.8 0.0	1.2 0.0	4.0 0.0	21.5 16.5	0.95
B100;B-169A1P B100;B-168A1P	B100;C-168A1	In	0.02	3.8 0.0	1.3 0.0	4.0 0.0	12.3 4.7	0.95
B100;B-169A1S B100;P-169A1	B100;C-169A1S	In	0.02	3.8 0.0	1.2 0.0	4.0 0.0	21.3 8.2	0.95
B100;B-169B2P B100;B-168B2P	B100;C-168B2	In	0.13	7.6 0.0	2.6 0.0	8.1 0.0	25.0 19.2	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-169B2S B100;P-169B2	B100;C-169B2S	In	0.06	3.8 0.0	1.2 0.0	4.0 0.0	21.6 16.6	0.95
B100;B-169C3P B100;B-168C3P	B100;C-168C3	In	0.06	3.8 0.0	1.3 0.0	4.0 0.0	12.4 9.5	0.95
B100;B-169C3S B100;P-169C3	B100;C-169C3S	In	0.06	3.8 0.0	1.2 0.0	4.0 0.0	21.5 16.5	0.95
B100;B-1DP1B1 B100;B-1DP1C1	B100;C-1DP1B1	In	0.02	25.7 0.0	8.4 0.0	27.0 0.0	80.6 11.7	0.95
B100;B-1DP1B2 B100;P-1R12	B100;C-1R12	In	0.09	8.6 0.0	2.8 0.0	9.0 0.0	26.8 23.3	0.95
B100;B-1DP1B3 B100;B-1DP1C3	B100;C-1DP1B3	In	0.04	34.2 0.0	11.3 0.0	36.0 0.0	107.6 34.7	0.95
B100;B-1DP1B4 B100;B-1DP1C4	B100;C-1DP1B4	In	0.01	34.2 0.0	11.3 0.0	36.0 0.0	107.6 11.6	0.95
B100;B-1DP1C1 B100;B-1R9-11	B100;C-1DP1C1	In	0.05	25.7 0.0	8.4 0.0	27.0 0.0	80.6 35.0	0.95
B100;B-1DP1C3 B100;B-1R1-4	B100;C-1DP1C3	In	0.04	34.2 0.0	11.3 0.0	36.0 0.0	107.6 34.7	0.95
B100;B-1DP1C4 B100;B-1R5-8	B100;C-1DP1C4	In	0.04	34.2 0.0	11.3 0.0	36.0 0.0	107.6 34.7	0.95
B100;B-1DP3B1 B100;B-1DP3C1	B100;C-1DP3B1	In	0.02	38.1 0.0	12.5 0.0	40.1 0.0	121.2 17.6	0.95
B100;B-1DP3C1 B100;B-1R1617	B100;C-1DP3C1	In	0.02	38.1 0.0	12.5 0.0	40.1 0.0	121.2 17.6	0.95
B100;B-1DP4B1 B100;B-1DP4C1	B100;C-1DP4B1	In	0.04	42.8 0.0	14.1 0.0	45.1 0.0	134.5 35.4	0.95
B100;B-1DP4C1 B100;B-1R1822	B100;C-1DP4C1	In	0.04	42.8 0.0	14.1 0.0	45.1 0.0	134.5 35.4	0.95
B100;B-1R1-2 B100;P-1R1	B100;C-1R1	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-1R1-2 B100;P-1R2	B100;C-1R2	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-1R1-4 B100;B-1R1-2	B100;C-1R1-2	In	0.02	17.1 0.0	5.6 0.0	18.0 0.0	53.8 17.4	0.95
B100;B-1R1-4 B100;B-1R3-4	B100;C-1R3-4	In	0.02	17.1 0.0	5.6 0.0	18.0 0.0	53.8 17.4	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-1R1617 B100;P-1R16	B100;C-1R16	In	0.04	12.4 0.0	4.1 0.0	13.0 0.0	39.4 26.2	0.95
B100;B-1R1617 B100;P-1R17	B100;C-1R17	In	0.09	25.7 0.0	8.4 0.0	27.0 0.0	81.8 54.6	0.95
B100;B-1R1819 B100;P-1R18	B100;C-1R18	In	0.03	17.1 0.0	5.6 0.0	18.0 0.0	53.8 23.4	0.95
B100;B-1R1819 B100;P-1R19	B100;C-1R19	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-1R1822 B100;B-1R1819	B100;C-1R1819	In	0.03	25.7 0.0	8.4 0.0	27.0 0.0	80.7 21.2	0.95
B100;B-1R1822 B100;B-1R2021	B100;C-1R2021	In	0.02	17.1 0.0	5.6 0.0	18.0 0.0	53.8 14.2	0.95
B100;B-1R2021 B100;P-1R20	B100;C-1R20	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-1R2021 B100;P-1R21	B100;C-1R21	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-1R3-4 B100;P-1R3	B100;C-1R3	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-1R3-4 B100;P-1R4	B100;C-1R4	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-1R5-6 B100;P-1R5	B100;C-1R5	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	26.9 17.9	0.95
B100;B-1R5-6 B100;P-1R6	B100;C-1R6	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	26.9 17.9	0.95
B100;B-1R5-8 B100;B-1R5-6	B100;C-1R5-6	In	0.02	17.1 0.0	5.6 0.0	18.0 0.0	53.8 17.3	0.95
B100;B-1R5-8 B100;B-1R7-8	B100;C-1R7-8	In	0.02	17.1 0.0	5.6 0.0	18.0 0.0	53.8 17.3	0.95
B100;B-1R7-8 B100;P-1R7	B100;C-1R7	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	26.9 17.9	0.95
B100;B-1R7-8 B100;P-1R8	B100;C-1R8	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	26.9 17.9	0.95
B100;B-1R9-11 B100;P-1R10	B100;C-1R10	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	26.9 17.9	0.95
B100;B-1R9-11 B100;P-1R11	B100;C-1R11	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	26.9 17.9	0.95
B100;B-1R9-11 B100;P-1R9	B100;C-1R9	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-2DP1 B100;P-2R1	B100;C-2R1	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	46.8 20.3	0.95
B100;B-2DP1 B100;P-2R2	B100;C-2R2	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	46.8 20.3	0.95
B100;B-2DP1 B100;P-2R3	B100;C-2R3	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	46.8 20.3	0.95
B100;B-2DP2 B100;P-2R4	B100;C-2R4	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	46.0 20.0	0.95
B100;B-2DP2 B100;P-2R5	B100;C-2R5	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	46.0 20.0	0.95
B100;B-2DP2 B100;P-2R6	B100;C-2R6	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	46.0 20.0	0.95
B100;B-2DP3 B100;P-2R7	B100;C-2R7	In	0.08	14.3 0.0	4.7 0.0	15.0 0.0	46.1 40.1	0.95
B100;B-2DP3 B100;P-2R8	B100;C-2R8	In	0.08	14.3 0.0	4.7 0.0	15.0 0.0	46.1 40.1	0.95
B100;B-2DPC1 B100;B-2DP1	B100;C-2DPC1	In	0.17	42.8 0.1	14.1 0.0	45.1 0.1	140.3 61.0	0.95
B100;B-2DPC2 B100;B-2DP2	B100;C-2DPC2	In	0.17	42.8 0.1	14.1 0.0	45.1 0.1	137.9 59.9	0.95
B100;B-2DPC3 B100;B-2DP3	B100;C-2DPC3	In	0.11	28.6 0.0	9.4 0.0	30.1 0.0	92.2 26.7	0.95
B100;B-2DPT1S B100;B-2DPC1	B100;C-2DPB1	In	0.17	42.9 0.1	14.2 0.0	45.2 0.1	140.3 61.0	0.95
B100;B-2DPT2S B100;B-2DPC2	B100;C-2DPB2	In	0.17	42.9 0.1	14.1 0.0	45.2 0.1	137.9 59.9	0.95
B100;B-2DPT3S B100;B-2DPC3	B100;C-2DPB3	In	0.32	28.7 0.1	9.4 0.0	30.2 0.1	92.2 80.2	0.95
B100;B-2DPT4S B100;P-2WRDP	B100;C-2DPB4	In	0.16	57.1 0.1	18.8 0.0	60.1 0.1	180.8 51.6	0.95
B100;B-3DP1 B100;P-3R1	B100;C-3R1	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.9 30.6	0.95
B100;B-3DP1 B100;P-3R2	B100;C-3R2	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.9 30.6	0.95
B100;B-3DP1 B100;P-3R3	B100;C-3R3	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.9 30.6	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-3DP2 B100;P-3R4	B100;C-3R4	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.9 30.6	0.95
B100;B-3DP2 B100;P-3R5	B100;C-3R5	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.9 30.6	0.95
B100;B-3DP2 B100;P-3R6	B100;C-3R6	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.9 30.6	0.95
B100;B-3DP3 B100;P-3R10	B100;C-3R10	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.4 17.5	0.95
B100;B-3DP3 B100;P-3R7	B100;C-3R7	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.4 17.5	0.95
B100;B-3DP3 B100;P-3R8	B100;C-3R8	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.4 17.5	0.95
B100;B-3DP3 B100;P-3R9	B100;C-3R9	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.4 17.5	0.95
B100;B-3DPC1 B100;B-3DP1	B100;C-3DPC1	In	0.06	42.8 0.0	14.1 0.0	45.1 0.0	137.7 20.0	0.95
B100;B-3DPC2 B100;B-3DP2	B100;C-3DPC2	In	0.06	42.8 0.0	14.1 0.0	45.1 0.0	137.7 20.0	0.95
B100;B-3DPC3 B100;B-3DP3	B100;C-3DPC3	In	0.05	57.0 0.0	18.8 0.0	60.0 0.0	181.5 19.5	0.95
B100;B-3DPT1S B100;B-3DPC1	B100;C-3DPB1	In	0.17	42.9 0.1	14.1 0.0	45.1 0.1	137.7 53.0	0.95
B100;B-3DPT2S B100;B-3DPC2	B100;C-3DPB2	In	0.17	42.9 0.1	14.1 0.0	45.1 0.1	137.7 53.0	0.95
B100;B-3DPT3S B100;B-3DPC3	B100;C-3DPB3	In	0.14	57.1 0.1	18.8 0.1	60.1 0.1	181.5 58.6	0.95
B100;B-3ED1TS B100;P-3ED1	B100;C-3ED1	In	0.07	11.4 0.0	3.8 0.0	12.0 0.0	36.4 20.8	0.95
B100;B-3WD1TS B100;P-3WD1	B100;C-3WD1	In	0.31	11.4 0.0	3.8 0.0	12.0 0.0	36.8 49.0	0.95
B100;B-4DP1 B100;P-4R1	B100;C-4R1	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	46.0 30.7	0.95
B100;B-4DP1 B100;P-4R2	B100;C-4R2	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	46.0 30.7	0.95
B100;B-4DP1 B100;P-4R3	B100;C-4R3	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	46.0 30.7	0.95
B100;B-4DP2	B100;C-4R4	In	0.05	14.3	4.7	15.0	46.1	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;P-4R4				0.0	0.0	0.0	30.8	
B100;B-4DP2 B100;P-4R5	B100;C-4R5	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	46.1 30.8	0.95
B100;B-4DP2 B100;P-4R6	B100;C-4R6	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	46.1 30.8	0.95
B100;B-4DP3 B100;P-4R7	B100;C-4R7	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.2 30.1	0.95
B100;B-4DP3 B100;P-4R8	B100;C-4R8	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.2 30.1	0.95
B100;B-4DP3 B100;P-4R9	B100;C-4R9	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.2 30.1	0.95
B100;B-4DPC1 B100;B-4DP1	B100;C-4DPC1	In	0.17	42.8 0.1	14.1 0.0	45.1 0.1	138.0 60.0	0.95
B100;B-4DPC2 B100;B-4DP2	B100;C-4DPC2	In	0.31	42.9 0.1	14.1 0.0	45.2 0.2	138.4 92.3	0.95
B100;B-4DPC3 B100;B-4DP3	B100;C-4DPC3	In	0.11	42.8 0.0	14.1 0.0	45.1 0.1	135.6 43.7	0.95
B100;B-4DPT1S B100;B-4DPC1	B100;C-4DPB1	In	0.17	42.9 0.1	14.1 0.0	45.2 0.1	138.0 60.0	0.95
B100;B-4DPT2S B100;B-4DPC2	B100;C-4DPB2	In	0.31	43.1 0.1	14.2 0.0	45.3 0.2	138.4 92.3	0.95
B100;B-4DPT3S B100;B-4DPC3	B100;C-4DPB3	In	0.11	42.9 0.0	14.1 0.0	45.1 0.1	135.6 43.7	0.95
B100;B-5DP15R B100;P-5R1	B100;C-5R1	In	0.01	14.3 0.0	4.7 0.0	15.0 0.0	46.4 7.7	0.95
B100;B-5DP15R B100;P-5R2	B100;C-5R2	In	0.01	14.3 0.0	4.7 0.0	15.0 0.0	46.4 7.7	0.95
B100;B-5DP15R B100;P-5R3	B100;C-5R3	In	0.01	14.3 0.0	4.7 0.0	15.0 0.0	46.4 7.7	0.95
B100;B-5DP15R B100;P-5R4	B100;C-5R4	In	0.01	14.3 0.0	4.7 0.0	15.0 0.0	46.4 7.7	0.95
B100;B-5DP1C B100;B-5DP15R	B100;C-5DP1C	In	0.22	57.1 0.1	18.8 0.1	60.2 0.2	185.8 80.8	0.95
B100;B-5DP1TS B100;B-5DP1C	B100;C-5DP1B	In	0.22	57.3 0.1	18.9 0.1	60.3 0.2	185.8 80.8	0.95
B100;B-5DP25R B100;P-5R5	B100;C-5R5	In	0.01	14.3 0.0	4.7 0.0	15.0 0.0	45.9 7.6	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-5DP25R B100;P-5R6	B100;C-5R6	In	0.01	14.3 0.0	4.7 0.0	15.0 0.0	45.9 7.6	0.95
B100;B-5DP25R B100;P-5R7	B100;C-5R7	In	0.01	14.3 0.0	4.7 0.0	15.0 0.0	45.9 7.6	0.95
B100;B-5DP2C B100;B-5DP25R	B100;C-5DP2C	In	0.17	42.8 0.1	14.1 0.0	45.1 0.1	137.6 59.8	0.95
B100;B-5DP2TS B100;B-5DP2C	B100;C-5DP2B	In	0.17	42.9 0.1	14.1 0.0	45.2 0.1	137.6 59.8	0.95
B100;B-A-1L B100;P-LSBDP1	B100;C-LSBDP1	In	0.02	252.5 0.0	84.5 0.0	266.2 0.1	340.6 29.9	0.95
B100;B-A-2L B100;P-CBDP1	B100;C-CBDP1	In	0.02	267.6 0.0	97.0 0.0	284.7 0.1	364.2 31.9	0.94
B100;B-A-3L B100;P-CBDP2	B100;C-CBDP2	In	0.01	94.5 0.0	32.0 0.0	99.7 0.0	127.5 16.8	0.95
B100;B-A-4L B100;P-EBDP1	B100;C-EBDP1	In	0.02	259.0 0.1	90.7 0.1	274.4 0.1	351.1 46.2	0.94
B100;B-A-5L B100;P-EBDP2	B100;C-EBDP2	In	0.01	111.7 0.0	37.8 0.0	118.0 0.0	150.8 19.8	0.95
B100;B-A-6L B100;P-EBDP3	B100;C-EBDP3	In	0.01	117.0 0.0	38.9 0.0	123.3 0.0	157.6 20.7	0.95
B100;B-A-7L B100;P-EBDP4	B100;C-EBDP4	In	0.04	385.7 0.1	128.5 0.2	406.6 0.2	520.7 68.5	0.95
B100;B-A-8L B100;P-EPDP	B100;C-EPDP	In	0.00	8.6 0.0	2.8 0.0	9.0 0.0	11.5 1.5	0.95
B100;B-A-9L B100;P-EBDPRI	B100;C-EBDPRIM	In	0.02	17.1 0.0	5.6 0.0	18.0 0.0	23.0 8.8	0.95
B100;B-A-9L B100;P-FIRE-P	B100;C-A-9L	In	0.01	8.6 0.0	2.8 0.0	9.0 0.0	11.5 1.7	0.95
B100;B-BDP10B B100;B-BDP10C	B100;C-BDP10B	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.1 30.0	0.95
B100;B-BDP10C B100;P-BDPCR	B100;C-BDPCRM	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.1 30.0	0.95
B100;B-BDP10E B100;B-BDP10F	B100;C-BDP10E	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.1 30.0	0.95
B100;B-BDP10F B100;P-CCTV	B100;C-CCTV	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	45.1 30.0	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-BDP5B B100;B-BDP5C	B100;C-BDP5B	In	0.02	58.0 0.0	19.1 0.0	61.1 0.0	181.2 15.9	0.95
B100;B-BDP5C B100;B-BDP5D	B100;C-BDP5C	In	0.06	58.0 0.0	19.1 0.0	61.1 0.0	181.2 47.7	0.95
B100;B-BDP5D B100;P-1R13	B100;C-1R13	In	0.04	15.2 0.0	5.0 0.0	16.0 0.0	47.5 12.5	0.95
B100;B-BDP5D B100;P-1R14	B100;C-1R14	In	0.04	14.3 0.0	4.7 0.0	15.0 0.0	44.6 11.7	0.95
B100;B-BDP5D B100;P-1R15	B100;C-1R15	In	0.04	14.3 0.0	4.7 0.0	15.0 0.0	44.6 11.7	0.95
B100;B-BDP5D B100;P-1R15A	B100;C-1R15A	In	0.04	14.3 0.0	4.7 0.0	15.0 0.0	44.6 11.7	0.95
B100;B-BDP6B1 B100;B-BR123	B100;C-BR123	In	0.08	42.8 0.0	14.1 0.0	45.1 0.0	137.6 59.8	0.95
B100;B-BDP6B2 B100;B-BR456	B100;C-BR456	In	0.11	42.8 0.0	14.1 0.0	45.1 0.1	135.3 43.7	0.95
B100;B-BDP6B3 B100;B-BR789	B100;C-BR789	In	0.11	42.8 0.0	14.1 0.0	45.1 0.1	135.3 43.7	0.95
B100;B-BK-C4R B100;B-C4R1,2	B100;C-C4R1,2	In	0.02	17.1 0.0	5.6 0.0	18.0 0.0	53.4 17.2	0.95
B100;B-BK-C5R B100;B-C5R1,2	B100;C-C5R1,2	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.5 47.4	0.95
B100;B-BK-E1R B100;B-E1R124	B100;C-E1R124	In	0.03	25.7 0.0	8.4 0.0	27.0 0.0	80.7 26.0	0.95
B100;B-BK-E2R B100;B-E2R1-2	B100;C-E2R1-2	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.2 47.2	0.95
B100;B-BK-E3R B100;B-E3R1,2	B100;C-E3R1,2	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.6 47.4	0.95
B100;B-BK-E4R B100;B-E4R1,2	B100;C-E4R1,2	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.4 47.3	0.95
B100;B-BK-E5R B100;B-E5R1,2	B100;C-E5R1,2	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.6 47.5	0.95
B100;B-BK-EBR B100;B-EBR1-2	B100;C-EBR1-2	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.8 47.7	0.95
B100;B-BR10-T B100;P-BR10	B100;C-BR10	In	0.19	22.9 0.0	7.5 0.0	24.1 0.0	72.7 55.9	0.95
B100;B-BR123 B100;P-BR1	B100;C-BR1	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.9 19.9	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-BR123 B100;P-BR2	B100;C-BR2	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.9 19.9	0.95
B100;B-BR123 B100;P-BR3	B100;C-BR3	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.9 19.9	0.95
B100;B-BR13TS B100;P-BR13	B100;C-BR13	In	0.15	14.3 0.0	4.7 0.0	15.0 0.0	45.0 39.1	0.95
B100;B-BR456 B100;P-BR4	B100;C-BR4	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.1 19.6	0.95
B100;B-BR456 B100;P-BR5	B100;C-BR5	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.1 19.6	0.95
B100;B-BR456 B100;P-BR6	B100;C-BR6	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.1 19.6	0.95
B100;B-BR789 B100;P-BR7	B100;C-BR7	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.1 19.6	0.95
B100;B-BR789 B100;P-BR8	B100;C-BR8	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.1 19.6	0.95
B100;B-BR789 B100;P-BR9	B100;C-BR9	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.1 19.6	0.95
B100;B-C1R1,2 B100;P-C1R1	B100;C-C1R1	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.2 23.7	0.95
B100;B-C1R1,2 B100;P-C1R2	B100;C-C1R2	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.2 23.7	0.95
B100;B-C2R1-3 B100;P-C2R2,3	B100;C-C2R2,3	In	0.02	17.1 0.0	5.6 0.0	18.0 0.0	53.7 14.1	0.95
B100;B-C2R1-3 B100;P-C2R1	B100;C-C2R1	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-C2R2,3 B100;P-C2R2	B100;C-C2R2	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-C2R2,3 B100;P-C2R3	B100;C-C2R3	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-C2R4,5 B100;P-C2R4	B100;C-C2R4	In	0.10	53.8 0.1	18.1 0.0	56.8 0.1	172.4 75.0	0.95
B100;B-C2R4,5 B100;P-C2R5	B100;C-C2R5	In	0.06	30.7 0.0	10.3 0.0	32.4 0.0	98.3 42.8	0.95
B100;B-C4R1,2 B100;P-C4R1	B100;C-C4R1	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.7 11.6	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-C4R1,2 B100;P-C4R2	B100;C-C4R2	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.7 11.6	0.95
B100;B-C5R1,2 B100;P-C5R1	B100;C-C5R1	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.2 23.7	0.95
B100;B-C5R1,2 B100;P-C5R2	B100;C-C5R2	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.2 23.7	0.95
B100;B-CC1R12 B100;B-C1R1,2	B100;C-C1R1,2	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.4 47.3	0.95
B100;B-C-C2R1 B100;B-C2R1-3	B100;C-C2R1-3	In	0.03	25.7 0.0	8.4 0.0	27.0 0.0	80.6 21.2	0.95
B100;B-C-C2R4 B100;B-C2R4,5	B100;C-C2R4,5	In	0.09	84.6 0.1	28.5 0.1	89.2 0.1	270.8 71.3	0.95
B100;B-C-URP6 B100;B-U-RP6	B100;C-U-RP6	In	0.11	43.0 0.0	14.1 0.0	45.3 0.1	137.6 54.0	0.95
B100;B-E1R124 B100;B-E1R2,4	B100;C-E1R2,4	In	0.02	17.1 0.0	5.6 0.0	18.0 0.0	53.8 17.4	0.95
B100;B-E1R124 B100;P-E1R1	B100;C-E1R1	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-E1R16A B100;P-E1R16A	B100;C-E1R16A	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	26.8 17.9	0.95
B100;B-E1R2,4 B100;P-E1R2	B100;C-E1R2	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-E1R2,4 B100;P-E1R4	B100;C-E1R4	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.9 11.7	0.95
B100;B-E2R1-2 B100;P-E2R1	B100;C-E2R1	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.1 23.6	0.95
B100;B-E2R1-2 B100;P-E2R2	B100;C-E2R2	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.1 23.6	0.95
B100;B-E2WO1 B100;P-2A100	B100;C-2A100	In	0.00	8.6 0.0	2.8 0.0	9.0 0.0	11.5 5.0	0.95
B100;B-E3R1,2 B100;P-E3R1	B100;C-E3R1	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.3 23.7	0.95
B100;B-E3R1,2 B100;P-E3R2	B100;C-E3R2	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.3 23.7	0.95
B100;B-E4R1,2 B100;P-E4R1	B100;C-E4R1	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.2 23.7	0.95
B100;B-E4R1,2	B100;C-E4R2	In	0.05	8.6	2.8	9.0	27.2	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;P-E4R2				0.0	0.0	0.0	23.7	
B100;B-E5R1,2 B100;P-E5R1	B100;C-E5R1	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.3 23.7	0.95
B100;B-E5R1,2 B100;P-E5R2	B100;C-E5R2	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.3 23.7	0.95
B100;B-EBPR1S B100;P-EBPR1	B100;C-EBPR1S	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	26.8 23.3	0.95
B100;B-EBR10S B100;P-EBR10	B100;C-EBR10S	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	26.7 11.6	0.95
B100;B-EBR1-2 B100;P-EBR1	B100;C-EBR1	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.4 23.8	0.95
B100;B-EBR1-2 B100;P-EBR2	B100;C-EBR2	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	27.4 23.8	0.95
B100;B-FD2 B100;B-T2-B-P	B100;C-T2-B-P	In	0.00	1,904.4 0.0	756.8 0.0	2,049.2 0.0	94.0 31.9	0.93
B100;B-FD3 B100;B-T2-A-P	B100;C-T2-A-P	In	0.00	1,921.3 0.0	791.7 0.0	2,078.0 0.0	95.3 32.3	0.92
B100;B-FD5 B100;B-T1-A-P	B100;C-T1-A-P	In	0.00	1,907.7 0.0	723.1 0.0	2,040.2 0.0	91.5 31.0	0.94
B100;B-RL1,2 B100;P-RL1	B100;C-RL1	In	0.14	8.6 0.0	2.8 0.0	9.0 0.0	27.0 31.7	0.95
B100;B-RL1,2 B100;P-RL2	B100;C-RL2	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	27.0 18.0	0.95
B100;B-RP1,2 B100;B-C-URP6	B100;C-RP1,2	In	0.09	43.0 0.0	14.2 0.0	45.3 0.1	137.6 36.2	0.95
B100;B-RP6 B100;P-RP6	B100;C-RP6	In	0.13	42.9 0.1	14.1 0.0	45.2 0.1	137.6 70.6	0.95
B100;B-T1-A-S B100;SG-SS1-A	B100;BD-T1A-S	In	0.04	1,902.4 0.7	626.7 0.4	2,002.9 0.8	2,496.9 62.4	0.95
B100;B-T2-A-S B100;SG-SS2-A	B100;BD-T2A-S	In	0.04	1,915.4 0.8	685.4 0.5	2,034.3 0.9	2,599.4 65.0	0.94
B100;B-T2-B-S B100;SG-SS2-B	B100;BD-T2B-S	In	0.04	1,898.6 0.7	653.4 0.5	2,007.9 0.9	2,563.3 64.1	0.95
B100;B-T456S B100;B-BDP6B2	B100;C-BDP6B2	In	0.11	42.8 0.0	14.1 0.0	45.1 0.1	135.3 43.7	0.95
B100;B-T789S B100;B-BDP6B3	B100;C-BDP6B3	In	0.11	42.8 0.0	14.1 0.0	45.1 0.1	135.3 43.7	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-T-BMES B100;P-BME	B100;C-BME	In	0.47	8.6 0.0	2.8 0.0	9.0 0.0	26.9 31.7	0.95
B100;B-TBR123 B100;B-BDP6B1	B100;C-BDP6B1	In	0.17	42.9 0.1	14.1 0.0	45.1 0.1	137.6 59.8	0.95
B100;B-TC1R1S B100;B-CC1R12	B100;C-TC1R1S	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.4 47.3	0.95
B100;B-TC1R3S B100;P-C1R3	B100;C-C1R3	In	0.12	17.1 0.0	5.6 0.0	18.0 0.0	54.2 36.1	0.95
B100;B-TC2R1S B100;B-C-C2R1	B100;C-TC2R1S	In	0.03	25.7 0.0	8.5 0.0	27.0 0.0	80.6 21.2	0.95
B100;B-TC2R4S B100;B-C-C2R4	B100;C-TC2R4S	In	0.09	84.6 0.1	28.5 0.1	89.3 0.1	270.8 71.3	0.95
B100;B-TC2WD B100;P-C2W1	B100;C-C2W1	In	0.02	17.1 0.0	5.6 0.0	18.0 0.0	54.1 9.0	0.95
B100;B-TC3R1S B100;P-C3R1	B100;C-C3R1	In	0.23	8.6 0.0	2.8 0.0	9.0 0.0	27.0 41.5	0.95
B100;B-T-C4RS B100;B-BK-C4R	B100;C-T-C4RS	In	0.02	17.1 0.0	5.6 0.0	18.0 0.0	53.4 17.2	0.95
B100;B-T-C5RS B100;B-BK-C5R	B100;C-T-C5RS	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.5 47.4	0.95
B100;B-TE1R1S B100;B-BK-E1R	B100;C-TE1R1S	In	0.03	25.7 0.0	8.5 0.0	27.0 0.0	80.7 26.0	0.95
B100;B-TE1R3S B100;P-E1R3	B100;C-TE1R3S	In	0.09	8.6 0.0	2.8 0.0	9.0 0.0	26.8 23.3	0.95
B100;B-TE2DP3 B100;P-E2WD1	B100;C-TE2DP3	In	0.01	8.6 0.0	2.8 0.0	9.0 0.0	26.7 2.9	0.95
B100;B-T-E2RS B100;B-BK-E2R	B100;C-T-E2RS	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.2 47.2	0.95
B100;B-T-E3RS B100;B-BK-E3R	B100;C-T-E3RS	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.6 47.4	0.95
B100;B-T-E4RS B100;B-BK-E4R	B100;C-T-E4RS	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.4 47.3	0.95
B100;B-T-E5RS B100;B-BK-E5R	B100;C-T-E5RS	In	0.09	17.1 0.0	5.6 0.0	18.0 0.0	54.6 47.5	0.95
B100;B-TEB7AS B100;P-EBDP7A	B100;C-TEB7AS	In	0.03	59.9 0.0	19.7 0.0	63.0 0.0	187.4 16.4	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-TEB9BS B100;P-EBDP9B	B100;C-EBDP9B	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	26.7 10.3	0.95
B100;B-T-EBRS B100;B-BK-EBR	B100;C-T-EBRS	In	0.19	17.2 0.0	5.6 0.0	18.1 0.0	54.8 47.7	0.95
B100;B-TLS1RS B100;P-LS1R1	B100;C-LS1R1	In	0.22	8.6 0.0	2.8 0.0	9.0 0.0	26.9 41.4	0.95
B100;B-TLS2RS B100;P-LS2R1	B100;C-LS2R1	In	0.23	8.6 0.0	2.8 0.0	9.0 0.0	27.0 41.5	0.95
B100;B-TLS3RS B100;P-LS3R1	B100;C-LS3R1	In	0.23	8.6 0.0	2.8 0.0	9.0 0.0	27.0 41.5	0.95
B100;B-TLS4RS B100;P-LS4R1	B100;C-LS4R1	In	0.23	8.6 0.0	2.8 0.0	9.0 0.0	27.0 41.5	0.95
B100;B-TLS5RS B100;P-LS5R1	B100;C-LS5R1	In	0.23	8.6 0.0	2.8 0.0	9.0 0.0	27.0 41.5	0.95
B100;B-TLSBR5 B100;P-LSBR1	B100;C-LSBR1	In	0.17	8.6 0.0	2.8 0.0	9.0 0.0	27.0 41.5	0.95
B100;B-TRL12S B100;B-RL1,2	B100;C-RL1,2	In	0.12	17.1 0.0	5.6 0.0	18.0 0.0	53.9 36.0	0.95
B100;B-U-RP6 B100;B-RP6	B100;C-BYPASS	In	0.00	42.9 0.0	14.1 0.0	45.2 0.0	137.6 25.7	0.95
B100;MC-CT2 B100;B-100P10	B100;C-100P10	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-CT2 B100;B-100P11	B100;C-100P11	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-CT2 B100;B-100P12	B100;C-100P12	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-CT2 B100;B-100P9	B100;C-100P9	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-EMCB B100;B-AC-10	B100;C-AC-10	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-EMCC B100;B-SF-16	B100;C-SF-16	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-EMCC B100;B-EMCC4	B100;C-EMCC4	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-EMCE B100;B-EMCEB	B100;C-EMCEB	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-EMCF B100;B-AC24	B100;C-AC24	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;MC-EMCF B100;B-MED-V1	B100;C-MED-V1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-EMCF B100;B-T-BMEP	B100;C-T-BMEP	In	0.19	8.6 0.0	2.9 0.0	9.1 0.0	11.7 15.6	0.95
B100;MC-MCCA B100;B-100AC8	B100;C-100AC8	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCCA B100;B-3ED1TP	B100;C-MCC-A3	In	0.16	11.5 0.0	4.3 0.0	12.2 0.0	15.8 52.5	0.94
B100;MC-MCCA B100;B-100AC7	B100;C-100AC7	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCCC B100;B-MCCC2	B100;C-MCCC2	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCCC B100;B-AC11	B100;C-AC11	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCCC B100;B-CF55	B100;C-CF55	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCCC B100;B-AC17	B100;C-AC17	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCCD B100;B-AHU3	B100;C-AHU3	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCCD B100;B-100AC4	B100;C-100AC4	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCCD B100;B-3WD1TP	B100;C-3WD1-P	In	0.13	11.5 0.0	4.3 0.0	12.3 0.0	15.9 53.1	0.94
B100;MC-MCCD B100;B-100AC2	B100;C-100AC2	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCCD B100;B-AC5	B100;C-AC5	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCCD B100;B-BR13TP	B100;C-BR13TP	In	0.14	14.3 0.0	5.2 0.0	15.2 0.0	19.5 39.0	0.94
B100;MC-MCCF B100;B-VFDP1	B100;C-VFDP1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCCF B100;P-BYL1	B100;C-BYL1	In	0.04	14.3 0.0	4.7 0.0	15.0 0.0	19.2 22.6	0.95
B100;MC-MCEB B100;B-100P7	B100;C-100P7	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;MC-MCEB B100;B-CT1FAN	B100;C-CT1FAN	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCEB B100;V-100P1	B100;C-V100P1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCEB B100;V-100P2	B100;C-V100P2	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCEB B100;B-100P5	B100;C-100P5	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCEB B100;B-100P6	B100;C-100P6	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCEB B100;B-100P8	B100;C-100P8	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCEB B100;B-CT2FAN	B100;C-CT2FAN	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCEB B100;B-100P1A	B100;C-100P1A	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCEB B100;B-100P2A	B100;C-100P2A	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCEB B100;B-100P4A	B100;C-100P4A	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;MC-MCEB B100;B-100P5A	B100;C-100P5A	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;P-1DP1 B100;B-1DP1A1	B100;C-1DP1A1	In	0.08	25.7 0.0	9.1 0.0	27.3 0.0	34.9 41.1	0.94
B100;P-1DP1 B100;B-1DP1A2	B100;C-1DP1A2	In	0.01	8.6 0.0	3.0 0.0	9.1 0.0	11.6 7.7	0.95
B100;P-1DP1 B100;B-1DP1A3	B100;C-1DP1A3	In	0.07	34.3 0.0	12.2 0.0	36.4 0.0	46.6 40.5	0.94
B100;P-1DP1 B100;B-1DP1A4	B100;C-1DP1A4	In	0.07	34.3 0.0	12.2 0.0	36.4 0.0	46.6 40.5	0.94
B100;P-1DP2 B100;B-1DP2-9	B100;C-1DP2-9	In	0.03	4.8 0.0	1.6 0.0	5.0 0.0	6.4 4.3	0.95
B100;P-1DP2 B100;P-1DP2S1	B100;C-1DP2-1	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-1DP2 B100;P-1DP2S2	B100;C-1DP2-2	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-1DP2	B100;C-1DP2-3	In	0.06	8.6	2.8	9.0	11.5	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;P-1DP2S3				0.0	0.0	0.0	7.7	
B100;P-1DP2 B100;P-1DP2S4	B100;C-1DP2-4	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-1DP2 B100;P-1DP2S5	B100;C-1DP2-5	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-1DP2 B100;P-1DP2S6	B100;C-1DP2-6	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-1DP2 B100;P-1DP2S7	B100;C-1DP2-7	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-1DP2 B100;P-MSI850	B100;C-1DP2-8	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-1DP2 B100;P-PBLOAD	B100;C-1DP2-10	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-1DP3 B100;B-1DP3A1	B100;C-1DP3A1	In	0.06	38.2 0.0	15.0 0.0	41.1 0.0	52.5 23.3	0.93
B100;P-1DP3 B100;MC-MCCF	B100;C-1DP3A2	In	0.05	36.1 0.0	11.9 0.0	38.0 0.0	48.6 15.7	0.95
B100;P-1DP4 B100;B-1DP4A1	B100;C-1DP4A1	In	0.01	42.9 0.0	15.4 0.0	45.6 0.0	58.3 8.4	0.94
B100;P-1DP4 B100;MC-MCCC	B100;C-MCCCI	In	0.04	28.5 0.0	9.4 0.0	30.0 0.0	38.4 11.0	0.95
B100;P-1R16 B100;P-1R16B	B100;C-1R16B	In	0.02	6.7 0.0	2.2 0.0	7.0 0.0	21.2 7.1	0.95
B100;P-1R17 B100;P-UNKNO	B100;C-UNKNOW	In	0.06	6.7 0.0	2.2 0.0	7.0 0.0	21.2 22.3	0.95
B100;P-1R17 B100;P-UNNAM	B100;C-UNNAM1	In	0.06	6.7 0.0	2.2 0.0	7.0 0.0	21.2 22.3	0.95
B100;P-1R17 B100;P-UNNAM	B100;C-UNNAM2	In	0.06	6.7 0.0	2.2 0.0	7.0 0.0	21.2 22.3	0.95
B100;P-1R18 B100;P-1R22	B100;C-1R22	In	0.11	8.6 0.0	2.8 0.0	9.0 0.0	26.9 41.4	0.95
B100;P-2DP B100;B-2DPT1P	B100;C-2DPA1	In	0.09	43.2 0.0	19.3 0.0	47.3 0.0	60.8 46.8	0.91
B100;P-2DP B100;B-2DPT2P	B100;C-2DPA2	In	0.09	43.1 0.0	17.4 0.0	46.5 0.0	59.7 46.0	0.93
B100;P-2DP B100;B-2DPT3P	B100;C-2DPA3	In	0.22	28.9 0.1	11.6 0.0	31.1 0.1	39.9 72.6	0.93

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;P-2DP B100;B-2DPT4P	B100;C-2DPA4	In	0.06	57.3 0.0	20.9 0.0	61.0 0.0	78.3 40.2	0.94
B100;P-2WRDP B100;P-2WR1	B100;C-2WR1	In	0.08	14.3 0.0	4.7 0.0	15.0 0.0	45.2 39.3	0.95
B100;P-2WRDP B100;P-2WR2	B100;C-2WR2	In	0.08	14.3 0.0	4.7 0.0	15.0 0.0	45.2 39.3	0.95
B100;P-2WRDP B100;P-2WR3	B100;C-2WR3	In	0.06	14.3 0.0	4.7 0.0	15.0 0.0	45.2 34.8	0.95
B100;P-3DP B100;B-3DPT1P	B100;C-3DPA1	In	0.14	43.1 0.1	17.4 0.0	46.5 0.1	59.7 62.8	0.93
B100;P-3DP B100;B-3DPT2P	B100;C-3DPA2	In	0.14	43.1 0.1	17.4 0.0	46.5 0.1	59.7 62.8	0.93
B100;P-3DP B100;B-3DPT3P	B100;C-3DPA3	In	0.12	57.3 0.1	21.5 0.0	61.2 0.1	78.7 60.5	0.94
B100;P-4DP B100;B-4DPT1P	B100;C-4DPA1	In	0.14	43.2 0.1	17.4 0.0	46.5 0.1	59.8 70.3	0.93
B100;P-4DP B100;B-4DPT2P	B100;C-4DPA2	In	0.14	43.3 0.1	17.4 0.0	46.7 0.1	60.0 70.6	0.93
B100;P-4DP B100;B-4DPT3P	B100;C-4DPA3	In	0.09	43.0 0.0	15.6 0.0	45.7 0.0	58.8 51.1	0.94
B100;P-4DP B100;P-4DP6	B100;C-4DPA4	In	0.01	14.3 0.0	4.7 0.0	15.0 0.0	19.3 14.8	0.95
B100;P-5DP B100;B-5DP1TP	B100;C-5DP1A	In	0.04	57.6 0.0	24.8 0.0	62.7 0.0	80.5 23.3	0.92
B100;P-5DP B100;B-5DP2TP	B100;C-5DP2A	In	0.03	43.1 0.0	17.4 0.0	46.5 0.0	59.6 17.3	0.93
B100;P-BDP1 B100;MC-MCCF	B100;C-BDP1	In	0.11	58.0 0.1	19.1 0.1	61.1 0.1	78.1 12.6	0.95
B100;P-BDP1 B100;P-BYL2	B100;C-BYL2	In	0.08	14.3 0.0	4.7 0.0	15.0 0.0	19.2 9.8	0.95
B100;P-BDP10 B100;B-BDP10A	B100;C-BDP10A	In	0.07	14.3 0.0	5.3 0.0	15.3 0.0	19.5 30.0	0.94
B100;P-BDP10 B100;B-BDP10D	B100;C-BDP10D	In	0.07	14.3 0.0	5.3 0.0	15.3 0.0	19.5 30.0	0.94
B100;P-BDP2 B100;MC-MCCA	B100;C-BDP2A2	In	0.27	45.7 0.1	15.1 0.1	48.1 0.1	61.6 26.8	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;P-BDP2 B100;MC-MCCA	B100;C-BDP2A3	In	0.58	57.4 0.3	19.4 0.1	60.6 0.4	77.6 44.3	0.95
B100;P-BDP2 B100;MC-MCCA	B100;C-BDP2A4	In	0.32	43.8 0.1	14.5 0.1	46.2 0.2	59.1 22.7	0.95
B100;P-BDP2 B100;MC-MCCA	B100;C-BDP2A5	In	0.36	44.8 0.2	14.8 0.1	47.2 0.2	60.4 26.2	0.95
B100;P-BDP2 B100;P-BDP8	B100;C-BDP3C8	In	0.15	58.1 0.1	19.1 0.0	61.2 0.1	78.2 52.2	0.95
B100;P-BDP3 B100;MC-MCCC	B100;C-BDP3C2	In	0.56	44.9 0.3	14.8 0.1	47.3 0.3	60.5 40.3	0.95
B100;P-BDP3 B100;MC-MCCC	B100;C-BDP3C3	In	0.59	44.0 0.3	14.4 0.1	46.3 0.3	59.2 39.5	0.95
B100;P-BDP3 B100;MC-MCCC	B100;C-BDP3C4	In	0.35	44.8 0.2	14.8 0.1	47.2 0.2	60.4 26.2	0.95
B100;P-BDP4 B100;MC-MCCD	B100;C-MCCD2	In	0.52	43.9 0.2	14.4 0.1	46.3 0.3	59.2 39.5	0.95
B100;P-BDP4 B100;MC-MCCD	B100;C-MCCD3	In	1.32	59.9 0.9	20.1 0.2	63.2 0.9	80.8 70.3	0.95
B100;P-BDP4 B100;MC-MCCD	B100;C-MCCD4	In	1.06	44.2 0.5	14.5 0.1	46.5 0.5	59.5 45.8	0.95
B100;P-BDP4 B100;MC-MCCD	B100;C-MCCD5	In	1.06	44.2 0.5	14.5 0.1	46.5 0.5	59.5 45.8	0.95
B100;P-BDP4 B100;MC-MCCD	B100;C-MCCDB	In	0.09	58.1 0.0	19.6 0.0	61.3 0.1	78.4 25.3	0.95
B100;P-BDP5 B100;B-BDP5A	B100;C-BDP5A	In	0.07	58.1 0.0	19.9 0.0	61.4 0.0	78.5 17.1	0.95
B100;P-BDP5 B100;B-BDP5RT	B100;C-BDP5R	In	0.13	23.0 0.0	8.9 0.0	24.6 0.0	31.5 63.0	0.93
B100;P-BDP6 B100;B-T456P	B100;C-BDP6A2	In	0.11	43.0 0.1	15.6 0.0	45.7 0.1	58.6 51.0	0.94
B100;P-BDP6 B100;B-T789P	B100;C-BDP6A3	In	0.11	43.0 0.1	15.6 0.0	45.7 0.1	58.6 51.0	0.94
B100;P-BDP6 B100;B-TBR13P	B100;C-BDP6A1	In	0.17	43.1 0.1	17.4 0.0	46.5 0.1	59.6 70.1	0.93
B100;P-BDP8 B100;MC-ELES9	B100;C-BDP8-9	In	0.11	43.8 0.1	14.4 0.0	46.1 0.1	59.0 90.8	0.95
B100;P-BR10 B100;P-BR10A	B100;C-BR10A	In	0.15	11.4 0.0	3.7 0.0	12.0 0.0	36.4 48.5	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;P-C1DP B100;B-TC1R1P	B100;C-TC1R1P	In	0.13	17.2 0.0	6.4 0.0	18.4 0.0	23.6 47.2	0.94
B100;P-C1DP B100;B-TC1R3P	B100;C-TC1R3P	In	0.02	17.2 0.0	6.3 0.0	18.3 0.0	23.5 15.6	0.94
B100;P-C1DP B100;P-C1L1	B100;C-C1L1	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	11.6 10.1	0.95
B100;P-C1R3 B100;P-C1R4	B100;C-C1R4	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	27.1 18.1	0.95
B100;P-C2DP B100;B-TC2R1P	B100;C-TC2R1P	In	0.02	25.7 0.0	8.9 0.0	27.2 0.0	34.9 15.2	0.94
B100;P-C2DP B100;B-TC2R4P	B100;C-TC2R4P	In	0.06	85.0 0.1	33.6 0.0	91.4 0.1	117.3 51.0	0.93
B100;P-C2DP B100;P-C2L1	B100;C-C2L1	In	0.04	8.6 0.0	2.8 0.0	9.0 0.0	11.6 17.8	0.95
B100;P-C2DP B100;P-C2WDP	B100;C-C2WDP	In	0.28	25.8 0.1	9.0 0.0	27.3 0.1	35.0 41.2	0.94
B100;P-C2R4 B100;B-150A1P	B100;C-150A1	In	0.30	19.1 0.1	6.5 0.0	20.2 0.1	61.3 23.6	0.95
B100;P-C2R4 B100;B-150B2P	B100;C-150B2	In	1.03	23.3 0.3	7.8 0.1	24.5 0.3	74.6 64.9	0.95
B100;P-C2R5 B100;B-150C3P	B100;C-150C3	In	0.85	19.3 0.2	6.5 0.0	20.4 0.2	61.9 53.8	0.95
B100;P-C2W1 B100;P-C2W2	B100;C-C2W2	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	27.1 20.8	0.95
B100;P-C2WDP B100;B-TC2WD	B100;C-TC2WDP	In	0.03	17.1 0.0	6.1 0.0	18.2 0.0	23.5 27.6	0.94
B100;P-C3DP B100;B-TC3R1P	B100;C-TC3R1P	In	0.10	8.6 0.0	3.0 0.0	9.1 0.0	11.7 39.0	0.94
B100;P-C3DP B100;P-C3L1	B100;C-C3L1	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	11.6 13.6	0.95
B100;P-C4DP B100;B-T-C4RP	B100;C-T-C4RP	In	0.03	17.1 0.0	5.9 0.0	18.1 0.0	23.2 20.1	0.95
B100;P-C4DP B100;P-C4L1	B100;C-C4L1	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	11.5 13.5	0.95
B100;P-C5DP B100;B-T-C5RP	B100;C-T-C5RP	In	0.07	17.2 0.0	6.4 0.0	18.4 0.0	23.6 47.2	0.94

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;P-C5DP B100;P-C5L1	B100;C-C5L1	In	0.04	8.6 0.0	2.8 0.0	9.0 0.0	11.6 17.8	0.95
B100;P-CBDP1 B100;P-C1DP	B100;C-C1DP	In	0.35	51.7 0.2	18.4 0.1	54.8 0.2	70.2 30.5	0.94
B100;P-CBDP1 B100;P-C2DP	B100;C-C2DP	In	0.31	155.8 0.4	58.3 0.5	166.4 0.7	212.9 28.0	0.94
B100;P-CBDP1 B100;P-C3DP	B100;C-C3DP	In	0.39	25.8 0.1	8.6 0.0	27.2 0.1	34.8 23.2	0.95
B100;P-CBDP1 B100A;P-BDC1	B100;C-BDC1	In	0.23	21.9 0.1	7.5 0.0	23.2 0.1	29.7 14.8	0.95
B100;P-CBDP2 B100;P-C1L1A	B100;C-C1L1A	In	0.11	8.6 0.0	2.8 0.0	9.0 0.0	11.5 6.8	0.95
B100;P-CBDP2 B100;P-C1L2A	B100;C-C1L2A	In	0.11	8.6 0.0	2.8 0.0	9.0 0.0	11.5 6.8	0.95
B100;P-CBDP2 B100;P-C4DP	B100;C-C4DP	In	0.08	34.3 0.0	11.5 0.0	36.1 0.0	46.2 4.4	0.95
B100;P-CBDP2 B100;P-C5DP	B100;C-C5DP	In	0.61	34.5 0.2	12.1 0.1	36.6 0.2	46.8 31.2	0.94
B100;P-E1DP1 B100;B-TE1R1P	B100;C-TE1R1P	In	0.05	25.7 0.0	9.0 0.0	27.2 0.0	35.0 30.4	0.94
B100;P-E1DP1 B100;P-E1L1	B100;C-E1L1	In	0.02	8.6 0.0	2.8 0.0	9.0 0.0	11.6 10.0	0.95
B100;P-E1DP2 B100;B-E1R16A	B100;C-E1R16AP	In	0.02	8.6 0.0	3.0 0.0	9.1 0.0	11.6 17.9	0.94
B100;P-E1DP2 B100;B-TE1R3P	B100;C-TE1R3P	In	0.04	8.6 0.0	3.0 0.0	9.1 0.0	11.6 17.9	0.94
B100;P-E1DP2 B100;MC-EMCF	B100;C-EMCCF1	In	0.02	28.5 0.0	9.4 0.0	30.0 0.0	38.4 14.8	0.95
B100;P-E1DP2 B100;P-C1315L	B100;C-C1315L	In	0.00	8.6 0.0	2.8 0.0	9.0 0.0	11.5 5.0	0.95
B100;P-E1DP2 B100;P-C1315R	B100;C-C1315R	In	0.00	8.6 0.0	2.8 0.0	9.0 0.0	11.5 5.0	0.95
B100;P-E1DP2 B100;P-E1DP2A	B100;C-E1DP2A	In	0.00	8.6 0.0	2.8 0.0	9.0 0.0	11.5 5.1	0.95
B100;P-E2DP B100;B-E2WO1	B100;C-E2WO1	In	0.05	17.1 0.0	5.7 0.0	18.0 0.0	23.1 10.0	0.95
B100;P-E2DP	B100;C-T-E2RP	In	0.13	17.2	6.4	18.4	23.5	0.94

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-T-E2RP				0.0	0.0	0.0	47.0	
B100;P-E2DP B100;P-E2L1	B100;C-EMCCF2	In	0.04	8.6 0.0	2.8 0.0	9.0 0.0	11.5 17.7	0.95
B100;P-E2DP B100;P-E2L1A	B100;C-E2L1A	In	0.00	8.6 0.0	2.8 0.0	9.0 0.0	11.5 2.6	0.95
B100;P-E2DP B100;P-E2WDP2	B100;C-E2WDP2	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	11.5 5.0	0.95
B100;P-E3DP B100;B-T-E3RP	B100;C-T-E3RP	In	0.13	17.2 0.0	6.4 0.0	18.4 0.0	23.6 47.3	0.94
B100;P-E3DP B100;P-E3L1	B100;C-E3L1	In	0.04	8.6 0.0	2.8 0.0	9.0 0.0	11.6 17.8	0.95
B100;P-E4DP B100;B-T-E4RP	B100;C-T-E4RP	In	0.13	17.2 0.0	6.4 0.0	18.4 0.0	23.6 47.2	0.94
B100;P-E4DP B100;P-E4L1	B100;C-E4L1	In	0.04	8.6 0.0	2.8 0.0	9.0 0.0	11.6 17.8	0.95
B100;P-E5DP B100;B-T-E5RP	B100;C-T-E5RP	In	0.13	17.2 0.0	6.4 0.0	18.4 0.0	23.7 47.3	0.94
B100;P-E5DP B100;P-E5L1	B100;C-E5L1	In	0.04	8.6 0.0	2.8 0.0	9.0 0.0	11.6 17.8	0.95
B100;P-EBDP1 B100;P-E1DP1	B100;C-E1DP1	In	0.29	42.9 0.1	14.7 0.1	45.4 0.1	58.1 25.3	0.95
B100;P-EBDP1 B100;P-E3DP	B100;C-E3DP	In	0.52	34.5 0.2	12.1 0.1	36.6 0.2	46.8 31.2	0.94
B100;P-EBDP1 B100;P-E4DP	B100;C-E4DP	In	0.31	34.4 0.1	12.1 0.1	36.5 0.1	46.7 20.3	0.94
B100;P-EBDP1 B100;P-E4L1A	B100;C-E4L1A	In	0.14	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-EBDP1 B100;P-E5DP	B100;C-E5DP	In	0.61	34.5 0.2	12.1 0.1	36.6 0.2	46.8 31.2	0.94
B100;P-EBDP1 B100;P-EBDP6	B100;C-EBDP6	In	0.88	78.3 0.7	28.4 0.3	83.3 0.8	106.6 71.1	0.94
B100;P-EBDP1 B100;P-EBL1A	B100;C-EBL1A	In	0.11	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-EBDP1 B100;P-EBL2A	B100;C-EBL2A	In	0.11	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-EBDP1A B100;B-EBDPA3	B100;C-EBDPA3	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;P-EBDP2 B100;P-E2DP	B100;C-E2DP	In	0.09	68.6 0.0	23.4 0.1	72.5 0.1	92.6 8.1	0.95
B100;P-EBDP2 B100;P-E3L1A	B100;C-E3L1A	In	0.13	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-EBDP2 B100;P-E5L1A	B100;C-E5L1A	In	0.15	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-EBDP2 BMRI;P-EMH	B100;C-EMH	In	1.62	17.5 0.3	6.0 0.0	18.5 0.3	23.6 31.5	0.95
B100;P-EBDP3 B100;MC-MCEB	B100;C-MCCEB3	In	0.02	28.5 0.0	9.4 0.0	30.0 0.0	38.4 6.6	0.95
B100;P-EBDP3 B100;P-E1DP2	B100;C-E1DP2	In	0.10	79.9 0.1	26.7 0.1	84.2 0.1	107.7 9.4	0.95
B100;P-EBDP3 B100;V-100P3	B100;C-V100P3	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;P-EBDP4 B100;B-EBR10P	B100;C-EBR10P	In	0.02	8.6 0.0	2.9 0.0	9.0 0.0	11.6 8.9	0.95
B100;P-EBDP4 B100;B-TEB7AP	B100;C-TEB7AP	In	0.06	60.0 0.0	20.6 0.0	63.4 0.0	81.2 15.9	0.95
B100;P-EBDP4 B100;MC-EMCB	B100;C-EMCBP	In	0.02	37.1 0.0	12.4 0.0	39.1 0.0	50.1 6.6	0.95
B100;P-EBDP4 B100;MC-EMCC	B100;C-EMCCC2	In	0.20	28.6 0.1	9.4 0.0	30.1 0.1	38.5 16.7	0.95
B100;P-EBDP4 B100;MC-EMCC	B100;C-EMCCC3	In	0.42	28.6 0.1	9.4 0.0	30.1 0.1	38.6 25.7	0.95
B100;P-EBDP4 B100;MC-EMCC	B100;C-EMCCC4	In	0.25	28.6 0.1	9.4 0.0	30.1 0.1	38.5 16.8	0.95
B100;P-EBDP4 B100;MC-EMCD	B100;C-EMCCD5	In	0.44	28.6 0.1	9.4 0.0	30.1 0.1	38.6 25.7	0.95
B100;P-EBDP4 B100;MC-EMCD	B100;C-EMCCDB	In	0.18	28.5 0.0	9.4 0.0	30.1 0.1	38.5 16.7	0.95
B100;P-EBDP4 B100;MC-EMCE	B100;C-EMCCEB	In	0.14	28.5 0.0	9.4 0.0	30.0 0.0	38.5 33.5	0.95
B100;P-EBDP4 B100;MC-EMCF	B100;C-EMCCFB	In	0.06	37.1 0.0	12.3 0.0	39.1 0.0	50.1 6.6	0.95
B100;P-EBDP4 B100;P-EBDP9A	B100;C-EBDP9A	In	0.11	45.7 0.0	15.1 0.0	48.1 0.1	61.6 10.6	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;P-EBDP4 B100A;P-BDE1	B100;C-BDE1	In	0.11	17.2 0.0	5.9 0.0	18.2 0.0	23.3 10.1	0.95
B100;P-EBDP6 B100;B-LA108	B100;C-LA108	In	0.25	43.2 0.1	16.1 0.0	46.1 0.1	59.6 30.6	0.94
B100;P-EBDP6 B100;B-T-EBR	B100;C-T-EBRP	In	0.09	17.2 0.0	6.4 0.0	18.4 0.0	23.7 36.5	0.94
B100;P-EBDP6 B100;P-EBL1	B100;C-EBL1	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	11.6 10.1	0.95
B100;P-EBDP7A B100;P-EBR11	B100;C-EBR11	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	26.8 11.6	0.95
B100;P-EBDP7A B100;P-EBR11A	B100;C-EBR11A	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	26.8 7.7	0.95
B100;P-EBDP7A B100;P-EBR11B	B100;C-EBR11B	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	26.8 7.6	0.95
B100;P-EBDP7A B100;P-EBR11C	B100;C-EBR11C	In	0.05	8.6 0.0	2.8 0.0	9.0 0.0	26.8 8.6	0.95
B100;P-EBDP7A B100;P-EBR12	B100;C-EBR12	In	0.06	8.6 0.0	2.8 0.0	9.0 0.0	26.8 11.6	0.95
B100;P-EBDP7A B100;P-KITCHE	B100;C-KITCHE	In	0.04	8.6 0.0	2.8 0.0	9.0 0.0	26.8 8.6	0.95
B100;P-EBDP9A B100;B-TEB9BP	B100;C-TEB9BP	In	0.02	8.6 0.0	2.9 0.0	9.0 0.0	11.6 8.9	0.95
B100;P-EBDP9A B100;MC-MCCC	B100;C-MCC-CB	In	0.08	28.5 0.0	9.4 0.0	30.0 0.0	38.5 19.7	0.95
B100;P-EBDPRI B100;P-EBDP1A	B100;C-EBDPM3	In	0.01	8.6 0.0	2.8 0.0	9.0 0.0	11.5 7.7	0.95
B100;P-EPDP B100;B-RCPP1	B100;C-M-P1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;P-EPDP B100;B-RCPP2	B100;C-M-P2	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;P-EPDP B100;B-RCPP3	B100;C-M-P3	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;P-EPDP B100;B-RCPP4	B100;C-M-P4	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;P-EPDP B100;B-RCPS5	B100;C-M-S5	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;P-EPDP B100;B-RCPS6	B100;C-M-S6	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;P-EPDP B100;B-RCPS7	B100;C-M-S7	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;P-EPDP B100;B-RCPS8	B100;C-M-S8	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;P-FIRE-P B100;B-FIRE-P	B100;C-FIRE-P	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;P-FIRE-P B100;B-JYP	B100;C-JYP	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;P-LS1DP B100;B-TLS1RP	B100;C-TLS1RP	In	0.10	8.6 0.0	3.0 0.0	9.1 0.0	11.7 38.9	0.94
B100;P-LS1DP B100;P-LS1L1	B100;C-LS1L1	In	0.04	8.6 0.0	2.8 0.0	9.0 0.0	11.5 17.8	0.95
B100;P-LS2DP B100;B-TLS2RP	B100;C-TLS2RP	In	0.10	8.6 0.0	3.0 0.0	9.1 0.0	11.7 39.0	0.94
B100;P-LS2DP B100;P-LS2L1	B100;C-LS2L1	In	0.04	8.6 0.0	2.8 0.0	9.0 0.0	11.6 17.8	0.95
B100;P-LS2DP B100;P-LS2WL1	B100;C-LS2WL1	In	0.82	8.6 0.1	2.8 0.0	9.1 0.1	11.7 38.9	0.95
B100;P-LS3DP B100;B-TLS3RP	B100;C-TLS3R1	In	0.10	8.6 0.0	3.0 0.0	9.1 0.0	11.7 39.0	0.94
B100;P-LS3DP B100;P-LS3L1	B100;C-LS3L1	In	0.04	8.6 0.0	2.8 0.0	9.0 0.0	11.6 17.8	0.95
B100;P-LS4DP B100;B-TLS4RP	B100;C-TLS4RP	In	0.10	8.6 0.0	3.0 0.0	9.1 0.0	11.7 39.0	0.94
B100;P-LS4DP B100;P-LS4L1	B100;C-LS4L1	In	0.03	8.6 0.0	2.8 0.0	9.0 0.0	11.6 13.6	0.95
B100;P-LS5DP B100;B-TLS5RP	B100;C-TLS5RP	In	0.10	8.6 0.0	3.0 0.0	9.1 0.0	11.7 39.0	0.94
B100;P-LS5DP B100;P-LS5L1	B100;C-LS5L1	In	0.04	8.6 0.0	2.8 0.0	9.0 0.0	11.6 17.8	0.95
B100;P-LSBDP1 B100;MC-LSMC	B100;C-LSMCCG	In	0.56	28.7 0.2	9.4 0.0	30.2 0.2	38.6 45.4	0.95
B100;P-LSBDP1 B100;P-LS1DP	B100;C-LS1DP	In	0.17	25.7 0.0	8.6 0.0	27.1 0.1	34.7 15.1	0.95
B100;P-LSBDP1 B100;P-LS2DP	B100;C-LS2DP	In	0.47	34.5 0.2	11.5 0.1	36.4 0.2	46.5 31.0	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;P-LSBDP1 B100;P-LS3DP	B100;C-LS3DP	In	0.39	25.8 0.1	8.6 0.0	27.2 0.1	34.8 23.2	0.95
B100;P-LSBDP1 B100;P-LS4DP	B100;C-LS4DP	In	0.42	25.8 0.1	8.6 0.0	27.2 0.1	34.8 23.2	0.95
B100;P-LSBDP1 B100;P-LS5DP	B100;C-LS5DP	In	0.46	25.8 0.1	8.7 0.0	27.2 0.1	34.8 23.2	0.95
B100;P-LSBDP1 B100;P-LSBDP2	B100;C-LSBDP2	In	0.48	43.1 0.2	14.6 0.1	45.5 0.2	58.2 38.8	0.95
B100;P-LSBDP1 B100A;P-BDLS1	B100;C-BDLS1	In	0.30	34.4 0.1	11.6 0.1	36.3 0.1	46.5 20.2	0.95
B100;P-LSBDP2 B100;B-TLSBRP	B100;C-TLSBRP	In	0.07	8.6 0.0	3.0 0.0	9.1 0.0	11.7 39.0	0.94
B100;P-LSBDP2 B100;B-TRL12P	B100;C-TRL12	In	0.13	17.2 0.0	5.9 0.0	18.2 0.0	23.4 20.3	0.95
B100;P-LSBDP2 B100;P-LSBL1	B100;C-C-LSBL	In	0.04	8.6 0.0	2.8 0.0	9.0 0.0	11.6 17.8	0.95
B100;P-LSBL1 B100;P-LSB2	B100;C-LSB2	In	0.00	8.6 0.0	2.8 0.0	9.0 0.0	11.6 2.5	0.95
B100;P-RP1 B100;P-RP5	B100;C-RP5	In	0.12	8.6 0.0	2.8 0.0	9.0 0.0	27.6 21.2	0.95
B100;P-RP2 B100;P-RP3	B100;C-RP3	In	0.09	8.6 0.0	2.8 0.0	9.0 0.0	27.5 21.2	0.95
B100;P-RP6 B100;P-RP1	B100;C-RP1	In	0.28	17.2 0.1	5.6 0.0	18.1 0.1	55.1 42.4	0.95
B100;P-RP6 B100;P-RP2	B100;C-RP2	In	0.28	17.2 0.1	5.6 0.0	18.1 0.1	55.1 42.4	0.95
B100;SG-SS1-A B100;B-CCU1	B100;C-CCU1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;SG-SS1-A B100;B-CCU2	B100;C-CCU2	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;SG-SS1-A B100;MC-CT2	B100;B-S1-2A	In	0.13	380.4 0.4	125.3 0.4	400.5 0.6	499.5 71.4	0.95
B100;SG-SS1-A B100;MC-MCEB	B100;B-S1-2B	In	0.13	380.4 0.4	125.3 0.4	400.5 0.6	499.5 80.6	0.95
B100;SG-SS1-A B100;MC-MCEB	B100;B-S1-2C	In	0.13	380.4 0.4	125.3 0.4	400.5 0.6	499.5 80.6	0.95
B100;SG-SS1-A	B100;B-S1-3C	In	0.13	380.4	125.3	400.5	499.5	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;MC-MCEB				0.4	0.4	0.6	71.4	
B100;SG-SS2-A B100;MC-MCCB	B100;C-S2-3C	In	0.12	43.7 0.0	14.4 0.1	46.1 0.1	58.9 7.7	0.95
B100;SG-SS2-A B100;P-2DP	B100;C-S2-5C	In	0.46	187.5 0.8	74.6 0.8	201.8 1.1	258.0 41.6	0.93
B100;SG-SS2-A B100;P-3DP	B100;C-S2-5D	In	0.43	158.4 0.6	61.6 0.6	169.9 0.9	217.3 35.0	0.93
B100;SG-SS2-A B100;P-4DP	B100;C-S2-4C	In	0.47	158.6 0.6	60.5 0.7	169.8 1.0	217.0 35.0	0.93
B100;SG-SS2-A B100;P-5DP	B100;C-S2-4D	In	0.38	115.3 0.4	47.2 0.4	124.6 0.6	159.3 25.7	0.93
B100;SG-SS2-A B100;P-BDP1	B100;C-S2-5A	In	0.03	86.5 0.0	28.5 0.0	91.1 0.0	116.5 18.8	0.95
B100;SG-SS2-A B100;P-BDP10	B100;C-S2-2C	In	0.08	42.9 0.0	15.3 0.0	45.6 0.0	58.2 9.4	0.94
B100;SG-SS2-A B100;P-BDP2	B100;C-S2-5B	In	0.09	264.3 0.2	87.7 0.2	278.5 0.3	356.0 50.9	0.95
B100;SG-SS2-A B100;P-BDP3	B100;C-S2-4A	In	0.10	148.1 0.1	48.8 0.1	155.9 0.2	199.3 56.9	0.95
B100;SG-SS2-A B100;P-BDP4	B100;C-S2-4B	In	0.09	264.8 0.2	88.0 0.2	279.0 0.3	356.7 51.0	0.95
B100;SG-SS2-A B100;P-BDP5	B100;C-S2-3A	In	0.04	100.1 0.0	35.1 0.0	106.1 0.0	135.6 19.4	0.94
B100;SG-SS2-A B100;P-BDP6	B100;C-S2-3B	In	0.28	143.7 0.4	53.7 0.4	153.4 0.5	196.1 31.6	0.94
B100;SG-SS2-A B100A;P-BDDP1	B100;C-S2-2B	In	0.42	143.5 0.5	50.5 0.6	152.1 0.8	194.4 31.4	0.94
B100;SG-SS2-A BMRI;P-H	B100;C-S2-2A	In	0.12	42.8 0.0	14.3 0.0	45.1 0.1	57.7 9.3	0.95
B100;SG-SS2-B B100;B-A-1N	B100;C-S2-10B	In	0.15	252.8 0.3	85.0 0.3	266.7 0.5	340.6 54.9	0.95
B100;SG-SS2-B B100;B-A-2N	B100;C-S2-10A	In	0.14	268.0 0.3	97.4 0.4	285.1 0.5	364.2 58.7	0.94
B100;SG-SS2-B B100;B-A-3N	B100;C-S2-9B	In	0.04	94.5 0.0	32.1 0.0	99.8 0.1	127.5 20.6	0.95
B100;SG-SS2-B B100;B-A-4N	B100;C-S2-9A	In	0.17	259.4 0.4	91.1 0.4	274.9 0.5	351.1 50.2	0.94

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;SG-SS2-B B100;B-A-5N	B100;C-S2-8A	In	0.07	111.8 0.1	37.9 0.1	118.1 0.1	150.8 21.5	0.95
B100;SG-SS2-B B100;B-A-6N	B100;C-S2-8B	In	0.07	117.1 0.1	39.0 0.1	123.4 0.1	157.6 25.4	0.95
B100;SG-SS2-B B100;B-A-7N	B100;C-S2-7A	In	0.24	386.5 0.8	129.6 0.9	407.7 1.2	520.7 84.0	0.95
B100;SG-SS2-B B100;B-A-8N	B100;C-S2-7B	In	0.00	8.6 0.0	2.8 0.0	9.0 0.0	11.5 1.9	0.95
B100;SG-SS2-B B100;B-A-9N	B100;C-S2-10D	In	0.01	25.7 0.0	8.4 0.0	27.0 0.0	34.5 5.6	0.95
B100;SG-SS2-B B100;P-1DP1	B100;C-S2-9C	In	0.18	111.6 0.2	39.5 0.2	118.4 0.3	151.2 19.9	0.94
B100;SG-SS2-B B100;P-1DP2	B100;C-S2-9D	In	0.11	90.4 0.1	29.8 0.1	95.2 0.1	121.5 10.7	0.95
B100;SG-SS2-B B100;P-1DP3	B100;C-S2-8C	In	0.13	88.7 0.1	31.7 0.1	94.2 0.2	120.3 10.6	0.94
B100;SG-SS2-B B100;P-1DP4	B100;C-S2-8D	In	0.19	80.1 0.1	27.7 0.2	84.7 0.2	108.2 14.2	0.94
B100;SG-SS2-B B100;SG-SS2-A	B100;BD-SS2-B	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;V-100P1 B100;B-100P1	B100;C-100P1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100;V-100P2 B100;B-100P2	B100;C-100P2	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100A;B-1DLSS B100A;P-1DLSR	B100A;C-1DLSS	In	0.23	8.6 0.0	2.8 0.0	9.0 0.0	27.0 41.5	0.95
B100A;B-1DT1S B100A;P-1DR1	B100A;C-1DR1	In	0.11	28.5 0.0	9.4 0.0	30.0 0.0	89.8 34.5	0.95
B100A;B-1DT1S B100A;P-1DR2	B100A;C-1DR2	In	0.15	14.3 0.0	4.7 0.0	15.0 0.0	44.9 34.5	0.95
B100A;B-2DCRS B100A;P-2DCR1	B100A;C-2DCR1	In	0.02	11.4 0.0	3.7 0.0	12.0 0.0	35.9 13.8	0.95
B100A;B-2DT1S B100A;P-2DRDP	B100A;C-2DT1S	In	0.04	42.8 0.0	14.1 0.0	45.1 0.0	135.6 31.5	0.95
B100A;B-BDLSS B100A;P-BDLSR	B100A;C-1DLST	In	0.22	8.6 0.0	2.8 0.0	9.0 0.0	26.9 41.4	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100A;B-BDT1S B100A;P-BDR1	B100A;C-BDT1S	In	0.15	14.3 0.0	4.7 0.0	15.0 0.0	45.0 34.6	0.95
B100A;B-TBDES B100A;P-BDEL	B100A;C-TBDE2	In	0.11	8.6 0.0	2.8 0.0	9.0 0.0	27.0 36.1	0.95
B100A;P-1DL1 B100A;B-1DT1P	B100A;C-1DT1P	In	0.06	42.9 0.0	14.9 0.0	45.4 0.0	58.4 34.3	0.94
B100A;P-1DLS1 B100A;B-1DLSP	B100A;C-1DLSP0	In	0.03	8.6 0.0	3.0 0.0	9.1 0.0	11.7 21.3	0.95
B100A;P-1DR1 B100A;P-1DR1S	B100A;C-1DR1S	In	0.05	14.3 0.0	4.7 0.0	15.0 0.0	44.9 17.3	0.95
B100A;P-2DCR1 B100A;P-2DCR2	B100A;C-2DCR2	In	0.02	5.7 0.0	1.9 0.0	6.0 0.0	18.0 12.0	0.95
B100A;P-2DL1 B100A;B-2DT1P	B100A;C-2DT1P	In	0.04	42.9 0.0	15.7 0.0	45.7 0.0	58.8 45.2	0.94
B100A;P-2DRDP B100A;P-2DR1	B100A;C-2DR1	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	45.2 17.4	0.95
B100A;P-2DRDP B100A;P-2DR2	B100A;C-2DR2	In	0.08	14.3 0.0	4.7 0.0	15.0 0.0	45.2 34.8	0.95
B100A;P-2DRDP B100A;P-2DR3	B100A;C-2DR3	In	0.08	14.3 0.0	4.7 0.0	15.0 0.0	45.2 34.8	0.95
B100A;P-BDC1 B100A;B-2DCRP	B100A;C-2DCRP	In	0.13	11.4 0.0	4.1 0.0	12.1 0.0	15.6 51.9	0.94
B100A;P-BDDP1 B100A;B-BDT1P	B100A;C-BDT1P	In	0.07	14.3 0.0	5.1 0.0	15.2 0.0	19.5 26.0	0.94
B100A;P-BDDP1 B100A;P-1DL1	B100A;C-1DL1	In	0.08	57.2 0.0	19.7 0.1	60.5 0.1	77.6 18.1	0.95
B100A;P-BDDP1 B100A;P-2DL1	B100A;C-2DL1	In	0.15	57.2 0.1	20.5 0.1	60.8 0.1	78.1 22.3	0.94
B100A;P-BDDP1 B100A;V-VFDP1	B100A;C-VFDP1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100A;P-BDDP1 B100A;V-VFDP2	B100A;C-VFDP2	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100A;P-BDE1 B100A;B-BDE1P	B100A;C-BDE1P	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100A;P-BDE1 B100A;B-TBDEP	B100A;C-TBDE1	In	0.19	8.6 0.0	3.1 0.0	9.1 0.0	11.7 39.1	0.94
B100A;P-BDLS1 B100A;B-BDLSP	B100A;C-BDLST	In	0.04	8.6 0.0	3.0 0.0	9.1 0.0	11.7 15.5	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100A;P-BDLS1 B100A;P-1DLS1	B100A;C-1DLS1	In	0.32	17.2 0.1	5.8 0.0	18.1 0.1	23.3 31.1	0.95
B103;B-103S B103;P-MDP	B103;C-103S	In	0.13	374.1 0.4	131.6 0.5	396.5 0.6	467.0 54.3	0.94
B103;B-A-CL B103;P-NC1D1	B103;C-A-CL	In	0.09	133.9 0.1	47.6 0.1	142.1 0.1	167.8 64.5	0.94
B103;B-A-EL B103;P-NE1D1	B103;C-NE1D1	In	0.12	52.7 0.1	17.7 0.0	55.6 0.1	65.6 50.5	0.95
B103;B-A-EN B103;P-MDP	B103;C-A-EN	In	0.15	-52.7 0.1	-17.7 0.0	55.6 0.1	65.6 50.5	0.95
B103;B-NC1D2S B103;P-NC1D2	B103;C-NC1D2S	In	0.30	66.8 0.2	21.8 0.1	70.3 0.2	196.0 75.4	0.95
B103;B-NE1R1S B103;P-NE1R1	B103;C-NE1R1S	In	0.26	21.2 0.1	6.9 0.0	22.3 0.1	61.4 47.2	0.95
B103;B-T-S B103;P-N1D1	B103;C-T-S	In	0.54	116.1 0.5	38.5 0.5	122.3 0.7	337.4 52.7	0.95
B103;P-MDP B103;B-A-CN	B103;C-TSWC	In	0.13	134.1 0.2	47.7 0.1	142.3 0.2	167.8 64.5	0.94
B103;P-MDP B103;B-T-M	B103;C-T-M	In	0.19	116.5 0.2	42.5 0.2	124.0 0.2	146.2 45.7	0.94
B103;P-MDP B103;MC-NMCC	B103;C-NMCC1	In	0.12	28.5 0.0	9.4 0.0	30.0 0.0	35.4 13.6	0.95
B103;P-MDP B103;P-N1L1	B103;C-N1L1	In	0.02	10.5 0.0	3.4 0.0	11.0 0.0	13.0 10.0	0.95
B103;P-MDP B103;P-N2D2	B103;C-N2D2	In	0.08	10.5 0.0	3.4 0.0	11.0 0.0	13.0 10.0	0.95
B103;P-MDP B103;P-N2L1	B103;C-N2L1	In	0.46	10.5 0.1	3.4 0.0	11.0 0.1	13.0 43.4	0.95
B103;P-N1D1 B103;P-N1R1	B103;C-N1R1	In	0.11	10.5 0.0	3.4 0.0	11.0 0.0	30.5 23.5	0.95
B103;P-N1D1 B103;P-N1R2	B103;C-N1R2	In	0.87	10.5 0.1	3.5 0.0	11.1 0.1	30.8 23.7	0.95
B103;P-N1D1 B103;P-N1R3	B103;C-N1R3	In	0.95	10.6 0.1	3.5 0.0	11.1 0.1	30.8 23.7	0.95
B103;P-N1D1 B103;P-N1R4	B103;C-N1R4	In	0.13	10.5 0.0	3.4 0.0	11.0 0.0	30.5 23.5	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B103;P-N1D1 B103;P-N2D1	B103;C-N2D1	In	0.49	63.1 0.3	20.8 0.2	66.4 0.3	184.2 36.1	0.95
B103;P-N2D1 B103;P-N2R1	B103;C-N2R1	In	0.09	10.5 0.0	3.4 0.0	11.0 0.0	30.7 20.5	0.95
B103;P-N2D1 B103;P-N2R2	B103;C-N2R2	In	0.41	10.5 0.0	3.4 0.0	11.0 0.0	30.8 20.5	0.95
B103;P-N2D1 B103;P-N2R3	B103;C-N2R3	In	0.34	10.5 0.0	3.4 0.0	11.0 0.0	30.8 20.5	0.95
B103;P-N2D1 B103;P-N2R4	B103;C-N2R4	In	0.09	10.5 0.0	3.4 0.0	11.0 0.0	30.7 20.5	0.95
B103;P-N2D1 B103;P-N2R5	B103;C-N2R5	In	0.09	10.5 0.0	3.4 0.0	11.0 0.0	30.7 20.5	0.95
B103;P-NC1D1 B103;B-NC1D2P	B103;C-NC1D2P	In	0.16	67.1 0.1	25.6 0.0	71.9 0.1	84.9 65.3	0.93
B103;P-NC1D1 B103;MC-NCMC	B103;C-NCMCC1	In	0.28	31.4 0.1	10.3 0.0	33.1 0.1	39.1 30.1	0.95
B103;P-NC1D1 B103;P-NC1L1	B103;C-NC1L1	In	0.02	12.4 0.0	4.1 0.0	13.0 0.0	15.4 11.8	0.95
B103;P-NC1D1 B103;P-NC2L1	B103;C-NC2L1	In	0.61	12.4 0.1	4.1 0.0	13.1 0.1	15.5 51.5	0.95
B103;P-NC1D2 B103;P-NC1R1	B103;C-NC1R1	In	0.51	10.5 0.1	3.4 0.0	11.1 0.1	30.9 56.2	0.95
B103;P-NC1D2 B103;P-NC1R2	B103;C-NC1R2	In	1.04	10.6 0.1	3.5 0.0	11.1 0.1	31.1 23.9	0.95
B103;P-NC1D2 B103;P-NC1R3	B103;C-NC1R3	In	1.04	10.6 0.1	3.5 0.0	11.1 0.1	31.1 23.9	0.95
B103;P-NC1D2 B103;P-NC2R1	B103;C-NC2R1	In	1.44	10.6 0.2	3.4 0.0	11.2 0.2	31.2 56.8	0.95
B103;P-NC1D2 B103;P-NC2R2	B103;C-NC2R2	In	2.60	10.8 0.3	3.5 0.0	11.3 0.3	31.6 57.5	0.95
B103;P-NC1D2 B103;P-NC2R3	B103;C-NC2R3	In	2.71	10.8 0.3	3.5 0.0	11.3 0.3	31.6 57.5	0.95
B103;P-NE1D1 B103;B-NE1R1P	B103;C-NE1R1P	In	0.19	21.2 0.0	7.4 0.0	22.5 0.0	26.6 48.3	0.94
B103;P-NE1D1 B103;P-NE1L1	B103;C-NE1L1	In	0.03	10.5 0.0	3.4 0.0	11.0 0.0	13.0 10.0	0.95
B103;P-NE1D1	B103;C-NE2L1	In	0.18	10.5	3.4	11.0	13.0	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B103;P-NE2L1				0.0	0.0	0.0	17.4	
B103;P-NE1R1 B103;P-NE2R1	B103;C-NE2R1	In	1.83	10.7 0.2	3.5 0.0	11.2 0.2	31.0 56.3	0.95
B105;B-36H-S B105;P-36L	B105;C-36H-S	In	0.04	7.6 0.0	2.5 0.0	8.0 0.0	19.6 17.0	0.95
B105;B-36P-S B105;P-36P	B105;C-36P-S	In	0.07	7.6 0.0	2.5 0.0	8.0 0.0	19.7 23.1	0.95
B105;P-36H B105;B-36H-P	B105;C-36H-P	In	0.03	7.6 0.0	2.6 0.0	8.0 0.0	9.8 15.1	0.95
B105;P-36H B105;B-36P-P	B105;C-36P-P	In	0.03	7.6 0.0	2.6 0.0	8.1 0.0	9.8 15.1	0.94
B105;P-36P,H B105;P-36H	B105;C-36P,H	In	0.01	22.8 0.0	7.7 0.0	24.1 0.0	29.4 39.2	0.95
B105;P-36P,H BT36;B-T36	BT36;C-T36	In	0.05	15.3 0.0	5.1 0.0	16.1 0.0	19.6 26.2	0.95
B106;B-106S B106;B-FP	B106;C-FP	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B106;B-106S B106;SG-N	B106;C-N	In	0.10	381.9 0.3	134.9 0.3	405.1 0.5	477.1 34.1	0.94
B106;B-A-1L B106;P-EMDPH	B106;C-A-1L	In	0.04	132.9 0.0	47.6 0.0	141.1 0.1	166.6 23.8	0.94
B106;B-ELV B106;B-EL-P1	B106;C-EL-P1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B106;B-ELV B106;B-EL-S1	B106;C-EL-S1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B106;B-ELV B106;B-EV	B106;C-EV	In	0.05	6.7 0.0	2.4 0.0	7.1 0.0	8.4 41.8	0.94
B106;B-EMDPL B106;P-EMDPL	B106;C-EMDPLS	In	0.18	67.7 0.1	22.2 0.1	71.2 0.1	198.3 76.3	0.95
B106;B-EV B106;B-EV-P	B106;C-EV-P	In	0.05	6.7 0.0	2.4 0.0	7.1 0.0	8.4 41.8	0.94
B106;B-EV-S B106;P-EV	B106;C-EV-S	In	0.13	6.7 0.0	2.2 0.0	7.0 0.0	19.3 35.1	0.95
B106;B-FP B106;B-FP-N	B106;C-FP-N	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B106;B-FP-L B106;B-FIRE-P	B106;C-FP-L	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B106;B-JB-PPH B106;P-PPH1	B106;C-PPH1	In	0.07	18.1 0.0	6.1 0.0	19.1 0.0	22.6 13.3	0.95
B106;B-JB-PPH B106;P-PPH2-L	B106;C-PPH2-L	In	0.15	29.5 0.0	9.9 0.0	31.1 0.0	36.8 28.3	0.95
B106;B-MDPL-S B106;P-MDPL	B106;C-MDPL-S	In	0.10	171.1 0.1	57.1 0.1	180.4 0.2	495.1 35.4	0.95
B106;B-PPL1-S B106;P-PPL1	B106;C-PPL1-S	In	0.25	6.7 0.0	2.2 0.0	7.0 0.0	19.4 35.2	0.95
B106;B-PPL2-S B106;P-PPL2	B106;C-PPL2-S	In	0.19	6.7 0.0	2.2 0.0	7.0 0.0	19.4 35.2	0.95
B106;B-T106P B103;B-T103P	OD;C-T106-103	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B106;P-E1A B106;P-E2A	B106;C-E2A	In	0.14	7.6 0.0	2.5 0.0	8.0 0.0	22.4 17.3	0.95
B106;P-E1B B106;P-E2B	B106;C-E2B	In	0.14	7.6 0.0	2.5 0.0	8.0 0.0	22.8 17.5	0.95
B106;P-E1C B106;P-E2C	B106;C-E2C	In	0.12	7.6 0.0	2.5 0.0	8.0 0.0	22.7 17.5	0.95
B106;P-E1D B106;P-E2D	B106;C-E2D	In	0.16	7.6 0.0	2.5 0.0	8.0 0.0	22.9 17.6	0.95
B106;P-EMDPH B106;B-ELV	B106;C-EPPH3	In	0.11	6.7 0.0	2.4 0.0	7.1 0.0	8.4 6.4	0.94
B106;P-EMDPH B106;B-EMDPL	B106;C-EMDPLP	In	0.13	68.0 0.1	26.1 0.0	72.8 0.1	85.9 66.1	0.93
B106;P-EMDPH B106;P-EPPH1	B106;C-EPPH1	In	0.84	19.2 0.2	6.3 0.0	20.2 0.2	23.8 31.7	0.95
B106;P-EMDPH B106;P-EPPH2	B106;C-EPPH2	In	0.32	20.0 0.1	6.6 0.0	21.1 0.1	24.9 19.1	0.95
B106;P-EMDPL B106;P-E1A	B106;C-E1A	In	0.33	14.3 0.0	4.7 0.0	15.1 0.0	42.0 32.3	0.95
B106;P-EMDPL B106;P-E1B	B106;C-E1B	In	1.80	14.5 0.3	4.7 0.1	15.3 0.3	42.7 32.8	0.95
B106;P-EMDPL B106;P-E1C	B106;C-E1C	In	1.46	14.5 0.2	4.7 0.1	15.2 0.2	42.5 32.7	0.95
B106;P-EMDPL B106;P-E1D	B106;C-E1D	In	2.36	14.6 0.4	4.8 0.1	15.4 0.4	42.9 33.0	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B106;P-EMDPL B106;P-EKL	B106;C-EKL	In	1.23	7.7 0.1	2.5 0.0	8.1 0.1	22.6 30.1	0.95
B106;P-L1A B106;P-L2A	B106;C-L2A	In	0.14	19.0 0.0	6.3 0.0	20.0 0.0	55.1 24.5	0.95
B106;P-L1A B106;P-R1A	B106;C-R1A	In	0.05	9.5 0.0	3.1 0.0	10.0 0.0	27.5 23.9	0.95
B106;P-L1B B106;P-L2B	B106;C-L2B	In	0.14	19.0 0.0	6.3 0.0	20.0 0.0	55.5 24.7	0.95
B106;P-L1B B106;P-R1B	B106;C-R1B	In	0.06	9.5 0.0	3.1 0.0	10.0 0.0	27.7 16.3	0.95
B106;P-L1C B106;P-L2C	B106;C-L2C	In	0.07	19.0 0.0	6.3 0.0	20.0 0.0	55.2 15.8	0.95
B106;P-L1C B106;P-R1C	B106;C-R1C	In	0.06	9.5 0.0	3.1 0.0	10.0 0.0	27.6 16.2	0.95
B106;P-L1D B106;P-L2D	B106;C-L2D	In	0.16	19.0 0.0	6.3 0.0	20.0 0.0	55.7 24.7	0.95
B106;P-L1D B106;P-R1D	B106;C-R1D	In	0.10	9.5 0.0	3.1 0.0	10.0 0.0	27.8 21.4	0.95
B106;P-L2A B106;P-R2A	B106;C-R2A	In	0.09	9.5 0.0	3.1 0.0	10.0 0.0	27.6 21.2	0.95
B106;P-L2B B106;P-R2B	B106;C-R2B	In	0.10	9.5 0.0	3.1 0.0	10.0 0.0	27.8 21.4	0.95
B106;P-L2C B106;P-R2C	B106;C-R2C	In	0.06	9.5 0.0	3.1 0.0	10.0 0.0	27.6 16.2	0.95
B106;P-L2D B106;P-R2D	B106;C-R2D	In	0.06	9.5 0.0	3.1 0.0	10.0 0.0	27.8 16.4	0.95
B106;P-MDPH B106;B-JB-PPH	B106;C-PPH	In	0.32	47.8 0.1	16.0 0.1	50.4 0.2	59.4 34.9	0.95
B106;P-MDPH B106;P-KH	B106;C-KH	In	0.12	9.5 0.0	3.1 0.0	10.0 0.0	11.8 9.1	0.95
B106;P-MDPH B106;P-OL	B106;C-OL	In	0.02	9.5 0.0	3.1 0.0	10.0 0.0	11.8 9.1	0.95
B106;P-MDPL B106;P-KL	B106;C-KL	In	0.62	9.6 0.1	3.1 0.0	10.1 0.1	27.6 16.3	0.95
B106;P-MDPL B106;P-L1A	B106;C-L1A	In	0.16	38.1 0.0	12.6 0.1	40.1 0.1	110.2 25.6	0.95
B106;P-MDPL B106;P-L1B	B106;C-L1B	In	0.86	38.3 0.2	12.8 0.3	40.4 0.4	110.9 25.8	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B106;P-MDPL B106;P-L1C	B106;C-L1C	In	0.43	38.2 0.1	12.6 0.1	40.2 0.2	110.4 15.8	0.95
B106;P-MDPL B106;P-L1D	B106;C-L1D	In	1.13	38.4 0.3	13.0 0.4	40.5 0.6	111.2 25.9	0.95
B106;P-PPH1 B106;B-PPL1-P	B106;C-PPL1-P	In	0.08	6.7 0.0	2.4 0.0	7.1 0.0	8.4 41.9	0.94
B106;P-PPH2-L B106;P-PPH2-R	B106;C-PPH2-R	In	0.02	18.1 0.0	6.1 0.0	19.1 0.0	22.6 17.4	0.95
B106;P-PPH2-R B106;B-PPL2-P	B106;C-PPL2-P	In	0.02	6.7 0.0	2.4 0.0	7.1 0.0	8.4 15.2	0.94
B106;SG-N B106;B-A-1N	B106;C-A-1N	In	0.09	133.0 0.1	47.7 0.1	141.3 0.1	166.6 47.6	0.94
B106;SG-N B106;B-MDPL-P	B106;C-MDPL-P	In	0.04	171.4 0.0	61.1 0.1	182.0 0.1	214.5 24.9	0.94
B106;SG-N B106;P-MDPH	B106;B-MDPH	In	0.03	75.3 0.0	25.1 0.0	79.4 0.0	93.6 21.8	0.95
B20;B-20A1-S B20;P-E8PBJ1A1	B20;C-20A1-S	In	0.11	3.8 0.0	1.2 0.0	4.0 0.0	11.5 38.4	0.95
B20;B-20A2-S B20;P-E8PBJ1A2	B20;C-20A2-S	In	0.11	3.8 0.0	1.2 0.0	4.0 0.0	11.5 38.4	0.95
B20;B-20L1S-S B20;P-P20L15	B20;C-20L1S-S	In	0.08	6.7 0.0	2.2 0.0	7.0 0.0	19.5 23.0	0.95
B20;B-20-P B20;B-T-20-P	B20;C-T-20-P	In	0.00	110.2 0.0	40.0 0.0	117.2 0.0	5.4 1.8	0.94
B20;B-20-P B9;B-9S-P	B9;C-T9S-20	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B20;B-T-20A-S B20;P-20L11	B20;C-T-20A-S	In	0.07	50.1 0.0	16.4 0.0	52.7 0.0	147.7 34.4	0.95
B20;B-T-20-S B20;P-20MDP	B20;C-T-20-S	In	0.10	110.1 0.1	37.8 0.1	116.4 0.1	139.6 30.4	0.95
B20;P-20L11 B20;P-20L12	B20;C-20L12	In	0.08	30.1 0.0	9.8 0.0	31.7 0.0	88.8 38.6	0.95
B20;P-20L11 B20;P-20L14	B20;C-20L14	In	0.22	6.7 0.0	2.2 0.0	7.0 0.0	19.7 17.1	0.95
B20;P-20L11 B20;P-20L15	B20;C-20L15	In	0.19	6.7 0.0	2.2 0.0	7.0 0.0	19.7 17.1	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B20;P-20L12 BT34;P-T34A	BT34;C-T34A	In	2.17	15.8 0.4	5.1 0.1	16.6 0.4	46.5 54.6	0.95
B20;P-20L12 BT34;P-T34B	BT34;C-T34B	In	1.03	7.7 0.1	2.5 0.0	8.1 0.1	22.7 26.7	0.95
B20;P-20MDP B105;P-36P,H	B20;C-20MDP-4	In	1.50	46.4 0.7	15.4 0.1	48.9 0.7	58.8 61.8	0.95
B20;P-20MDP B20;B-20L1S-P	B20;C-20L1S-P	In	0.04	6.7 0.0	2.3 0.0	7.0 0.0	8.5 16.9	0.95
B20;P-20MDP B20;B-T-20A-P	B20;C-T-20A-P	In	0.04	50.2 0.0	17.9 0.0	53.3 0.0	64.0 36.6	0.94
B20;P-T20A B20;B-20A1-P	B20;C-20A1-P	In	0.08	3.8 0.0	1.3 0.0	4.0 0.0	10.0 33.3	0.94
B20;P-T20A B20;B-20A2-P	B20;C-20A2-P	In	0.08	3.8 0.0	1.3 0.0	4.0 0.0	10.0 33.3	0.94
B22;B-22-P B22;B-T-22-P	B22;C-T-22-P	In	0.00	243.8 0.0	91.8 0.0	260.5 0.0	11.9 4.1	0.94
B22;B-22-P B9A;B-P-TR-9N	OD;C-T22-9N	In	0.01	344.5 0.0	126.3 0.0	366.9 0.0	16.8 5.7	0.94
B22;B-41-S B22;P-LB1	B22;C-41-S	In	0.29	99.9 0.2	33.0 0.3	105.2 0.4	299.1 85.5	0.95
B22;B-C-41-P B22;B-41-P	B22;C-41-P	In	0.06	100.3 0.1	38.6 0.0	107.5 0.1	129.6 64.8	0.93
B22;B-C-ELE2 B22;B-M-ELE2	B22;C-M-ELE2	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B22;B-ELE P1 B22;B-M-ELE P	B22;C-ELE P1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B22;B-EMER B5;P-EMER	B22;C-P-EMER	In	1.68	15.5 0.3	5.1 0.1	16.3 0.3	46.6 40.5	0.95
B22;B-JB-H1 B22;B-JB-H2	B22;C-H2,3	In	0.10	26.6 0.0	8.8 0.0	28.0 0.0	33.8 26.0	0.95
B22;B-JB-H1 B22;P-H1	B22;C-H1	In	0.01	13.3 0.0	4.4 0.0	14.0 0.0	16.9 13.0	0.95
B22;B-JB-H2 B22;P-H2	B22;C-H2	In	0.01	13.3 0.0	4.4 0.0	14.0 0.0	16.9 13.0	0.95
B22;B-JB-H2 B22;P-H3	B22;C-H3	In	0.05	13.3 0.0	4.4 0.0	14.0 0.0	16.9 13.0	0.95
B22;B-L1,2,3	B22;C-L2,3	In	0.55	26.8	8.8	28.2	80.6	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B22;B-L2,3				0.2	0.0	0.2	70.1	
B22;B-L1,2,3 B22;P-L1	B22;C-L1	In	0.07	13.3 0.0	4.4 0.0	14.0 0.0	40.0 34.8	0.95
B22;B-L2,3 B22;B-L3	B22;C-L2-3	In	0.28	13.3 0.0	4.4 0.0	14.1 0.0	40.4 35.1	0.95
B22;B-L2,3 B22;P-L2	B22;C-L2	In	0.07	13.3 0.0	4.4 0.0	14.0 0.0	40.3 35.0	0.95
B22;B-L3 B22;P-L3	B22;C-L3	In	0.07	13.3 0.0	4.4 0.0	14.0 0.0	40.4 35.1	0.95
B22;B-P1E B22;B-TS1-P1	B22;C-P1E	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B22;B-P1L B22;B-ELE P1	B22;C-P1L	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B22;B-T-22-S B22;P-MDP	B22;C-T-22-S	In	0.25	243.5 0.4	86.2 0.7	258.3 0.8	310.4 32.7	0.94
B22;B-TS1L B22;B-EMER	B22;C-EMER	In	0.13	15.5 0.0	5.1 0.0	16.3 0.0	46.6 35.8	0.95
B22;B-TS1L B22;P-EHB	B22;C-TS1L	In	0.10	26.8 0.0	8.8 0.0	28.2 0.0	80.5 35.0	0.95
B22;P-ACD B22;P-AC1	B22;C-AC1	In	0.03	15.2 0.0	5.0 0.0	16.0 0.0	19.3 14.8	0.95
B22;P-ACD B22;P-AC2	B22;C-AC2	In	0.06	15.2 0.0	5.0 0.0	16.0 0.0	19.3 14.8	0.95
B22;P-ACD B22;P-AC3	B22;C-AC3	In	0.10	15.2 0.0	5.0 0.0	16.0 0.0	19.3 14.8	0.95
B22;P-EHB B22;B-C-ELE2	B22;C-ELE2	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B22;P-EHB B22;B-TS1-P1	B22;C-TS1-P1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B22;P-EHB B22;P-GEN	B22;C-GEN	In	1.01	13.5 0.2	4.4 0.0	14.1 0.2	40.4 53.9	0.95
B22;P-LB1 B22;B-L1,2,3	B22;C-L1,2,3	In	0.22	40.2 0.1	13.2 0.1	42.3 0.1	120.7 46.4	0.95
B22;P-LB1 B22;B-P1N	B22;C-MTS-P1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B22;P-LB1 B22;B-TS1N	B22;C-TS1	In	0.15	42.3 0.1	13.9 0.0	44.6 0.1	127.0 55.2	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B22;P-LB1 B22;P-LB2	B22;C-LB2	In	0.21	13.3 0.0	4.4 0.0	14.0 0.0	40.0 34.8	0.95
B22;P-MDP B22;B-C-41-P	B22;C-LB1	In	0.12	100.4 0.1	38.6 0.1	107.6 0.1	129.6 64.8	0.93
B22;P-MDP B22;B-JB-H1	B22;C-H1,2,3	In	0.08	40.0 0.0	13.1 0.0	42.1 0.0	50.7 39.0	0.95
B22;P-MDP B22;P-ACD	B22;C-ACD	In	0.03	58.9 0.0	19.4 0.0	62.0 0.0	74.8 21.4	0.95
B22;P-MDP B22;P-H12	B22;C-H12	In	0.02	15.2 0.0	5.0 0.0	16.0 0.0	19.3 16.8	0.95
B22;P-MDP B22;P-HB	B22;C-HB	In	0.02	15.2 0.0	5.0 0.0	16.0 0.0	19.3 7.4	0.95
B5;B-5L31 B5;P-5L31	B5;C-5L31-M	In	0.44	14.3 0.1	4.7 0.0	15.1 0.1	37.0 21.1	0.95
B5;B-5-P B22;B-22-P	OD;C-T22-5	In	0.02	588.4 0.1	218.2 0.1	627.5 0.1	28.8 9.8	0.94
B5;B-5-P B5;B-T-5-P	B5;C-T-5-P	In	0.00	172.2 0.0	63.8 0.0	183.6 0.0	8.4 2.9	0.94
B5;B-5PB1-S B5;P-5PB1	B5;C-5PB1-S	In	0.04	15.2 0.0	5.0 0.0	16.0 0.0	38.5 10.1	0.95
B5;B-L1B-S B5;P-L1B	B5;C-L1B-S	In	0.18	15.2 0.0	5.0 0.0	16.0 0.0	44.9 26.4	0.95
B5;B-L1-S B5;P-L1	B5;C-L1-S	In	0.09	15.2 0.0	5.0 0.0	16.0 0.0	44.6 17.1	0.95
B5;B-NORMAL B5;P-NORMAL	B5;C-NORMAL-M	In	0.41	14.3 0.1	4.7 0.0	15.1 0.1	36.9 18.5	0.95
B5;B-PL21 B5;P-PL21	B5;C-PL21	In	0.57	11.5 0.1	3.8 0.0	12.1 0.1	29.6 25.7	0.95
B5;B-PL22 B5;P-PL22	B5;C-PL22M	In	0.35	14.3 0.0	4.7 0.0	15.1 0.1	36.9 18.5	0.95
B5;B-T-5-S B5;P-5MDP	B5;C-T-5-S	In	0.16	172.0 0.2	60.6 0.2	182.4 0.3	218.8 47.6	0.94
B5;B-WIREWA B5;B-5L31	B5;C-5L31	In	0.03	14.3 0.0	4.7 0.0	15.1 0.0	37.0 21.1	0.95
B5;B-WIREWA B5;B-NORMAL	B5;C-NORMAL	In	0.03	14.3 0.0	4.7 0.0	15.1 0.0	36.9 21.1	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B5;B-WIREWA B5;B-PL21	B5;C-DS-PL21	In	0.04	11.5 0.0	3.8 0.0	12.1 0.0	29.6 25.7	0.95
B5;B-WIREWA B5;B-PL22	B5;C-PL22	In	0.04	14.3 0.0	4.7 0.0	15.1 0.0	36.9 24.6	0.95
B5;B-WIREWA B5;P-X	B5;C-X	In	0.09	14.3 0.0	4.7 0.0	15.0 0.0	36.8 21.0	0.95
B5;B-WIREWA B5;B-WIREWA	B5;C-WIREWAYS	In	0.22	68.8 0.1	22.8 0.2	72.4 0.2	177.2 46.6	0.95
B5;P-5MDP B5;B-5PB1-P	B5;C-5PB1-P	In	0.02	15.2 0.0	5.1 0.0	16.0 0.0	19.3 8.4	0.95
B5;P-5MDP B5;B-L1B-P	B5;C-L1B-P	In	0.12	15.3 0.0	5.4 0.0	16.2 0.0	19.4 29.9	0.94
B5;P-5MDP B5;B-L1-P	B5;C-L1-P	In	0.05	15.2 0.0	5.2 0.0	16.1 0.0	19.3 16.8	0.95
B5;P-5MDP B5;B-WIREWA	B5;C-WIREWAYP	In	0.09	69.0 0.1	26.1 0.0	73.8 0.1	88.6 38.5	0.94
B5;P-5MDP B5;P-5L205	B5;C-5L205	In	0.30	17.2 0.1	5.6 0.0	18.1 0.1	21.7 18.9	0.95
B5;P-5MDP B5;P-5L21	B5;C-5L21	In	0.10	17.1 0.0	5.6 0.0	18.0 0.0	21.6 9.4	0.95
B6;B-6LDP1-JB B8;B-6LDP1SAF	B8;C-6LDP1SAF	In	0.05	22.9 0.0	7.6 0.0	24.1 0.0	59.6 25.9	0.95
B6;B-T-6A-S B6;P-6PDP1	B6;C-T-6A-S	In	0.10	68.7 0.1	23.5 0.0	72.6 0.1	176.0 34.5	0.95
B6;B-T-6B-S B6;P-6LDP1	B6;C-T-6B-S	In	0.10	114.7 0.1	38.0 0.1	120.8 0.2	297.0 39.1	0.95
B6;B-T-6-P B6;B-T-6-P	B6;C-T-6-P	In	0.00	230.3 0.0	89.5 0.0	247.0 0.0	11.3 3.8	0.93
B6;B-T-6-P B8;B-8-P	OD;C-T-6-8	In	0.00	223.9 0.0	81.6 0.0	238.3 0.0	10.9 3.7	0.94
B6;B-T-6-S B6;P-6MDP	B6;C-T-6-S	In	0.29	230.0 0.5	84.4 0.8	245.0 0.9	294.2 38.7	0.94
B6;B-T-7-JB B8;B-SAFETY	B8;C-SAFETY	In	0.03	23.0 0.0	8.4 0.0	24.4 0.0	59.5 25.9	0.94
B6;P-6L11A B6;P-6L11B	B6;C-6L11B	In	0.27	22.9 0.1	7.5 0.0	24.1 0.1	59.3 45.6	0.95
B6;P-6LDP1 B6;B-6LDP1-JB	B6;C-6LDP1-3	In	0.38	23.0 0.1	7.7 0.1	24.2 0.1	59.6 15.7	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B6;P-6LDP1 B6;P-6L11A	B6;C-6L11A	In	0.20	45.7 0.1	15.1 0.1	48.2 0.1	118.5 59.2	0.95
B6;P-6LDP1 B6;P-6LDP-1A	B6;C-6LDP-1A	In	1.35	23.1 0.3	7.6 0.1	24.3 0.3	59.9 39.9	0.95
B6;P-6MDP B6;B-T-6A-P	B6;C-T-6A-P	In	0.06	68.8 0.0	24.6 0.0	73.0 0.0	88.0 38.3	0.94
B6;P-6MDP B6;B-T-6B-P	B6;C-T-6B-P	In	0.05	115.1 0.1	44.1 0.0	123.3 0.1	148.5 32.3	0.93
B6;P-6MDP B6;P-6SL1	B6;C-6SL1	In	0.03	22.8 0.0	7.5 0.0	24.0 0.0	28.9 25.1	0.95
B6;P-6PDP1 B6;B-T-7-JB	B6;C-6PDP1-3	In	0.38	23.0 0.1	8.5 0.1	24.5 0.1	59.5 15.7	0.94
B6;P-6PDP1 B6;P-6P11	B6;C-6PDP1-4	In	0.04	22.8 0.0	7.5 0.0	24.0 0.0	58.2 18.8	0.95
B7;B-T-7-S B7;P-PP	B7;C-T-7-S	In	0.09	22.8 0.0	7.5 0.0	24.0 0.0	68.7 39.2	0.95
B8;B-1PA-1 B8;P-1PA-1	B8;C-1PA-1	In	0.08	6.7 0.0	2.2 0.0	7.0 0.0	19.8 23.3	0.95
B8;B-1PA-2 B8;P-1PA	B8;C-1PA	In	0.05	13.3 0.0	4.5 0.0	14.1 0.0	34.1 20.1	0.95
B8;B-1PB B8;P-1PB	B8;C-1PB	In	0.12	6.7 0.0	2.2 0.0	7.0 0.0	19.9 26.5	0.95
B8;B-6LDP1SAF B7;P-P1	B7;C-P1	In	0.44	22.9 0.1	7.6 0.1	24.1 0.1	59.6 22.9	0.95
B8;B-8LB1-S B8;P-8LB1	B8;C-8LB1-S	In	0.05	6.7 0.0	2.2 0.0	7.0 0.0	19.7 17.2	0.95
B8;B-8-P B20;B-20-P	OD;C-T8-20	In	0.00	110.2 0.0	40.0 0.0	117.2 0.0	5.4 1.8	0.94
B8;B-8-P B8;B-T-8-P	B8;C-T-8-P	In	0.00	113.6 0.0	41.6 0.0	121.0 0.0	5.5 1.9	0.94
B8;B-8PB1R B8;B-8LB1-P	B8;C-8LB1-P	In	0.14	6.7 0.0	2.3 0.0	7.0 0.0	17.1 57.0	0.95
B8;B-A-1L B8;P-8PBJ	B8;C-A-1L	In	0.07	113.1 0.1	38.3 0.1	119.4 0.1	288.3 46.5	0.95
B8;B-BK-A-1N B8;B-A-1N	B8;C-A-1N	In	0.10	113.2 0.1	38.4 0.1	119.5 0.1	288.3 41.2	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B8;B-SAFETY B7;B-T-7-P	B7;C-T-7-P	In	0.42	23.0 0.1	8.4 0.1	24.4 0.1	59.5 25.9	0.94
B8;B-T-8L11-S B8;P-GR	B8;C-T-8L11-S	In	0.05	26.7 0.0	8.8 0.0	28.1 0.0	79.0 34.3	0.95
B8;B-T-8L11-S B8;P-GRA	B8;C-GRA1	In	0.10	13.4 0.0	4.4 0.0	14.1 0.0	39.6 34.4	0.95
B8;B-T-8-S B8;B-BK-A-1N	B8;C-T8-S	In	0.35	113.5 0.3	38.7 0.3	119.9 0.5	288.3 46.5	0.95
B8;B-TMHC265 B8;P-MHC26	B8;C-MHC26-1	In	0.52	6.7 0.0	2.2 0.0	7.0 0.0	19.7 35.9	0.95
B8;P-1PA B8;B-T-1PA-1P	B8;C-1PA-D	In	0.33	6.7 0.0	2.3 0.0	7.1 0.0	17.1 85.6	0.95
B8;P-8L11 B8;P-8L11A	B8;C-8L11-2	In	0.32	6.7 0.0	2.2 0.0	7.0 0.0	19.8 23.2	0.95
B8;P-8PB1 B8;B-8PB1R	B8;C-8PB1R	In	0.21	6.7 0.0	2.3 0.0	7.1 0.0	17.1 57.0	0.95
B8;P-8PB1 B8;P-MACHSHO	B8;C-8PB1L	In	0.13	6.7 0.0	2.2 0.0	7.0 0.0	17.0 14.7	0.95
B8;P-8PBJ B20;P-T20A	B8;C-8PBJ-CK9	In	2.26	17.6 0.4	5.8 0.0	18.5 0.4	44.7 68.8	0.95
B8;P-8PBJ B8;B-1PA-2	B8;C-8PBJ-CK7	In	0.21	13.4 0.0	4.5 0.0	14.1 0.0	34.1 22.7	0.95
B8;P-8PBJ B8;B-T-8L11-P	B8;C-8PBJ-CK2	In	0.10	40.2 0.0	13.9 0.0	42.5 0.0	102.7 51.4	0.94
B8;P-8PBJ B8;B-TMHC265	B8;C-8PBJ-C11	In	0.19	6.7 0.0	2.3 0.0	7.1 0.0	17.1 31.1	0.95
B8;P-8PBJ B8;P-8PB1	B8;C-8PBJ-CK1	In	0.13	20.0 0.0	6.7 0.0	21.1 0.0	51.0 25.5	0.95
B8;P-8PBJ B8;P-8PBJ1	B8;C-8PBJ-CK5	In	0.04	6.7 0.0	2.2 0.0	7.0 0.0	16.9 7.4	0.95
B8;P-8PBJ1 B8;B-BFWP1	B8;C-8PBJ1-2	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B8;P-8PBJ1 B8;B-BFWP2	B8;C-8PBJ1-3	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B8;P-GR B8;P-8L11	B8;C-8L11-1	In	0.06	13.3 0.0	4.4 0.0	14.0 0.0	39.5 19.7	0.95
B8;P-GR	B8;C-WATER-T	In	0.77	6.7	2.2	7.1	19.8	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B8;P-BL12				0.1	0.0	0.1	23.3	
B8;P-GRA B8;B-1PB	B8;C-GRA2	In	0.71	6.7 0.1	2.2 0.0	7.1 0.1	19.9 26.5	0.95
B9;B-9EL21 B9;P-9EL21	B9;C-9EL21	In	1.03	25.9 0.3	8.5 0.1	27.3 0.3	77.0 51.3	0.95
B9;B-9S-P B9;B-T-9S-P	B9;C-T-9S-P	In	0.00	230.0 0.0	85.3 0.0	245.3 0.0	11.3 3.8	0.94
B9;B-9S-P B9A;B-P-TR-9N	OD;C-T9N-9S	In	0.00	-230.0 0.0	-85.3 0.0	245.3 0.0	11.3 3.8	0.94
B9;B-A-1L B9;P-9EHDP	B9;C-A-1L	In	0.10	155.4 0.1	55.7 0.1	165.1 0.2	198.6 76.4	0.94
B9;B-T9ELDP-S B9;P-9ELDP	B9;C-T9ELDP-S	In	0.07	25.7 0.0	8.4 0.0	27.0 0.0	75.7 43.3	0.95
B9;B-T-9S-S B9;SG-9MDP	B9;C-T-9S-S	In	0.06	229.7 0.1	80.3 0.1	243.4 0.2	292.3 38.5	0.94
B9;B-TEL21-S B9;B-9EL21	B9;C-TEL21-S	In	0.09	25.9 0.0	8.5 0.0	27.3 0.0	77.0 51.3	0.95
B9;B-TLDP-S B9;P-9LDP	B9;C-TLDP-S	In	0.15	77.5 0.1	25.7 0.1	81.7 0.1	230.5 60.7	0.95
B9;P-9EHDP B9;B-T9ELDP-P	B9;C-T9ELDP-P	In	0.06	25.7 0.0	9.0 0.0	27.3 0.0	32.8 50.5	0.94
B9;P-9EHDP B9;B-TEL21-P	B9;C-TEL21-P	In	0.09	26.0 0.0	9.5 0.0	27.7 0.0	33.3 51.3	0.94
B9;P-9EHDP B9;B-TLDP-P	B9;C-TLDP-P	In	0.19	77.8 0.2	28.7 0.0	83.0 0.2	99.9 76.8	0.94
B9;P-9LDP B9;P-9L11	B9;C-9L11	In	0.80	25.8 0.2	8.5 0.1	27.2 0.2	76.9 44.0	0.95
B9;P-9LDP B9;P-9L21	B9;C-9L21	In	0.66	25.8 0.2	8.5 0.1	27.2 0.2	76.8 33.4	0.95
B9;P-9LDP B9;P-9L22	B9;C-9L22	In	0.54	25.8 0.1	8.5 0.1	27.1 0.2	76.7 33.4	0.95
B9;SG-9MDP B9;B-A-1N	B9;C-A-1N	In	0.08	155.5 0.1	55.8 0.1	165.2 0.1	198.6 76.4	0.94
B9;SG-9MDP B9;P-9HDP	B9;C-9HDP	In	0.13	25.7 0.0	8.4 0.0	27.0 0.0	32.5 19.1	0.95
B9A;B-A-2L B9A;P-ELP	B9A;C-A-2L	In	0.02	16.2 0.0	5.4 0.0	17.0 0.0	20.5 12.0	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B9A;B-A-3L B9A;B-TEDP1-P	B9A;C-TEDP1-P	In	0.03	16.3 0.0	5.7 0.0	17.2 0.0	20.7 15.9	0.94
B9A;B-ELEVAT B9A;B-M-ELEV	B9A;C-M-ELEVA	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B9A;B-P-TR-9N B9A;B-T-9N-P	B9A;C-T-9N-P	In	0.00	114.4 0.0	40.9 0.0	121.5 0.0	5.6 1.9	0.94
B9A;B-T9A-1S B9A;P-9ALDP	B9A;C-T9A-1S	In	0.04	40.0 0.0	13.2 0.0	42.1 0.0	117.3 15.4	0.95
B9A;B-T-9N-S B9A;P-9AMDP	B9A;C-T-9N-S	In	0.02	114.3 0.0	38.6 0.0	120.7 0.0	144.8 11.7	0.95
B9A;B-TEDP1-S B9A;P-EDP1	B9A;C-TEDP1-S	In	0.11	16.2 0.0	5.3 0.0	17.1 0.0	47.8 28.1	0.95
B9A;B-TEDP-S B9A;P-EDP	B9A;C-TEDP-S	In	0.08	7.6 0.0	2.5 0.0	8.0 0.0	22.3 17.1	0.95
B9A;MC-MCC-9 B9A;B-A-2N	B9A;C-A-2N	In	0.02	16.2 0.0	5.4 0.0	17.0 0.0	20.5 12.0	0.95
B9A;MC-MCC-9 B9A;B-A-3N	B9A;C-A-3N	In	0.04	16.3 0.0	5.7 0.0	17.2 0.0	20.7 15.9	0.94
B9A;MC-MCC-9 B9A;B-ELEVAT	B9A;C-ELEVATR	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B9A;MC-MCC-9 B9A;B-T9A-1P	B9A;C-T9A-1P	In	0.02	40.0 0.0	13.7 0.0	42.3 0.0	50.8 14.5	0.95
B9A;MC-MCC-9 B9A;P-LP	B9A;C-LP	In	0.04	7.6 0.0	2.5 0.0	8.0 0.0	9.6 12.8	0.95
B9A;P-9ALDP B9A;P-LVP	B9A;C-LVP	In	0.41	8.6 0.0	2.8 0.0	9.0 0.0	25.2 19.4	0.95
B9A;P-9ALDP B9A;P-PP1	B9A;C-PP1	In	0.23	7.6 0.0	2.5 0.0	8.0 0.0	22.3 8.6	0.95
B9A;P-9ALDP B9A;P-PP2	B9A;C-PP2	In	0.25	8.6 0.0	2.8 0.0	9.0 0.0	25.1 9.7	0.95
B9A;P-9ALDP B9A;P-PP3	B9A;C-PP3	In	0.23	7.6 0.0	2.5 0.0	8.0 0.0	22.3 8.6	0.95
B9A;P-9AMDP B9A;MC-MCC-9	B9A;C-T-9N-S0	In	0.03	105.7 0.0	35.8 0.0	111.6 0.0	134.0 21.6	0.95
B9A;P-EDP1 B9A;P-EDP2	B9A;C-EDP2	In	0.70	7.7 0.1	2.5 0.0	8.1 0.1	22.6 17.4	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B9A;P-ELP B9A;B-TEDP-P	B9A;C-TEDP-P	In	0.03	7.6 0.0	2.5 0.0	8.0 0.0	9.6 12.9	0.95
BMRI;B-EMH-S BMRI;P-EML	BMRI;C-EMH-S	In	0.23	8.6 0.0	2.8 0.0	9.0 0.0	27.4 42.2	0.95
BMRI;B-H-S BMRI;P-L	BMRI;C-H-S	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	44.5 13.9	0.95
BMRI;P-EMH BMRI;B-EMH-P	BMRI;C-EMH-P	In	0.03	8.6 0.0	3.1 0.0	9.1 0.0	11.9 21.6	0.94
BMRI;P-H BMRI;B-H-P	BMRI;C-H-P	In	0.02	14.3 0.0	4.9 0.0	15.1 0.0	19.3 12.9	0.95
BMRI;P-H BMRI;MC-CHIL	BMRI;C-CHILL	In	0.03	14.3 0.0	4.7 0.0	15.0 0.0	19.2 14.8	0.95
BMRI;P-H BMRI;U-UPS	BMRI;C-UPS	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
BT34;P-T34A BT25;P-MSPP1	BT25;C-MSPP1	In	2.24	7.8 0.2	2.5 0.0	8.2 0.2	23.5 47.0	0.95
BT36;B-36P2-S BT36;P-36P2	BT36;C-36P2-S	In	0.05	7.6 0.0	2.5 0.0	8.0 0.0	22.7 13.0	0.95
BT36;B-T36 BT36;P-36P1	BT36;C-36P1A	In	0.45	15.3 0.1	5.1 0.0	16.1 0.1	19.6 26.2	0.95
BT36;P-36P1 BT36;B-36P2-P	BT36;C-36P2-P	In	0.03	7.6 0.0	2.5 0.0	8.0 0.0	9.8 8.5	0.95
OD;B-FD-A OD;SG-1	OD;C-FD-A	In	0.02	5,042.5 0.7	2,003.1 0.5	5,425.8 0.9	248.7 84.3	0.93
OD;B-FD-B OD;B-FD-A	OD;BD-ABTIE	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
OD;B-FD-B OD;SG-4	OD;C-FD-B	In	0.01	2,665.7 0.2	1,011.7 0.1	2,851.3 0.2	127.9 43.3	0.93
OD;B-TRU1P OD;B-T-U1-P	OD;C-T-U1-P	In	0.00	5,065.3 0.1	2,403.5 0.1	5,606.6 0.1	94.6 0.0	0.90
OD;B-TRU2P OD;B-TRU1P	OD;BD-UT12TIE	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
OD;B-TRU2P OD;B-T-U2-P	OD;C-T-U2-P	In	0.00	2,671.8 0.0	1,117.4 0.0	2,896.0 0.0	48.7 0.0	0.92
OD;B-T-U1-S OD;B-FD-A	OD;C-T-U1-S	In	0.01	5,043.0 0.5	2,003.5 0.3	5,426.4 0.6	248.7 84.3	0.93
OD;B-T-U2-S OD;B-FD-B	OD;C-T-U2-S	In	0.01	2,665.9 0.1	1,011.8 0.1	2,851.4 0.2	127.9 43.3	0.93

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
OD;B-UTIL1 OD;B-TRU1P	OD;C-UTIL1	In	0.00	5,065.4 0.1	2,403.6 0.1	5,606.7 0.1	94.6 0.0	0.90
OD;B-UTIL-2 OD;B-TRU2P	OD;C-UTIL-2	In	0.00	2,671.8 0.0	1,117.4 0.0	2,896.0 0.0	48.7 0.0	0.92
OD;SG-1 B100;B-FD2	OD;C-FD2	In	0.03	1,904.9 0.6	757.3 0.4	2,049.9 0.7	94.0 31.9	0.93
OD;SG-1 B6;B-T6-P	OD;C-FD1	In	0.01	454.2 0.1	171.1 0.0	485.3 0.1	22.2 7.5	0.94
OD;SG-1 OD;SG-2	OD;C-SG-1-2	In	0.00	2,682.7 0.0	1,074.3 0.0	2,889.8 0.0	132.5 44.9	0.93
OD;SG-2 B100;B-FD3	OD;C-FD3	In	0.03	1,921.9 0.6	792.2 0.4	2,078.7 0.7	95.3 32.3	0.92
OD;SG-2 B5;B-5-P	OD;C-FD4-T5	In	0.03	760.8 0.2	282.1 0.2	811.4 0.3	37.2 12.6	0.94
OD;SG-2 OD;SG-3	OD;C-SG-2-3	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
OD;SG-3 B100;B-FD5	OD;C-FD-5	In	0.03	1,908.3 0.5	723.5 0.4	2,040.8 0.7	91.5 31.0	0.94
OD;SG-3 B106;B-T106P	OD;C-FD-6	In	0.00	382.6 0.0	145.9 0.0	409.4 0.0	18.4 6.2	0.93
OD;SG-3 OD;SG-4	OD;C-SG3-4	In	0.00	-2,290.8 0.0	-869.4 0.0	2,450.2 0.0	109.9 37.3	0.93
OD;SG-4 B103;B-T103P	OD;C-FD9	In	0.02	374.7 0.1	142.2 0.0	400.8 0.1	18.0 6.1	0.93

2-Winding Transformers

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-150A1 B100;B-150A1	B100;T-150A1	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 88.2	0.95
B100;B-150B2P B100;B-150B2S	B100;T-150B2	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 89.0	0.95
B100;B-150C3P B100;B-150C3S	B100;T-150C3	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 88.8	0.95
B100;B-164A1 B100;B-164A1	B100;T-164A1	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 88.3	0.95

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-164B2P B100;B-164B2S	B100;T-164B2	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 89.3	0.95
B100;B-164C3P B100;B-164C3S	B100;T-164C3	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 89.0	0.95
B100;B-166A1 B100;B-166A1	B100;T-166A1	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 88.4	0.95
B100;B-166B2P B100;B-166B2S	B100;T-166B2	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 89.6	0.95
B100;B-166C3P B100;B-166C3S	B100;T-166C3	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 89.2	0.95
B100;B-168A1 B100;B-168A1	B100;T-168A1	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 88.5	0.95
B100;B-168B2P B100;B-168B2S	B100;T-168B2	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 89.9	0.95
B100;B-168BP B100;B-168BS	B100;T-168B	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 90.0	0.95
B100;B-168C3P B100;B-168C3S	B100;T-168C3	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 89.4	0.95
B100;B-169A1 B100;B-169A1	B100;T-169A1	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 88.4	0.95
B100;B-169B2P B100;B-169B2S	B100;T-169B2	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 89.8	0.95
B100;B-169C3P B100;B-169C3S	B100;T-169C3	In	0.33	3.8 0.0	1.3 0.0	4.0 0.0	12.0 89.4	0.95
B100;B-1DP1A B100;B-1DP1B	B100;T-1DP1-1	In	0.80	25.7 0.0	9.1 0.6	27.3 0.6	35.0 38.7	0.94
B100;B-1DP1A B100;B-1DP1B	B100;T-1DP1-2	In	0.56	8.6 0.0	3.0 0.1	9.1 0.1	12.0 32.1	0.95
B100;B-1DP1A B100;B-1DP1B	B100;T-1DP1-3	In	0.91	34.3 0.1	12.2 0.9	36.4 0.9	47.0 51.7	0.94
B100;B-1DP1A B100;B-1DP1B	B100;T-1DP1-4	In	0.91	34.3 0.1	12.2 0.9	36.4 0.9	47.0 51.7	0.94
B100;B-1DP2-9 B100;P-1C90	B100;T-T-XP6	In	0.07	4.8 0.0	1.6 0.0	5.0 0.0	6.0 3.5	0.95
B100;B-1DP3A B100;B-1DP3B	B100;T-1DP3	In	2.24	38.2 0.1	15.0 2.5	41.0 2.5	53.0 97.0	0.93
B100;B-1DP4A B100;B-1DP4B	B100;T-1DP4	In	0.97	42.9 0.1	15.4 1.3	45.5 1.3	58.0 16.2	0.94

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-2DPT1 B100;B-2DPT1	B100;T-2DP1	In	4.17	43.2 0.3	19.3 5.1	47.3 5.1	61.0 16.9	0.91
B100;B-2DPT2 B100;B-2DPT2	B100;T-2DP2	In	2.58	43.1 0.2	17.4 3.2	46.5 3.2	60.0 16.6	0.93
B100;B-2DPT3 B100;B-2DPT3	B100;T-2DP3	In	2.58	28.8 0.1	11.6 2.2	31.0 2.2	40.0 11.1	0.93
B100;B-2DPT4 B100;B-2DPT4	B100;T-2DP4	In	1.21	57.2 0.1	20.9 2.1	60.9 2.1	78.0 21.7	0.94
B100;B-3DPT1 B100;B-3DPT1	B100;T-3DPT1	In	2.57	43.0 0.2	17.3 3.2	46.4 3.2	60.0 16.5	0.93
B100;B-3DPT2 B100;B-3DPT2	B100;T-3DPT2	In	2.57	43.0 0.2	17.3 3.2	46.4 3.2	60.0 16.5	0.93
B100;B-3DPT3 B100;B-3DPT3	B100;T-3DPT3	In	1.58	57.3 0.1	21.5 2.7	61.2 2.7	79.0 21.8	0.94
B100;B-3ED1T B100;B-3ED1T	B100;T-3ED1	In	1.61	11.4 0.0	4.3 0.5	12.2 0.5	16.0 87.4	0.94
B100;B-3WD1 B100;B-3WD1	B100;T-3WD1	In	1.63	11.5 0.0	4.3 0.6	12.3 0.6	16.0 88.3	0.94
B100;B-4DPT1 B100;B-4DPT1	B100;T-4DPT1	In	2.58	43.1 0.2	17.4 3.2	46.5 3.2	60.0 16.6	0.93
B100;B-4DPT2 B100;B-4DPT2	B100;T-4DPT2	In	2.58	43.2 0.2	17.4 3.3	46.6 3.3	60.0 16.6	0.93
B100;B-4DPT3 B100;B-4DPT3	B100;T-4DPT3	In	1.16	42.9 0.1	15.6 1.5	45.7 1.5	59.0 16.3	0.94
B100;B-5DP1T B100;B-5DP1T	B100;T-5DP1	In	3.56	57.6 0.3	24.8 5.9	62.7 5.9	81.0 22.3	0.92
B100;B-5DP2T B100;B-5DP2T	B100;T-5DP2	In	2.57	43.1 0.2	17.4 3.2	46.4 3.2	60.0 16.5	0.93
B100;B-BDP10 B100;B-BDP10	B100;T-BDP10A	In	1.46	14.3 0.0	5.3 0.6	15.3 0.6	20.0 5.4	0.94
B100;B-BDP10 B100;B-BDP10	B100;T-BDP10D	In	1.46	14.3 0.0	5.3 0.6	15.3 0.6	20.0 5.4	0.94
B100;B-BDP5A B100;B-BDP5B	B100;T-BDP5-L	In	0.44	58.0 0.0	19.9 0.8	61.4 0.8	79.0 21.8	0.95
B100;B-BDP5R B100;B-BR10-	B100;T-BDP5-R	In	2.03	22.9 0.1	8.9 1.4	24.6 1.4	32.0 87.3	0.93
B100;B-BR13T B100;B-BR13T	B100;T-BR13	In	1.10	14.3 0.0	5.2 0.5	15.2 0.5	20.0 5.4	0.94

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-E1R16 B100;B-E1R16	B100;T-E1R16A	In	0.72	8.6 0.0	3.0 0.2	9.1 0.2	12.0 32.2	0.94
B100;B-E2WO B100;B-TE2DP	B100;T-E2DP3	In	0.26	8.6 0.0	2.9 0.1	9.0 0.1	12.0 12.8	0.95
B100;B-EBR10 B100;B-EBR10	B100;T-EBR10	In	0.26	8.6 0.0	2.9 0.1	9.0 0.1	12.0 3.2	0.95
B100;B-LA108 B100;B-RP1,2	B100;T-RP1,2	In	1.47	43.1 0.1	16.1 1.9	46.0 1.9	60.0 66.1	0.94
B100;B-T1-A-P B100;B-T1-A-S	B100;T-SS1-A	In	1.82	1,907.7 5.4	723.1 96.4	2,040.2 96.5	92.0 59.3	0.94
B100;B-T2-A-P B100;B-T2-A-S	B100;T-SS2-A	In	2.05	1,921.3 5.9	791.7 106.3	2,078.0 106.5	95.0 61.7	0.92
B100;B-T2-B-P B100;B-T2-B-S	B100;T-SS2-B	In	1.97	1,904.3 5.7	756.8 103.4	2,049.2 103.6	94.0 60.9	0.93
B100;B-T456P B100;B-T456S	B100;T-BR456	In	1.16	42.9 0.1	15.6 1.5	45.7 1.5	59.0 16.3	0.94
B100;B-T789P B100;B-T789S	B100;T-BR789	In	1.16	42.9 0.1	15.6 1.5	45.7 1.5	59.0 16.3	0.94
B100;B-T-BME B100;B-T-BME	B100;T-BME	In	0.36	8.6 0.0	2.9 0.1	9.1 0.1	12.0 21.5	0.95
B100;B-TBR13 B100;B-TBR12	B100;T-BR123	In	2.57	43.0 0.2	17.3 3.2	46.4 3.2	60.0 16.5	0.93
B100;B-TC1R1 B100;B-TC1R1	B100;T-C1R1,2	In	1.50	17.2 0.0	6.4 0.8	18.3 0.8	24.0 65.4	0.94
B100;B-TC1R3 B100;B-TC1R3	B100;T-C1R3,4	In	1.23	17.2 0.0	6.3 0.6	18.3 0.6	23.0 65.0	0.94
B100;B-TC2R1 B100;B-TC2R1	B100;T-C2R1-3	In	0.58	25.7 0.0	8.9 0.4	27.2 0.4	35.0 25.8	0.94
B100;B-TC2R4 B100;B-TC2R4	B100;T-C2R4,5	In	2.06	84.9 0.3	33.6 5.1	91.3 5.1	117.0 86.7	0.93
B100;B-TC2W B100;B-TC2W	B100;T-C2WDP	In	1.01	17.1 0.0	6.1 0.5	18.2 0.5	23.0 43.3	0.94
B100;B-TC3R1 B100;B-TC3R1	B100;T-C3R1	In	0.68	8.6 0.0	3.0 0.2	9.1 0.2	12.0 64.8	0.94
B100;B-T-C4R B100;B-T-C4R	B100;T-C4R1,2	In	0.45	17.1 0.0	5.9 0.2	18.1 0.2	23.0 25.7	0.95
B100;B-T-C5R B100;B-T-C5R	B100;T-C5R1,2	In	1.50	17.2 0.0	6.4 0.8	18.3 0.8	24.0 65.4	0.94

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100;B-TE1R1 B100;B-TE1R1	B100;T-E1R124	In	0.68	25.7 0.0	9.0 0.5	27.2 0.5	35.0 38.8	0.94
B100;B-TE1R3 B100;B-TE1R3	B100;T-1RE1R3	In	0.72	8.6 0.0	3.0 0.2	9.1 0.2	12.0 32.2	0.94
B100;B-T-E2R B100;B-T-E2R	B100;T-E2R1-2	In	1.49	17.2 0.0	6.4 0.8	18.3 0.8	23.0 65.1	0.94
B100;B-T-E3R B100;B-T-E3R	B100;T-E3R1,2	In	1.50	17.2 0.0	6.4 0.8	18.3 0.8	24.0 65.5	0.94
B100;B-T-E4R B100;B-T-E4R	B100;T-E4R1,2	In	1.50	17.2 0.0	6.4 0.8	18.3 0.8	24.0 65.4	0.94
B100;B-T-E5R B100;B-T-E5R	B100;T-E5R1,2	In	1.51	17.2 0.0	6.4 0.8	18.3 0.8	24.0 65.6	0.94
B100;B-TEB7A B100;B-TEB7A	B100;T-EBDP7A	In	0.45	59.9 0.0	20.5 0.8	63.4 0.8	81.0 22.5	0.95
B100;B-TEB9B B100;B-TEB9B	B100;T-EBDP9B	In	0.27	8.6 0.0	2.9 0.1	9.0 0.1	12.0 3.2	0.95
B100;B-T-EBR B100;B-T-EBR	B100;T-EBR1-2	In	1.51	17.2 0.0	6.4 0.8	18.4 0.8	24.0 65.8	0.94
B100;B-TLS1R B100;B-TLS1R	B100;T-LS1R1	In	0.67	8.6 0.0	3.0 0.2	9.1 0.2	12.0 64.6	0.94
B100;B-TLS2R B100;B-TLS2R	B100;T-LS2R1	In	0.68	8.6 0.0	3.0 0.2	9.1 0.2	12.0 64.8	0.94
B100;B-TLS3R B100;B-TLS3R	B100;T-LS3R1	In	0.68	8.6 0.0	3.0 0.2	9.1 0.2	12.0 64.8	0.94
B100;B-TLS4R B100;B-TLS4R	B100;T-LS4R1	In	0.68	8.6 0.0	3.0 0.2	9.1 0.2	12.0 64.8	0.94
B100;B-TLS5R B100;B-TLS5R	B100;T-LS5R1	In	0.68	8.6 0.0	3.0 0.2	9.1 0.2	12.0 64.8	0.94
B100;B-TLSBR B100;B-TLSBR	B100;T-LSBR1	In	0.68	8.6 0.0	3.0 0.2	9.1 0.2	12.0 64.8	0.94
B100;B-TRL12 B100;B-TRL12	B100;T-RL1,2	In	0.56	17.2 0.0	5.9 0.3	18.2 0.3	23.0 25.9	0.95
B100;MC-EMC B100;B-EBPR1	B100;T-EBPR1	In	0.67	8.6 0.0	3.0 0.2	9.1 0.2	12.0 64.4	0.94
B100A;B-1DLS B100A;B-1DLS	B100A;T-1DLST1	In	0.58	8.6 0.0	3.0 0.2	9.1 0.2	12.0 64.8	0.95
B100A;B-1DT1 B100A;B-1DT1	B100A;T-1DT1	In	0.66	42.9 0.0	14.9 0.9	45.4 0.9	58.0 43.1	0.94

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B100A;B-2DC B100A;B-2DC	B100A;T-2DCR1	In	0.91	11.4 0.0	4.1 0.3	12.1 0.3	16.0 86.3	0.94
B100A;B-2DT1 B100A;B-2DT1	B100A;T-2DT1	In	1.29	42.9 0.1	15.7 1.7	45.7 1.7	59.0 65.2	0.94
B100A;B-BDE1 B100A;B-BDE1	B100A;T-BDE1	In	0.00	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00
B100A;B-BDL B100A;B-BDL	B100A;T-BDLST1	In	0.58	8.6 0.0	3.0 0.2	9.1 0.2	12.0 64.6	0.95
B100A;B-BDT1 B100A;B-BDT1	B100A;T-BDT1	In	0.85	14.3 0.0	5.1 0.4	15.2 0.4	19.0 36.0	0.94
B100A;B-TBD B100A;B-TBD	B100A;T-TBDE1	In	1.12	8.6 0.0	3.1 0.3	9.1 0.3	12.0 65.0	0.94
B103;B-NC1D2 B103;B-NC1D2	B103;T-NC1D2	In	2.10	67.0 0.2	25.6 3.8	71.8 3.9	85.0 94.1	0.93
B103;B-NE1R1 B103;B-NE1R1	B103;T-NE1R1	In	0.85	21.2 0.0	7.4 0.5	22.5 0.5	27.0 73.7	0.94
B103;B-T103P B103;B-103S	B103;T-103	In	-3.81	374.7 0.6	142.1 10.6	400.7 10.6	18.0 81.5	0.93
B103;B-T-M B103;B-T-S	B103;T-T	In	1.18	116.3 0.2	42.3 3.8	123.8 3.8	146.0 54.0	0.94
B105;B-36H-P B105;B-36H-S	B105;T-36H	In	0.38	7.6 0.0	2.6 0.1	8.0 0.1	10.0 54.3	0.95
B105;B-36P-P B105;B-36P-S	B105;T-36P	In	0.64	7.6 0.0	2.6 0.1	8.1 0.1	10.0 27.2	0.94
B106;B-EMDP B106;B-EMDP	B106;T-EMDPL	In	2.14	67.9 0.2	26.1 3.9	72.7 3.9	86.0 95.3	0.93
B106;B-EV-P B106;B-EV-S	B106;T-EV	In	0.90	6.7 0.0	2.4 0.2	7.1 0.2	8.0 77.3	0.94
B106;B-MDPL- B106;B-MDPL-	B106;T-MDPL	In	0.84	171.4 0.2	61.0 3.9	181.9 3.9	215.0 35.7	0.94
B106;B-PPL1-P B106;B-PPL1-S	B106;T-PPL1	In	0.90	6.7 0.0	2.4 0.2	7.1 0.2	8.0 77.5	0.94
B106;B-PPL2-P B106;B-PPL2-S	B106;T-PPL2	In	0.90	6.7 0.0	2.4 0.2	7.1 0.2	8.0 77.5	0.94
B106;B-T106P B106;B-106S	B106;T-106	In	-3.79	382.5 0.6	145.9 11.0	409.4 11.0	18.0 83.3	0.93
B20;B-20A1-P B20;B-20A1-S	B20;T-20A1	In	0.71	3.8 0.0	1.3 0.1	4.0 0.1	10.0 83.0	0.94

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B20;B-20A2-P B20;B-20A2-S	B20;T-20A2	In	0.71	3.8 0.0	1.3 0.1	4.0 0.1	10.0 83.0	0.94
B20;B-20L1S-P B20;B-20L1S-S	B20;T-20L1S	In	0.52	6.7 0.0	2.3 0.1	7.0 0.1	8.0 23.4	0.95
B20;B-T-20A-P B20;B-T-20A-S	B20;T-20A	In	1.07	50.2 0.1	17.9 1.5	53.3 1.5	64.0 47.3	0.94
B20;B-T-20-P B20;B-T-20-S	B20;T-20	In	-4.07	110.2 0.1	40.0 2.2	117.2 2.2	5.0 54.2	0.94
B22;B-41-P B22;B-41-S	B22;T-41	In	2.01	100.2 0.3	38.6 5.6	107.4 5.6	130.0 95.8	0.93
B22;B-T-22-P B22;B-T-22-S	B22;T-22	In	-3.92	243.8 0.3	91.8 5.6	260.5 5.6	12.0 90.3	0.94
B5;B-5PB1-P B5;B-5PB1-S	B5;T-5PB1	In	0.18	15.2 0.0	5.1 0.1	16.0 0.1	19.0 10.7	0.95
B5;B-L1B-P B5;B-L1B-S	B5;T-L1B	In	0.83	15.2 0.0	5.4 0.4	16.2 0.4	19.0 35.9	0.94
B5;B-L1-P B5;B-L1-S	B5;T-L1	In	0.36	15.2 0.0	5.2 0.2	16.1 0.2	19.0 21.4	0.95
B5;B-T-5-P B5;B-T-5-S	B5;T-5	In	-4.10	172.2 0.2	63.8 3.2	183.6 3.2	8.0 84.9	0.94
B5;B-WIREWA B5;B-WIREWA	B5;T-WIREWAY	In	1.70	69.0 0.2	26.0 3.3	73.7 3.3	89.0 98.2	0.94
B6;B-T-6A-P B6;B-T-6A-S	B6;T-6A	In	0.52	68.8 0.1	24.5 1.0	73.0 1.0	88.0 48.8	0.94
B6;B-T-6B-P B6;B-T-6B-S	B6;T-6B	In	1.92	115.1 0.3	44.1 6.1	123.2 6.1	148.0 73.9	0.93
B6;B-T-6-P B6;B-T-6-S	B6;T-6	In	-3.95	230.3 0.3	89.5 5.1	247.0 5.1	11.0 85.6	0.93
B7;B-T-7-P B7;B-T-7-S	B7;T-7	In	1.25	22.9 0.0	8.3 0.8	24.3 0.8	60.0 55.0	0.94
B8;B-8LB1-P B8;B-8LB1-S	B8;T-8LB1	In	0.49	6.7 0.0	2.3 0.1	7.0 0.1	17.0 47.4	0.95
B8;B-T-1PA-1P B8;B-1PA-1	B8;T-1PA-1	In	0.55	6.7 0.0	2.3 0.1	7.0 0.1	17.0 47.5	0.95
B8;B-T-8L11-P B8;B-T-8L11-S	B8;T-8L11,GR	In	0.68	40.1 0.0	13.9 0.8	42.5 0.8	103.0 56.9	0.94
B8;B-T-8-P B8;B-T-8-S	B8;T-8	In	-3.85	113.6 0.2	41.6 2.9	121.0 2.9	6.0 83.9	0.94

From Bus To Bus	Component Name	In/Out Service	%VD	kW Loss	kvar Loss	kVA Loss	LF Amps Rating %	PF
B8;B-TMHC26 B8;B-TMHC26	B8;T-MHC265	In	0.40	6.7 0.0	2.3 0.1	7.1 0.1	17.0 47.4	0.95
B9;B-T9ELDP- B9;B-T9ELDP-	B9;T-T9ELDP	In	0.79	25.7 0.0	9.0 0.6	27.2 0.6	33.0 60.6	0.94
B9;B-T-9S-P B9;B-T-9S-S	B9;T-9S	In	-3.98	230.0 0.3	85.3 5.0	245.3 5.0	11.0 85.0	0.94
B9;B-TEL21-P B9;B-TEL21-S	B9;T-TEL21	In	1.29	26.0 0.1	9.5 0.9	27.7 0.9	33.0 61.6	0.94
B9;B-TLDP-P B9;B-TLDP-S	B9;T-TLDP	In	1.36	77.7 0.2	28.7 2.9	82.8 2.9	100.0 73.8	0.94
B9A;B-T9A-1P B9A;B-T9A-1S	B9A;T-T9A-1	In	0.46	40.0 0.0	13.7 0.5	42.3 0.5	51.0 18.8	0.95
B9A;B-T-9N-P B9A;B-T-9N-S	B9A;T-9N	In	-4.05	114.4 0.1	40.9 2.3	121.5 2.3	6.0 56.2	0.94
B9A;B-TEDP1- B9A;B-TEDP1-	B9A;T-TEDP1	In	0.89	16.2 0.0	5.7 0.4	17.2 0.4	21.0 38.3	0.94
B9A;B-TEDP-P B9A;B-TEDP-S	B9A;T-TEDP	In	0.23	7.6 0.0	2.5 0.0	8.0 0.1	10.0 17.8	0.95
BMRI;B-EMH- BMRI;B-EMH-	BMRI;T-EMH	In	1.17	8.6 0.0	3.1 0.3	9.1 0.3	12.0 65.9	0.94
BMRI;B-H-P BMRI;B-H-S	BMRI;T-H	In	0.43	14.3 0.0	4.9 0.2	15.1 0.2	19.0 21.4	0.95
BT36;B-36P2-P BT36;B-36P2-S	BT36;T-36P2	In	0.21	7.6 0.0	2.5 0.0	8.0 0.0	10.0 10.9	0.95
OD;B-T-U1-P OD;B-T-U1-S	OD;T-UTIL1	In	2.91	5,065.2 22.2	2,403.4 399.9	5,606.5 400.5	95.0 80.8	0.90
OD;B-T-U2-P OD;B-T-U2-S	OD;T-UTIL2	In	1.25	2,671.7 5.9	1,117.4 105.6	2,896.0 105.7	49.0 41.5	0.92

6 ARC-FLASH HAZARD ANALYSIS

6.1 Introduction:

Arc-flash hazard is defined as a dangerous condition associated with the release of energy caused by an electric arc. The focus of industry on electrical safety and recognition of arc-flash burns as having great significance highlighted the need for protecting employees from all arc-flash hazards. The National Electrical Code (NEC)-2002, Article 110.16 “Flash Protection,” states in part that switchboards, panelboards, industrial control panels, and motor control centers that are in other than dwelling occupancies and are likely to require examination, adjustment, servicing, or maintenance while energized shall be field marked to warn qualified persons of potential electric arc-flash hazards. It is implied that flash protection is required when examining, adjusting, servicing or maintaining energized equipment. The equipment shall be field marked to warn qualified persons of potential electric arc flash hazards.

NFPA 70E Article 130.3 mandates that “A flash hazard analysis shall be done in order to protect personnel from the possibility of being injured by an arc flash. The analysis shall determine the Flash Protection Boundary and the personal protective equipment that people within the Flash Protection Boundary shall use.”

An arc-flash hazard analysis is performed in conjunction with the short circuit study and protective device coordination study. Results of the short circuit study are used to determine the fault current level associated with an arcing condition. Results of protective device coordination study are used to determine the time required for the electrical protective devices to clear such an arc fault. Results from both short circuit and protective device coordination studies are used to perform an arc-flash hazard analysis. Results of arc-flash hazard analysis are used together to identify the flash-protection boundary and the incident energy at assigned working distances within an electrical power distribution system. Since the NEC-2002, Article 110.16 requires that the electrical equipment shall be field marked to warn qualified persons of potential electric arc-flash hazards, it is recommended that the VAMC refer to NEC, NFPA 70E and ANSI Z535.4-2002 for guidelines for the design of safety signs and labels for application and products.

The arc-flash hazard analysis calculates the incident energy and arc flash boundary at each location in a power system. The calculations were performed in accordance with IEEE 1584. The calculation results are used to determine the arc flash boundary, hazard risk category, and personal protective equipment requirements.

These calculations determine Approach Boundaries to Live Parts for Shock Protection based on the system model developed as part of the short-circuit analysis and protective device coordination study and in accordance with IEEE 1584. The calculations are based on the current installation and assumptions that have been outlined herein. System modifications or assumptions that prove to be false may change the hazard risk category and arc flash boundary.

These calculations are not meant to promote or encourage work on energized equipment. They are also not meant to imply that it is safe to work on energized equipment if protective equipment is used. S&A recommends de-energizing all equipment prior to gaining access.

6.1.1 Software:

SKM Power Tools was used to perform the study. Specifically, the SKM Power Tools' Arc Flash Evaluation module was used for performing the arc flash hazard analysis.

The Arc Flash Evaluation Report is included in Section 6.4 and the Approach Boundaries to Live Parts for Shock Protection are in Section 6.5.

6.1.2 Disclaimer:

The arc flash analysis as presented in the SKM software program is performed based on the equations and formulas presented in the IEEE Std-1584 and the information given in the NFPA 70E-2004 on personal protective equipment. It is assumed that the user of the flash analysis is knowledgeable with the NFPA 70E, "Electrical Safety Requirements for Employees Workplaces," that provides information and guidance on protective performance of equipment and various fabrics. It is also assumed that the user has read and is familiar with the pertinent standards and references, such as industry standards and codes dealing with the subject of flash protection, fault analysis, overcurrent device protection and the performance of a given system electrical equipment under various fault conditions. It is assumed that the user has read and understood all of the related protective device coordination industry standards and understands the theory and concepts. The equations and formulas used in the flash analysis program are based on experimental data and uses theoretical and empirical equations to provide an approximation to the heat falling on a surface. Since temperature, humidity, barometric pressure, arc length, and the location of a fault within any switchgear cubicle, panel, motor control center or any other electrical equipment have a bearing on the arc, an actual arc is likely to produce heat that may differ from the results documented in this study. *Therefore, the user should use the Flash Analysis results documented in this study only as a guide. The interpretation and use of the calculated results provided by the flash analysis program documented in this study are the sole responsibility of the user.*

6.2 Analysis and Recommendations:

The arc-flash hazard calculation results are documented in Section 6.3. The incident energy (cal/cm²) and the hazard/risk category (HRC) are listed in the two right hand columns respectively. The equipment for which no PPE is available is listed as "**Extreme Danger**" since it exceeds the incident energy (cal/cm²) for which known HRC's are identified in NFPA 70E. The equipment and location that is listed as "Extreme Danger" shall be only approached or worked upon when it is completely de-energized.

The arc flash analysis was performed for the distribution equipment installed at VAMC's South Carolina facility. The analysis entailed the major existing electrical equipment under

existing system conditions. Based on the analysis, the greatest incident energy observed was at the incoming section of Switchgear EP in Building 100. The incident energy and corresponding hazard risk categories were 37 cal/cm² and Category 4, respectively. The incident energies among the rest of the equipment were lower than this value.

6.3 Typical Personal Protective Equipment

The following table shows clothing descriptions of HRCs [as per NFPA 70E, Article 130.7(c)(11)]:

Hazard/Risk Category	Clothing Description (Typical number of clothing layers is given in parentheses)
0	Non-melting, flammable materials (i.e., untreated cotton, wool, rayon, or silk, or blends of these materials) with a fabric weight at least 4.5 oz/yd ² (1)
1	FR shirt and FR pants or FR coverall (1)
2	Cotton underwear – conventional short sleeve and brief/shorts, plus FR shirt and FR pants (1 or 2)
3	Cotton underwear plus FR shirt and FR pants plus FR coverall, or cotton underwear plus two FR coveralls (2 or 3)
4	Cotton underwear plus FR shirt and FR pants plus multilayer flash suit (3 or more)

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Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/ Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B100;B-A-1L	B100;F-S2-10B	Bldg 100, ATS-1	0.48	32.62	32.62	15.31	0.046	0.000	Yes	PNL	25	28	18	2.4	Category 1
B100;B-A-2L	B100;F-S2-10A	Bldg 100, ATS-2	0.48	33.08	33.08	15.49	0.043	0.000	Yes	PNL	25	27	18	2.3	Category 1
B100;B-A-3L	B100;F-S2-9B	Bldg 100, ATS-3	0.48	33.55	33.55	15.68	0.04	0.000	Yes	PNL	25	26	18	2.2	Category 1
B100;B-A-4L	B100;F-S2-9A	Bldg 100, ATS-4	0.48	32.18	32.18	15.13	0.049	0.000	Yes	PNL	25	29	18	2.6	Category 1
B100;B-A-5L	B100;F-S2-8A	Bldg 100, ATS-5	0.48	32.18	32.18	15.13	0.049	0.000	Yes	PNL	25	29	18	2.6	Category 1
B100;B-A-6L	B100;BR-S2-8B	Bldg 100, ATS-6	0.48	32.68	30.86	14.47	0.05	0.000	Yes	PNL	25	29	18	2.6	Category 1
B100;B-A-7L	B100;BK-S2-7A	Bldg 100, ATS-7	0.48	33.02	30.00	14.05	0.05	0.000	Yes	PNL	25	29	18	2.7	Category 1
B100;B-A-8L	B100;F-S2-7B	Bldg 100, ATS-8	0.48	34.03	34.03	15.87	0.037	0.000	Yes	PNL	25	25	18	2.0	Category 1
B100;B-A-9L	B100;BK-S2-10D	Bldg 100, ATS-9	0.48	34.22	33.19	18.19	0.001	0.000	Yes	PNL	25	3	18	0.07	Category 0
B100;B-FD2	OD;BK-SG1-FD2	Xfmr SS2-B Primary Switch	13.09	3.19	2.97	2.94	0.06	0.050	Yes	SWG	153	11	36	0.39	Category 0
B100;B-FD3	OD;BK-SG2-F3	Xfmr SS2-A Primary Switch	13.09	3.19	2.96	2.93	0.06	0.050	Yes	SWG	153	11	36	0.39	Category 0
B100;B-FD5	OD;BK-SG3-FD5	Xfmr SS1-A Primary Switch	13.09	3.20	2.74	2.72	0.063	0.050	Yes	SWG	153	12	36	0.40	Category 0
B100;MC-CT2	B100;F-S1-2A	Bldg 100, MCC CT2	0.48	42.38	40.10	18.11	0.016	0.000	Yes	PNL	25	17	18	1.1	Category 0
B100;MC-ELES9	B100;BK-BDP8	Bldg 100, MCC ELES9	0.48	17.77	17.77	10.71	0.017	0.000	Yes	PNL	25	12	18	0.60	Category 0
B100;MC-EMCBP	B100;BK-EMCBP	Bldg 100, EMCC BP	0.48	28.76	28.24	15.88	0.025	0.000	Yes	PNL	25	20	18	1.4	Category 1
B100;MC-EMCC2	B100;BK-EMCCC2	Bldg 100, EMCC C2	0.48	12.94	12.58	7.94	0.017	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;MC-EMCC3	B100;BK-EMCCC3	Bldg 100, EMCC C3	0.48	7.67	7.60	5.18	0.01	0.000	Yes	PNL	25	5	18	0.16	Category 0
B100;MC-EMCC4	B100;BK-EMCCC4	Bldg 100, EMCC C4	0.48	10.64	10.63	6.91	0.01	0.000	Yes	PNL	25	6	18	0.22	Category 0
B100;MC-EMCD5	B100;BK-EMCCD5	Bldg 100, EMCC D5	0.48	7.35	7.33	5.03	0.01	0.000	Yes	PNL	25	5	18	0.16	Category 0
B100;MC-EMCDB	B100;BK-EMCCDB	Bldg 100, EMCC DB	0.48	13.59	13.55	8.50	0.01	0.000	Yes	PNL	25	7	18	0.28	Category 0
B100;MC-EMCEB	B100;BK-EMCCEB	Bldg 100, EMCC EB	0.48	17.39	16.91	10.23	0.01	0.000	Yes	PNL	25	9	18	0.35	Category 0
B100;MC-EMCF1	B100;BK-E1DP2	Bldg 100, EMCC F1	0.48	21.80	21.22	12.42	0.01	0.000	Yes	PNL	25	10	18	0.43	Category 0
B100;MC-EMCFB	B100;BK-EMCCFB	Bldg 100, EMCC FB	0.48	23.18	21.96	12.74	0.01	0.000	Yes	PNL	25	10	18	0.46	Category 0
B100;MC-LSMCG	B100;BK-LSMCC-G	Bldg 100, MCC LSMCG	0.48	6.02	6.02	4.25	0.017	0.000	Yes	PNL	25	6	18	0.22	Category 0
B100;MC-MCCA2	B100;BK-BDP2A2	Bldg 100, MCC A2	0.48	14.63	14.23	8.83	0.017	0.000	Yes	PNL	25	11	18	0.50	Category 0
B100;MC-MCCA3	B100;BK-BDP2A3	Bldg 100, MCC A3	0.48	10.59	10.35	6.73	0.01	0.000	Yes	PNL	25	6	18	0.22	Category 0
B100;MC-MCCA4	B100;BK-BDP2A4	Bldg 100, MCC A4	0.48	12.56	12.37	7.84	0.01	0.000	Yes	PNL	25	7	18	0.26	Category 0
B100;MC-MCCA5	B100;BK-BDP2A5	Bldg 100, MCC A5	0.48	11.72	11.60	7.43	0.01	0.000	Yes	PNL	25	7	18	0.24	Category 0
B100;MC-MCCBP	B100;BK-S2-3C	Bldg 100, MCC BP	0.48	20.19	19.86	11.76	0.05	0.000	Yes	PNL	25	25	18	2.0	Category 1
B100;MC-MCCC2	B100;BK-BDP3C2	Bldg 100, MCC C2	0.48	8.73	8.73	5.84	0.01	0.000	Yes	PNL	25	6	18	0.19	Category 0

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/ Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B100;MC-MCCC3	B100;BK-BDP3C3	Bldg 100, MCC C3	0.48	8.31	8.22	5.53	0.01	0.000	Yes	PNL	25	6	18	0.18	Category 0
B100;MC-MCCC4	B100;BK-BDP3C4	Bldg 100, MCC C4	0.48	12.86	11.65	7.37	0.01	0.000	Yes	PNL	25	7	18	0.27	Category 0
B100;MC-MCCCB	B100;BK-MCC-CB	Bldg 100, MCC CB	0.48	15.71	15.71	9.65	0.017	0.000	Yes	PNL	25	11	18	0.53	Category 0
B100;MC-MCCCI	B100;BK-MCCCI	Bldg 100, MCC CI	0.48	17.57	16.89	10.20	0.017	0.000	Yes	PNL	25	12	18	0.59	Category 0
B100;MC-MCCD2	B100;BK-S2-4B	Bldg 100, MCC D2	0.48	9.52	8.75	5.78	0.05	0.000	Yes	PNL	25	16	18	1.0	Category 0
B100;MC-MCCD3	B100;BK-MCCD3	Bldg 100, MCC D3	0.48	5.89	5.43	3.85	0.01	0.000	Yes	PNL	25	5	18	0.13	Category 0
B100;MC-MCCD4	B100;BK-MCCD4	Bldg 100, MCC D4	0.48	5.48	5.01	3.59	0.01	0.000	Yes	PNL	25	4	18	0.12	Category 0
B100;MC-MCCD5	B100;BK-MCCD5	Bldg 100, MCC D5	0.48	5.08	5.01	3.63	0.01	0.000	Yes	PNL	25	4	18	0.11	Category 0
B100;MC-MCCDB	B100;BK-MCCDB	Bldg 100, MCC DB	0.48	25.25	24.82	14.22	0.017	0.000	Yes	PNL	25	14	18	0.83	Category 0
B100;MC-MCCF1	B100;BK-1DP3A2	Bldg 100, MCC F1	0.48	20.76	20.64	12.17	0.017	0.000	Yes	PNL	25	13	18	0.69	Category 0
B100;MC-MCCFB	B100;BK-BDP1	Bldg 100, MCC FB	0.48	23.36	22.34	12.94	0.015	0.000	Yes	PNL	25	13	18	0.71	Category 0
B100;MC-MCEB1	B100;F-S1-2B	Bldg 100, MCC EB1	0.48	42.39	40.05	18.09	0.016	0.000	Yes	PNL	25	17	18	1.1	Category 0
B100;MC-MCEB2	B100;F-S1-2C	Bldg 100, MCC EB2	0.48	42.15	41.00	18.53	0.014	0.000	Yes	PNL	25	15	18	0.90	Category 0
B100;MC-MCEB3	B100;BK-MCCEB3	Bldg 100, MCC EB3	0.48	27.89	27.30	15.42	0.01	0.000	Yes	PNL	25	11	18	0.54	Category 0
B100;MC-MCEB4	B100;F-S1-3C	Bldg 100, MCC EB4	0.48	42.12	41.11	18.58	0.013	0.000	Yes	PNL	25	15	18	0.88	Category 0
B100;P-1C90	B100;BK-1DP2A9	Bldg 100, Panel 1C90	0.48	2.81	2.81	1.88	0.033	0.000	Yes	PNL	25	6	18	0.18	Category 0
B100;P-1DP1	B100;BK-S2-9C	Bldg 100, Panel 1DP1	0.48	24.81	24.81	14.25	0.05	0.000	Yes	PNL	25	28	18	2.4	Category 1
B100;P-1DP2	B100;F-S2-9D	Bldg 100, Panel 1DP2	0.48	26.89	26.89	15.27	0.047	0.000	Yes	PNL	25	28	18	2.4	Category 1
B100;P-1DP2S1	B100;BK-1DP2A1	Bldg 100, Panel 1DP2S1	0.48	12.94	12.94	8.17	0.017	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;P-1DP2S2	B100;BK-1DP2A2	Bldg 100, Panel 1DP2S2	0.48	12.94	12.94	8.17	0.017	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;P-1DP2S3	B100;BK-1DP2A3	Bldg 100, Panel 1DP2S3	0.48	12.94	12.94	8.17	0.017	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;P-1DP2S4	B100;BK-1DP2A4	Bldg 100, Panel 1DP2S4	0.48	12.94	12.94	8.17	0.017	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;P-1DP2S5	B100;BK-1DP2A5	Bldg 100, Panel 1DP2S5	0.48	12.94	12.94	8.17	0.017	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;P-1DP2S6	B100;BK-1DP2A6	Bldg 100, Panel 1DP2S6	0.48	12.94	12.94	8.17	0.017	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;P-1DP2S7	B100;BK-1DP2A7	Bldg 100, Panel 1DP2S7	0.48	12.94	12.94	8.17	0.017	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;P-1DP3	B100;BK-S2-8C	Bldg 100, Panel 1DP3	0.48	26.20	26.08	14.86	0.05	0.000	Yes	PNL	25	29	18	2.6	Category 1
B100;P-1DP4	B100;BK-S2-8D	Bldg 100, Panel 1DP4	0.48	21.98	21.29	12.45	0.05	0.000	Yes	PNL	25	26	18	2.2	Category 1
B100;P-1R1	B100;BK-1DP1B3	Bldg 100, Panel 1R1	0.208	3.70	3.70	2.17	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-1R10	B100;BK-1DP1B1	Bldg 100, Panel 1R10	0.208	3.27	3.27	1.98	2	0.000	Yes	PNL	25	71	18	11	Category 3
B100;P-1R11	B100;BK-1DP1B1	Bldg 100, Panel 1R11	0.208	3.27	3.27	1.98	2	0.000	Yes	PNL	25	71	18	11	Category 3
B100;P-1R12	B100;BK-1DP1A2	Bldg 100, Panel 1R12	0.208	1.62	1.62	1.21	2	0.000	Yes	PNL	25	52	18	6.7	Category 2
B100;P-1R13	B100;BK-S2-3A	Bldg 100, Panel 1R13	0.208	10.19	10.19	4.41	0.05	0.000	Yes	PNL	25	13	18	0.68	Category 0

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/ Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B100;P-1R14	B100;BK-S2-3A	Bldg 100, Panel 1R14	0.208	10.19	10.19	4.41	0.05	0.000	Yes	PNL	25	13	18	0.68	Category 0
B100;P-1R15	B100;BK-S2-3A	Bldg 100, Panel 1R15	0.208	10.19	10.19	4.41	0.05	0.000	Yes	PNL	25	13	18	0.68	Category 0
B100;P-1R15A	B100;BK-S2-3A	Bldg 100, Panel 1R15A	0.208	10.19	10.19	4.41	0.05	0.000	Yes	PNL	25	13	18	0.68	Category 0
B100;P-1R16	B100;BK-1R16	Bldg 100, Panel 1R16	0.208	1.93	1.93	1.37	2	0.000	Yes	PNL	25	56	18	7.7	Category 2
B100;P-1R16B	B100;BK-1R16B	Bldg 100, Panel 1R16B	0.208	1.93	1.93	1.37	2	0.000	Yes	PNL	25	56	18	7.7	Category 2
B100;P-1R17	B100;BK-1R17	Bldg 100, Panel 1R17	0.208	1.93	1.93	1.37	2	0.000	Yes	PNL	25	56	18	7.7	Category 2
B100;P-1R18	B100;BK-1DP4A1	Bldg 100, Panel 1R18	0.208	4.27	4.27	2.39	2	0.000	Yes	PNL	25	81	18	14	Category 3
B100;P-1R19	B100;BK-1DP4A1	Bldg 100, Panel 1R19	0.208	4.27	4.27	2.39	2	0.000	Yes	PNL	25	81	18	14	Category 3
B100;P-1R2	B100;BK-1DP1B3	Bldg 100, Panel 1R2	0.208	3.70	3.70	2.17	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-1R20	B100;BK-1DP4A1	Bldg 100, Panel 1R20	0.208	4.27	4.27	2.39	2	0.000	Yes	PNL	25	81	18	14	Category 3
B100;P-1R21	B100;BK-1DP4A1	Bldg 100, Panel 1R21	0.208	4.27	4.27	2.39	2	0.000	Yes	PNL	25	81	18	14	Category 3
B100;P-1R22	B100;BK-1DP4A1	Bldg 100, Panel 1R22	0.208	4.02	4.02	2.29	2	0.000	Yes	PNL	25	78	18	13	Category 3
B100;P-1R3	B100;BK-1DP1B3	Bldg 100, Panel 1R3	0.208	3.70	3.70	2.17	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-1R4	B100;BK-1R4	Bldg 100, Panel 1R4	0.208	3.70	3.70	2.17	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-1R5	B100;BK-1DP1B4	Bldg 100, Panel 1R5	0.208	3.72	3.72	2.17	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-1R6	B100;BK-1DP1B4	Bldg 100, Panel 1R6	0.208	3.72	3.72	2.17	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-1R7	B100;BK-1DP1B4	Bldg 100, Panel 1R7	0.208	3.72	3.72	2.17	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-1R8	B100;BK-1DP1B4	Bldg 100, Panel 1R8	0.208	3.72	3.72	2.17	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-1R9	B100;BK-1DP1B1	Bldg 100, Panel 1R9	0.208	3.28	3.28	1.99	2	0.000	Yes	PNL	25	72	18	12	Category 3
B100;P-2A100	B100;F-2A100	Bldg 100, Panel 2A100	0.48	15.73	15.73	9.66	0.01	0.000	Yes	PNL	25	8	18	0.32	Category 0
B100;P-2DP	B100;BK-S2-5C	Bldg 100, Panel 2DP	0.48	22.45	22.45	13.09	0.05	0.000	Yes	PNL	25	26	18	2.2	Category 1
B100;P-2R1	B100;BK-2DPB1	Bldg 100, Panel 2R1	0.208	1.26	1.26	1.02	2	0.000	Yes	PNL	25	46	18	5.6	Category 2
B100;P-2R2	B100;BK-2DPB1	Bldg 100, Panel 2R2	0.208	1.26	1.26	1.02	2	0.000	Yes	PNL	25	46	18	5.6	Category 2
B100;P-2R3	B100;BK-2DPB1	Bldg 100, Panel 2R3	0.208	1.26	1.26	1.02	2	0.000	Yes	PNL	25	46	18	5.6	Category 2
B100;P-2R4	B100;BK-2DPB2	Bldg 100, Panel 2R4	0.208	1.88	1.88	1.34	2	0.000	Yes	PNL	25	55	18	7.5	Category 2
B100;P-2R5	B100;BK-2DPB2	Bldg 100, Panel 2R5	0.208	1.88	1.88	1.34	2	0.000	Yes	PNL	25	55	18	7.5	Category 2
B100;P-2R6	B100;BK-2DPB2	Bldg 100, Panel 2R6	0.208	1.88	1.88	1.34	2	0.000	Yes	PNL	25	55	18	7.5	Category 2
B100;P-2R7	B100;BK-2DPB3	Bldg 100, Panel 2R7	0.208	1.27	1.27	0.87	1.28	0.000	Yes	PNL	25	32	18	3.0	Category 1
B100;P-2R8	B100;BK-2DPB3	Bldg 100, Panel 2R8	0.208	1.27	1.27	0.87	1.28	0.000	Yes	PNL	25	32	18	3.0	Category 1
B100;P-2WR1	B100;BK-2WRDP	Bldg 100, Panel 2WR1	0.208	4.64	4.64	2.54	2	0.000	Yes	PNL	25	84	18	15	Category 3
B100;P-2WR2	B100;BK-2WRDP	Bldg 100, Panel 2WR2	0.208	4.64	4.64	2.54	2	0.000	Yes	PNL	25	84	18	15	Category 3
B100;P-2WR3	B100;BK-2WRDP	Bldg 100, Panel 2WR3	0.208	4.66	4.66	2.54	2	0.000	Yes	PNL	25	84	18	15	Category 3

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/ Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B100;P-2WRDP	B100;BK-2WRDP	Bldg 100, Panel 2WRDP	0.208	4.80	4.80	2.60	2	0.000	Yes	PNL	25	85	18	15	Category 3
B100;P-3DP	B100;BK-S2-5D	Bldg 100, Panel 3DP	0.48	21.54	21.54	12.63	0.05	0.000	Yes	PNL	25	26	18	2.1	Category 1
B100;P-3ED1	B100;BK-3ED1	Bldg 100, Panel 3ED1	0.208	0.80	0.80	0.63	0.798	0.000	Yes	PNL	25	19	18	1.3	Category 1
B100;P-3R1	B100;BK-3DPB1	Bldg 100, Panel 3R1	0.208	1.89	1.89	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2
B100;P-3R10	B100;BK-3DPB3	Bldg 100, Panel 3R10	0.208	3.69	3.69	2.16	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-3R2	B100;BK-3DPB1	Bldg 100, Panel 3R2	0.208	1.89	1.89	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2
B100;P-3R3	B100;BK-3DPB1	Bldg 100, Panel 3R3	0.208	1.89	1.89	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2
B100;P-3R4	B100;BK-3DPB2	Bldg 100, Panel 3R4	0.208	1.89	1.89	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2
B100;P-3R5	B100;BK-3DPB2	Bldg 100, Panel 3R5	0.208	1.89	1.89	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2
B100;P-3R6	B100;BK-3DPB2	Bldg 100, Panel 3R6	0.208	1.89	1.89	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2
B100;P-3R7	B100;BK-3DPB3	Bldg 100, Panel 3R7	0.208	3.69	3.69	2.16	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-3R8	B100;BK-3DPB3	Bldg 100, Panel 3R8	0.208	3.69	3.69	2.16	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-3R9	B100;BK-3DPB3	Bldg 100, Panel 3R9	0.208	3.69	3.69	2.16	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-3WD1	B100;BK-3WD1	Bldg 100, Panel 3WD1	0.208	0.78	0.78	0.62	0.823	0.000	Yes	PNL	25	19	18	1.4	Category 1
B100;P-4DP	B100;BK-S2-4C	Bldg 100, Panel 4DP	0.48	20.49	20.49	12.10	0.05	0.000	Yes	PNL	25	25	18	2.0	Category 1
B100;P-4DP6	B100;BK-4DPA4	Bldg 100, Panel 4DP6	0.48	18.57	18.57	11.13	0.017	0.000	Yes	PNL	25	12	18	0.62	Category 0
B100;P-4R1	B100;BK-4DPB1	Bldg 100, Panel 4R1	0.208	1.86	1.86	1.34	2	0.000	Yes	PNL	25	55	18	7.5	Category 2
B100;P-4R2	B100;BK-4DPB1	Bldg 100, Panel 4R2	0.208	1.86	1.86	1.34	2	0.000	Yes	PNL	25	55	18	7.5	Category 2
B100;P-4R3	B100;BK-4DPB1	Bldg 100, Panel 4R3	0.208	1.86	1.86	1.34	2	0.000	Yes	PNL	25	55	18	7.5	Category 2
B100;P-4R4	B100;BK-4DPB2	Bldg 100, Panel 4R4	0.208	1.85	1.85	1.33	2	0.000	Yes	PNL	25	55	18	7.5	Category 2
B100;P-4R5	B100;BK-4DPB2	Bldg 100, Panel 4R5	0.208	1.85	1.85	1.33	2	0.000	Yes	PNL	25	55	18	7.5	Category 2
B100;P-4R6	B100;BK-4DPB2	Bldg 100, Panel 4R6	0.208	1.85	1.85	1.33	2	0.000	Yes	PNL	25	55	18	7.5	Category 2
B100;P-4R7	B100;BK-4DPB3	Bldg 100, Panel 4R7	0.208	3.59	3.59	2.12	2	0.000	Yes	PNL	25	75	18	12	Category 3
B100;P-4R8	B100;BK-4DPB3	Bldg 100, Panel 4R8	0.208	3.59	3.59	2.12	2	0.000	Yes	PNL	25	75	18	12	Category 3
B100;P-4R9	B100;BK-4DPB3	Bldg 100, Panel 4R9	0.208	3.59	3.59	2.12	2	0.000	Yes	PNL	25	75	18	12	Category 3
B100;P-5DP	B100;BK-S2-4D	Bldg 100, Panel 5DP	0.48	19.71	19.71	11.71	0.05	0.000	Yes	PNL	25	24	18	2.0	Category 1
B100;P-5R1	B100;BK-5DP1B	Bldg 100, Panel 5R1	0.208	1.88	1.88	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2
B100;P-5R2	B100;BK-5DP1B	Bldg 100, Panel 5R2	0.208	1.88	1.88	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2
B100;P-5R3	B100;BK-5DP1B	Bldg 100, Panel 5R3	0.208	1.88	1.88	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2
B100;P-5R4	B100;BK-5DP1B	Bldg 100, Panel 5R4	0.208	1.88	1.88	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2
B100;P-5R5	B100;BK-5DP2B	Bldg 100, Panel 5R5	0.208	1.88	1.88	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2
B100;P-5R6	B100;BK-5DP2B	Bldg 100, Panel 5R6	0.208	1.88	1.88	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/ Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B100;P-5R7	B100;BK-5DP2B	Bldg 100, Panel 5R7	0.208	1.88	1.88	1.35	2	0.000	Yes	PNL	25	55	18	7.6	Category 2
B100;P-BDP1	B100;F-S2-5A	Bldg 100, Panel BDP1	0.48	34.94	33.90	15.74	0.039	0.000	Yes	PNL	25	26	18	2.2	Category 1
B100;P-BDP10	B100;BK-S2-2C	Bldg 100, Panel BDP10	0.48	24.80	24.80	14.24	0.05	0.000	Yes	PNL	25	28	18	2.4	Category 1
B100;P-BDP2	B100;F-S2-5B	Bldg 100, Panel BDP2	0.48	34.96	33.76	15.68	0.04	0.000	Yes	PNL	25	26	18	2.2	Category 1
B100;P-BDP3	B100;BK-S2-4A	Bldg 100, Panel BDP3	0.48	32.42	30.92	14.52	0.05	0.000	Yes	PNL	25	29	18	2.6	Category 1
B100;P-BDP4	B100;F-S2-4B	Bldg 100, Panel BDP4	0.48	35.21	32.72	15.18	0.048	0.000	Yes	PNL	25	30	18	2.7	Category 1
B100;P-BDP5	B100;F-S2-3A	Bldg 100, Panel BDP5	0.48	34.76	34.76	16.16	0.034	0.000	Yes	PNL	25	24	18	1.9	Category 1
B100;P-BDP6	B100;BK-S2-3B	Bldg 100, Panel BDP6	0.48	24.51	24.51	14.11	0.05	0.000	Yes	PNL	25	28	18	2.4	Category 1
B100;P-BDP8	B100;BK-BDP8	Bldg 100, Panel BDP8	0.48	23.86	23.86	13.79	0.017	0.000	Yes	PNL	25	14	18	0.78	Category 0
B100;P-BDPCRM	B100;BK-BDP10A	Bldg 100, Panel BDPCRM	0.208	1.09	1.09	0.92	2	0.000	Yes	PNL	25	43	18	5.0	Category 2
B100;P-BME	B100;BK-BME	Bldg 100, Panel BME	0.208	1.95	1.95	1.17	1.714	0.000	Yes	PNL	25	46	18	5.6	Category 2
B100;P-BR1	B100;BK-BDP6B1	Bldg 100, Panel BR1	0.208	1.89	1.89	1.35	2	0.000	Yes	PNL	25	56	18	7.6	Category 2
B100;P-BR10	B100;BK-BDP5-R	Bldg 100, Panel BR10	0.208	1.29	1.29	1.03	2	0.000	Yes	PNL	25	47	18	5.7	Category 2
B100;P-BR10A	B100;BK-BR10A	Bldg 100, Panel BR10A	0.208	1.27	1.27	0.87	0.809	0.000	Yes	PNL	25	24	18	1.9	Category 1
B100;P-BR13	B100;BK-BR13	Bldg 100, Panel BR13	0.208	1.41	1.41	0.93	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B100;P-BR2	B100;BK-BDP6B1	Bldg 100, Panel BR2	0.208	1.89	1.89	1.35	2	0.000	Yes	PNL	25	56	18	7.6	Category 2
B100;P-BR3	B100;BK-BDP6B1	Bldg 100, Panel BR3	0.208	1.89	1.89	1.35	2	0.000	Yes	PNL	25	56	18	7.6	Category 2
B100;P-BR4	B100;BK-BDP6B2	Bldg 100, Panel BR4	0.208	3.64	3.64	2.14	2	0.000	Yes	PNL	25	75	18	12	Category 3
B100;P-BR5	B100;BK-BDP6B2	Bldg 100, Panel BR5	0.208	3.64	3.64	2.14	2	0.000	Yes	PNL	25	75	18	12	Category 3
B100;P-BR6	B100;BK-BDP6B2	Bldg 100, Panel BR6	0.208	3.64	3.64	2.14	2	0.000	Yes	PNL	25	75	18	12	Category 3
B100;P-BR7	B100;BK-BDP6B3	Bldg 100, Panel BR7	0.208	3.64	3.64	2.14	2	0.000	Yes	PNL	25	75	18	12	Category 3
B100;P-BR8	B100;BK-BDP6B3	Bldg 100, Panel BR8	0.208	3.64	3.64	2.14	2	0.000	Yes	PNL	25	75	18	12	Category 3
B100;P-BR9	B100;BK-BDP6B3	Bldg 100, Panel BR9	0.208	3.64	3.64	2.14	2	0.000	Yes	PNL	25	75	18	12	Category 3
B100;P-BYL1	B100;BK-BYL1	Bldg 100, Panel BYL1	0.48	17.00	17.00	10.32	0.017	0.000	Yes	PNL	25	12	18	0.58	Category 0
B100;P-BYL2	B100;BK-BYL2	Bldg 100, Panel BYL2	0.48	15.37	15.37	9.47	0.01	0.000	Yes	PNL	25	8	18	0.31	Category 0
B100;P-C1315L	B100;BK-E1DP2	Bldg 100, Panel C1315L	0.48	22.82	22.82	13.27	0.01	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;P-C1315R	B100;BK-E1DP2	Bldg 100, Panel C1315R	0.48	22.82	22.82	13.27	0.01	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;P-C1DP	B100;BK-C1DP	Bldg 100, Panel C1DP	0.48	12.89	12.89	8.14	0.017	0.000	Yes	PNL	25	10	18	0.44	Category 0
B100;P-C1L1	B100;BK-C1L1	Bldg 100, Panel C1L1	0.48	11.03	11.03	7.13	0.017	0.000	Yes	PNL	25	9	18	0.38	Category 0
B100;P-C1L1A	B100;BK-C1L1A	Bldg 100, Panel C1L1A	0.48	8.81	8.81	5.88	0.017	0.000	Yes	PNL	25	8	18	0.31	Category 0
B100;P-C1L2A	B100;BK-C1L2A	Bldg 100, Panel C1L2A	0.48	8.81	8.81	5.88	0.01	0.000	Yes	PNL	25	6	18	0.19	Category 0
B100;P-C1R1	B100;BK-C1R1,2	Bldg 100, Panel C1R1	0.208	1.25	1.25	0.86	0.798	0.000	Yes	PNL	25	24	18	1.9	Category 1

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/ Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B100;P-C1R2	B100;BK-C1R1,2	Bldg 100, Panel C1R2	0.208	1.25	1.25	0.86	0.798	0.000	Yes	PNL	25	24	18	1.9	Category 1
B100;P-C1R3	B100;BK-C1R3	Bldg 100, Panel C1R3	0.208	1.51	1.51	1.15	1.762	0.000	Yes	PNL	25	46	18	5.7	Category 2
B100;P-C1R4	B100;BK-C1R3	Bldg 100, Panel C1R4	0.208	1.49	1.49	1.14	1.779	0.000	Yes	PNL	25	46	18	5.6	Category 2
B100;P-C2DP	B100;BK-S2-10A	Bldg 100, Panel C2DP	0.48	20.88	20.88	12.30	0.05	0.000	Yes	PNL	25	25	18	2.1	Category 1
B100;P-C2L1	B100;BK-C2L1	Bldg 100, Panel C2L1	0.48	13.59	13.59	8.52	0.017	0.000	Yes	PNL	25	10	18	0.47	Category 0
B100;P-C2R1	B100;BK-C2R1	Bldg 100, Panel C2R1	0.208	4.30	4.30	2.40	2	0.000	Yes	PNL	25	81	18	14	Category 3
B100;P-C2R2	B100;BK-C2R2	Bldg 100, Panel C2R2	0.208	4.23	4.23	2.38	2	0.000	Yes	PNL	25	80	18	14	Category 3
B100;P-C2R3	B100;BK-C2R3	Bldg 100, Panel C2R3	0.208	4.23	4.23	2.38	2	0.000	Yes	PNL	25	80	18	14	Category 3
B100;P-C2R4	B100;BK-C2R4	Bldg 100, Panel C2R4	0.208	4.30	4.30	2.40	2	0.000	Yes	PNL	25	81	18	14	Category 3
B100;P-C2R5	B100;BK-C2R5	Bldg 100, Panel C2R5	0.208	4.30	4.30	2.40	2	0.000	Yes	PNL	25	81	18	14	Category 3
B100;P-C2W1	B100;BK-TC2WDP	Bldg 100, Panel C2W1	0.208	1.82	1.82	1.31	1.984	0.000	Yes	PNL	25	54	18	7.3	Category 2
B100;P-C2W2	B100;BK-C2W1	Bldg 100, Panel C2W2	0.208	1.79	1.79	1.30	2	0.000	Yes	PNL	25	54	18	7.3	Category 2
B100;P-C2WDP	B100;BK-C2WDP	Bldg 100, Panel C2WDP	0.48	8.58	8.58	5.75	0.017	0.000	Yes	PNL	25	8	18	0.30	Category 0
B100;P-C3DP	B100;BK-C3DP	Bldg 100, Panel C3DP	0.48	7.48	7.48	5.11	0.01	0.000	Yes	PNL	25	5	18	0.16	Category 0
B100;P-C3L1	B100;BK-C3DP	Bldg 100, Panel C3L1	0.48	6.38	6.38	4.47	0.01	0.000	Yes	PNL	25	5	18	0.14	Category 0
B100;P-C3R1	B100;BK-T-C3R1	Bldg 100, Panel C3R1	0.208	1.29	1.29	0.88	1.463	0.000	Yes	PNL	25	35	18	3.5	Category 1
B100;P-C4DP	B100;BK-C4DP	Bldg 100, Panel C4DP	0.48	22.55	22.55	13.13	0.017	0.000	Yes	PNL	25	13	18	0.74	Category 0
B100;P-C4L1	B100;BK-C4L1	Bldg 100, Panel C4L1	0.48	16.13	16.13	9.87	0.017	0.000	Yes	PNL	25	11	18	0.55	Category 0
B100;P-C4R1	B100;BK-C4R1,2	Bldg 100, Panel C4R1	0.208	3.75	3.75	2.18	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-C4R2	B100;BK-C4R1,2	Bldg 100, Panel C4R2	0.208	3.75	3.75	2.18	2	0.000	Yes	PNL	25	76	18	13	Category 3
B100;P-C5DP	B100;BK-C5DP	Bldg 100, Panel C5DP	0.48	6.52	6.52	4.55	0.01	0.000	Yes	PNL	25	5	18	0.14	Category 0
B100;P-C5L1	B100;BK-C5DP	Bldg 100, Panel C5L1	0.48	5.28	5.28	3.80	0.01	0.000	Yes	PNL	25	4	18	0.12	Category 0
B100;P-C5R1	B100;BK-C5R1,2	Bldg 100, Panel C5R1	0.208	1.23	1.23	0.85	1.353	0.000	Yes	PNL	25	32	18	3.1	Category 1
B100;P-C5R2	B100;BK-C5R1,2	Bldg 100, Panel C5R2	0.208	1.23	1.23	0.85	1.353	0.000	Yes	PNL	25	32	18	3.1	Category 1
B100;P-CBDP1	B100;F-S2-10A	Bldg 100, Panel CBDP1	0.48	32.52	32.52	15.26	0.047	0.000	Yes	PNL	25	28	18	2.4	Category 1
B100;P-CBDP2	B100;F-S2-9B	Bldg 100, Panel CBDP2	0.48	32.70	32.70	15.33	0.045	0.000	Yes	PNL	25	28	18	2.4	Category 1
B100;P-CCTV	B100;BK-BDP10D	Bldg 100, Panel CCTV	0.208	1.09	1.09	0.92	2	0.000	Yes	PNL	25	43	18	5.0	Category 2
B100;P-E1DP1	B100;BK-E1DP1	Bldg 100, Panel E1DP1	0.48	12.67	12.67	8.03	0.017	0.000	Yes	PNL	25	10	18	0.44	Category 0
B100;P-E1DP2	B100;BK-E1DP2	Bldg 100, Panel E1DP2	0.48	24.02	23.42	13.52	0.01	0.000	Yes	PNL	25	10	18	0.47	Category 0
B100;P-E1DP2A	B100;BK-E1DP2	Bldg 100, Panel E1DP2A	0.48	22.83	22.83	13.27	0.01	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;P-E1L1	B100;BK-E1L1	Bldg 100, Panel E1L1	0.48	10.87	10.87	7.04	0.017	0.000	Yes	PNL	25	9	18	0.38	Category 0
B100;P-E1R1	B100;BK-E1R124	Bldg 100, Panel E1R1	0.208	3.60	3.60	2.12	2	0.000	Yes	PNL	25	75	18	12	Category 3

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/ Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B100;P-E1R16A	B100;BK-E1R16	Bldg 100, Panel E1R16A	0.208	1.29	1.29	1.03	2	0.000	Yes	PNL	25	47	18	5.7	Category 2
B100;P-E1R2	B100;BK-E1R124	Bldg 100, Panel E1R2	0.208	3.55	3.55	2.10	2	0.000	Yes	PNL	25	74	18	12	Category 3
B100;P-E1R3	B100;BK-TE1R3S	Bldg 100, Panel E1R3	0.208	1.28	1.28	1.02	2	0.000	Yes	PNL	25	46	18	5.6	Category 2
B100;P-E1R4	B100;BK-E1R124	Bldg 100, Panel E1R4	0.208	3.55	3.55	2.10	2	0.000	Yes	PNL	25	74	18	12	Category 3
B100;P-E2DP	B100;BK-EBDP2	Bldg 100, Panel E2DP	0.48	23.12	23.12	13.42	0.025	0.000	Yes	PNL	25	18	18	1.1	Category 0
B100;P-E2L1	B100;BK-E2L1	Bldg 100, Panel E2L1	0.48	14.52	14.52	9.02	0.01	0.000	Yes	PNL	25	8	18	0.30	Category 0
B100;P-E2L1A	B100;BK-E2L1A	Bldg 100, Panel E2L1A	0.48	22.58	22.58	13.15	0.017	0.000	Yes	PNL	25	13	18	0.75	Category 0
B100;P-E2R1	B100;BK-E2R1-2	Bldg 100, Panel E2R1	0.208	1.26	1.26	0.86	0.779	0.000	Yes	PNL	25	23	18	1.8	Category 1
B100;P-E2R2	B100;BK-E2R1-2	Bldg 100, Panel E2R2	0.208	1.26	1.26	0.86	0.779	0.000	Yes	PNL	25	23	18	1.8	Category 1
B100;P-E2WD1	B100;F-TE2DP3	Bldg 100, Panel E2WD1	0.208	3.32	3.32	2.00	2	0.000	Yes	PNL	25	72	18	12	Category 3
B100;P-E2WDP2	B100;BK-E2WDP2	Bldg 100, Panel E2WDP2	0.48	15.43	15.43	9.50	0.017	0.000	Yes	PNL	25	11	18	0.52	Category 0
B100;P-E3DP	B100;BK-E3DP	Bldg 100, Panel E3DP	0.48	7.41	7.41	5.07	0.01	0.000	Yes	PNL	25	5	18	0.16	Category 0
B100;P-E3L1	B100;BK-E3DP	Bldg 100, Panel E3L1	0.48	5.85	5.85	4.15	0.01	0.000	Yes	PNL	25	5	18	0.13	Category 0
B100;P-E3L1A	B100;BK-E3L1A	Bldg 100, Panel E3L1A	0.48	7.27	7.27	5.00	0.01	0.000	Yes	PNL	25	5	18	0.16	Category 0
B100;P-E3R1	B100;BK-E3R1,2	Bldg 100, Panel E3R1	0.208	1.23	1.23	0.85	1.352	0.000	Yes	PNL	25	32	18	3.1	Category 1
B100;P-E3R2	B100;BK-E3R1,2	Bldg 100, Panel E3R2	0.208	1.23	1.23	0.85	1.352	0.000	Yes	PNL	25	32	18	3.1	Category 1
B100;P-E4DP	B100;BK-E4DP	Bldg 100, Panel E4DP	0.48	10.51	10.51	6.84	0.017	0.000	Yes	PNL	25	9	18	0.37	Category 0
B100;P-E4L1	B100;BK-E4L1	Bldg 100, Panel E4L1	0.48	7.86	7.86	5.34	0.017	0.000	Yes	PNL	25	7	18	0.28	Category 0
B100;P-E4L1A	B100;BK-E4L1A	Bldg 100, Panel E4L1A	0.48	6.90	6.90	4.78	0.01	0.000	Yes	PNL	25	5	18	0.15	Category 0
B100;P-E4R1	B100;BK-E4R1,2	Bldg 100, Panel E4R1	0.208	1.24	1.24	0.85	0.808	0.000	Yes	PNL	25	24	18	1.9	Category 1
B100;P-E4R2	B100;BK-E4R1,2	Bldg 100, Panel E4R2	0.208	1.24	1.24	0.85	0.808	0.000	Yes	PNL	25	24	18	1.9	Category 1
B100;P-E5DP	B100;BK-E5DP	Bldg 100, Panel E5DP	0.48	6.46	6.46	4.51	0.01	0.000	Yes	PNL	25	5	18	0.14	Category 0
B100;P-E5L1	B100;BK-E5DP	Bldg 100, Panel E5L1	0.48	5.24	5.24	3.77	0.01	0.000	Yes	PNL	25	4	18	0.12	Category 0
B100;P-E5L1A	B100;BK-E5L1A	Bldg 100, Panel E5L1A	0.48	6.36	6.36	4.45	0.01	0.000	Yes	PNL	25	5	18	0.14	Category 0
B100;P-E5R1	B100;BK-E5R1,2	Bldg 100, Panel E5R1	0.208	1.22	1.22	0.85	0.825	0.000	Yes	PNL	25	24	18	1.9	Category 1
B100;P-E5R2	B100;BK-E5R1,2	Bldg 100, Panel E5R2	0.208	1.22	1.22	0.85	0.825	0.000	Yes	PNL	25	24	18	1.9	Category 1
B100;P-EBDP1	B100;BK-S2-9A	Bldg 100, Panel EBDP1	0.48	31.38	31.38	14.80	0.05	0.000	Yes	PNL	25	28	18	2.5	Category 1
B100;P-EBDP1A	B100;BK-EBDPRIM	Bldg 100, Panel EBDP1A	0.48	25.52	25.47	14.57	0.017	0.000	Yes	PNL	25	14	18	0.83	Category 0
B100;P-EBDP2	B100;BK-S2-8A	Bldg 100, Panel EBDP2	0.48	31.38	31.38	14.80	0.05	0.000	Yes	PNL	25	28	18	2.5	Category 1
B100;P-EBDP3	B100;BR-S2-8B	Bldg 100, Panel EBDP3	0.48	31.95	30.13	14.18	0.05	0.000	Yes	PNL	25	29	18	2.6	Category 1
B100;P-EBDP4	B100;BK-S2-7A	Bldg 100, Panel EBDP4	0.48	32.34	29.31	13.77	0.05	0.000	Yes	PNL	25	29	18	2.6	Category 1
B100;P-EBDP6	B100;BK-EBDP6	Bldg 100, Panel EBDP6	0.48	9.48	9.48	6.26	0.01	0.000	Yes	PNL	25	6	18	0.20	Category 0

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B100;P-EBDP7A	B100;BK-EBDP7A	Bldg 100, Panel EBDP7A	0.208	11.79	11.79	4.88	2	0.000	Yes	PNL	25	128	18	30	Category 4
B100;P-EBDP9A	B100;BK-EBDP9A	Bldg 100, Panel EBDP9A	0.48	21.49	21.49	12.61	0.025	0.000	Yes	PNL	25	17	18	1.1	Category 0
B100;P-EBDP9B	B100;BK-EBDP9A2	Bldg 100, Panel EBDP9B	0.208	3.13	3.13	1.92	2	0.000	Yes	PNL	25	70	18	11	Category 3
B100;P-EBDPRI	B100;BK-S2-10D	Bldg 100, Panel EBDPRI	0.48	28.34	28.30	15.94	0.001	0.000	Yes	PNL	25	3	18	0.06	Category 0
B100;P-EBL1	B100;BK-EBDP6	Bldg 100, Panel EBL1	0.48	7.83	7.83	5.32	0.01	0.000	Yes	PNL	25	5	18	0.17	Category 0
B100;P-EBL1A	B100;BK-EBL1A	Bldg 100, Panel EBL1A	0.48	8.67	8.67	5.81	0.01	0.000	Yes	PNL	25	6	18	0.18	Category 0
B100;P-EBL2A	B100;BK-EBL2A	Bldg 100, Panel EBL2A	0.48	8.67	8.67	5.81	0.01	0.000	Yes	PNL	25	6	18	0.18	Category 0
B100;P-EBPR1	B100;BK-EBPR1	Bldg 100, Panel EBPR1	0.208	1.39	1.39	0.92	1.209	0.000	Yes	PNL	25	32	18	3.0	Category 1
B100;P-EBR1	B100;BK-T-EBRS	Bldg 100, Panel EBR1	0.208	1.23	1.23	0.85	1.349	0.000	Yes	PNL	25	32	18	3.1	Category 1
B100;P-EBR10	B100;BK-EBR10	Bldg 100, Panel EBR10	0.208	3.39	3.39	1.73	1.055	0.000	Yes	PNL	25	44	18	5.2	Category 2
B100;P-EBR11	B100;BK-EBR11	Bldg 100, Panel EBR11	0.208	9.69	9.69	4.26	0.017	0.000	Yes	PNL	25	7	18	0.23	Category 0
B100;P-EBR11A	B100;BK-EBR11A	Bldg 100, Panel EBR11A	0.208	9.75	9.75	3.63	0.034	0.000	Yes	PNL	25	9	18	0.38	Category 0
B100;P-EBR11B	B100;BK-EBR11B	Bldg 100, Panel EBR11B	0.208	10.36	10.36	3.79	0.031	0.000	Yes	PNL	25	9	18	0.36	Category 0
B100;P-EBR11C	B100;BK-EBR11C	Bldg 100, Panel EBR11C	0.208	9.56	9.56	3.58	2	0.000	Yes	PNL	25	104	18	21	Category 3
B100;P-EBR12	B100;BK-EBR12	Bldg 100, Panel EBR12	0.208	9.93	9.93	4.33	0.017	0.000	Yes	PNL	25	7	18	0.23	Category 0
B100;P-EBR2	B100;BK-T-EBRS	Bldg 100, Panel EBR2	0.208	1.23	1.23	0.85	1.349	0.000	Yes	PNL	25	32	18	3.1	Category 1
B100;P-EPDP	B100;F-S2-7B	Bldg 100, Panel EPDP	0.48	33.16	33.16	15.52	0.043	0.000	Yes	PNL	25	27	18	2.3	Category 1
B100;P-FIRE-P	B100;BK-S2-10D	Bldg 100, Panel FIRE-P	0.48	26.93	25.94	14.72	0.001	0.000	Yes	PNL	25	3	18	0.05	Category 0
B100;P-KITCHE	B100;BK-KITCHEN	Bldg 100, Panel KITCHE	0.208	9.95	9.95	3.68	0.033	0.000	Yes	PNL	25	9	18	0.37	Category 0
B100;P-LS1DP	B100;BK-LS1DP	Bldg 100, Panel LS1DP	0.48	12.80	12.80	8.10	0.01	0.000	Yes	PNL	25	7	18	0.26	Category 0
B100;P-LS1L1	B100;BK-LS1DP	Bldg 100, Panel LS1L1	0.48	9.13	9.13	6.07	0.01	0.000	Yes	PNL	25	6	18	0.19	Category 0
B100;P-LS1R1	B100;BK-LS1R1	Bldg 100, Panel LS1R1	0.208	1.31	1.31	0.89	1.409	0.000	Yes	PNL	25	34	18	3.4	Category 1
B100;P-LS2DP	B100;BK-LS2DP	Bldg 100, Panel LS2DP	0.48	8.04	8.04	5.44	0.01	0.000	Yes	PNL	25	6	18	0.17	Category 0
B100;P-LS2L1	B100;BK-LS2DP	Bldg 100, Panel LS2L1	0.48	6.24	6.24	4.39	0.01	0.000	Yes	PNL	25	5	18	0.14	Category 0
B100;P-LS2R1	B100;BK-LS2R1	Bldg 100, Panel LS2R1	0.208	1.30	1.30	0.88	1.446	0.000	Yes	PNL	25	34	18	3.5	Category 1
B100;P-LS2WL1	B100;BK-LS2WL1	Bldg 100, Panel LS2WL1	0.48	1.15	1.15	1.03	0.018	0.000	Yes	PNL	25	3	18	0.05	Category 0
B100;P-LS3DP	B100;BK-LS3DP	Bldg 100, Panel LS3DP	0.48	7.45	7.45	5.10	0.01	0.000	Yes	PNL	25	5	18	0.16	Category 0
B100;P-LS3L1	B100;BK-LS3DP	Bldg 100, Panel LS3L1	0.48	5.88	5.88	4.16	0.01	0.000	Yes	PNL	25	5	18	0.13	Category 0
B100;P-LS3R1	B100;BK-LS3R1	Bldg 100, Panel LS3R1	0.208	1.29	1.29	0.88	1.457	0.000	Yes	PNL	25	35	18	3.5	Category 1
B100;P-LS4DP	B100;BK-LS4DP	Bldg 100, Panel LS4DP	0.48	6.94	6.94	4.80	0.01	0.000	Yes	PNL	25	5	18	0.15	Category 0
B100;P-LS4L1	B100;BK-LS4DP	Bldg 100, Panel LS4L1	0.48	5.98	5.98	4.23	0.01	0.000	Yes	PNL	25	5	18	0.13	Category 0
B100;P-LS4R1	B100;BK-T-LS4R1P	Bldg 100, Panel LS4R1	0.208	1.29	1.29	0.88	1.467	0.000	Yes	PNL	25	35	18	3.5	Category 1

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B100;P-LS5DP	B100;BK-LS5DP	Bldg 100, Panel LS5DP	0.48	6.49	6.49	4.53	0.01	0.000	Yes	PNL	25	5	18	0.14	Category 0
B100;P-LS5L1	B100;BK-LS5DP	Bldg 100, Panel LS5L1	0.48	5.26	5.26	3.79	0.01	0.000	Yes	PNL	25	4	18	0.12	Category 0
B100;P-LS5R1	B100;BK-T-LS5R1P	Bldg 100, Panel LS5R1	0.208	1.29	1.29	0.88	1.471	0.000	Yes	PNL	25	35	18	3.5	Category 1
B100;P-LSB2	B100;BK-LSB2L1	Bldg 100, Panel LSB2	0.48	6.95	6.95	4.81	0.017	0.000	Yes	PNL	25	7	18	0.25	Category 0
B100;P-LSBDP1	B100;F-S2-10B	Bldg 100, Panel LSBDP1	0.48	32.08	32.08	15.09	0.05	0.000	Yes	PNL	25	29	18	2.6	Category 1
B100;P-LSBDP2	B100;BK-LSBDP2	Bldg 100, Panel LSBDP2	0.48	9.55	9.55	6.30	0.017	0.000	Yes	PNL	25	8	18	0.34	Category 0
B100;P-LSBL1	B100;BK-LSB2L1	Bldg 100, Panel LSBL1	0.48	7.14	7.14	4.92	0.017	0.000	Yes	PNL	25	7	18	0.26	Category 0
B100;P-LSBR1	B100;BK-T-LSBR1P	Bldg 100, Panel LSBR1	0.208	1.33	1.33	0.89	1.435	0.000	Yes	PNL	25	35	18	3.5	Category 1
B100;P-MSI850	B100;BK-1DP2A8	Bldg 100, Panel MSI850	0.48	12.94	12.94	8.17	0.017	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;P-PBLOAD	B100;BK-1DP2A10	Bldg 100, Panel PBLOAD	0.48	12.94	12.94	8.17	0.017	0.000	Yes	PNL	25	10	18	0.45	Category 0
B100;P-RL2	B100;BK-T-RL1,2P	Bldg 100, Panel RL2	0.208	2.80	2.80	1.78	2	0.000	Yes	PNL	25	66	18	10	Category 3
B100;P-RP1	B100;BK-RP6,1	Bldg 100, Panel RP1	0.208	2.66	2.66	1.46	0.878	0.000	Yes	PNL	25	35	18	3.6	Category 1
B100;P-RP2	B100;BK-RP6,2	Bldg 100, Panel RP2	0.208	2.66	2.66	1.46	0.878	0.000	Yes	PNL	25	35	18	3.6	Category 1
B100;P-RP3	B100;BK-RP2	Bldg 100, Panel RP3	0.208	2.51	2.51	1.40	1.011	0.000	Yes	PNL	25	38	18	4.0	Category 1
B100;P-RP5	B100;BK-RP1	Bldg 100, Panel RP5	0.208	2.48	2.48	1.39	1.048	0.000	Yes	PNL	25	38	18	4.1	Category 2
B100;P-RP6	B100;BK-LA108	Bldg 100, Panel RP6	0.208	2.89	2.89	1.82	2	0.000	Yes	PNL	25	67	18	10	Category 3
B100;SG-EP	MaxTripTime @2.0s	Bldg 100, Switchgear EP	0.48	14.92	14.92	8.79	2	0.000	Yes	SWG	32	245	24	37	Category 4
B100;SG-SS1-A	OD;BK-SG3-FD5	Bldg 100, Switchgear SS1-A	0.48	46.77	30.42	12.58	0.664	0.050	Yes	SWG	32	173	24	22	Category 3
B100;SG-SS2-A	OD;BK-SG2-F3	Bldg 100, Switchgear SS2-A	0.48	38.00	31.01	13.28	0.592	0.050	Yes	SWG	32	157	24	19	Category 3
B100;SG-SS2-B	OD;BK-SG1-FD2	Bldg 100, Switchgear SS2-B	0.48	37.68	31.05	13.32	0.589	0.050	Yes	SWG	32	157	24	19	Category 3
B100;V-100P1	B100;BK-V100P1	Bldg 100, VFD 100P1	0.48	32.89	32.29	17.80	0.01	0.000	Yes	PNL	25	12	18	0.63	Category 0
B100;V-100P2	B100;BK-V100P2	Bldg 100, VFD 100P2	0.48	32.89	32.29	17.80	0.01	0.000	Yes	PNL	25	12	18	0.63	Category 0
B100;V-100P3	B100;BK-V100P3	Bldg 100, VFD 100P3	0.48	23.83	23.24	13.43	0.017	0.000	Yes	PNL	25	14	18	0.78	Category 0
B100A;P-1DL1	B100A;BK-1DL1	Bldg 100A, Panel 1DL1	0.48	16.30	16.30	9.95	0.017	0.000	Yes	PNL	25	11	18	0.55	Category 0
B100A;P-1DLS1	B100A;BK-1DLST1	Bldg 100A, Panel 1DLS1	0.48	4.44	4.44	3.28	0.017	0.000	Yes	PNL	25	5	18	0.17	Category 0
B100A;P-1DLSR1	B100A;BK-1DLSR1	Bldg 100A, Panel 1DLSR1	0.208	1.46	1.46	0.96	0.482	0.000	Yes	PNL	25	19	18	1.3	Category 1
B100A;P-1DR1	B100A;BK-1DR1	Bldg 100A, Panel 1DR1	0.208	5.80	5.80	2.52	2	0.000	Yes	PNL	25	83	18	15	Category 3
B100A;P-1DR1S	B100A;BK-1DRK3	Bldg 100A, Panel 1DR1S	0.208	5.51	5.51	2.86	0.017	0.000	Yes	PNL	25	5	18	0.14	Category 0
B100A;P-1DR2	B100A;BK-1DR2	Bldg 100A, Panel 1DR2	0.208	5.56	5.56	2.88	0.017	0.000	Yes	PNL	25	5	18	0.14	Category 0
B100A;P-2DCR1	B100A;BK-2DCR1	Bldg 100A, Panel 2DCR1	0.208	1.34	1.34	1.06	2	0.000	Yes	PNL	25	47	18	5.9	Category 2
B100A;P-2DL1	B100A;BK-2DL1-M	Bldg 100A, Panel 2DL1	0.48	14.30	14.30	8.90	0.012	0.000	Yes	PNL	25	9	18	0.36	Category 0
B100A;P-2DR1	B100A;BK-2DR1	Bldg 100A, Panel 2DR1	0.208	3.37	3.37	1.72	2	0.000	Yes	PNL	25	65	18	9.8	Category 3

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/ Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B100A;P-2DR2	B100A;BK-2DR2	Bldg 100A, Panel 2DR2	0.208	3.34	3.34	2.02	0.017	0.000	Yes	PNL	25	4	18	0.10	Category 0
B100A;P-2DR3	B100A;BK-2DR3	Bldg 100A, Panel 2DR3	0.208	3.34	3.34	2.02	0.017	0.000	Yes	PNL	25	4	18	0.10	Category 0
B100A;P-2DRDP	B100A;BK-2DT1P	Bldg 100A, Panel 2DRDP	0.208	3.42	3.42	2.05	2	0.000	Yes	PNL	25	73	18	12	Category 3
B100A;P-BDC1	B100A;BK-BDC1-M	Bldg 100A, Panel BDC1	0.48	9.62	9.62	6.34	0.012	0.000	Yes	PNL	25	7	18	0.23	Category 0
B100A;P-BDDP1	B100;BK-S2-2B	Bldg 100A, Panel BDDP1	0.48	20.60	20.44	12.06	0.05	0.000	Yes	PNL	25	25	18	2.1	Category 1
B100A;P-BDE1	B100A;BK-BDE1M	Bldg 100A, Panel BDE1	0.48	13.56	13.56	8.50	0.016	0.000	Yes	PNL	25	10	18	0.46	Category 0
B100A;P-BDELV	B100A;BK-BDELV	Bldg 100A, Panel BDELV	0.208	0.84	0.84	0.76	0.8	0.000	Yes	PNL	25	22	18	1.6	Category 1
B100A;P-BDLS1	B100;BK-BDLS1	Bldg 100A, Panel BDLS1	0.48	10.60	10.60	6.89	0.017	0.000	Yes	PNL	25	9	18	0.37	Category 0
B100A;P-BDLSR1	B100A;BK-BDLSR1	Bldg 100A, Panel BDLSR1	0.208	1.51	1.51	1.15	0.017	0.000	Yes	PNL	25	3	18	0.05	Category 0
B100A;P-BDR1	B100A;BK-BDR1-M	Bldg 100A, Panel BDR1	0.208	1.78	1.78	1.30	2	0.000	Yes	PNL	25	54	18	7.3	Category 2
B100A;V-VFDP1	B100A;BK-VFDP1	Bldg 100A, VFD VFDP1	0.48	4.05	4.02	3.01	0.017	0.000	Yes	PNL	25	5	18	0.15	Category 0
B100A;V-VFDP2	B100A;BK-VFDP2	Bldg 100A, VFD VFDP2	0.48	4.05	4.02	3.01	0.017	0.000	Yes	PNL	25	5	18	0.15	Category 0
B105;P-36L	B105;BK-36H-P	Bldg 105, Panel 36L	0.24	1.53	1.53	1.18	2	0.000	Yes	PNL	25	51	18	6.6	Category 2
B105;P-36P	B105;BK-36P	Bldg 105, Panel 36P	0.24	1.00	1.00	0.87	2	0.000	Yes	PNL	25	42	18	4.8	Category 2
B105;P-36P,H	B20;BK-20MDP-4	Bldg 105, Panel 36P,H	0.48	3.06	3.06	2.38	0.019	0.000	Yes	PNL	25	5	18	0.13	Category 0
B106;B-A-1L	B106;BK-C3	Bldg 106, ATS-1L	0.48	14.02	13.32	8.32	0.04	0.000	Yes	PNL	25	18	18	1.1	Category 0
B106;B-T106P	OD;BK-SG3-FD6	Bldg 106, B-T106P	13.09	3.21	3.17	3.14	0.057	0.050	Yes	SWG	153	11	36	0.38	Category 0
B106;P-E1A	B106;BK-C2-E1A	Bldg 106, Panel E1A	0.208	2.86	2.86	1.54	0.533	0.000	Yes	PNL	25	27	18	2.3	Category 1
B106;P-E1B	B106;BK-C2-E1B	Bldg 106, Panel E1B	0.208	1.66	1.66	1.05	1.236	0.000	Yes	PNL	25	35	18	3.6	Category 1
B106;P-E1C	B106;BK-C2-E1C	Bldg 106, Panel E1C	0.208	1.86	1.86	1.14	1.042	0.000	Yes	PNL	25	33	18	3.3	Category 1
B106;P-E1D	B106;BK-C2-E1D	Bldg 106, Panel E1D	0.208	1.39	1.39	0.93	1.599	0.000	Yes	PNL	25	38	18	4.0	Category 2
B106;P-E2A	B106;BK-C2-E1A	Bldg 106, Panel E2A	0.208	2.61	2.61	1.44	0.62	0.000	Yes	PNL	25	28	18	2.5	Category 1
B106;P-E2B	B106;BK-C2-E1B	Bldg 106, Panel E2B	0.208	1.52	1.52	0.99	1.4	0.000	Yes	PNL	25	36	18	3.8	Category 1
B106;P-E2C	B106;BK-C2-E1C	Bldg 106, Panel E2C	0.208	1.72	1.72	1.07	1.169	0.000	Yes	PNL	25	34	18	3.5	Category 1
B106;P-E2D	B106;BK-C2-E1D	Bldg 106, Panel E2D	0.208	1.28	1.28	0.87	1.811	0.000	Yes	PNL	25	39	18	4.3	Category 2
B106;P-EKL	B106;BK-C5-EKL	Bldg 106, Panel EKL	0.208	1.45	1.45	0.95	0.746	0.000	Yes	PNL	25	24	18	1.9	Category 1
B106;P-EMDPH	B106;BK-C3	Bldg 106, Panel EMDPH	0.48	13.61	12.92	6.88	0.1	0.000	Yes	PNL	25	27	18	2.3	Category 1
B106;P-EMDPL	B106;BK-EMDPL	Bldg 106, Panel EMDPL	0.208	3.16	3.16	1.94	2	0.000	Yes	PNL	25	70	18	11	Category 3
B106;P-EPPH1	B106;BK-EMDPH4	Bldg 106, Panel EPPH1	0.48	2.60	2.60	2.08	0.017	0.000	Yes	PNL	25	4	18	0.10	Category 0
B106;P-EPPH2	B106;BK-EMDPH3	Bldg 106, Panel EPPH2	0.48	5.83	5.83	4.14	0.017	0.000	Yes	PNL	25	6	18	0.21	Category 0
B106;P-EV	B106;F-EV	Bldg 106, Panel EV	0.208	0.76	0.76	0.72	0.01	0.000	Yes	PNL	25	1	18	0.02	Category 0
B106;P-KH	B106;BK-KH	Bldg 106, Panel KH	0.48	7.14	7.14	4.92	0.017	0.000	Yes	PNL	25	7	18	0.26	Category 0

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B106;P-KL	B106;BK-KL	Bldg 106, Panel KL	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-L1A	B106;BK-L1A	Bldg 106, Panel L1A	0.208	1.22	1.22	1.00	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-L1B	B106;BK-L1B	Bldg 106, Panel L1B	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-L1C	B106;BK-L1C	Bldg 106, Panel L1C	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-L1D	B106;BK-L1D	Bldg 106, Panel L1D	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-L2A	B106;BK-L2A	Bldg 106, Panel L2A	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-L2B	B106;BK-L2B	Bldg 106, Panel L2B	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-L2C	B106;BK-L2C	Bldg 106, Panel L2C	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-L2D	B106;BK-L2D	Bldg 106, Panel L2D	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-MDPH	B106;BK-C2	Bldg 106, Panel MDPH	0.48	14.28	14.28	8.89	0.04	0.000	Yes	PNL	25	18	18	1.2	Category 0
B106;P-MDPL	B106;BK-C5	Bldg 106, Panel MDPL	0.208	1.22	33.40	27.15	0.04	0.000	Yes	PNL	25	4	18	0.11	Category 0
B106;P-OL	B106;BK-OL	Bldg 106, Panel OL	0.48	12.79	12.79	8.09	0.017	0.000	Yes	PNL	25	10	18	0.44	Category 0
B106;P-PPH1	B106;BK-PPH1-M	Bldg 106, Panel PPH1	0.48	7.79	7.79	5.30	0.017	0.000	Yes	PNL	25	7	18	0.28	Category 0
B106;P-PPH2-L	B106;BK-PPH	Bldg 106, Panel PPH2-L	0.48	7.31	7.31	5.02	0.017	0.000	Yes	PNL	25	7	18	0.26	Category 0
B106;P-PPH2-R	B106;BK-PPH	Bldg 106, Panel PPH2-R	0.48	6.98	6.98	4.82	0.017	0.000	Yes	PNL	25	7	18	0.25	Category 0
B106;P-PPL1	B106;BK-PPL1	Bldg 106, Panel PPL1	0.208	0.76	0.76	0.61	0.535	0.000	Yes	PNL	25	15	18	0.86	Category 0
B106;P-PPL2	B106;BK-PPL2-S	Bldg 106, Panel PPL2	0.208	0.77	0.77	0.61	0.526	0.000	Yes	PNL	25	15	18	0.85	Category 0
B106;P-R1A	B106;BK-R1A	Bldg 106, Panel R1A	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-R1B	B106;BK-R1B	Bldg 106, Panel R1B	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-R1C	B106;BK-R1C	Bldg 106, Panel R1C	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-R1D	B106;BK-R1D	Bldg 106, Panel R1D	0.208	1.22	1.22	0.99	1.932	0.000	Yes	PNL	25	43	18	4.9	Category 2
B106;P-R2A	B106;BK-R2A	Bldg 106, Panel R2A	0.208	1.22	1.22	0.99	1.923	0.000	Yes	PNL	25	43	18	4.9	Category 2
B106;P-R2B	B106;BK-R2B	Bldg 106, Panel R2B	0.208	1.22	1.22	0.99	1.931	0.000	Yes	PNL	25	43	18	4.9	Category 2
B106;P-R2C	B106;BK-R2C	Bldg 106, Panel R2C	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;P-R2D	B106;BK-R2D	Bldg 106, Panel R2D	0.208	1.22	1.22	0.99	2	0.000	Yes	PNL	25	44	18	5.1	Category 2
B106;SG-N	B106;BK-N	Bldg 106, Switchgear N	0.48	14.89	14.20	7.11	2	0.000	Yes	SWG	32	205	24	28	Category 4
B20;P-20L11	B20;BK-20L11-1	Bldg 20, Panel 20L11	0.208	3.83	3.83	2.22	2	0.000	Yes	PNL	25	77	18	13	Category 3
B20;P-20L12	B20;BK-20L12	Bldg 20, Panel 20L12	0.208	3.75	3.75	2.18	2	0.000	Yes	PNL	25	76	18	13	Category 3
B20;P-20L14	B20;BK-20L14-M	Bldg 20, Panel 20L14	0.208	3.18	3.18	1.95	0.017	0.000	Yes	PNL	25	4	18	0.09	Category 0
B20;P-20L15	B20;BK-20L15-M	Bldg 20, Panel 20L15	0.208	3.29	3.29	1.69	0.027	0.000	Yes	PNL	25	5	18	0.13	Category 0
B20;P-20MDP	B20;F-T-20-P	Bldg 20, Panel 20MDP	0.48	6.72	6.72	3.97	2	0.000	Yes	PNL	25	112	18	24	Category 3
B20;P-P20L15	B20;BK-P20L15	Bldg 20, Panel P20L15	0.208	1.26	1.26	0.86	2	0.000	Yes	PNL	25	41	18	4.7	Category 2

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/ Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B20;P-T20A	B20;F-T20A	Bldg 20, Panel T20A	0.24	1.82	1.82	1.34	0.01	0.000	Yes	PNL	25	2	18	0.04	Category 0
B22;P-AC1	B22;BK-AC1	Bldg 22, Panel AC1	0.48	10.28	10.28	6.72	0.019	0.000	Yes	PNL	25	9	18	0.41	Category 0
B22;P-AC2	B22;BK-AC2	Bldg 22, Panel AC2	0.48	9.49	9.49	6.27	0.019	0.000	Yes	PNL	25	9	18	0.38	Category 0
B22;P-AC3	B22;BK-AC3	Bldg 22, Panel AC3	0.48	8.34	8.34	5.61	0.019	0.000	Yes	PNL	25	8	18	0.33	Category 0
B22;P-ACD	B22;BK-ACD	Bldg 22, Panel ACD	0.48	11.01	11.01	7.12	0.025	0.000	Yes	PNL	25	12	18	0.58	Category 0
B22;P-EHB	B22;BK-TS1	Bldg 22, Panel EHB	0.208	5.42	4.74	2.47	0.019	0.000	Yes	PNL	25	5	18	0.16	Category 0
B22;P-GEN	B22;BK-GEN-M	Bldg 22, Panel GEN	0.208	2.79	2.79	1.78	0.01	0.000	Yes	PNL	25	3	18	0.05	Category 0
B22;P-H1	B22;BK-H1	Bldg 22, Panel H1	0.48	10.25	10.25	6.70	0.017	0.000	Yes	PNL	25	9	18	0.36	Category 0
B22;P-H12	B22;BK-H12-M	Bldg 22, Panel H12	0.48	10.86	10.86	7.04	0.017	0.000	Yes	PNL	25	9	18	0.38	Category 0
B22;P-H2	B22;BK-H2	Bldg 22, Panel H2	0.48	8.61	8.61	5.77	0.017	0.000	Yes	PNL	25	8	18	0.31	Category 0
B22;P-H3	B22;BK-H3	Bldg 22, Panel H3	0.48	7.53	7.53	5.15	0.017	0.000	Yes	PNL	25	7	18	0.27	Category 0
B22;P-HB	B22;BK-HB	Bldg 22, Panel HB	0.48	10.55	10.55	6.86	0.023	0.000	Yes	PNL	25	11	18	0.50	Category 0
B22;P-L1	B22;BK-L1	Bldg 22, Panel L1	0.208	5.20	5.20	2.75	0.017	0.000	Yes	PNL	25	5	18	0.14	Category 0
B22;P-L2	B22;BK-L2	Bldg 22, Panel L2	0.208	4.27	4.27	2.03	0.024	0.000	Yes	PNL	25	5	18	0.14	Category 0
B22;P-L3	B22;BK-L3	Bldg 22, Panel L3	0.208	3.49	3.49	1.77	0.029	0.000	Yes	PNL	25	5	18	0.15	Category 0
B22;P-LB1	B22;BK-41-P	Bldg 22, Panel LB1	0.208	5.82	4.47	2.29	2	0.000	Yes	PNL	25	83	18	15	Category 3
B22;P-LB2	B22;BK-LB2	Bldg 22, Panel LB2	0.208	5.10	5.10	2.71	0.019	0.000	Yes	PNL	25	5	18	0.15	Category 0
B22;P-MDP	B22;F-T22-P	Bldg 22, Panel MDP	0.48	11.40	10.93	5.98	0.653	0.000	Yes	PNL	25	75	18	12	Category 3
B5;P-5L205	B5;BK-5L205	Bldg 5, Panel 5L205	0.48	5.05	5.05	3.66	0.017	0.000	No	PNL	25	7	18	0.25	Category 0
B5;P-5L21	B5;BK-5L21	Bldg 5, Panel 5L21	0.48	7.32	7.32	5.02	0.017	0.000	No	PNL	25	8	18	0.35	Category 0
B5;P-5MDP	B5;BK-5MDP	Bldg 5, Panel 5MDP	0.48	10.42	10.42	6.79	0.025	0.000	No	PNL	25	13	18	0.72	Category 0
B5;P-5PB1	B5;BK-5MDP-4	Bldg 5, Panel 5PB1	0.24	5.32	5.32	2.90	2	0.000	Yes	PNL	25	92	18	17	Category 3
B5;P-L1	B5;BK-L1	Bldg 5, Panel L1	0.208	3.65	3.65	2.14	2	0.000	Yes	PNL	25	75	18	13	Category 3
B5;P-L1B	B5;BK-L1B	Bldg 5, Panel L1B	0.208	1.79	1.79	1.30	2	0.000	Yes	PNL	25	54	18	7.3	Category 2
B6;P-6MDP	B6;BK-6MDP	Bldg 6, Panel 6MDP	0.48	10.75	10.75	6.97	0.02	0.000	Yes	PNL	25	10	18	0.45	Category 0
B6;P-6P11	B6;BK-6PDP1-4	Bldg 6, Panel 6P11	0.24	7.25	7.25	3.08	0.091	0.000	No	PNL	25	17	18	1.1	Category 0
B6;P-6PDP1	B6;BK-T-6A-S	Bldg 6, Panel 6PDP1	0.24	7.69	7.69	3.78	2	0.000	No	PNL	25	128	18	30	Category 4
B7;P-PP	B8;F-SAFETY	Bldg 7, Panel PP	0.208	1.42	1.23	0.96	2	0.000	Yes	PNL	25	49	18	6.1	Category 2
B8;B-A-1L	B8;F-T8-P	Bldg 8, ATS-1L	0.24	10.34	9.67	4.37	2	0.000	Yes	PNL	25	122	18	28	Category 4
B8;P-1PA-1	B8;BK-1PA-D	Bldg 8, Panel 1PA-1	0.208	1.09	0.94	0.67	0.231	0.000	Yes	PNL	25	10	18	0.48	Category 0
B8;P-8L11	B8;BK-8L11-1	Bldg 8, Panel 8L11	0.208	3.92	3.92	1.91	2	0.000	Yes	PNL	25	69	18	11	Category 3
B8;P-8PB1	B8;BK-8PB1-CK1	Bldg 8, Panel 8PB1	0.24	8.62	8.62	4.10	0.021	0.000	Yes	PNL	25	7	18	0.26	Category 0

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/ Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
B8;P-8PBJ	B8;F-T8-P	Bldg 8, Panel 8PBJ	0.24	10.12	9.45	4.30	2	0.000	Yes	PNL	25	121	18	27	Category 4
B8;P-8PBJ1	B8;BK-8PBJ-CK5	Bldg 8, Panel 8PBJ1	0.24	8.59	8.07	3.27	0.032	0.000	Yes	PNL	25	8	18	0.34	Category 0
B8;P-BL12	B8;BK-GR-2R	Bldg 8, Panel BL12	0.208	1.93	1.93	1.37	2	0.000	Yes	PNL	25	56	18	7.7	Category 2
B8;P-GR	B8;BK-8PBJ-CK2	Bldg 8, Panel GR	0.208	4.06	4.06	2.31	2	0.000	Yes	PNL	25	78	18	13	Category 3
B8;P-GRA	B8;BK-GRA1	Bldg 8, Panel GRA	0.208	3.96	3.96	2.27	0.017	0.000	Yes	PNL	25	4	18	0.11	Category 0
B8;P-MACHSHOP	B8;BK-8PB1L	Bldg 8, Panel MACHSHOP	0.24	5.83	5.83	3.10	0.018	0.000	Yes	PNL	25	6	18	0.17	Category 0
B8;P-MHC26	B8;BK-MHC26-1	Bldg 8, Panel MHC26	0.208	1.28	1.28	0.87	0.157	0.000	Yes	PNL	25	9	18	0.37	Category 0
B9;B-A-1L	B9;BK-9MDP-2C	Bldg 9, ATS-1L	0.48	11.48	11.48	7.38	0.033	0.000	Yes	PNL	25	14	18	0.79	Category 0
B9;P-9EHDP	B9;BK-9MDP-2C	Bldg 9, Panel 9EHDP	0.48	11.04	11.04	7.14	0.033	0.000	Yes	PNL	25	14	18	0.76	Category 0
B9;P-9EL21	B9;F-9EL21	Bldg 9, Panel 9EL21	0.208	1.81	1.81	1.11	2	0.000	Yes	PNL	25	49	18	6.2	Category 2
B9;P-9ELDP	B9;BK-9ELDP	Bldg 9, Panel 9ELDP	0.208	3.09	3.09	1.91	2	0.000	Yes	PNL	25	70	18	11	Category 3
B9;P-9HDP	B9;BK-9MDP-2B	Bldg 9, Panel 9HDP	0.48	9.29	9.29	6.16	0.033	0.000	Yes	PNL	25	12	18	0.65	Category 0
B9;P-9L11	B9;BK-9L11	Bldg 9, Panel 9L11	0.208	3.63	3.63	1.82	2	0.000	Yes	PNL	25	68	18	10	Category 3
B9;P-9L21	B9;BK-9L21	Bldg 9, Panel 9L21	0.208	3.66	3.66	2.15	2	0.000	Yes	PNL	25	75	18	13	Category 3
B9;P-9L22	B9;BK-9L22	Bldg 9, Panel 9L22	0.208	3.86	3.86	2.23	2	0.000	Yes	PNL	25	77	18	13	Category 3
B9;P-9LDP	B9;BK-TLDP	Bldg 9, Panel 9LDP	0.208	4.98	4.98	2.66	2	0.000	Yes	PNL	25	87	18	16	Category 3
B9;SG-9MDP	B9;F-T-9S-P	Bldg 9, Switchgear 9MDP	0.48	11.82	11.82	6.43	0.511	0.000	Yes	PNL	25	67	18	10	Category 3
B9A;B-A-2L	B9A;BK-A-2N	Bldg 9A, ATS-2L	0.48	6.85	6.85	4.75	0.015	0.000	Yes	PNL	25	6	18	0.22	Category 0
B9A;B-A-3L	B9A;BK-A-3N	Bldg 9A, ATS-3L	0.48	6.78	6.78	4.70	0.015	0.000	Yes	PNL	25	6	18	0.22	Category 0
B9A;MC-MCC-9A	B9A;BK-9AMDP	Bldg 9A, MCC 9A	0.48	7.11	6.75	3.96	0.696	0.000	Yes	PNL	25	60	18	8.5	Category 3
B9A;P-9ALDP	B9A;BK-T9A-1	Bldg 9A, Panel 9ALDP	0.208	5.86	5.86	2.99	2	0.000	Yes	PNL	25	93	18	18	Category 3
B9A;P-9AMDP	B9A;F-T-9N-P	Bldg 9A, Panel 9AMDP	0.48	7.19	6.84	4.00	0.452	0.000	Yes	PNL	25	46	18	5.6	Category 2
B9A;P-EDP	B9A;BK-EDP	Bldg 9A, Panel EDP	0.208	2.78	2.78	1.50	0.03	0.000	Yes	PNL	25	5	18	0.13	Category 0
B9A;P-EDP1	B9A;BK-EDP1-M	Bldg 9A, Panel EDP1	0.208	0.97	0.97	0.84	2	0.000	Yes	PNL	25	41	18	4.6	Category 2
B9A;P-ELP	B9A;BK-ELP-M	Bldg 9A, Panel ELP	0.48	6.63	6.63	4.62	0.015	0.000	Yes	PNL	25	6	18	0.22	Category 0
B9A;P-LP	B9A;BK-LP	Bldg 9A, Panel LP	0.48	6.40	6.40	4.48	0.015	0.000	Yes	PNL	25	6	18	0.21	Category 0
B9A;P-LVP	B9A;BK-LVP	Bldg 9A, Panel LVP	0.208	3.71	3.71	2.17	0.01	0.000	Yes	PNL	25	3	18	0.06	Category 0
B9A;P-PP1	B9A;BK-PP1	Bldg 9A, Panel PP1	0.208	4.02	4.02	2.29	2	0.000	Yes	PNL	25	78	18	13	Category 3
B9A;P-PP2	B9A;BK-PP2	Bldg 9A, Panel PP2	0.208	4.06	4.06	2.31	2	0.000	Yes	PNL	25	79	18	13	Category 3
B9A;P-PP3	B9A;BK-PP3	Bldg 9A, Panel PP3	0.208	4.02	4.02	2.29	2	0.000	Yes	PNL	25	78	18	13	Category 3
BMRI;MC-CHILL	BMRI;BK-CHILLER	Bldg MRI, MCC CHILL	0.48	17.06	16.76	10.17	0.019	0.000	Yes	PNL	25	12	18	0.65	Category 0
BMRI;P-EMH	BMRI;BK-EMH	Bldg MRI, Panel EMH	0.48	1.34	1.34	1.00	0.983	0.000	Yes	PNL	25	30	18	2.7	Category 1

Bus Name	Protective Device Name	Remarks	Bus kV	Bus Bolted Fault (kA)	Prot Dev Bolted Fault (kA)	Prot Dev Arcing Fault (kA)	Trip/ Delay Time (sec.)	Breaker Opening Time (sec.)	Ground	Equip Type	Gap (mm)	Arc Flash Boundary (in)	Working Distance (in)	Incident Energy (cal/cm2)	NFPA Hazard / Risk Category
BMRI;P-EML	BMRI;BK-EML-M	Bldg MRI, Panel EML	0.208	0.75	0.75	0.60	1.341	0.000	Yes	PNL	25	26	18	2.1	Category 1
BMRI;P-H	B100;BK-MDP-H	Bldg MRI, Panel H	0.48	20.72	20.39	12.03	0.025	0.000	Yes	PNL	25	16	18	1.0	Category 0
BMRI;P-L	BMRI;BK-L	Bldg MRI, Panel L	0.208	3.36	3.36	2.02	2	0.000	Yes	PNL	25	72	18	12	Category 3
BT34;P-T34B	B20;BK-20L12-R	Tank 34, Panel T34B	0.208	1.70	1.70	1.25	0.017	0.000	Yes	PNL	25	3	18	0.06	Category 0
BT36;P-36P1	BT36;BK-T36	Tank 36, Panel 36P1	0.48	1.76	1.76	1.49	0.014	0.000	Yes	PNL	25	3	18	0.06	Category 0
BT36;P-36P2	BT36;BK-36P1B	Tank 36, Panel 36P2	0.208	2.23	2.23	1.29	1.001	0.000	Yes	PNL	25	35	18	3.6	Category 1
OD;B-FD-A	OD;R-BANK1	Outdoor, 13.09 KV Swgr A	13.09	3.21	2.62	2.59	1.917	0.083	Yes	SWG	153	199	36	6.3	Category 2
OD;B-FD-B	OD;R-BANK2	Outdoor, 13.09 KV Swgr B	13.09	3.22	2.62	2.59	1.917	0.083	Yes	SWG	153	199	36	6.3	Category 2
OD;B-T-U1-P	OD;R-BANK1	Outdoor, 33 KV Swgr A	33.00	5.71	5.55	5.55	0.016	0.083	Yes	SWG	153	111	36	11	Category 3
OD;B-T-U2-P	OD;R-BANK2	Outdoor, 33 KV Swgr B	33.00	5.70	5.53	5.53	0.016	0.083	Yes	SWG	153	111	36	11	Category 3
OD;SG-1	OD;BK-FD-A	Outdoor, Vista Swgr SG-1	13.09	3.21	2.72	2.70	0.102	0.050	Yes	SWG	153	15	36	0.53	Category 0
OD;SG-2	OD;BK-FD-A	Outdoor, Vista Swgr SG-2	13.09	3.21	2.72	2.70	0.102	0.050	Yes	SWG	153	15	36	0.52	Category 0
OD;SG-3	OD;BK-FD-B	Outdoor, Vista Swgr SG-3	13.09	3.22	2.73	2.70	0.102	0.050	Yes	SWG	153	15	36	0.53	Category 0
OD;SG-4	OD;BK-FD-B	Outdoor, Vista Swgr SG-4	13.09	3.22	2.73	2.70	0.102	0.050	Yes	SWG	153	15	36	0.53	Category 0
B106;B-T106P	OD;BK-SG3-FD6	Xfmr T-106 Primary Switch	13.09	3.21	3.17	3.14	0.057	0.050	Yes	SWG	153	11	36	0.38	Category 0
B103;B-T103P	OD;BK-SG4-FD9	Xfmr T-103 Primary Switch	13.09	3.15	3.15	3.11	0.057	0.050	Yes	SWG	153	11	36	0.38	Category 0
B5;B-5-P	OD;BK-SG2-F4	Xfmr T-5 Primary Switch	13.09	3.15	3.12	3.08	0.058	0.050	Yes	SWG	153	11	36	0.38	Category 0
B22;B-22-P	OD;BK-SG2-F4	Xfmr T-22 Primary Switch	13.09	3.11	3.07	3.04	0.058	0.050	Yes	SWG	153	11	36	0.38	Category 0
B9A;B-P-TR-9N	OD;BK-SG2-F4	Xfmr T-9N Primary Switch	13.09	3.06	3.03	3.00	0.059	0.050	Yes	SWG	153	11	36	0.37	Category 0
B9;B-9S-P	OD;BK-SG2-F4	Xfmr T-9S Primary Switch	13.09	3.04	3.01	2.99	0.059	0.050	Yes	SWG	153	11	36	0.37	Category 0
B20;B-20-P	OD;BK-SG1-FD1	Xfmr T-20 Primary Switch	13.09	3.12	3.10	3.07	0.058	0.050	Yes	SWG	153	11	36	0.38	Category 0
B8;B-8-P	OD;BK-SG1-FD1	Xfmr T-8 Primary Switch	13.09	3.15	3.14	3.11	0.058	0.050	Yes	SWG	153	11	36	0.38	Category 0
B6;B-T6-P	OD;BK-SG1-FD1	Xfmr T-6 Primary Switch	13.09	3.17	3.16	3.12	0.057	0.050	Yes	SWG	153	11	36	0.38	Category 0

South Carolina (Columbia) VA Medical Center - Approach Boundaries

Equipment Identification	Equipment Type	Bus Voltage	Limited Approach Boundary	Restricted Approach Boundary	Prohibited Approach Boundary
B100;P-150A1	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-150B2	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-150C3	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-164A1	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-164B2	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-164C3	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-166A1	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-166B2	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-166C3	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-168A1	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-168B	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-168B2R	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-168C3	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-169A1	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-169B2	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-169C3	Panel	120	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R13	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R15	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R15A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-EBR11B	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R10	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R11	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R12	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R14	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R16	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R16B	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R17	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R18	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R19	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R20	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R21	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R22	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R4	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R5	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R6	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R7	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R8	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-1R9	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-2R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-2R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-2R3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-2R7	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-2R8	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-2WR1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact

South Carolina (Columbia) VA Medical Center - Approach Boundaries

Equipment Identification	Equipment Type	Bus Voltage	Limited Approach Boundary	Restricted Approach Boundary	Prohibited Approach Boundary
B100;P-2WR3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-2WRDP	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-3R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-3R10	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-3R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-3R3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-3R4	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-3R5	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-3R6	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-3R7	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-3R8	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-3R9	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-4R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-4R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-4R3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-4R4	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-4R5	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-4R6	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-4R7	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-4R8	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-4R9	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-5R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-5R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-5R4	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-5R5	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-5R6	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-5R7	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BR1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BR10	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BR10A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BR13	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BR2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BR4	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BR5	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BR7	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BR8	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BR9	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C1R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C1R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C1R4	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C2R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C2R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C2R3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C2R4	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C2R5	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C2W1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C2W2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact

South Carolina (Columbia) VA Medical Center - Approach Boundaries

Equipment Identification	Equipment Type	Bus Voltage	Limited Approach Boundary	Restricted Approach Boundary	Prohibited Approach Boundary
B100;P-C3R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C4R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C4R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C5R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C5R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E1R16A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E1R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E1R3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E1R4	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E2R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E2R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E2WD1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E3R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E3R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E4R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E4R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-EBDP7A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-EBDP9B	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-EBPR1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-EBR1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-EBR10	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-EBR11	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-EBR11A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-EBR11C	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-EBR12	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-EBR2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-LS1R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-LS2R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-LS3R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-LS4R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-LSBR1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-RL1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-RL2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-RP1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-RP2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-RP3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-RP5	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-RP6	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-UNKNOW	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-UNNAM1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-UNNAM2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100A;P-1DLSR1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100A;P-1DR1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100A;P-1DR1S	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100A;P-1DR2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100A;P-2DCR2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100A;P-BDLSR1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact

South Carolina (Columbia) VA Medical Center - Approach Boundaries

Equipment Identification	Equipment Type	Bus Voltage	Limited Approach Boundary	Restricted Approach Boundary	Prohibited Approach Boundary
B100A;P-BDR1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-N2R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-N2R3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-N2R4	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-N2R5	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-NC1R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-NC2R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-NE2R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-E1A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-E1B	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-E1C	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-E1D	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-E2A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-E2B	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-E2C	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-E2D	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-EMDPL	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-EV	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-L1B	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-L1C	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-L1D	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-L2A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-L2B	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-L2C	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-MDPL	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-PPL2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-R1B	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-R1D	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-R2A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-R2B	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-R2C	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B20;P-20L11	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B20;P-20L12	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B22;P-EHB	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B22;P-GEN	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B22;P-L1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B22;P-LB1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B22;P-LB2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B5;P-EMER	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B5;P-L1B	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B7;P-PP	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-1PB	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-8L11A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-8LB1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-GR	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-GRA	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-MHC26	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact

South Carolina (Columbia) VA Medical Center - Approach Boundaries

Equipment Identification	Equipment Type	Bus Voltage	Limited Approach Boundary	Restricted Approach Boundary	Prohibited Approach Boundary
B9;P-9L11	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9;P-9L21	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9;P-9L22	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9;P-9LDP	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9A;P-LVP	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9A;P-PP1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9A;P-PP3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
BMRI;P-EML	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
BMRI;P-L	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
BT25;P-MSPP1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
BT34;P-T34B	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
BT36;P-36P2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-2R4	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-2R5	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-2R6	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-2WR2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-3ED1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-3WD1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-5R3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BDPCRM	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BME	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BR3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-BR6	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-C1R3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-CCTV	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E1R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E5R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-E5R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-KITCHE	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;P-LS5R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100A;P-2DCR1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100A;P-2DR1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100A;P-2DR2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100A;P-2DR3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B100A;P-BDELV	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-N1D1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-N1R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-N1R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-N1R3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-N1R4	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-N2D1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-N2R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-NC1D2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-NC1R2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-NC1R3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-NC2R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B103;P-NC2R3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact

South Carolina (Columbia) VA Medical Center - Approach Boundaries

Equipment Identification	Equipment Type	Bus Voltage	Limited Approach Boundary	Restricted Approach Boundary	Prohibited Approach Boundary
B103;P-NE1R1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-EKL	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-KL	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-L1A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-L2D	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-PPL1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-R1A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-R1C	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B106;P-R2D	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B20;P-20L14	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B20;P-20L15	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B20;P-E8PBJ1A1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B20;P-E8PBJ1A2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B20;P-P20L15	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B22;P-L2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B22;P-L3	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B5;P-L1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-1PA-1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-8L11	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-BL12	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9;P-9EL21	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9;P-9ELDP	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9A;P-9ALDP	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9A;P-EDP	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9A;P-EDP1	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9A;P-EDP2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B9A;P-PP2	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
BT34;P-T34A	Panel	208	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-8PBJ	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B5;P-NORMAL	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B5;P-PL21	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B5;P-PL22	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B6;P-6L11A	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B6;P-6L11B	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B6;P-6LDP-1A	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B6;P-6LDP1	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B6;P-6P11	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B6;P-6PDP1	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B7;P-P1	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-1PA	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-8PBJ1	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-MACHSHOP	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B105;P-36L	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B105;P-36P	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B20;P-T20A	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B5;P-5L31	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B5;P-5PB1	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact

South Carolina (Columbia) VA Medical Center - Approach Boundaries

Equipment Identification	Equipment Type	Bus Voltage	Limited Approach Boundary	Restricted Approach Boundary	Prohibited Approach Boundary
B5;P-X	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B8;P-8PB1	Panel	240	3 ft 6 in.	Avoid Contact	Avoid Contact
B100;MC-EMCBP	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-EMCFB	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCDB	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCFB	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCEB1	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCEB2	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-4DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-4DP6	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-BDP4	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-BDP5	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-BYL2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C2DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C4DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E1DP2A	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E2DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-EBDPRI	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100A;P-1DL1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100A;P-2DL1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100A;P-BDDP1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
BMRI;P-H	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-EMCC2	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-EMCC4	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-EMCD5	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-EMCDB	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-EMCEB	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-EMCF1	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-LSMCG	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCA2	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCA3	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCA4	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCA5	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCBP	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCC2	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCC3	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCC4	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCCCB	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCCCI	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCD2	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCD3	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCD4	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCD5	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCCF1	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCEB3	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-MCEB4	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-1DP1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.

South Carolina (Columbia) VA Medical Center - Approach Boundaries

Equipment Identification	Equipment Type	Bus Voltage	Limited Approach Boundary	Restricted Approach Boundary	Prohibited Approach Boundary
B100;P-1DP2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-1DP3	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-1DP4	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100A;P-2DL1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-2DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-3DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-5DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-BDP1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-BDP2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-BDP3	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-BDP6	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-BYL1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C1DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C1L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C1L1A	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C1L2A	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C2L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C3DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C3L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C4L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C5DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C5L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-CBDP1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-CBDP2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E1DP1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E1DP2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E1L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E2L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E2L1A	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E2WDP2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E3DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E3L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E3L1A	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E4L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E4L1A	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E5DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E5L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-EBDP1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-EBDP2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-EBDP3	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-EBDP4	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-EBDP6	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-EBDP9A	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-EBL1A	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-EBL2A	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-EPDP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LS1DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.

South Carolina (Columbia) VA Medical Center - Approach Boundaries

Equipment Identification	Equipment Type	Bus Voltage	Limited Approach Boundary	Restricted Approach Boundary	Prohibited Approach Boundary
B100;P-LS1L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LS2DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LS2L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LS2WL1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LS3DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LS3L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LS4DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LS4L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LS5DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LS5L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LSB2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LSBDP1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LSBDP2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-LSBL1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100A;P-1DLS1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100A;P-BDC1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100A;P-BDE1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100A;P-BDLS1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;P-N2D2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;P-N2L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;P-NC2L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;P-NIG1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B105;P-36H	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B106;P-EMDPH	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B106;P-PPH1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B106;P-PPH2-L	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B106;P-PPH2-R	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B106;SG-N	Switchgear	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B20;P-20MDP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B22;P-AC1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B22;P-AC2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B22;P-AC3	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B22;P-ACD	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B22;P-H1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B22;P-H12	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B22;P-H3	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B22;P-HB	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B22;P-MDP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B5;P-5L205	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B5;P-5MDP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B6;P-6MDP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B9;P-9EHDP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B9;P-9HDP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B9;SG-9MDP	Switchgear	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
BMRI;P-EMH	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
BT36;P-36P1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-CT2	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.

South Carolina (Columbia) VA Medical Center - Approach Boundaries

Equipment Identification	Equipment Type	Bus Voltage	Limited Approach Boundary	Restricted Approach Boundary	Prohibited Approach Boundary
B100;MC-ELES9	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;MC-EMCC3	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-1C90	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-1DP2S1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-1DP2S2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-1DP2S3	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-1DP2S4	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-1DP2S5	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-1DP2S6	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-1DP2S7	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-2A100	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-BDP10	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-BDP8	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C1315L	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C1315R	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-C2WDP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E4DP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-E5L1A	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-EBDP1A	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-EBL1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-FIRE-P	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-MSI850	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;P-PBLOAD	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;SG-EP	Switchgear	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;SG-SS1-A	Switchgear	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;SG-SS2-A	Switchgear	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B100;SG-SS2-B	Switchgear	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;MC-NCMC1	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;MC-NMCC1	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;P-MDP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;P-N1L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;P-NC1D1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;P-NC1L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;P-NE1D1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;P-NE1L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B103;P-NE2L1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B105;P-36P,H	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B106;P-EPPH1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B106;P-EPPH2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B106;P-KH	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B106;P-MDPH	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B106;P-OL	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B22;P-H2	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B5;P-5L21	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B6;P-6SL1	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B9A;P-9AMDP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
B9A;P-ELP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.

South Carolina (Columbia) VA Medical Center - Approach Boundaries

Equipment Identification	Equipment Type	Bus Voltage	Limited Approach Boundary	Restricted Approach Boundary	Prohibited Approach Boundary
B9A;P-LP	Panel	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
BMRI;MC-CHILL	MCC	480	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.
OD;SG-1	Switchgear	13090	5 ft 0 in.	2 ft 2 in.	0 ft 7 in.
OD;SG-2	Switchgear	13090	5 ft 0 in.	2 ft 2 in.	0 ft 7 in.
OD;SG-3	Switchgear	13090	5 ft 0 in.	2 ft 2 in.	0 ft 7 in.
OD;SG-4	Switchgear	13090	5 ft 0 in.	2 ft 2 in.	0 ft 7 in.

7 SITE ASSESSMENT

7.0 Introduction:

The site assessment examines the site for several concerns. All buildings were examined for the following concerns:

A. Adequate code required for working clearances:

1. The table in Section 7.1 is a summary of site assessment and cost estimate by building. The prioritized table in Section 7.2 is a summary of the concerns developed as part of the assessment. The table identifies location and describes the existing condition. Section 7.3 is a summary of site assessment by priority. For each recommendation, a cost estimate is included. Priorities are identified by the severities of NEC violations as follows:
 - a. Priority #1: Under this priority, corrective actions must be taken immediately in order to provide safety to the personnel and reliability of the power supply to the VAMC facilities.
 - b. Priority #2: This priority requires corrective actions to be taken in order to comply with the NEC code violations and provide reliable power to the electrical facilities. However, the corrective actions can be deferred.
 - c. Priority #3: NEC code violations cited under this priority must be complied with in future upgrades. However, these tasks, even though required by NEC, are not posing safety and reliability problems by themselves. Thus, the corrective actions required under this priority can be programmed with the planned future expansion.

B. Adequate ground fault protection per NFPA 70, Article 215 and 517:

1. The majority of the power at utilization voltage is distributed at 208Y/120V. Some power is distributed at 480Y/277V: Some of the 480 Volt switchboards are provided with ground fault protection; however, the ground fault protection has not been used. S&A recommends use of the available ground fault protection, and installation of ground fault protection to provide ground fault protection.

C. Proper automatic transfer switches configuration and applications:

1. Transfer switches are rated at 480V and 208V. Some of 208V ATS's are not connected to ground fault type breakers.

D. Use of cable limiters:

1. The use of cable limiters was not observed at any of the buildings.

E. Application of under voltage protection at the main switchgear:

1. The two medium voltage transformers at the main outdoor sub station is provided with under voltage protection.

F. Oil-filled transformer clearance from buildings:

1. The study reviewed the code required working clearance to service the transformers. There weren't any instances of working clearance violations. Separate from the working clearance is clearance from the building, building windows and means of egress. The study is not required to address these issues; however, based on conversations with the VACO – the concern has been noted in this report.
2. The NEC and the NESC requires “use of good engineering judgment” in determining clearances and does not provide specific clearance requirements. There is only one instance, Buildings #9 & 9A – Research Area, where the transformer is too close to doors and to means of egress and does not meet “use of good engineering judgment”. Consideration should be given to relocate the transformer (perhaps as the transformers are replaced) or install blast walls between the transformer and the building.

TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 5 (Gym)	Emergency pnl	Condition of conductor's insulation is less than satisfactory NEC 110.3.A.4	Replace the new conductors.	1	\$1,500.00
Bldg 5 (Gym)	Normal pnl	Condition of conductor's insulation is less than satisfactory NEC 110.3.A.4	Replace the new conductors.	1	\$1,500.00
Bldg 5	5L21	Condition of conductor's insulation is less than satisfactory NEC 110.3.A.4 Very old panel, which is in violation of NEC.310.11	Replace the panel with new conductors	1	\$6,000.00
Bldg 5 (Post office)	Emergency pnl	Very old panel, which is in violation of NEC.310.11	Replace the panel	1	\$5,000.00
Bldg 5	5MDP	Very old SWGR, which is in violation of NEC 310.11. Water pipes run across SWBD, which is in violation of NEC 408.17 - 408.20, and 110.26.F. The room does not have two clear exits, which is in violation of NEC 110.26.C (2).	Replace the switchboard due to its condition with ground fault protection, and modify the room to provide two exits.	1	\$30,000.00

Shah & Associates, Inc
416 N. Frederick Avenue, Gaithersburg, MD 20877 (301) 926-2797

NIKA Technologies, Inc
11400 Rockville Pike, Ste 505, N. Bethesda, MD 20852 (301) 770-3520

TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 5	5MDP	No ground fault protection, which is in violation of NEC 230.95	Replace the switchboard due to its condition with ground fault protection, and modify the room to provide two exits.	1	
Bldg 5	L1	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A Very old panel, which is in violation of NEC.310.11	Replace the panel	1	\$5,000.00
Bldg 5	5PB1	Water pipes run across the panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F. Very old panel, which is in violation of NEC.310.11	Replace the panel	1	\$5,000.00
Bldg 5	Wireway Splice	Splice in wireway is deteriorated because of overheating. It is extremely danger to work on this splice, which is in violation of NEC 110.3.A.4	Replace the new conductors with all five new disconnect switch	1	\$7,500.00
Bldg 6	6MDP	Very old Panelboard, which is in violation of NEC 310.11.	Replace the panelboard	1	\$30,000.00
Bldg 6	6LDP1-A	There is not enough working clearance due to communication panels and storage, which is in violation of NEC110.26.A-C Very old panel, which is in violation of NEC 310.11	Replace the panel	1	\$5,000.00

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TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 6	6SL1	Very old panel, which is in violation of NEC 310.11 Unused wires do not have wire nut, which is in violation of NEC 110.12	Replace the panel	1	\$5,000.00
Bldg 6	6P11A	There is not enough working clearance due to communication panels and storage, which is in violation of NEC110.26.A-C Very old panel, which is in violation of NEC 310.11	Replace the panel	1	\$5,000.00
Bldg 6	6P11B	There is not enough working clearance due to communication panels and storage, which is in violation of NEC110.26.A-C Very old panel, which is in violation of NEC 310.11	Replace the panel	1	\$5,000.00
Bldg 7	P1	Very old and Rusted panel, which is in violation of NEC 310.11 Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A No Grounding, which is in violation of NEC 250.12	Replace the panel with new conductors	1	\$7,500.00

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TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 8	Machine shop Pnl	<p>No Grounding, which is in violation of NEC 250.12</p> <p>Very old and Rusted panel, which is in violation of NEC 310.11</p> <p>There is not enough working clearance due to machinery, which is in violation of NEC110.26.A-C</p>	Replace the panel	1	\$5,000.00
Bldg 8	8PB1	<p>Very old panel, which is in violation of NEC 310.11</p> <p>There is not enough working clearance due to working metal table, which is in violation of NEC110.26.A-C</p> <p>Steam pipes run across panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.</p> <p>No Separate grounding, which is in violation of NEC 250.12</p>	Replace the panel	1	\$6,000.00
Bldg 8	8LB1	<p>Very old panel, which is in violation of NEC 310.11</p> <p>There is not enough working clearance due to working metal table, which is in violation of NEC110.26.A-C</p>	Replace the panel	1	\$6,000.00

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TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 8	8LB1	Steam pipes run across panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F. No Separate grounding, which is in violation of NEC 250.12	Replace the panel	1	\$7,500.00
Bldg 8	Disc_pnl_warehouse	There is not enough working clearance due to cabinet in front of panel, which is in violation of NEC110.26.A-C Water pipes run across panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Replace the switch at new location	1	
Bldg 8	Disc_pnl_PP	There is not enough working clearance due to cabinet in front of panel, which is in violation of NEC110.26.A-C Water pipes run across panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Replace the switch at new location	1	\$1,500.00
Bldg 20	P20L15	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A Unused wires do not have wire nut, which is in violation of NEC 110.12	Patch the unused opening Cover the unused wires wire with wire nut	1	Negligible
Bldg 22	MND	Very old panel, which is in violation of NEC 310.11	Replace the panel	1	\$0.000.00

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TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg. 22	MD1	No Separate grounding, which is in violation of NEC 250.12	Replace the panel	1	\$5,000.00
Bldg. 22	Bkr_Xmfr_T41	Very old enclosed circuit breaker, which is in violation of NEC 250.12	Replace the breaker	1	\$1,500.00
Bldg. 22	Dsw_Elev_1	Very old enclosed switch, which is in violation of NEC 250.12 There is not enough working clearance due to panel in front of breaker, which is in violation of NEC110.26.A-C	Replace the disconnect switch	1	\$1,500.00
Bldg. T-25	MSP1	There is not enough working clearance due to machine in front of panel, which is in violation of NEC110.26.A-C	Relocate the panel	2	\$1,500.00
Bldg. 100A	2DCR2	There is not enough working clearance due to stored material in front of panel, which is in violation of NEC110.26.A-C	Remove the stored material	2	Negligible
Bldg. 100A	1DR1, Sec 2	There is not enough working clearance because panel is in corner and other panel is in front, which is in violation of NEC 110.26.A-C	Relocate the panel	2	\$1,500.00
Bldg. 103	N2D1	Hot Water and Steam pipes run above panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Relocate the panel or if possible relocate the mechanical pipes	2	\$1,500.00
Bldg. 103	N2R4	Hot Water and Steam pipes run above panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Relocate the panel or if possible relocate the mechanical pipes	2	\$1,500.00

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TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg. 103	NC1R1	Hot Water and Steam pipes run above panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Relocate the panel or if possible relocate the mechanical pipes	2	\$1,500.00
Bldg. 103	NE2R1	Hot Water and Steam pipes run above panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Relocate the panel or if possible relocate the mechanical pipes	2	\$1,500.00
Bldg. 106	EPPH1	Water pipes run above the panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F. Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Relocate the panel Patch the unused hole	2	\$1,000.00 Negligible
Bldg 5	Xfmr T-40	Water pipes run across the transformer, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Relocate the xfmr	2	\$1,500.00
Bldg 5	Switch_wireway	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Patch the opening	2	Negligible
Bldg 5	Switch_wireway	Condition of conductor's insulation is less than satisfactory NEC 110.3.A.4	Replace the conductors	2	\$1,000.00
Bldg 6	6PDP1	Very old panel, which is in violation of NEC 310.11	Replace the panel	2	\$6,000.00
Bldg 6	6LDP1	Very old panel, which is in violation of NEC 310.11	Replace the panel	2	\$6,000.00

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TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 6	6P11	There is not enough working clearance due to communication panels and storage, which is in violation of NEC110.26.A-C Very old panel, which is in violation of NEC 310.11	Replace the panel	2	\$5,000.00
Bldg 6	Xfmr T-6B	Very old transformer, which is in violation of NEC 310.11	Replace the transformer	2	\$4,000.00
Bldg 6	Xfmr T-6A	Very old transformer, which is in violation of NEC 310.11	Replace the transformer	2	\$4,000.00
Bldg 8	Emergency Generator	Old generator, which is in violation of NEC 310.11	Replace the Generator	2	\$100,000.00
Bldg 8	MHC26S	Incoming feeders are undersized of ampacity	Replace the incoming feeders	2	\$1,000.00
Bldg 8	8L11A	There is not enough working clearance due to cabinet in front of panel, which is in violation of NEC110.26.A-C	Relocate the panel	2	\$1,500.00
Bldg 8	8PBJ	Old panel, which is in violation of NEC 310.11	Replace the panel	2	\$1,500.00
Bldg 9	9L11	Very old and Rusted panel, which is in violation of NEC 310.11	Replace the panel	2	\$5,000.00

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TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 20	20MDP	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Patch the unused opening	2	Negligible
Bldg 20	20L11	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Patch the unused opening	2	Negligible
Bldg 22	Gen panel	Very old panel, which is in violation of NEC 310.11	Replace the panel	2	\$5,000.00
Bldg. 22	Disc_Elev_p1	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Cover the unused holes	2	Negligible
Bldg. 22	panel H1	No Separate grounding, which is in violation of NEC 250.12	Provide the separate grounding	2	\$1,000.00
Bldg. 22	Bkr_Xmfr_T41	There is not enough working clearance due to transformer in front of breaker, which is in violation of NEC110.26.A-C	Replace the enclosed circuit breaker	2	\$1,500.00
Bldg 5	L1B	There is not enough working clearance, which is in violation of NEC 110.26.A-C	Relocate the panel		
Bldg 20	20L14	There is not enough working clearance due to storage material in front of panel, which is in violation of NEC110.26.A-C	Remove the stored material	3	Negligible

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TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg. 100	1R1	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Patch the unused hole	1	Negligible
Bldg. 100	Dsw_Pnl_1R5 thr_1R8	Unused holes are uncovered , which is a violation of NEC 110.12.A	Patch the unused hole	1	Negligible
Bldg. 100	Dsw_Pnl_1R1 thr_1R4	Unused holes are uncovered , which is a violation of NEC 110.12.A	Patch the unused hole	1	Negligible
Bldg. 100	Dsw_Pnl_E1R3	Unused holes are uncovered , which is a violation of NEC 110.12.A	Patch the unused hole	1	Negligible
Bldg. 100	Pnl_1B146	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Patch the unused hole	1	Negligible
Bldg. 100	1R15	The splice inside the panel uses most of the gutter space, which is in violation of NEC 366.56	Remove the splice or replace the panel	1	\$1,500.00
Bldg. 100	1R15A	The splice inside the panel uses most of the gutter space,, which is in violation of NEC 366.56	Remove the splice or replace the panel	1	\$1,500.00
Bldg. 100	Dsw_Pump_10 0-p6	Very old and rusted switch, which is in violation of NEC 310.11.	Replace the Switch		\$2,000.00

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TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg. 100	C1R1	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Patch the unused hole	1	Negligible
Bldg. 100	BYL2	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A No Separate grounding, which is in violation of NEC 250.12	Patch the unused hole Install the ground wire from source	1	\$1,000.00
Bldg. 100	EBR11A	No Separate grounding, which is in violation of NEC 250.12	Install the ground wire from source	1	\$1,000.00
Bldg. 100	EBR11B	No Separate grounding, which is in violation of NEC 250.12	Install the ground wire from source	1	\$1,000.00
Bldg. 100	EBR11C	No Separate grounding, which is in violation of NEC 250.12	Install the ground wire from source	1	\$1,000.00
Bldg. 100	BR10A	Unused holes are uncovered at bottom, which is a violation of NEC 110.12.A	Patch the unused hole	1	Negligible
Bldg. 100	BDP5	Unused holes are uncovered at top, which is a violation of NEC 110.12.A	Patch the unused hole	1	Negligible
Bldg. 100	EBPR1	Two wires(cables) in single terminal of 1 pole circuit breaker #8	Feed each circuit from a separate breaker	1	Negligible

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TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg. 100	5R4	Two wires(cables) in single terminal of 2 pole circuit breaker #38,40	Feed each circuit from a separate breaker	1	Negligible
Bldg. 100	CathLab_Pnl	There is not enough working clearance due to X-ray equipment in front of panel, which is in violation of NEC110.26.A-C	Move the equipment	1	Negligible
Bldg. 100	LS2WL1	The drainage pipes with drain pan is not sealed properly.	Seal the drain pipes	2	\$1,000.00
Bldg. 100	2WR3	The drainage pipes with drain pan is not sealed properly.	Seal the drain pipes	2	covered above
Bldg. 100	2WR2	The drainage pipes with drain pan is not sealed properly.	Seal the drain pipes	2	covered above
Bldg. 100	2WR1	The drainage pipes with drain pan is not sealed properly.	Seal the drain pipes	2	covered above
Bldg. 100	2WRDP	The drainage pipes with drain pan is not sealed properly.	Seal the drain pipes	2	covered above
Bldg. 100	C2WDP	The drainage pipes with drain pan is not sealed properly.	Seal the drain pipes	2	covered above
Bldg. 100	C2W1	The drainage pipes with drain pan is not sealed properly.	Seal the drain pipes	2	covered above

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TABLE 7.1 - ELECTRICAL SITE ASSESSMENT SUMMARY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg. 100	C2W2	The drainage pipes with drain pan is not sealed properly.	Seal the drain pipes	2	covered above
Bldg. 100	E2WDP2	The drainage pipes with drain pan is not sealed properly.	Seal the drain pipes	2	covered above
Bldg. 100	Bkr_Xray_IDP2	There is not enough working clearance due to X-ray equipment in front of breaker, which is in violation of NEC110.26.A-C	Relocate the Breaker	2	\$750.00
Bldg. 100	Dsw_Pnl_1DP2	There is not enough working clearance due to X-ray equipment in front of breaker, which is in violation of NEC110.26.A-C	Relocate the Switch	2	\$750.00
Bldg. 100	Dsw_Pump_10 0-p7	Very old and rusted switch, which is in violation of NEC 310.11.	Replace the Switch	2	\$2,000.00
Bldg. 100	Dsw_Pump_10 0-p5	Very old and rusted switch, which is in violation of NEC 310.11.	Replace the Switch	2	\$2,000.00
Bldg. 100	RL1	There is not enough working clearance due to X-ray equipment in front of breaker, which is in violation of NEC110.26.A-C	Relocate the panel	2	\$2,500.00
Bldg. 100	RP2	There is not enough working clearance due to material stored in front of breaker, which is in violation of NEC110.26.A-C	Remove the stored material	2	Negligible
Bldg. 100	E1R4	There is not enough working clearance because panel is in corner and other panel is in front, which is in violation of NEC 110.26.A.C	Relocate the panel	2	\$2,500.00

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EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg. 100	EBDP-9-A	Too many conductors in a single conduit	Replace the conductor in different conduit	2	\$2,000.00
Bldg. 100	BME	There is not enough working clearance due to equipment in front of Panel, which is in violation of NEC110.26.A-C	Move the equipment	2	Negligible
Bldg. 100	BR10	Panel has too many wires and are congested	Replace the panel	2	\$5,000.00
Bldg. 100	LSBDP1	Panel has too many wires and are congested	Replace the panel	2	\$10,000.00
Bldg. 100	CBDP2	Panel has too many wires and are congested	Replace the panel	2	\$10,000.00
Bldg. 100	EBDP4L	Panel has too many wires and are congested	Replace the panel	2	\$10,000.00
Bldg. 100	EBDP1	Panel has too many wires and are congested	Replace the panel	2	\$5,000.00

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EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Outside bldg. 106	TR-106	Mechanical Protection is not provided for the possibly damage from external cause, which is in violation of 450.8.A	Provide safety bollards around	1	\$1,500.00
Outside bldg. 9	TR-9S	Mechanical Protection is not provided for the possibly damage from external cause, which is in violation of 450.8.A	Provide safety bollards around	1	\$1,500.00
Outside bldg. 9A	TR-9N	Mechanical Protection is not provided for the possibly damage from external cause, which is in violation of 450.8.A	Provide safety bollards around	1	\$1,500.00
Outside bldg. 22	TR-22	Mechanical Protection is not provided for the possibly damage from external cause, which is in violation of 450.8.A	Provide safety bollards around	1	\$1,500.00
Outside bldg. 8	TR-8	Mechanical Protection is not provided for the possibly damage from external cause, which is in violation of 450.8.A	Provide safety bollards around	1	\$1,500.00
Outside bldg. 20	TR-20	Mechanical Protection is not provided for the possibly damage from external cause, which is in violation of 450.8.A	Provide safety bollards around	1	\$1,500.00
Outside bldg. 5	TR-5	Mechanical Protection is not provided for the possibly damage from external cause, which is in violation of 450.8.A	Provide safety bollards around	1	\$1,500.00

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Columbia, SC Dorn VA Medical Center
Power Study

TABLE 7.2 SYSTEMS ASSESSMENT		
BUILDING	EQUIPMENT NAME	EQUIPMENT CONDITION (SEE DESCRIPTION AT END OF TABLE)
5	PNL BRD - 5MDP	F
	EMERGENCY	F
	5L205	B
	5L21	F
	5L22	F
	NORMAL PNL	F
	EMERGENCY	F
	PL21	F
	5L31	F
	L1B	C
	L1	C
	5PB1	F
	X	F
	T-40	D
	T-L1	B
	T-LIB	B
	XFMR	B
6	GMDP	F
	6PDPD1	F
	6LDP1	F
	6LDP-1A	C
	6SL1	F
	6P11	F
	6L11A	F
	6L11B	F
	T-6B	D/F
	T-6A	D/F
7	P1	F
	PP	D
	XFMR	B
8	ATS-BLDG 8	D
	8PBJ1	B
	MACHINE SHOP PANEL	F
	MHC26S	C
	8PB1	F
	8LB1	C
	GR	C
	8L11A	C/D
	8PBJ	D
	GR A	B
	1P-B	C
	1P-A	C
	1PA-1	C
	T-2	C
	T-LB1	C
	T-8L11 & GR	C
	NL	B
20	20L14	A/B
	20L15	C/D
	E8PJB1 A1	A/B
	E8PJB1 A2	A/B
	20 MPD	C/D

Columbia, SC Dorn VA Medical Center
Power Study

TABLE 7.2 SYSTEMS ASSESSMENT		
BUILDING	EQUIPMENT NAME	EQUIPMENT CONDITION (SEE DESCRIPTION AT END OF TABLE)
20	20L11	C/D
	20L12	C/D
	P20L15	C/D
	T-T20A	C
	T-20LIS	C/D
	T-20D	A/B
	T-20C	A/B
22	GEN PANEL	F
	EMERGENCY GENERATOR	C/D
	H3	D/F
	L3	D/F
	AC3	D/F
	H2	D/F
	L2	D/F
	AC2	D/F
	H12	D
	PNL ACD	D
	AC1	D
	PNL L1	B
	MDP	F
	PNL H1	D
	LB2	D
	HB	F
	EHB	F
	LB1	C
	T-41	C
T-25	MSPP1	B
T-34	PANEL T34A	B
	PNL T34B	C
T-36	T-36_P1	B
	T-36 P2	C
	T-T-36	C
105	LOAD CENTER (NO NAME)	C
	36-P	C/D
	36-H	B
	T-36P	B
	XFMR	B
114	MDP-PNL H	C
	PNL L	C
	PNL EMH	C
	PNL EML	C
	XFMR	C
103 & 101	PNL_103/161_OUTSIDE_SMOKING AREA	D/F
WATER TANK	PNL_WATER TANK	F
100 A	BDDP1	B
	BDE1	B
	BDELV	B
	BDC1	B
	BDR1	B
	BDLS1	B
	PNL BDLSR1	B
	2DR1	A/B
	2DR2	A/B

Columbia, SC Dorn VA Medical Center
Power Study

TABLE 7.2 SYSTEMS ASSESSMENT		
BUILDING	EQUIPMENT NAME	EQUIPMENT CONDITION (SEE DESCRIPTION AT END OF TABLE)
100 A	2DR3	A/B
	2DRDP	A/B
	2DL1	A/B
	2DCR1	A/B
	2DCR2	C
	1DL1	B
	1DR1	B
	1DR1 SEC-2	B
	1DR2	B
	1DLS1	B
	1DLSR1	B
	1DT1	B
	1DLST1	B
	XFMR 2DT1	A/B
	XFMR 2DTC1	A/B
	XFMR 2DTC2	A/B
	BLDST1	B
	BDT1	B
	TBDE1	B
103	NG1	C
	EMERGENCY GENERATOR	C
	NCMCC-1	C
	MCC	B
	N2D1	D
	N2R4	D
	N2R5	D
	NC1R1	D
	NE2R1	D
	N2D2	D
	NC2R3	B
	N2R3	B
	NC2R2	C
	N2R2	C
	NE2L1	D
	NC2L1	D
	N2L1	D
	N2R1	D
106	MDPH	B
	OL	C
	PPH1	B
	PPL1	B
	T-PNL_PPL1	B
	PPH2-L	B
	PPH2-R	B
	T_PPL2	B
	PPL2	A/B
	MDPL	C
	XFMR-PNL-MDPL	A/B
	L1A	C
	R1A	C
	L2A	C
	R2A	C
	L1B	B

Columbia, SC Dorn VA Medical Center
Power Study

TABLE 7.2 SYSTEMS ASSESSMENT		
BUILDING	EQUIPMENT NAME	EQUIPMENT CONDITION (SEE DESCRIPTION AT END OF TABLE)
106	R1B	B
	L2B	B
	R2B	B
	L1C	B
	R1C	B
	L2C	B
	R2C	B
	L1D	B
	R1D	B
	L2D	C
	R2D	C
	EMDPH	B
	EPP1 (EPPH1)	C/D
	EPPH2	B
	T_EMPDL	B
	EMDPL	B
	E1A	B/C
	E2A	C
	E1B	B
	E2B	B
	E1C	C
	E2C	B
	E1D	B
	E2D	C
	EV	B
	T_EV	B/C
100 PENTHOUSE	EPDP	B/C
	BPR1	A/B
	EBPR1	A/B
100 Closet 5A100	E5R2	C
	E5R1	C
	LS5DP	C
	E5L1	C
	C5L1	C
	LS5L1	C
	C5R1	B
	C5R2	B
	E5DP	C
	C5DP	C
	LS5R1	C
	T-LS5R1	B
	T-C5R1, 2	C
	T-E5R1, 2	C
100 Closet 5A101	SR1	B
	5R2	A/B
	5R3	A/B
	5R4	A/B
	5DP	B
	E5L1-A	B
	5R5	B
	5R6	B

Columbia, SC Dorn VA Medical Center
Power Study

TABLE 7.2 SYSTEMS ASSESSMENT		
BUILDING	EQUIPMENT NAME	EQUIPMENT CONDITION (SEE DESCRIPTION AT END OF TABLE)
100 Closet 5A101	5R7	B
	T-5R5, 6, 7	C
	T-5R1, 2, 3, 4	C
100 Closet 4A100	E4DP	B
	E4L1	B
	C4DP	B
	C4R1	B
	C4R2	B
	C4L1	B
	LS4DP	B
	LS4R1	B
	LS4L1	B
	E4R1	B
	E4R2	B
	T-C4R1, 2	B
	T-E4R1, 2	B
	T-LS4R1	B
100 Closet 4A101	4R1	B
	4R2	B
	4R5	B
	4R4	B
	4R6	B
	4R7	B
	4R8	B
	4R9	B
	4R3	B
	E4L1A	B
	4DP6	B
	4DP	B
	T-VA-5950-0003, 4 & 5	B
	T-4R7, 8, 9	B
	T-4R4, 5, 6	B
	T-4R1, 2, 3	B
	T-VA 5950-0001	B
	T-VA 5950-0002	B
100 Closet 4A115	CATH LAB PANEL	A/B
100 Closet 3A101	3DP	C
	E3L1A	C
	3R7	C
	3R8	C
	3R9	C
	3R10	C
	3R1	C
	3R2	C
	3R3	C
	3R4	C
	3R5	C
	3R6	C
	T-3R, 7, 8, 9, 10	C
	T-3R 1, 2, 3	C
	T-3R 4, 5, 6	C
100 Closet 3A100	E3DP	B

Columbia, SC Dorn VA Medical Center
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TABLE 7.2 SYSTEMS ASSESSMENT		
BUILDING	EQUIPMENT NAME	EQUIPMENT CONDITION (SEE DESCRIPTION AT END OF TABLE)
100 Closet 3A100	E361	B
	E3R1	B
	E3R2	B
	C3L1	B
	LS3L1	B
	LS3R1	B
	C3R1	B
	LS3DP	B
	C3DP	B
	T-E3R1,2	B
	T-C3R1	B
	T-LS3R1	B
100 Closet 2A100	E2DP	B
	C2L1	C
	LS2DP	B
	C2DP	B
	E2R1	C
	E2R2	C
	C2R1	C
	C2R2	C
	C2R3	C
	E2L1	C
	E2L1A	B
	LS2L1	C
	LS2R1	C
	C2R4	C
	C2R5	C
	T-C2R1, 2, 3	C
	T-C2R4, 5	C
	T-E2R1, 2	C
	T-LS2R1	C
100 Closet 2A101	2R4	C
	2R5	C
	2R6	C
	2R7	C
	2R8	C
	2R1	C
	2R2	C
	2R3	C
	2DP	C
	T-2R 1, 2, 3 XFMR	B
	T-2R 4, 5, 6	B
	T-2R 7, 8	B
100 Closet 2B190	E2WD1	A
	LS2WL1	A
	2WR3	A
	2WR2	A
	2WR1	A
	2WRDP	A
	C2WDP	A
	C2W1	A
	C2W2	A

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TABLE 7.2 SYSTEMS ASSESSMENT		
BUILDING	EQUIPMENT NAME	EQUIPMENT CONDITION (SEE DESCRIPTION AT END OF TABLE)
100 Closet 2B190	E2WDP2	A
	2DP-4-T- 2WRDP	A
	C2WDP-1-T-C2W1	A
	E2DP-3 - E2WD1	A
100 SURGICAL ROOM 2ND FLOOR	1PU2A150 A-1	C
		B
	1PU2A150 A-2	
	1PU2A150 A-3	C
	1PU2A164 A-1	C
	1PU2A164 B-2	B
	1PU2A164 C-3	C
	1PU2A166 A-1	C
	1PU2A166 B-2	B
	1PU2A166 C-3	C
	2A169-1	C
	2A169-2	B
	2A169-3	C
	1PU2A146	C
	1PU2A150D-4	C
	PANEL NO.2	C
9 & 9A	9HDP	D
	ATS #1	D
	9EHDP	B
	T9ELDP	C
	9ELDP	C
	TEL21	C
	9EL21	D
	TLDP	C
	9LDP	C
	9L11	F
	9L21	C
	9L22	C
	MCC-9A	B
	LP	C
	ATS- EDP1 #3	B
	T_PNL_EDP1	B/C
	EDP1	C
	EDP2	C
	T-9 A-1	B
	9ALDP	C
	9ALDP_SUB	C
	PP1	B
	PP2	C
	PP3	B
	LVP	B
	EMERGENCY TRANSFER #2	C
	ELP	C
	TEDP	C
	EDP	B
	9AMDP	B
100 Closet 1C190	UNKNOWN	C
	UNNAMED	C

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Power Study

TABLE 7.2 SYSTEMS ASSESSMENT		
BUILDING	EQUIPMENT NAME	EQUIPMENT CONDITION (SEE DESCRIPTION AT END OF TABLE)
100	UNNAMED	C
100	1R18	C
Closet 1A154	1R19	C
	1R20	C
	1R21	C
	1DP4	C
	T-1R18, 19, 20, 21	C
100 Closet 1A101	1DP1	C/D
	1R1	C/D
	1R2	C/D
	1R3	C/D
	1R4	C/D
	1R5	C/D
	1R6	C/D
	1R7	C/D
	1R8	C/D
	1R9	C/D
	1R10	C/D
	1R11	C/D
	C1L1-A	C/D
	C1L2-A	C/D
	T-1R1, 2, 3, 4	C/D
	T-1R5, 6, 7, 8	C/D
100 Closet 1C214	T-1R9, 1R10, 1R11	C/D
	1DP2	D
	E1DP2	C/D
	E1R3	C/D
	1R17	C/D
	MCC-FB	D
	1R16	C/D
	1DP3	C/D
	E1DP2-A	C/D
	E1R16A	C/D
	T-P6	B
	T-1R16A	D
	T-E1R3	D
	T-1R16, 17	D
100 1st Floor	1R22	C/D
	1R16-B	C
	DOWN LIGHTS 1B146	C/D
	1R13	C
	1R14	C
	1R15	C/D
	1R15A	C/D
	1R12	C/D
100 MCCs	MCC-BP	D
	EMCC-BP	D
	MCC-A5	D
	MCC-D5	D
	EMCC-D5	D
	MCC DB	D

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TABLE 7.2 SYSTEMS ASSESSMENT		
BUILDING	EQUIPMENT NAME	EQUIPMENT CONDITION (SEE DESCRIPTION AT END OF TABLE)
100 MCCs	EMCC DB	D
	MCC-CI	D
	MCC-F1	D
	EMCC-F1	D
	MCC-C2	D
	EMCC-C2	D
	MCC-D2	D
	MCC-D3	D
	MCC-C3	D
	EMCC-C3	D
	MCC-D4	D
	MCC A2	D
	MCC A3	D
	MCC A4	D
	EMCC C4	D
	EMCC FB	D
	MCC CB	C/D
	EMCC-EB	D
	MCC-EB1	D
	EB2	D
	MCC EB3	D
	MCC-EB4	B
	MCC #2	B
100 3rd Floor	3ED1	A
	3WD1	A
	XFMR-PNL-3WD1	A
100 Tel. Room LA104	RL1	B
	RL2	B
	XFMR	B
100 Room LA108 Computer Room	RP6	C
	RP1	B
	RP5	C
	RP2	B
	RP3	C
	RP4	B
	T-RP1, 2	B
100 Closet 1A100	E1R2	C/D
	C1R2	C/D
	E1R4	C/D
	C1R1	C
	E1R1	C/D
	LS1L1	C/D
	C1L1	C/D
	E1L1	C/D
	LS1DP	C/D
	C1DP	C/D
	C1R3	A/B
	C1R4	A/B
	E1DP1	C/D
	LS1R1	C
	T_E1R1.2.4	C/D
	T-3	B/C

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Power Study

TABLE 7.2 SYSTEMS ASSESSMENT		
BUILDING	EQUIPMENT NAME	EQUIPMENT CONDITION (SEE DESCRIPTION AT END OF TABLE)
Room 1A100	T_C1R1-2	C/D
	T_LS1R1	C/D
100 Basement	BYL1	C
	EBR-11	C
	EBR 12	C
	BR-13	C
	EBDP-9-A	C
	EBDP9-B	C
	BME	B
	T_EBDP9B	B
100 Closet LA101	BR-7	B
	BR-8	B
	BR-9	B
	EBL2A	B
	EBL1A	B
	BR-1	B
	BR-2	B
	BR-3	B
	BR-4	B
	BR-5	B
	BR-6	B
	BDP-6	B
	BDP-10	B
	T-BR 1, 2, 3	B
	T-BR 4, 5, 6	B
	T-BR 7, 8, 9	B
100 Closet LA100	EBDP-6	C
	LSBL1	C
	LSB2	C
	LSBDP-2	C
	LSBR1	C
	EBR-1	C
	EBR 2	C
	T_LSBR1	C
	T_EBR1, 2	C
Bldg 100 Generator Room	EMERGENCY POWER LOW VOLTAGE UNIT	C/D
	EMERGENCY	D
	EMERGENCY SWGS	D
	EMERGENCY SWGR	D
	EMERGENCY SWGR	D
	LSMCC-G	D
	LSGR1	C/D
	BKR-BLDG 106_EMERGENCY GENERATOR ROOM	D
100 Room LB153	ATS #1	D
	ATS #2	D
	ATS #3	D
	ATS #4	D
	ATS #5	D
	ATS #6	D
	ATS #7	D

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TABLE 7.2 SYSTEMS ASSESSMENT		
BUILDING	EQUIPMENT NAME	EQUIPMENT CONDITION (SEE DESCRIPTION AT END OF TABLE)
100 Room LB153	ATS #8	D
	ATS #9	D
	MCC CHILLER #2	C
	BYL2	C
	EBR11A	A/B
	EBR11B	A/B
	EBR11C	A/B
	EBR10	C
	BR10	C
	BR-10A	C
	BDP5	C
	EBDP7-A	C
	LSBDP-1	C
	CBDP2	C
	CBDP1	C
	BDP1	C
	BDP2	C
	EBDPRIM	C/D
	BDP3	C/D
	BDP4	C/D
	EBDP2	C/D
	EBDP3	C/D
	EBDP4 L	C
	EBDP4 R	C/D
	EBDP1	C/D
	MAINTENANCE BYPASS PANEL	A/B
	EBDP1 A	C/D
	T_1R13, 14, 15, 15A	D
	BDP7	B
	T_BR10	B
	NL	A
	XFMR - SS #1	D
	SS1	D
	XFMR - SS2 - SECT. B	D
	XFMR - SS2 - SECT. A	D
	SS2 - SECT. A	D
	SS2 - SECT. B	D

LEGEND:

A = LIKE NEW CONDITION/ APPROXIMATELY 90% OF USEFUL LIFESPAN REMAINS

B = ABOVE AVERAGE CONDITION/ OVER HALF OF USEFUL LIFESPAN REMAINS

C = AVERAGE CONDITION/ LESS THAN HALF OF USEFUL CONDITION REMAINS

D = POOR CONDITION/ LESS THAN 10% OF USEFUL LIFESPAN REMAINS/ FAILURE IS NOT CRITICAL

F = CRITICAL CONDITION/ IMMINENT FAILURE/ REQUIRES IMMEDIATE ATTENTION

TABLE 7.3 - ELECTRICAL SITE ASSESSMENT SUMMARY BY PRIORITY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 5 (Gym)	Emergency pnl	Condition of conductor's insulation is less than satisfactory NEC 110.3.A.4	Replace the new conductors.	1	\$1,500.00
Bldg 5 (Gym)	Normal pnl	Condition of conductor's insulation is less than satisfactory NEC 110.3.A.4	Replace the new conductors.	1	\$1,500.00
Bldg 5	5L21	Condition of conductor's insulation is less than satisfactory NEC 110.3.A.4 Very old panel, which is in violation of NEC.310.11	Replace the panel with new conductors	1	\$6,000.00
Bldg 5 (Post office)	Emergency pnl	Very old panel, which is in violation of NEC.310.11	Replace the panel	1	\$5,000.00
Bldg 5	5MDP	Very old SWGR, which is in violation of NEC 310.11. Water pipes run across SWBD, which is in violation of NEC 408.17 - 408.20, and 110.26.F. The room does not have two clear exits, which is in violation of NEC 110.26.C (2).	Replace the switchboard due to its condition with ground fault protection, and modify the room to provide two exits.	1	\$30,000.00

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TABLE 7.3 - ELECTRICAL SITE ASSESSMENT SUMMARY BY PRIORITY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 5	5MDP	No ground fault protection, which is in violation of NEC 230.95	Replace the switchboard due to its condition with ground fault protection, and modify the room to provide two exits.	1	
Bldg 5	L1	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A Very old panel, which is in violation of NEC.310.11	Replace the panel	1	\$5,000.00
Bldg 5	5PB1	Water pipes run across the panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F. Very old panel, which is in violation of NEC.310.11	Replace the panel	1	\$5,000.00
Bldg 5	Wireway Splice	Splice in wireway is deteriorated because of overheating. It is extremely danger to work on this splice, which is in violation of NEC 110.3.A.4	Replace the new conductors with all five new disconnect switch	1	\$7,500.00
Bldg 6	6MDP	Very old Panelboard, which is in violation of NEC 310.11.	Replace the panelboard	1	\$30,000.00
Bldg 6	6LDP1-A	There is not enough working clearance due to communication panels and storage, which is in violation of NEC110.26.A-C Very old panel, which is in violation of NEC 310.11	Replace the panel	1	\$5,000.00

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TABLE 7.3 - ELECTRICAL SITE ASSESSMENT SUMMARY BY PRIORITY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 6	6SL1	Very old panel, which is in violation of NEC 310.11 Unused wires do not have wire nut, which is in violation of NEC 110.12	Replace the panel	1	\$5,000.00
Bldg 6	6P11A	There is not enough working clearance due to communication panels and storage, which is in violation of NEC110.26.A-C Very old panel, which is in violation of NEC 310.11	Replace the panel	1	\$5,000.00
Bldg 6	6P11B	There is not enough working clearance due to communication panels and storage, which is in violation of NEC110.26.A-C Very old panel, which is in violation of NEC 310.11	Replace the panel	1	\$5,000.00
Bldg 7	P1	Very old and Rusted panel, which is in violation of NEC 310.11 Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A No Grounding, which is in violation of NEC 250.12	Replace the panel with new conductors	1	\$7,500.00

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TABLE 7.3 - ELECTRICAL SITE ASSESSMENT SUMMARY BY PRIORITY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 8	Machine shop Pnl	<p>No Grounding, which is in violation of NEC 250.12</p> <p>Very old and Rusted panel, which is in violation of NEC 310.11</p> <p>There is not enough working clearance due to machinery, which is in violation of NEC110.26.A-C</p>	Replace the panel	1	\$5,000.00
Bldg 8	8PB1	<p>Very old panel, which is in violation of NEC 310.11</p> <p>There is not enough working clearance due to working metal table, which is in violation of NEC110.26.A-C</p> <p>Steam pipes run across panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.</p> <p>No Separate grounding, which is in violation of NEC 250.12</p>	Replace the panel	1	\$6,000.00
Bldg 8	8LB1	<p>Very old panel, which is in violation of NEC 310.11</p> <p>There is not enough working clearance due to working metal table, which is in violation of NEC110.26.A-C</p>	Replace the panel	1	\$6,000.00

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TABLE 7.3 - ELECTRICAL SITE ASSESSMENT SUMMARY BY PRIORITY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 8	8LB1	Steam pipes run across panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F. No Separate grounding, which is in violation of NEC 250.12	Replace the panel	1	\$7,500.00
Bldg 8	Disc_pnl_warehouse	There is not enough working clearance due to cabinet in front of panel, which is in violation of NEC110.26.A-C Water pipes run across panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Replace the switch at new location	1	
Bldg 8	Disc_pnl_PP	There is not enough working clearance due to cabinet in front of panel, which is in violation of NEC110.26.A-C Water pipes run across panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Replace the switch at new location	1	\$1,500.00
Bldg 20	P20L15	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A Unused wires do not have wire nut, which is in violation of NEC 110.12	Patch the unused opening Cover the unused wires wire with wire nut	1	Negligible
Bldg 22	MND	Very old panel, which is in violation of NEC 310.11	Replace the panel	1	\$0,000.00

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TABLE 7.3 - ELECTRICAL SITE ASSESSMENT SUMMARY BY PRIORITY					
EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
BLDG. 22	MDR	No Separate grounding, which is in violation of NEC 250.12	Replace the panel	1	\$5,000.00

TABLE 7.3 - ELECTRICAL SITE ASSESSMENT SUMMARY BY PRIORITY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg. 22	Bkr_Xmfr_T41	Very old enclosed circuit breaker, which is in violation of NEC 250.12	Replace the breaker	1	\$1,500.00
Bldg. 22	Dsw_Elev_1	Very old enclosed switch, which is in violation of NEC 250.12 There is not enough working clearance due to panel in front of breaker, which is in violation of NEC110.26.A-C	Replace the disconnect switch	1	\$1,500.00
Bldg. T-25	MSPP1	There is not enough working clearance due to machine in front of panel, which is in violation of NEC110.26.A-C	Relocate the panel	2	\$1,500.00
Bldg. 100A	2DCR2	There is not enough working clearance due to stored material in front of panel, which is in violation of NEC110.26.A-C	Remove the stored material	2	Negligible
Bldg. 100A	1DR1, Sec 2	There is not enough working clearance because panel is in corner and other panel is in front, which is in violation of NEC 110.26.A-C	Relocate the panel	2	\$1,500.00
Bldg. 103	N2D1	Hot Water and Steam pipes run above panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Relocate the panel or if possible relocate the mechanical pipes	2	\$1,500.00
Bldg. 103	N2R4	Hot Water and Steam pipes run above panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Relocate the panel or if possible relocate the mechanical pipes	2	\$1,500.00
Bldg. 103	NC1R1	Hot Water and Steam pipes run above panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Relocate the panel or if possible relocate the mechanical pipes	2	\$1,500.00

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TABLE 7.3 - ELECTRICAL SITE ASSESSMENT SUMMARY BY PRIORITY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg. 103	NE2R1	Hot Water and Steam pipes run above panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Relocate the panel or if possible relocate the mechanical pipes	2	\$1,500.00
Bldg. 106	EPPH1	Water pipes run above the panel, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Relocate the panel	2	\$1,000.00
		Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Patch the unused hole		Negligible
Bldg 5	Xfmr T-40	Water pipes run across the transformer, which is in violation of NEC 408.17 - 408.20, and 110.26.F.	Relocate the xfmr	2	\$1,500.00
Bldg 5	Switch_wireway	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Patch the opening	2	Negligible
Bldg 5	Switch_wireway	Condition of conductor's insulation is less than satisfactory NEC 110.3.A.4	Replace the conductors	2	\$1,000.00
Bldg 6	6PDP1	Very old panel, which is in violation of NEC 310.11	Replace the panel	2	\$6,000.00
Bldg 6	6LDP1	Very old panel, which is in violation of NEC 310.11	Replace the panel	2	\$6,000.00
Bldg 6	6P11	There is not enough working clearance due to communication panels and storage, which is in violation of NEC 110.26.A-C	Relocate the panel	2	\$5,000.00

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TABLE 7.3 - ELECTRICAL SITE ASSESSMENT SUMMARY BY PRIORITY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 6	6L11	Very old panel, which is in violation of NEC 310.11	Replace the panel	2	\$5,000.00
Bldg 6	Xfmr T-6B	Very old transformer, which is in violation of NEC 310.11	Replace the transformer	2	\$4,000.00
Bldg 6	Xfmr T-6A	Very old transformer, which is in violation of NEC 310.11	Replace the transformer	2	\$4,000.00
Bldg 8	Emergency Generator	Old generator, which is in violation of NEC 310.11	Replace the Generator	2	\$100,000.00
Bldg 8	MHC26S	Incoming feeders are undersized of ampacity	Replace the incoming feeders	2	\$1,000.00
Bldg 8	8L11A	There is not enough working clearance due to cabinet in front of panel, which is in violation of NEC110.26.A-C	Relocate the panel	2	\$1,500.00
Bldg 8	8PBJ	Old panel, which is in violation of NEC 310.11	Replace the panel	2	\$1,500.00
Bldg 9	9L11	Very old and Rusted panel, which is in violation of NEC 310.11	Replace the panel	2	\$5,000.00
Bldg 20	20MDP	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Patch the unused opening	2	Negligible

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TABLE 7.3 - ELECTRICAL SITE ASSESSMENT SUMMARY BY PRIORITY

EQUIPMENT		VIOLATION DESCRIPTION	RECOMMENDED CORRECTION	PRIORITY	APPROX. COST (\$)
BLDG	ITEM				
Bldg 20	20L11	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Patch the unused opening	2	Negligible
Bldg 22	Gen panel	Very old panel, which is in violation of NEC 310.11	Replace the panel	2	\$5,000.00
Bldg. 22	Disc_Elev_p1	Unused holes are uncovered at bottom and top, which is a violation of NEC 110.12.A	Cover the unused holes	2	Negligible
Bldg. 22	panel H1	No Separate grounding, which is in violation of NEC 250.12	Provide the separate grounding	2	\$1,000.00
Bldg. 22	Bkr_Xmfr_T41	There is not enough working clearance due to transformer in front of breaker, which is in violation of NEC110.26.A-C	Replace the enclosed circuit breaker	2	\$1,500.00
Bldg 5	L1B	There is not enough working clearance, which is in violation of NEC 110.26.A-C	Relocate the panel		
Bldg 20	20L14	There is not enough working clearance due to storage material in front of panel, which is in violation of NEC110.26.A-C	Remove the stored material	3	Negligible

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