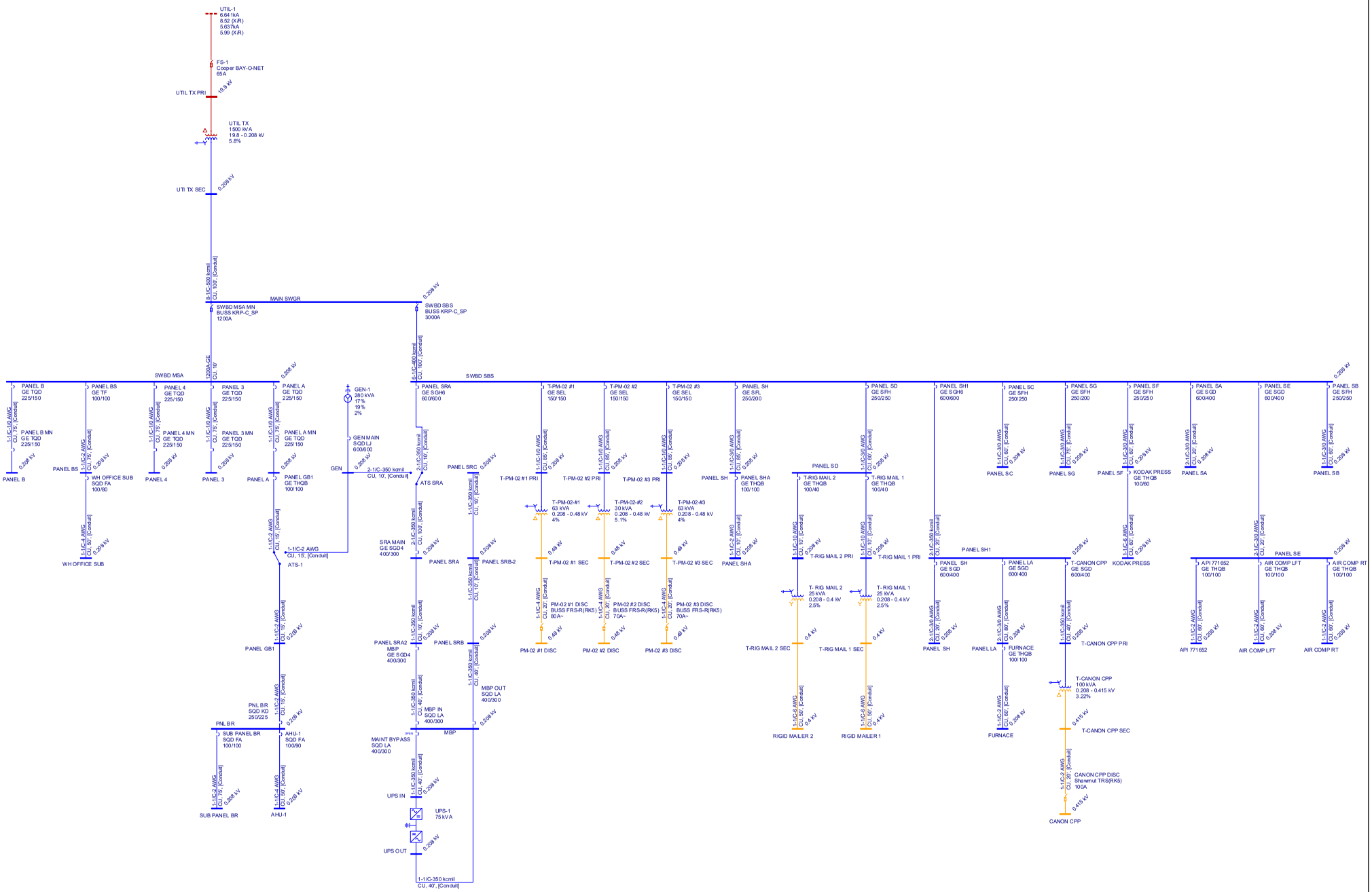
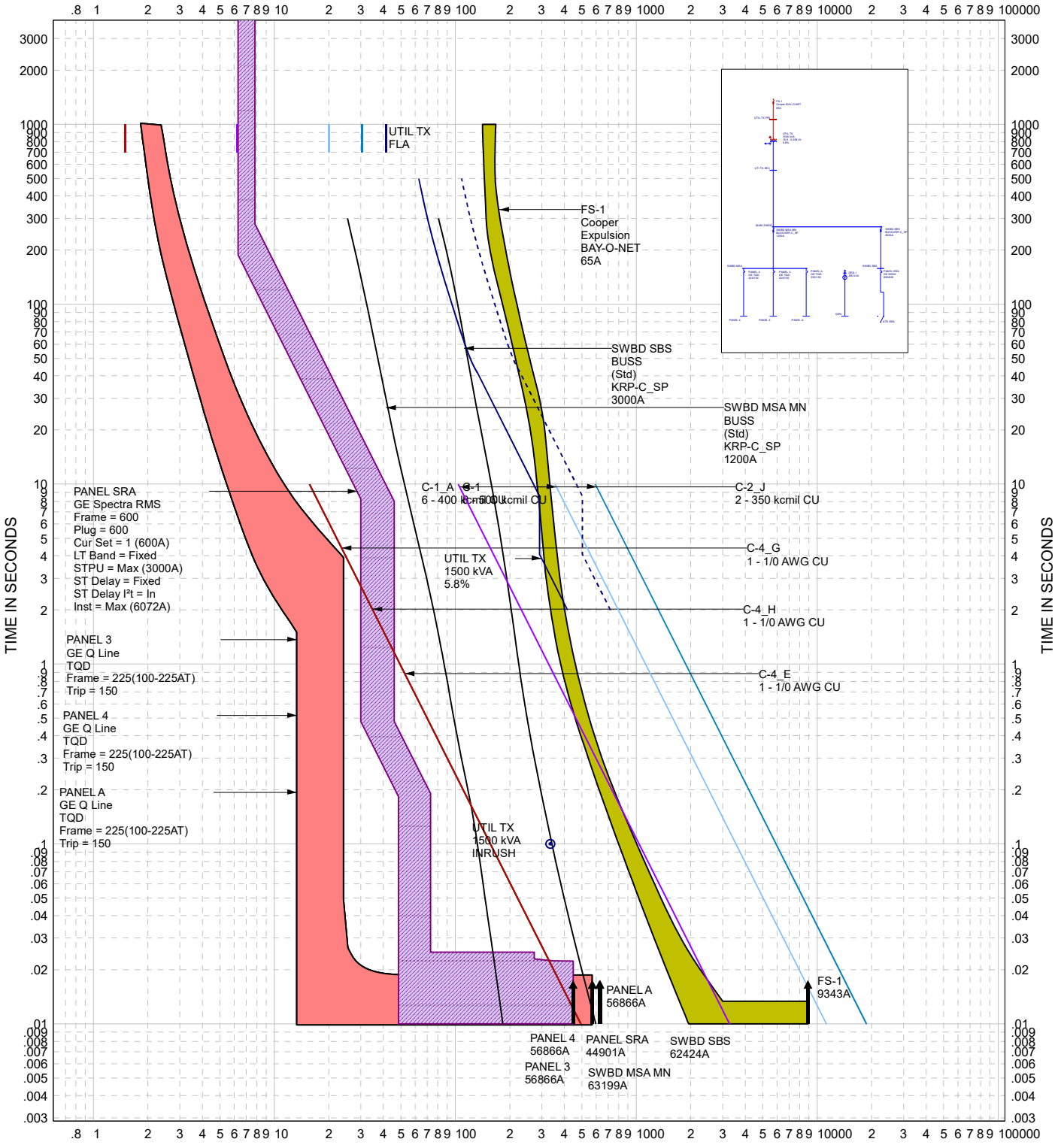


THALES	**Thales** 1800 NE Expressway Atlanta, GA 30329
	Arc Hazard Diagram

Printed by EasyPrint

CURRENT IN AMPERES X 100 AT 208 VOLTS

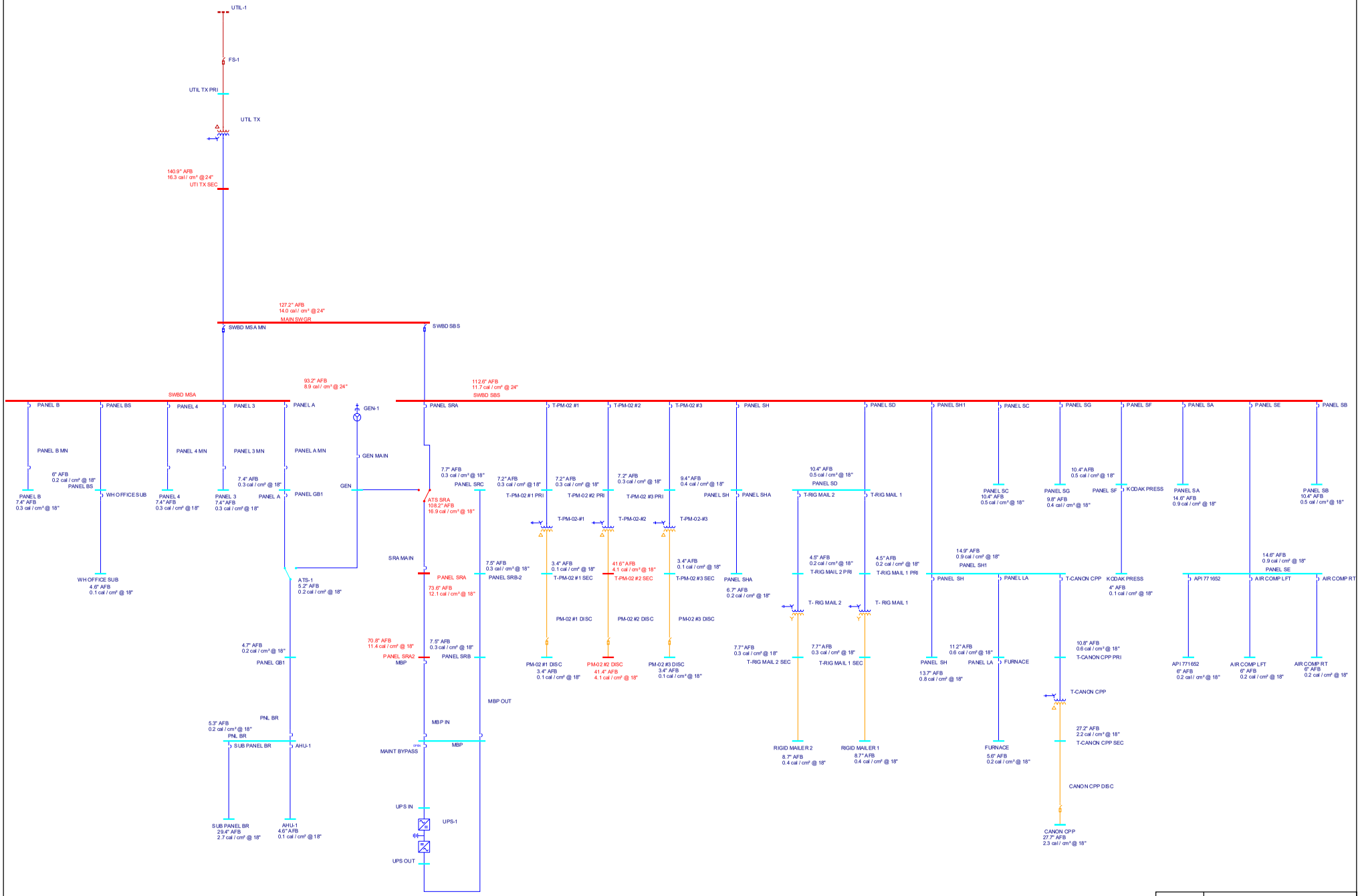


CURRENT IN AMPERES X 100 AT 208 VOLTS

E&E Capital Corporation	***EasyPower*®** **TIME-CURRENT CURVES**	TCC-1

FAULT:
DATE: Mar 23, 2021
BY:
REVISION: 1

ECS SWBD MSA

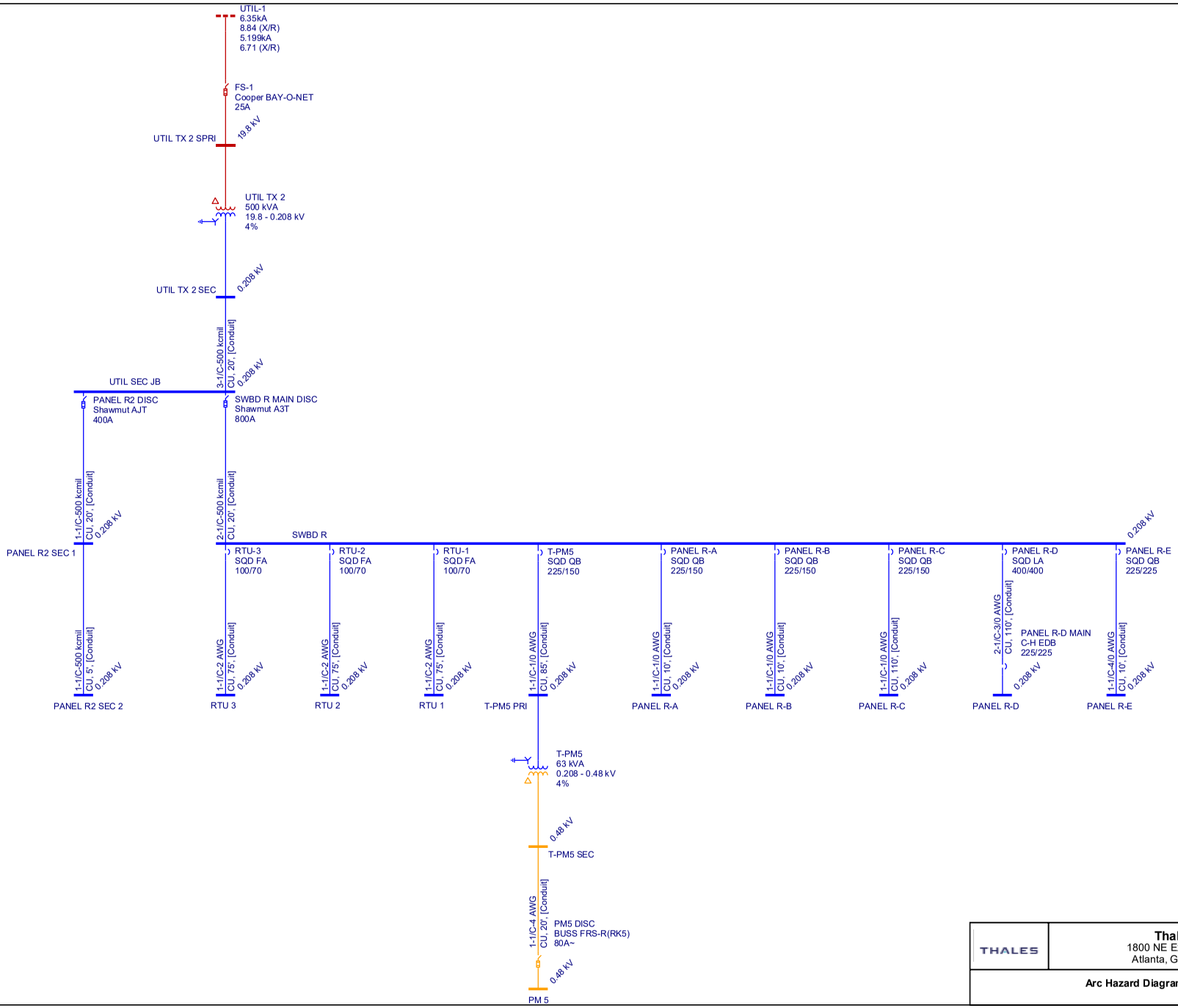


THALES

Thales
1800 NE Expressway
Atlanta, GA 30329

Arcing Diagram

Printed by EasyPower



THALES

Thales
1800 NE Expresway
Atlanta, Ga 30329

Arc Hazard Diagram

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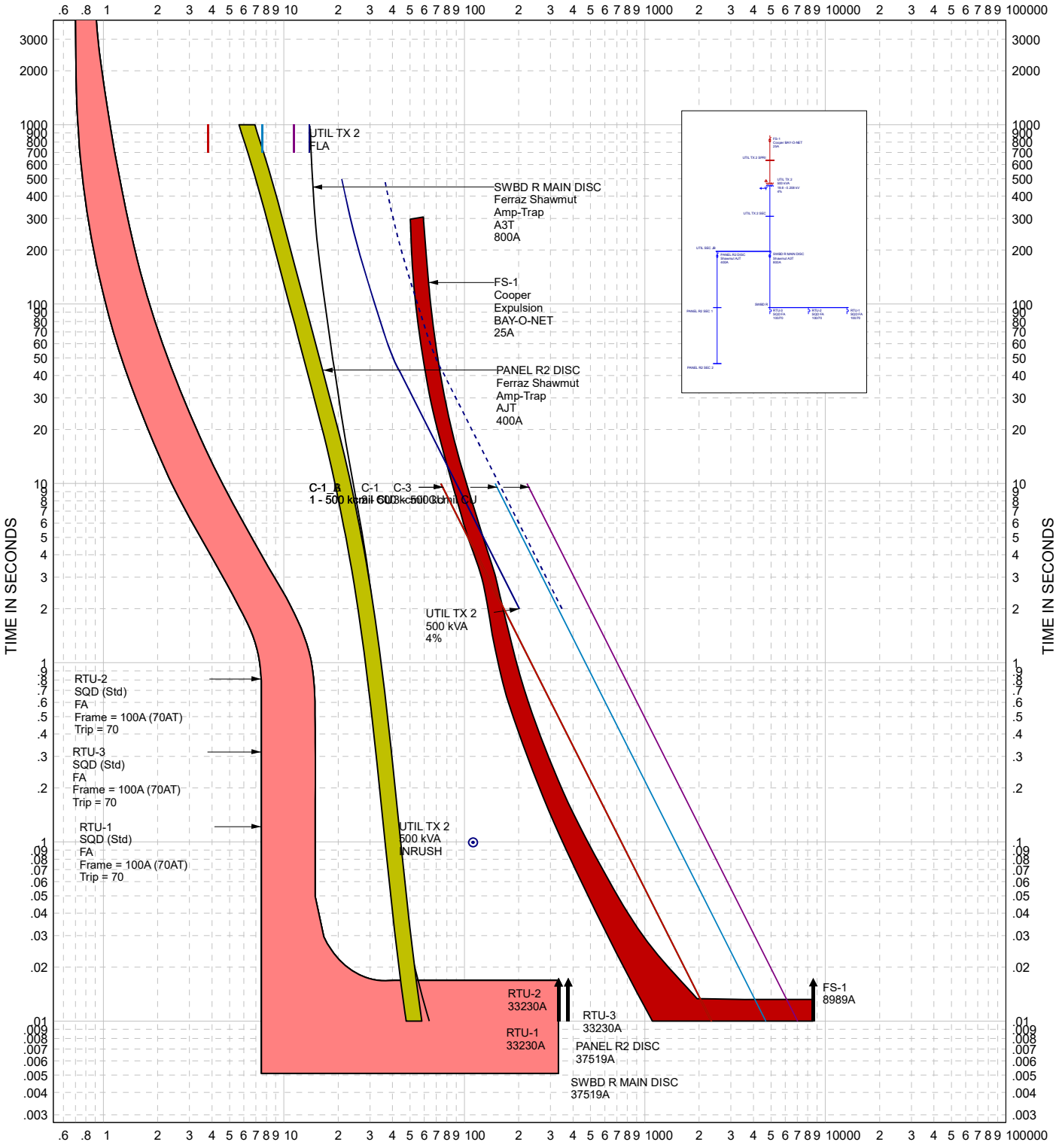
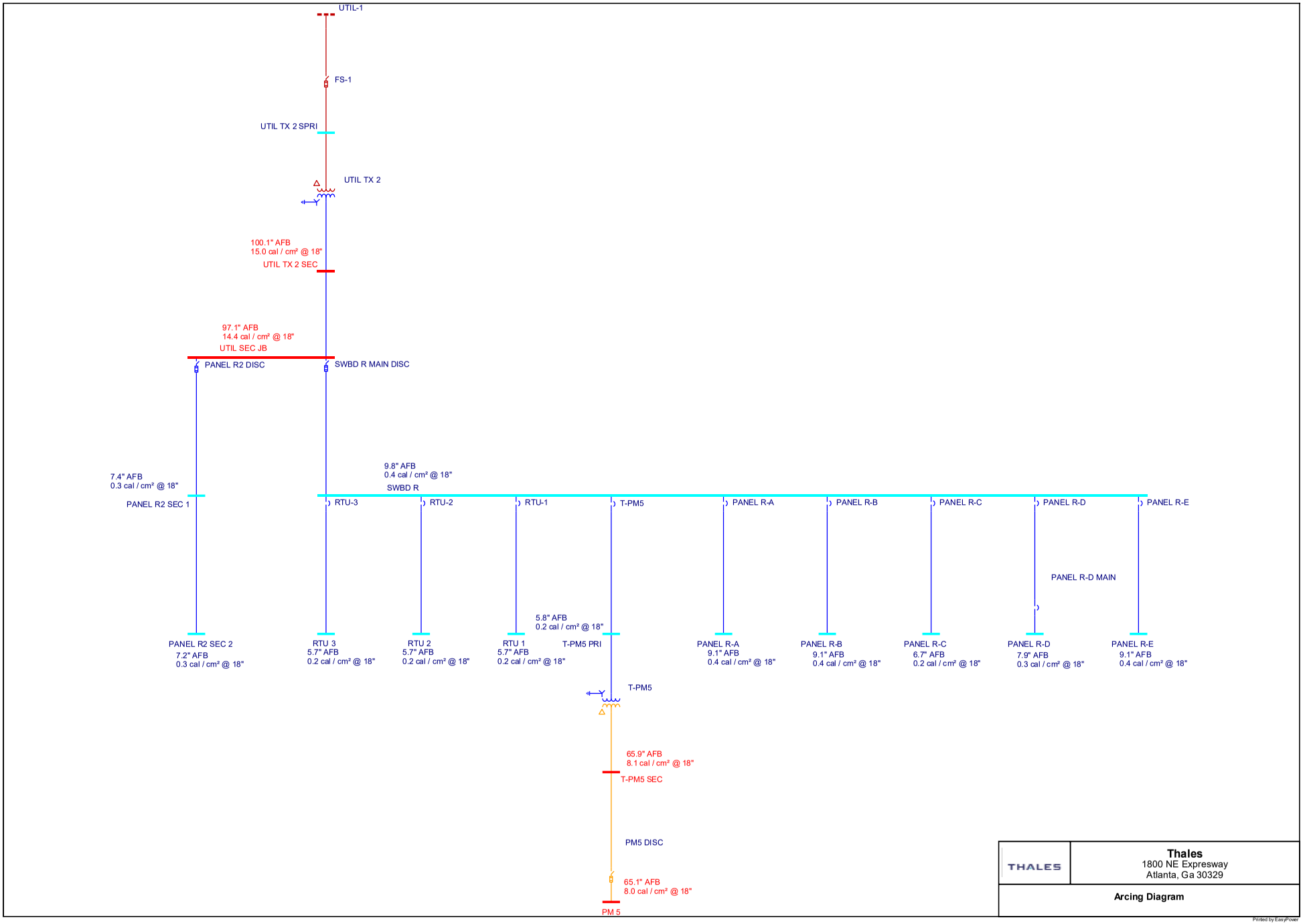
CURRENT IN AMPERES X 100 AT 208 VOLTS



CURRENT IN AMPERES X 100 AT 208 VOLTS

E&E Capital Corporation	***EasyPower*®** **TIME-CURRENT CURVES**	TCC-1
		FAULT: DATE: Mar 23, 2021 BY: REVISION: 1

ECS SWBD R



THALES

Thales
1800 NE Expresway
Atlanta, Ga 30329

Arcing Diagram

Printed by EasyPower

Arc Flash Hazard Report
Thales
Atlanta Ga

Arc Fault Bus Name	Arc Fault Bus kV	Upstream Trip Device Name	Upstream Bus Name	Equip Type	Gnd	Arc Gap (mm)	Bus Bolted Fault (kA)	Bus Arc Fault (kA)	Trip Time (sec)	Arc Time (sec)	Est Arc Flash Boundary (inches)	Working Distance (inches)	Incident Energy (cal/cm2)	Required Clothing Class
NOTE: Equipment calculated below 1.2 cal/cm² are noted in the lower arc flash hazard report and are not sustainable arc hazard event. These items will receive a general voltage hazard label when not properly marked.														
UTIL TX PRI	19.8													No Valid Trip Device Found Upstream or in Bus Dialog.
UTI TX SEC	0.208	SWBD SBS	MAIN SWGR	Transformer Terminal	X	32	65.072	14.954	1000	0.5	140.9	24	16.3	
MAIN SWGR	0.208	FS-1	UTIL TX PRI	Switchgear	X	32	52.987	13.002	1000	0.5	127.2	24	14	
SWBD MSA	0.208	SWBD MSA MN	MAIN SWGR	Switchgear	X	32	48.597	10.419	0.402	0.402	93.2	24	8.9	
SWBD SBS	0.208	SWBD SBS	MAIN SWGR	Switchgear	X	32	41.518	11.012	82.939	0.5	112.6	24	11.7	
ATS SRA	0.208	SRA MAIN	PANEL SRA	ATS	X	32	38.36	10.434	1000	0.5	108.2	18	16.9	
PANEL SRA	0.208	MBP	PANEL SRA2	Panel	X	25	21.603	7.471	1000	0.5	73.6	18	12.1	
PANEL SRA2	0.208	MBP IN	MBP	Panel	X	25	19.863	7.043	1000	0.5	70.8	18	11.4	
SUB PANEL BR	0.208	SUB PANEL BR	PNL BR	Panel	X	25	3.731	1.85	1.148	0.5	29.4	18	2.7	
T-CANON CPP PRI	0.208	T-CANON CPP	PANEL SH1	Transformer Terminal	X	32	22.204	7.191	0.025	0.025	10.8	18	0.6	
T-CANON CPP SEC	0.415	T-CANON CPP	PANEL SH1	Transformer Terminal	X	32	3.113	1.915	0.316	0.316	27.2	18	2.2	
T-PM-02 #2 PRI	0.208	T-PM-02 #2	SWBD SBS	Transformer Terminal	X	32	9.8	4.12	0.025	0.025	7.2	18	0.3	
T-PM-02 #2 SEC	0.48	T-PM-02 #2	SWBD SBS	Transformer Terminal	X	32	0.617	0.618	5.986	2	41.6	18	4.1	
PM-02 #2 DISC	0.48	T-PM-02 #2	SWBD SBS	Int Switch	X	32	0.611	0.614	6.074	2	41.4	18	4.1	
CANON CPP	0.415	T-CANON CPP	PANEL SH1	Int Switch	X	32	3.015	1.867	0.332	0.332	27.7	18	2.3	
Items Calculated below 1.2 cal/cm²:														
PANEL SH	0.208	PANEL SH	PANEL SH1	Panel	X	25	29.536	9.306	0.025	0.025	13.7	18	0.8	
PANEL 3	0.208	PANEL 3	SWBD MSA	Panel	X	25	11.339	4.751	0.019	0.019	7.4	18	0.3	
PANEL 4	0.208	PANEL 4	SWBD MSA	Panel	X	25	11.339	4.751	0.019	0.019	7.4	18	0.3	
PANEL A	0.208	PANEL A	SWBD MSA	Panel	X	25	11.339	4.751	0.019	0.019	7.4	18	0.3	
PANEL B	0.208	PANEL B	SWBD MSA	Panel	X	25	11.339	4.751	0.019	0.019	7.4	18	0.3	
PANEL BS	0.208	PANEL BS	SWBD MSA	Panel	X	25	7.966	3.708	0.018	0.018	6	18	0.2	
PANEL GB1	0.208	PANEL GB1	PANEL A	Panel	X	25	7.553	3.572	0.016	0.016	5.6	18	0.2	
PANEL LA	0.208	PANEL LA	PANEL SH1	Panel	X	25	19.093	6.85	0.025	0.025	11.2	18	0.6	
PANEL SA	0.208	PANEL SA	SWBD SBS	Panel	X	25	33.774	10.225	0.025	0.025	14.6	18	0.9	
PANEL SB	0.208	PANEL SB	SWBD SBS	Panel	X	25	16.416	6.161	0.025	0.025	10.4	18	0.5	
PANEL SC	0.208	PANEL SC	SWBD SBS	Panel	X	25	16.416	6.161	0.025	0.025	10.4	18	0.5	
PANEL SD	0.208	PANEL SD	SWBD SBS	Panel	X	25	16.416	6.161	0.025	0.025	10.4	18	0.5	
PANEL SE	0.208	PANEL SE	SWBD SBS	Panel	X	25	33.774	10.225	0.025	0.025	14.6	18	0.9	
PANEL SF	0.208	PANEL SF	SWBD SBS	Panel	X	25	16.416	6.161	0.025	0.025	10.4	18	0.5	
PANEL SG	0.208	PANEL SG	SWBD SBS	Panel	X	25	14.141	5.548	0.025	0.025	9.8	18	0.4	
PANEL SH	0.208	PANEL SH	SWBD SBS	Panel	X	25	12.939	5.213	0.025	0.025	9.4	18	0.4	
PANEL SH1	0.208	PANEL SH1	SWBD SBS	Panel	X	25	35.483	10.586	0.025	0.025	14.9	18	0.9	
PANEL SHA	0.208	PANEL SHA	PANEL SH	Panel	X	25	10.981	4.645	0.016	0.016	6.7	18	0.2	
PANEL SRB	0.208	MBP OUT	MBP	Panel	X	25	11.948	4.929	0.018	0.018	7.5	18	0.3	
PANEL SRB-2	0.208	MBP OUT	MBP	Panel	X	25	11.362	4.044	0.023	0.023	7.5	18	0.3	
PANEL SRC	0.208	MBP OUT	MBP	Panel	X	25	10.83	3.91	0.025	0.025	7.7	18	0.3	
WH OFFICE SUB	0.208	WH OFFICE SUB	PANEL BS	Panel	X	25	4.11	2.33	0.018	0.018	4.6	18	0.1	
PNL BR	0.208	PANEL GB1	PANEL A	Panel	X	25	6.459	3.2	0.017	0.017	5.3	18	0.2	
ATS-1	0.208	PANEL GB1	PANEL A	ATS	X	32	9.079	3.911	0.016	0.016	5.2	18	0.2	
AHU-1	0.208	AHU-1	PNL BR	Control Panel	X	25	3.677	1.831	0.024	0.024	4.6	18	0.1	
AIR COMP LFT	0.208	AIR COMP LFT	PANEL SE	Control Panel	X	25	8.799	3.976	0.016	0.016	6	18	0.2	
AIR COMP RT	0.208	AIR COMP RT	PANEL SE	Control Panel	X	25	8.799	3.976	0.016	0.016	6	18	0.2	
API 771652	0.208	API 771652	PANEL SE	Control Panel	X	25	8.799	3.976	0.016	0.016	6	18	0.2	
FURNACE	0.208	FURNACE	PANEL LA	Control Panel	X	25	7.259	3.474	0.017	0.017	5.6	18	0.2	
KODAK PRESS	0.208	KODAK PRESS	PANEL SF	Control Panel	X	25	3.616	2.129	0.016	0.016	4	18	0.1	
GEN	0.208													No Valid Trip Device Found Upstream or in Bus Dialog.
MBP	0.208													No Valid Trip Device Found Upstream or in Bus Dialog.

Arc Fault Bus Name	Arc Fault Bus kV	Upstream Trip Device Name	Upstream Bus Name	Equip Type	Gnd	Arc Gap (mm)	Bus Bolted Fault (kA)	Bus Arc Fault (kA)	Trip Time (sec)	Arc Time (sec)	Est Arc Flash Boundary (inches)	Working Distance (inches)	Incident Energy (cal/cm2)	Required Clothing Class
UPS IN	0.208													No Valid Trip Device Found Upstream or in Bus Dialog.
UPS OUT	0.208													No Valid Trip Device Found Upstream or in Bus Dialog.
T-PM-02 #1 PRI	0.208	T-PM-02 #1	SWBD SBS	Transformer Terminal	X	32	9.8	4.12	0.025	0.025	7.2	18	0.3	
T-PM-02 #1 SEC	0.48	T-PM-02 #1	SWBD SBS	Transformer Terminal	X	32	1.349	1.187	0.025	0.025	3.4	18	0.1	
T-PM-02 #3 PRI	0.208	T-PM-02 #3	SWBD SBS	Transformer Terminal	X	32	9.8	4.12	0.025	0.025	7.2	18	0.3	
T-PM-02 #3 SEC	0.48	T-PM-02 #3	SWBD SBS	Transformer Terminal	X	32	1.349	1.187	0.025	0.025	3.4	18	0.1	
T-RIG MAIL 1 PRI	0.208	T-RIG MAIL 1	PANEL SD	Transformer Terminal	X	32	6.834	3.223	0.017	0.017	4.5	18	0.2	
T-RIG MAIL 1 SEC	0.4	T-RIG MAIL 1	PANEL SD	Transformer Terminal		32	1.079	0.82	0.122	0.122	7.7	18	0.3	
T-RIG MAIL 2 PRI	0.208	T-RIG MAIL 2	PANEL SD	Transformer Terminal	X	32	6.834	3.223	0.017	0.017	4.5	18	0.2	
T-RIG MAIL 2 SEC	0.4	T-RIG MAIL 2	PANEL SD	Transformer Terminal		32	1.079	0.82	0.122	0.122	7.7	18	0.3	
PM-02 #1 DISC	0.48	T-PM-02 #1	SWBD SBS	Int Switch	X	32	1.321	1.167	0.025	0.025	3.4	18	0.1	
PM-02 #3 DISC	0.48	T-PM-02 #3	SWBD SBS	Int Switch	X	32	1.321	1.167	0.025	0.025	3.4	18	0.1	
RIGID MAILER 1	0.4	T-RIG MAIL 1	PANEL SD	Control Panel	X	25	0.997	0.764	0.137	0.137	8.7	18	0.4	
RIGID MAILER 2	0.4	T-RIG MAIL 2	PANEL SD	Control Panel	X	25	0.997	0.764	0.137	0.137	8.7	18	0.4	
Arc Fault Bus Name	Arc Fault Bus kV	Upstream Trip Device Name	Upstream Bus Name	Equip Type	Gnd	Arc Gap (mm)	Bus Bolted Fault (kA)	Bus Arc Fault (kA)	Trip Time (sec)	Arc Time (sec)	Est Arc Flash Boundary (inches)	Working Distance (inches)	Incident Energy (cal/cm2)	Required Clothing Class
NOTE: Equipment calculated below 1.2 cal/cm² are noted in the lower arc flash hazard report and are not sustainable arc hazard event. These items will receive a general voltage hazard label when not properly marked.														
UTIL TX 2 SPRI	19.8													No Valid Trip Device Found Upstream or in Bus Dialog.
UTIL TX 2 SEC	0.208	FS-1	UTIL TX 2 SPRI	Transformer Terminal	X	32	32.822	9.383	13.724	0.5	100.1	18	15	
UTIL SEC JB	0.208	FS-1	UTIL TX 2 SPRI	Junction Box - Large	X	32	30.873	9	15.995	0.5	97.1	18	14.4	
SWBD R	0.208	SWBD R MAIN DISC	UTIL SEC JB	Panelboard	X	25	28.308	9.033	0.015	0.015	9.8	18	0.4	
PANEL R2 SEC 1	0.208	PANEL R2 DISC	UTIL SEC JB	Panel	X	25	26.102	8.533	0.01	0.01	7.4	18	0.3	
PANEL R2 SEC 2	0.208	PANEL R2 DISC	UTIL SEC JB	Panel	X	25	24.193	8.089	0.01	0.01	7.2	18	0.3	
PANEL R-A	0.208	SWBD R MAIN DISC	UTIL SEC JB	Panel	X	25	23.841	8.006	0.015	0.015	9.1	18	0.4	
PANEL R-B	0.208	SWBD R MAIN DISC	UTIL SEC JB	Panel	X	25	23.841	8.006	0.015	0.015	9.1	18	0.4	
PANEL R-C	0.208	PANEL R-C	SWBD R	Panel	X	25	7.515	3.025	0.026	0.026	6.7	18	0.2	
PANEL R-D	0.208	PANEL R-D	SWBD R	Panel	X	25	14.972	5.775	0.017	0.017	7.9	18	0.3	
PANEL R-E	0.208	SWBD R MAIN DISC	UTIL SEC JB	Panel	X	25	23.841	8.006	0.015	0.015	9.1	18	0.4	
RTU 1	0.208	RTU-1	SWBD R	Control Panel	X	25	7.412	3.525	0.017	0.017	5.7	18	0.2	
RTU 2	0.208	RTU-2	SWBD R	Control Panel	X	25	7.412	3.525	0.017	0.017	5.7	18	0.2	
RTU 3	0.208	RTU-3	SWBD R	Control Panel	X	25	7.412	3.525	0.017	0.017	5.7	18	0.2	
T-PM5 PRI	0.208	T-PM5	SWBD R	Transformer Terminal	X	32	9.177	3.94	0.019	0.019	5.8	18	0.2	
T-PM5 SEC	0.48	T-PM5	SWBD R	Transformer Terminal		32	1.31	1.158	2.565	2	65.9	18	8.1	
PM 5	0.48	T-PM5	SWBD R	Int Switch		32	1.284	1.139	2.759	2	65.1	18	8	