

Project:
Location:
Contract:
Engineer:
Filename: PROPOSED-DESIGN

ETAP
19.0.1C

Study Case: SC

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Date: 01-17-2025
SN:
Revision: Base
Config.: Normal

Short-Circuit Summary Report

1/2 Cycle - 3-Phase, LG, LL, & LLG Fault Currents

Prefault Voltage = 100 % of the Bus Nominal Voltage

Bus		3-Phase Fault			Line-to-Ground Fault			Line-to-Line Fault			*Line-to-Line-to-Ground		
ID	kV	Real	Imag.	Mag.	Real	Imag.	Mag.	Real	Imag.	Mag.	Real	Imag.	Mag.
01 B	0.240	4.332	-2.169	4.844	0.000	0.000	0.000	1.879	3.751	4.195	1.879	3.751	4.195
02 B	0.240	7.186	-5.048	8.782	0.000	0.000	0.000	4.371	6.224	7.605	4.371	6.224	7.605
03 B	0.240	7.024	-4.678	8.439	0.000	0.000	0.000	4.051	6.083	7.308	4.051	6.083	7.308
3F4F B	0.240	9.667	-15.438	18.215	0.000	0.000	0.000	13.370	8.372	15.775	13.370	8.372	15.775
04 B	0.240	4.316	-1.082	4.450	0.000	0.000	0.000	0.937	3.738	3.854	0.937	3.738	3.854
05 B	0.240	6.273	-3.248	7.064	0.000	0.000	0.000	2.813	5.433	6.118	2.813	5.433	6.118
06 B	0.240	8.975	-6.119	10.862	0.000	0.000	0.000	5.299	7.772	9.407	5.299	7.772	9.407
07 B	0.240	8.263	-4.809	9.561	0.000	0.000	0.000	4.165	7.156	8.280	4.165	7.156	8.280
ACU1 B	0.240	3.812	-1.673	4.163	0.000	0.000	0.000	1.449	3.302	3.605	1.449	3.302	3.605
BSMT B	0.240	10.035	-9.344	13.712	0.000	0.000	0.000	8.092	8.691	11.875	8.092	8.691	11.875
CLINIC B	0.240	4.078	-1.635	4.394	0.000	0.000	0.000	1.416	3.532	3.805	1.416	3.532	3.805
DP ML B	0.240	7.280	-5.149	8.917	0.000	0.000	0.000	4.459	6.304	7.722	4.459	6.304	7.722
DP-01 B	0.240	11.289	-32.078	34.006	0.000	0.000	0.000	27.780	9.776	29.450	27.780	9.776	29.450
DP-2 B	0.240	11.381	-32.473	34.410	0.000	0.000	0.000	28.122	9.856	29.800	28.122	9.856	29.800
DP-3F B	0.240	9.558	-15.218	17.971	0.000	0.000	0.000	13.179	8.278	15.563	13.179	8.278	15.563
EDP1 B	0.240	11.504	-33.963	35.858	0.000	0.000	0.000	29.413	9.963	31.054	29.413	9.963	31.054
EDP2 B	0.240	11.486	-33.530	35.443	0.000	0.000	0.000	29.038	9.948	30.694	29.038	9.948	30.694
EE/ECE B	0.240	8.174	-11.667	14.245	0.000	0.000	0.000	10.104	7.079	12.337	10.104	7.079	12.337
G1 B	0.240	11.504	-33.963	35.858	0.000	0.000	0.000	29.413	9.963	31.054	29.413	9.963	31.054
G2 B	0.240	11.486	-33.530	35.443	0.000	0.000	0.000	29.038	9.948	30.694	29.038	9.948	30.694
HS LIB B	0.240	8.197	-11.582	14.189	0.000	0.000	0.000	10.030	7.099	12.288	10.030	7.099	12.288
JHS ME B	0.240	11.381	-32.473	34.410	0.000	0.000	0.000	28.122	9.856	29.800	28.122	9.856	29.800
L-ACU B	0.240	9.703	-15.018	17.879	0.000	0.000	0.000	13.006	8.403	15.484	13.006	8.403	15.484
L4F B	0.240	5.546	-1.828	5.840	0.000	0.000	0.000	1.583	4.803	5.057	1.583	4.803	5.057
L373 B	0.240	9.800	-14.091	17.163	0.000	0.000	0.000	12.203	8.487	14.864	12.203	8.487	14.864
L374 B	0.240	9.872	-10.566	14.460	0.000	0.000	0.000	9.150	8.549	12.523	9.150	8.549	12.523
L375 B	0.240	9.102	-7.552	11.827	0.000	0.000	0.000	6.540	7.883	10.242	6.540	7.883	10.242
L376 B	0.240	8.123	-5.603	9.867	0.000	0.000	0.000	4.852	7.034	8.545	4.852	7.034	8.545
LG1 B	0.240	6.691	-4.251	7.927	0.000	0.000	0.000	3.681	5.795	6.865	3.681	5.795	6.865
LG2 B	0.240	5.254	-2.200	5.695	0.000	0.000	0.000	1.905	4.550	4.932	1.905	4.550	4.932
MAIN B	0.240	11.624	-35.245	37.113	0.000	0.000	0.000	30.523	10.067	32.141	30.523	10.067	32.141

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1/2 Cycle - 3-Phase, LG, LL, & LLG Fault Currents

Prefault Voltage = 100 % of the Bus Nominal Voltage

Bus		3-Phase Fault			Line-to-Ground Fault			Line-to-Line Fault			*Line-to-Line-to-Ground		
ID	kV	Real	Imag.	Mag.	Real	Imag.	Mag.	Real	Imag.	Mag.	Real	Imag.	Mag.
MDP DNY B	0.240	9.667	-15.438	18.215	0.000	0.000	0.000	13.370	8.372	15.775	13.370	8.372	15.775
MDP SAL B	0.240	3.597	-1.186	3.788	0.000	0.000	0.000	1.027	3.115	3.280	1.027	3.115	3.280
MDP-CLPH-B	0.240	9.684	-15.486	18.265	0.000	0.000	0.000	13.411	8.386	15.818	13.411	8.386	15.818
ME LAB B	0.240	8.112	-11.404	13.995	0.000	0.000	0.000	9.876	7.025	12.120	9.876	7.025	12.120
ME157 B	0.240	9.732	-15.443	18.254	0.000	0.000	0.000	13.374	8.428	15.808	13.374	8.428	15.808
OB B	0.240	6.129	-7.714	9.853	0.000	0.000	0.000	6.681	5.308	8.533	6.681	5.308	8.533
PB-ACU-1 B	0.240	6.760	-5.002	8.410	0.000	0.000	0.000	4.332	5.855	7.283	4.332	5.855	7.283
PB-ACU-2 B	0.240	6.206	-4.403	7.610	0.000	0.000	0.000	3.813	5.375	6.590	3.813	5.375	6.590
PB-LB B	0.240	7.280	-5.149	8.917	0.000	0.000	0.000	4.459	6.304	7.722	4.459	6.304	7.722
PERICAN B	0.240	5.801	-7.137	9.197	0.000	0.000	0.000	6.181	5.024	7.965	6.181	5.024	7.965
PHYS B	0.240	3.732	-1.426	3.995	0.000	0.000	0.000	1.235	3.232	3.460	1.235	3.232	3.460
PO B	0.240	3.095	-0.928	3.231	0.000	0.000	0.000	0.804	2.680	2.798	0.804	2.680	2.798
R163 B	0.240	1.379	-0.208	1.394	0.000	0.000	0.000	0.180	1.194	1.208	0.180	1.194	1.208
R164 B	0.240	2.431	-0.648	2.516	0.000	0.000	0.000	0.561	2.106	2.179	0.561	2.106	2.179
R165 B	0.240	2.095	-0.485	2.151	0.000	0.000	0.000	0.420	1.815	1.863	0.420	1.815	1.863
RO B	0.240	3.250	-1.027	3.409	0.000	0.000	0.000	0.889	2.815	2.952	0.889	2.815	2.952
SAL-2F B	0.240	3.500	-1.141	3.681	0.000	0.000	0.000	0.988	3.031	3.188	0.988	3.031	3.188
SAL-3F B	0.240	3.179	-0.947	3.317	0.000	0.000	0.000	0.820	2.753	2.872	0.820	2.753	2.872
SAL 4F B	0.240	3.319	-1.059	3.484	0.000	0.000	0.000	0.917	2.874	3.017	0.917	2.874	3.017
SALGF B	0.240	1.096	-0.183	1.111	0.000	0.000	0.000	0.159	0.949	0.963	0.159	0.949	0.963
SGEN B	0.240	0.208	-3.946	3.951	0.462	-5.084	5.105	3.496	0.283	3.508	-3.716	3.132	4.860
TAC B	0.240	9.684	-15.486	18.265	0.000	0.000	0.000	13.411	8.386	15.818	13.411	8.386	15.818
TR B	0.240	5.258	-2.074	5.652	0.000	0.000	0.000	1.796	4.554	4.895	1.796	4.554	4.895
TR/AUDI B	0.240	11.381	-32.473	34.410	0.000	0.000	0.000	28.122	9.856	29.800	28.122	9.856	29.800
VECO B	23.000	0.519	-7.555	7.573	0.299	-2.007	2.029	6.543	0.449	6.558	-6.636	0.128	6.637
XFORMER B	0.240	11.538	-43.809	45.303	0.000	0.000	0.000	37.940	9.992	39.234	37.940	9.992	39.234

All fault currents are symmetrical (1/2 Cycle network) values in rms kA.

* LLG fault current is the larger of the two faulted line currents.

Sequence Impedance Summary Report

Bus		Positive Seq. Imp. (ohm)			Negative Seq. Imp. (ohm)			Zero Seq. Imp. (ohm)			Fault Zf (ohm)		
ID	kV	Resistance	Reactance	Impedance	Resistance	Reactance	Impedance	Resistance	Reactance	Impedance	Resistance	Reactance	Impedance
01 B	0.240	0.02558	0.01281	0.02860	0.02558	0.01281	0.02860				0.00000	0.00000	0.00000
02 B	0.240	0.01291	0.00907	0.01578	0.01291	0.00907	0.01578				0.00000	0.00000	0.00000
03 B	0.240	0.01367	0.00910	0.01642	0.01367	0.00910	0.01642				0.00000	0.00000	0.00000
3F4F B	0.240	0.00404	0.00645	0.00761	0.00404	0.00645	0.00761				0.00000	0.00000	0.00000
04 B	0.240	0.03020	0.00757	0.03114	0.03020	0.00757	0.03114				0.00000	0.00000	0.00000
05 B	0.240	0.01742	0.00902	0.01961	0.01742	0.00902	0.01961				0.00000	0.00000	0.00000
06 B	0.240	0.01054	0.00719	0.01276	0.01054	0.00719	0.01276				0.00000	0.00000	0.00000
07 B	0.240	0.01253	0.00729	0.01449	0.01253	0.00729	0.01449				0.00000	0.00000	0.00000
ACU1 B	0.240	0.03048	0.01337	0.03328	0.03048	0.01337	0.03328				0.00000	0.00000	0.00000
BSMT B	0.240	0.00740	0.00689	0.01011	0.00740	0.00689	0.01011				0.00000	0.00000	0.00000
CLINIC B	0.240	0.02927	0.01174	0.03154	0.02927	0.01174	0.03154				0.00000	0.00000	0.00000
DP ML B	0.240	0.01269	0.00897	0.01554	0.01269	0.00897	0.01554				0.00000	0.00000	0.00000
DP-01 B	0.240	0.00135	0.00384	0.00407	0.00135	0.00384	0.00407				0.00000	0.00000	0.00000
DP-2 B	0.240	0.00133	0.00380	0.00403	0.00133	0.00380	0.00403				0.00000	0.00000	0.00000
DP-3F B	0.240	0.00410	0.00653	0.00771	0.00410	0.00653	0.00771				0.00000	0.00000	0.00000
EDP1 B	0.240	0.00124	0.00366	0.00386	0.00124	0.00366	0.00386				0.00000	0.00000	0.00000
EDP2 B	0.240	0.00127	0.00370	0.00391	0.00127	0.00370	0.00391				0.00000	0.00000	0.00000
EE/ECE B	0.240	0.00558	0.00797	0.00973	0.00558	0.00797	0.00973				0.00000	0.00000	0.00000
G1 B	0.240	0.00124	0.00366	0.00386	0.00124	0.00366	0.00386				0.00000	0.00000	0.00000
G2 B	0.240	0.00127	0.00370	0.00391	0.00127	0.00370	0.00391				0.00000	0.00000	0.00000
HS LIB B	0.240	0.00564	0.00797	0.00977	0.00564	0.00797	0.00977				0.00000	0.00000	0.00000
JHS ME B	0.240	0.00133	0.00380	0.00403	0.00133	0.00380	0.00403				0.00000	0.00000	0.00000
L-ACU B	0.240	0.00421	0.00651	0.00775	0.00421	0.00651	0.00775				0.00000	0.00000	0.00000
L4F B	0.240	0.02254	0.00743	0.02373	0.02254	0.00743	0.02373				0.00000	0.00000	0.00000
L373 B	0.240	0.00461	0.00663	0.00807	0.00461	0.00663	0.00807				0.00000	0.00000	0.00000
L374 B	0.240	0.00654	0.00700	0.00958	0.00654	0.00700	0.00958				0.00000	0.00000	0.00000
L375 B	0.240	0.00902	0.00748	0.01172	0.00902	0.00748	0.01172				0.00000	0.00000	0.00000
L376 B	0.240	0.01156	0.00797	0.01404	0.01156	0.00797	0.01404				0.00000	0.00000	0.00000
LG1 B	0.240	0.01475	0.00937	0.01748	0.01475	0.00937	0.01748				0.00000	0.00000	0.00000
LG2 B	0.240	0.02244	0.00940	0.02433	0.02244	0.00940	0.02433				0.00000	0.00000	0.00000
MAIN B	0.240	0.00117	0.00355	0.00373	0.00117	0.00355	0.00373				0.00000	0.00000	0.00000
MDP DNY B	0.240	0.00404	0.00645	0.00761	0.00404	0.00645	0.00761				0.00000	0.00000	0.00000
MDP SAL B	0.240	0.03474	0.01146	0.03658	0.03474	0.01146	0.03658				0.00000	0.00000	0.00000
MDP-CLPH-B	0.240	0.00402	0.00643	0.00759	0.00402	0.00643	0.00759				0.00000	0.00000	0.00000
ME LAB B	0.240	0.00574	0.00807	0.00990	0.00574	0.00807	0.00990				0.00000	0.00000	0.00000
ME157 B	0.240	0.00405	0.00642	0.00759	0.00405	0.00642	0.00759				0.00000	0.00000	0.00000
OB B	0.240	0.00875	0.01101	0.01406	0.00875	0.01101	0.01406				0.00000	0.00000	0.00000
PB-ACU-1 B	0.240	0.01325	0.00980	0.01648	0.01325	0.00980	0.01648				0.00000	0.00000	0.00000
PB-ACU-2 B	0.240	0.01485	0.01054	0.01821	0.01485	0.01054	0.01821				0.00000	0.00000	0.00000
PB-LB B	0.240	0.01269	0.00897	0.01554	0.01269	0.00897	0.01554				0.00000	0.00000	0.00000
PERICAN B	0.240	0.00950	0.01169	0.01507	0.00950	0.01169	0.01507				0.00000	0.00000	0.00000
PHYS B	0.240	0.03240	0.01238	0.03468	0.03240	0.01238	0.03468				0.00000	0.00000	0.00000
PO B	0.240	0.04108	0.01232	0.04289	0.04108	0.01232	0.04289				0.00000	0.00000	0.00000
R163 B	0.240	0.09826	0.01479	0.09937	0.09826	0.01479	0.09937				0.00000	0.00000	0.00000

Bus		Positive Seq. Imp. (ohm)			Negative Seq. Imp. (ohm)			Zero Seq. Imp. (ohm)			Fault Zf (ohm)		
ID	kV	Resistance	Reactance	Impedance	Resistance	Reactance	Impedance	Resistance	Reactance	Impedance	Resistance	Reactance	Impedance
R164 B	0.240	0.05321	0.01417	0.05507	0.05321	0.01417	0.05507				0.00000	0.00000	0.00000
R165 B	0.240	0.06276	0.01454	0.06442	0.06276	0.01454	0.06442				0.00000	0.00000	0.00000
RO B	0.240	0.03876	0.01225	0.04065	0.03876	0.01225	0.04065				0.00000	0.00000	0.00000
SAL-2F B	0.240	0.03579	0.01167	0.03764	0.03579	0.01167	0.03764				0.00000	0.00000	0.00000
SAL-3F B	0.240	0.04004	0.01192	0.04178	0.04004	0.01192	0.04178				0.00000	0.00000	0.00000
SAL 4F B	0.240	0.03789	0.01209	0.03977	0.03789	0.01209	0.03977				0.00000	0.00000	0.00000
SALGF B	0.240	0.12295	0.02058	0.12467	0.12295	0.02058	0.12467				0.00000	0.00000	0.00000
SGEN B	0.240	0.00184	0.03502	0.03507	0.00369	0.03318	0.03338	0.00184	0.01290	0.01303	0.00000	0.00000	0.00000
TAC B	0.240	0.00402	0.00643	0.00759	0.00402	0.00643	0.00759				0.00000	0.00000	0.00000
TR B	0.240	0.02280	0.00899	0.02451	0.02280	0.00899	0.02451				0.00000	0.00000	0.00000
TR/AUDI B	0.240	0.00133	0.00380	0.00403	0.00133	0.00380	0.00403				0.00000	0.00000	0.00000
VECO B	23.000	0.12015	1.74946	1.75358	0.12015	1.74946	1.75358	2.64976	15.92325	16.14221	0.00000	0.00000	0.00000
XFORMER B	0.240	0.00078	0.00296	0.00306	0.00078	0.00296	0.00306				0.00000	0.00000	0.00000