



ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)										Potential Mitigation Solutions
					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
1	30760 COBURN 230 36075 COBURN 60.0 2 1	P1-3:A19:8:_COBURN 230/60kV TB 1	P1		<100	<100	<100	<100	<100	135.91	<100	<100			Under review
2	36354 SAN MIGL 70.0 34574 COLNGA 1 70.0 1 1	P1-2:A20:34:_Templeton-Paso Robles 70kV Line	P1		<100	<100	<100	151.1	<100	<100	<100	NConv			Generation mitigation
3	36354 SAN MIGL 70.0 36356 PSA RBLS 70.0 1 1	P1-2:A20:34:_Templeton-Paso Robles 70kV Line	P1		<100	NConv	<100	<100	NConv	<100	<100	NConv			Under review
4	36254 SN LS OB 115 36266 SNTA MRA 115 1 1	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2		<100	227	<100	<100	223.5	<100	<100	NConv			Under review
5	36260 SISQUOC 115 36286 PALMR 115 1 1	P2-3:A20:39:_DIVVIDE - MA 115kV & DIVVIDE-PURSMAJ1 #1 line	P2		<100	<100	112.25	<100	<100	<100	<100	<100			Divide and Mesa SPS or consider adding a second 230/115kV bank at Morro Bay and re-conductoring of the Midway-Temblor 115kV path.
6	36260 SISQUOC 115 36286 PALMR 115 1 1	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2		<100	138.8	<100	<100	144.7	<100	<100	NConv			Under review
7	36264 S.YNZ JT 115 36288 ZACA 115 1 1	P2-3:A20:39:_DIVVIDE - MA 115kV & DIVVIDE-PURSMAJ1 #1 line	P2		<100	<100	101.96	<100	<100	<100	<100	<100			Divide and Mesa SPS or consider adding a second 230/115kV bank at Morro Bay and re-conductoring of the Midway-Temblor 115kV path.
8	36264 S.YNZ JT 115 36288 ZACA 115 1 1	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2		<100	137.8	<100	<100	142.9	<100	<100	NConv			Under review
9	36266 SNTA MRA 115 36269 FRWAYTP 115 1 1	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2		<100	129.6	<100	<100	126.6	<100	<100	NConv			Under review
10	36286 PALMR 115 36287 AECCEORPT 115 1 1	P2-3:A20:39:_DIVVIDE - MA 115kV & DIVVIDE-PURSMAJ1 #1 line	P2		<100	<100	108.42	<100	<100	<100	<100	<100			Divide and Mesa SPS or consider adding a second 230/115kV bank at Morro Bay and re-conductoring of the Midway-Temblor 115kV path.
11	36286 PALMR 115 36287 AECCEORPT 115 1 1	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2		<100	135.7	<100	<100	140.8	<100	<100	NConv			Under review
12	36287 AECCEORPT 115 36288 ZACA 115 1 1	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2		<100	123.5	<100	<100	128.7	<100	<100	NConv			Divide and Mesa SPS or consider adding a second 230/115kV bank at Morro Bay and re-conductoring of the Midway-Temblor 115kV path.
13	36048 B.VSTA J 60.0 36050 FIRESTNE 60.0 1 1	P2-1:A19:33:_SALINAS1-FREXP JT 60kV [0] No Fault	P2-1		124.52	114.39	114.91	<100	<100	<100	<100	<100			Under review
14	36050 FIRESTNE 60.0 36052 SPNCE J2 60.0 1 1	P2-1:A19:33:_SALINAS1-FREXP JT 60kV [0] No Fault	P2-1		123.06	113.14	113.38	<100	<100	<100	<100	<100			Under review
15	36051 SPNCE J1 60.0 36053 SPENCE 60.0 1 1	P2-1:A19:33:_SALINAS1-FREXP JT 60kV [0] No Fault	P2-1		184.04	171.23	171.16	<100	<100	<100	126.36	<100			Under review

Study Area: PG&E Central Coast and Los Padres\_Baseline

Thermal Overloads



ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)										Potential Mitigation Solutions
					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
16	36052 SPNCE J2 60.0 36053 SPENCE 60.0 1 1	P2-1:A19:33:_SALINAS1-FREXP JT 60kV [0] No Fault	P2-1		130.83	120.28	120.54	<100	<100	<100	<100	<100			Under review
17	36354 SAN MIGL 70.0 36356 PSA RBL5 70.0 1 1	P1-1:A20:8:_UNION OL 14kV Gen Unit 1 & P1-2:A20:34:_Templeton-Paso Robles 70kV Line	P3		<100	<100	<100	<100	176.12	<100	<100	<100			Generation mitigation
18	30760 COBURN 230 36075 COBURN 60.0 2 1	P1-2:A19:54:_King City-Coburn #1 60 kV & P1-3:A19:8:_COBURN 230/60kV TB 1	P6		<100	<100	<100	104.76	<100	100.01	<100	103.95			Mitigation under review potential SPS
19	30900 GATES 230 30905 TEMPLETN 230 1 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-2:A20:13:_MORROBAY-MESA PGE #1 230kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
20	30905 TEMPLETN 230 30915 MORROBAY 230 1 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-2:A20:13:_MORROBAY-MESA PGE #1 230kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
21	30915 MORROBAY 230 30930 MESA PGE 230 1 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-2:A20:35:_Templeton-Atascadero 70kV Line	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
22	35907 PAUL SWT 115 36218 M 115 1 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-2:A20:13:_MORROBAY-MESA PGE #1 230kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
23	35910 CRZY_HRS 115 35913 NTVD SW2 115 1 1	P1-2:A19:20:_Moss Landing-Salinas #1 115kV Line & P1-2:A19:21:_Moss Landing-Salinas #2 115kV Line	P6		<100	118.72	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
24	35913 NTVD SW2 115 35920 SALINAS 115 1 1	P1-2:A19:20:_Moss Landing-Salinas #1 115kV Line & P1-2:A19:21:_Moss Landing-Salinas #2 115kV Line	P6		<100	104.33	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
25	36008 GREN VLY 60.0 35901 GRN VLY1 115 1 1	P1-3:A19:15:_SALINAS 115/60kV TB 2 & P1-3:A19:16:_SALINAS 115/60kV TB 3	P6		<100	<100	<100	<100	<100	<100	248.3	<100			Mitigation under review potential SPS
26	36011 CIC JCT 60.0 36013 ERTA JCT 60.0 1 1	P1-3:A19:15:_SALINAS 115/60kV TB 2 & P1-3:A19:16:_SALINAS 115/60kV TB 3	P6		<100	<100	<100	<100	<100	<100	187.6	<100			Mitigation under review potential SPS
27	36012 WTSNVLE 60.0 36014 GRANT JT 60.0 1 1	P1-3:A19:15:_SALINAS 115/60kV TB 2 & P1-3:A19:16:_SALINAS 115/60kV TB 3	P6		<100	<100	<100	<100	<100	<100	237.6	<100			Mitigation under review potential SPS
28	36018 BRIGTANO 60.0 36022 LGNSTAP 60.0 1 1	P1-3:A19:15:_SALINAS 115/60kV TB 2 & P1-3:A19:16:_SALINAS 115/60kV TB 3	P6		<100	<100	<100	<100	<100	<100	234.6	<100			Mitigation under review potential SPS
29	36022 LGNSTAP 60.0 36025 SALINAS2 60.0 1 1	P1-3:A19:15:_SALINAS 115/60kV TB 2 & P1-3:A19:16:_SALINAS 115/60kV TB 3	P6		<100	<100	<100	<100	<100	<100	236.2	<100			Mitigation under review potential SPS



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					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
30	36075 COBURN 60.0 36076 BA FOOD1 60.0 1 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-2:A20:13:_MORROBAY-MESA PGE #1 230kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
31	36076 BA FOOD1 60.0 36077 BA FOOD2 60.0 1 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-2:A20:13:_MORROBAY-MESA PGE #1 230kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
32	36252 MORRO BY 115 36303 GLDTRJC1 115 1 1	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-2:A20:28d:_Cabrillo-Santa Ynez Sw. Sta. 115 kV	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
33	36252 MORRO BY 115 36304 GLDTRJC2 115 1 1	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-2:A20:28d:_Cabrillo-Santa Ynez Sw. Sta. 115 kV	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
34	36253 FTHILTP1 115 36254 SN LS OB 115 1 1	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-2:A20:28d:_Cabrillo-Santa Ynez Sw. Sta. 115 kV	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
35	36254 SN LS OB 115 34796 CARRIZO 115 1 1	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-3:A20:3:_MORROBAY 230/115kV TB 6	P6		<100	<100	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
36	36254 SN LS OB 115 36266 SNTA MRA 115 1 1	P1-2:A20:14:_DIABLOCN-MESA PGE #1 230kV [0] & P1-2:A20:13:_MORROBAY-MESA PGE #1 230kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	189.07	140.46		Mitigation under review potential SPS
37	36254 SN LS OB 115 36266 SNTA MRA 115 1 1	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-2:A20:33:_Divide-Cabrillo #1 115kV Line	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
38	36254 SN LS OB 115 36278 OCEANO 115 1 1	P1-2:A20:14:_DIABLOCN-MESA PGE #1 230kV [0] & P1-2:A20:13:_MORROBAY-MESA PGE #1 230kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	144.08	105.71		Mitigation under review potential SPS
39	36254 SN LS OB 115 36278 OCEANO 115 1 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-2:A20:13:_MORROBAY-MESA PGE #1 230kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
40	36256 MESA_PGE 115 30930 MESA PGE 230 2 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-2:A20:35:_Templeton-Atascadero 70kV Line	P6		<100	<100	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
41	36256 MESA_PGE 115 36268 DIVVIDE 115 1 1	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
42	36256 MESA_PGE 115 36280 UNION OL 115 1 1	P1-2:A20:12:_MORROBAY-DIABLOCN #1 230kV [0] & P1-2:A20:13:_MORROBAY-MESA PGE #1 230kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	148.39	123.36		Mitigation under review potential SPS



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					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
43	36256 MESA_PGE 115 36280 UNION OL 115 1 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-3:A20:9:_SN LS OB 115/70kV TB 3	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
44	36260 SISQUOC 115 36286 PALMR 115 1 1	P1-2:A20:27:_MESA_PGE-DIVVIDE #1 115kV [0] & P1-2:A20:28:_MESA_PGE-DIVVIDE #2 115kV [0]	P6		211.58	193.19	<100	158.41	<100	<100	164.85	142.3			Mitigation under review potential SPS
45	36264 S.YNZ JT 115 36288 ZACA 115 1 1	P1-2:A20:27:_MESA_PGE-DIVVIDE #1 115kV [0] & P1-2:A20:28:_MESA_PGE-DIVVIDE #2 115kV [0]	P6		231.55	193.8	<100	158.56	165.54	<100	180.79	140.97			Mitigation under review potential SPS
46	36266 SNTA MRA 115 36269 FRWAYTP 115 1 1	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-2:A20:33:_Divide-Cabrillo #1 115kV Line	P6		<100	<100	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
47	36268 DIVVIDE 115 36300 PURSMAJ2 115 1 1	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
48	36269 FRWAYTP 115 36260 SISQUOC 115 1 1	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
49	36278 OCEANO 115 36280 UNION OL 115 1 1	P1-2:A20:12:_MORROBAY-DIABLOCN #1 230kV [0] & P1-2:A20:13:_MORROBAY-MESA PGE #1 230kV [0]	P6		<100	<100	<100	<100	<100	<100	149.22	123.18			Mitigation under review potential SPS
50	36278 OCEANO 115 36280 UNION OL 115 1 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-3:A20:9:_SN LS OB 115/70kV TB 3	P6		<100	<100	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
51	36286 PALMR 115 36287 AECCEORTP 115 1 1	P1-2:A20:28:_MESA_PGE-DIVVIDE #2 115kV [0] & P1-2:A20:27:_MESA_PGE-DIVVIDE #1 115kV [0]	P6		<100	189.03	<100	<100	160.4	<100	<100	139.88			Mitigation under review potential SPS
52	36286 PALMR 115 36288 ZACA 115 1 1	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-3:A20:3:_MORROBAY 230/115kV TB 6	P6		<100	<100	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
53	36286 PALMR 115 36288 ZACA 115 1 1	P1-2:A20:24:_MESA_PGE-DIVVIDE #1 115kV [0] & P1-2:A20:25:_MESA_PGE-DIVVIDE #2 115kV [0]	P6		207.38	<100	<100	<100	<100	<100	161.54	<100			Mitigation under review potential SPS
54	36287 AECCEORTP 115 36288 ZACA 115 1 1	P1-2:A20:27:_MESA_PGE-DIVVIDE #1 115kV [0] & P1-2:A20:28:_MESA_PGE-DIVVIDE #2 115kV [0]	P6		<100	173.35	<100	142.19	148.03	<100	<100	125.32			Mitigation under review potential SPS
55	36310 TEMPLT7 70.0 36316 TEMPL J2 70.0 1 1	P1-2:A20:11:_TEMPLETN-MORROBAY #1 230kV [0] & P1-2:A20:10:_GATES-TEMPLETN #1 230kV [5934]	P6		<100	<100	<100	132.98	<100	<100	<100	<100			Mitigation under review potential SPS



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					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
56	36310 TEMPLT7 70.0 36316 TEMPL J2 70.0 1 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-2:A20:26:_Callender Sw Sta Mesa 115kV Line	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
57	36315 TEMPL J 70.0 36356 PSA RBLS 70.0 1 1	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-3:A20:3:_MORROBAY 230/115kV TB 6	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
58	36316 TEMPL J2 70.0 36358 ATASCDRO 70.0 1 1	P1-2:A20:11:_TEMPLETN-MORROBAY #1 230kV [0] & P1-2:A20:10:_GATES-TEMPLETN #1 230kV [5934]	P6		155.91	<100	<100	132.79	<100	<100	<100	<100			Mitigation under review potential SPS
59	36354 SAN MIGL 70.0 34574 COLNGA 1 70.0 1 1	P1-2:A20:18:_Temblor-San Luis Obispo 115 kV & P1-2:A20:34:_Templeton-Paso Robles 70kV Line	P6		<100	<100	<100	<100	<100	<100	237.53	<100			Mitigation under review potential SPS
60	36354 SAN MIGL 70.0 34574 COLNGA 1 70.0 1 1	P1-2:A20:48:_Estrella-Paso Robles 70 kV & P1-3:A20:14:_Estrella 230/70 kV Transformer	P6		<100	<100	100.81	<100	<100	<100	<100	<100			Mitigation under review potential SPS
61	36354 SAN MIGL 70.0 34574 COLNGA 1 70.0 1 1	P1-3:A20:16:_Estrella 230/70 kV Transformer & P1-2:A20:34:_Templeton-Paso Robles 70kV Line	P6		<100	252.13	<100	<100	<100	<100	<100	123.92			Mitigation under review potential SPS
62	36358 ATASCDRO 70.0 36362 CACOS J2 70.0 1 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-2:A20:26:_Callender Sw Sta Mesa 115kV Line	P6		<100	<100	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
63	36358 ATASCDRO 70.0 36376 SN LS OB 70.0 1 1	P1-2:A20:11:_TEMPLETN-MORROBAY #1 230kV [0] & P1-2:A20:10:_GATES-TEMPLETN #1 230kV [5934]	P6		183.03	<100	<100	159.63	<100	<100	<100	<100			Mitigation under review potential SPS
64	36362 CACOS J2 70.0 36364 CAYUCOS 70.0 1 1	P1-2:A20:11:_TEMPLETN-MORROBAY #1 230kV [0] & P1-2:A20:10:_GATES-TEMPLETN #1 230kV [5934]	P6		142.68	<100	<100	<100	<100	<100	<100	<100			Mitigation under review potential SPS
65	36364 CAYUCOS 70.0 36370 BAYWOOD 70.0 1 1	P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0] & P1-2:A20:13:_MORROBAY-MESA PGE #1 230kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
66	38031 LOMPCJ1 115 36294 CABRILLO 115 1 1	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-2:A20:19:_SN LS OB-SNTA MRA #1 115kV [0]	P6		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
67	36316 TEMPL J2 70.0 36358 ATASCDRO 70.0 1 1	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7		NConv	NConv	<100	NConv	<100	<100	<100	<100			Mitigation under review
68	36354 SAN MIGL 70.0 34574 COLNGA 1 70.0 1 1	P7-1:A20:2:_Templeton-Atascadero & Templeton-Paso Robles 70 kV Lines	P7		NConv	<100	<100	NConv	<100	<100	237.38	<100			Mitigation under review
69	36354 SAN MIGL 70.0 36356 PSA RBLS 70.0 1 1	P7-1:A20:2:_Templeton-Atascadero & Templeton-Paso Robles 70 kV Lines	P7		NConv	<100	<100	NConv	<100	<100	176.09	<100			Mitigation under review





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70	36358 ATASCDRO 70.0 36362 CACOS J2 70.0 1 1	P7-1:A20:16:_ Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7		NConv	NConv	<100	NConv	<100	<100	<100	<100			Mitigation under review
71	36362 CACOS J2 70.0 36364 CAYUCOS 70.0 1 1	P7-1:A20:16:_ Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7		NConv	NConv	<100	NConv	<100	<100	<100	<100			Mitigation under review
72	36372 MUSTNG J 70.0 36376 SN LS OB 70.0 1 1	P7-1:A20:2:_ Templeton-Atascadero & Templeton-Paso Robles 70 kV Lines	P7		NConv	<100	<100	NConv	<100	<100	<100	<100			Mitigation under review
73	36378 DIVIDE 70.0 36380 VAFB SSA 70.0 1 1	P7-1:A20:17:_ Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		<100	NConv	<100	<100	NConv	<100	<100	<100			Mitigation under review
74	36378 DIVIDE 70.0 36380 VAFB SSA 70.0 1 1	P7-1:A20:6:_ Mesa-Divide #1 and #2 115 kV Lines	P7		<100	<100	<100	<100	<100	<100	<100	<100			Mitigation under review
75	36380 VAFB SSA 70.0 36384 VAFB A-I	P7-1:A20:17:_ Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		<100	NConv	<100	<100	NConv	<100	<100	<100			Mitigation under review
76	36380 VAFB SSA 70.0 36384 VAFB A-I	P7-1:A20:6:_Mesa-Divide #1 and #2 115 kV Lines	P7		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case
77	38031 LOMPCJ1 115 36294 CABRILLO 115 1 1	P7-1:A20:6:_ Mesa-Divide #1 and #2 115 kV Lines	P7		<100	<100	<100	<100	<100	<100	<100	<100			Sensitivity case



ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)										Potential Mitigation Solutions
					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
1	AGRILINK 60 kV	P1-3:A19:14:_GRN VLY1 115/60kV TB 1	P1		13.0			11.6			10.9				Under review
2	BRIGTANO 60 kV	P1-3:A19:14:_GRN VLY1 115/60kV TB 1	P1		8.7			7.8			7.2				Under review
3	CIC JCT 60 kV	P1-3:A19:14:_GRN VLY1 115/60kV TB 1	P1		13.1			11.8			11.0				Under review
4	PSA RBLS 70 kV	P1-2:A20:34:_Templeton-Paso Robles 70kV Line	P1		Voltage Collapse			Voltage Collapse			Voltage Collapse				Under review
5	SAN MIGL 70 kV	P1-2:A20:34:_Templeton-Paso Robles 70kV Line	P1		Voltage Collapse			Voltage Collapse			Voltage Collapse				Under review
6	WTSNVILLE 60 kV	P1-3:A19:14:_GRN VLY1 115/60kV TB 1	P1		12.8			11.5			10.8				Under review
7	ERTA 60 kV	P2-3:A19:5:_GRN VLY1 - 1D 115kV & GRN VLY1-ROB ROY #1 line	P2		14.1			12.7			11.9				Action Plan. Watsonville 115 kV Voltage Conversion Project
8	FAIRWAY 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	10.6		Voltage Collapse	10.4		Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
9	GAREY 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	9.6		Voltage Collapse	9.5		Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
10	LOMPCJ&1 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	11.7		Voltage Collapse	11.7		Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
11	MANVILLE 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	11.8		Voltage Collapse	11.7		Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
12	PALMR 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	10.0		Voltage Collapse	9.9		Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
13	PURISIMA 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	11.7		Voltage Collapse	11.7		Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
14	S.M.ASSO 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2				10.1			10.0					Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.



ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)										Potential Mitigation Solutions
					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
15	SISQUOC 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	9.6		Voltage Collapse	9.5		Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
16	SNTA YNZ 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	10.8		Voltage Collapse	10.8		Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
17	SNTAMRTP 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	10.5		Voltage Collapse	10.4		Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
18	SURF 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	11.4		Voltage Collapse	11.3		Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
19	VAFB A-N 70 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	11.9		Voltage Collapse	11.9		Voltage Collapse			Under review
20	WTSNVLLE 60 kV	P2-3:A19:5:_GRN VLY1 - 1D 115kV & GRN VLY1-ROB ROY #1 line	P2		13.3			11.9			11.1				Action Plan. Watsonville 115 kV Voltage Conversion Project
21	ZACA 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	10.4		Voltage Collapse	10.3		Voltage Collapse			Under review
22	AGRILINK 60 kV	P2-1:A19:28:_GREN VLY-ERTA JCT 60kV [0] No Fault	P2-1		13.0			11.7			10.9				Action Plan. Watsonville 115 kV Voltage Conversion Project
23	BNA VSTA 60 kV	P2-1:A19:33:_SALINAS1-FREXP JT 60kV [0] No Fault	P2-1		12.6	11.6	11.6	6.5	6.1	5.6	8.2				Action Plan. Install shunt capacitor
24	CIC JCT 60 kV	P2-1:A19:28:_GREN VLY-ERTA JCT 60kV [0] No Fault	P2-1		13.2			11.8			11.0				Under review
25	ERTA 60 kV	P2-1:A19:28:_GREN VLY-ERTA JCT 60kV [0] No Fault	P2-1		13.7			12.3			11.5				Action Plan. Watsonville 115 kV Voltage Conversion Project
26	FIRESTNE 60 kV	P2-1:A19:33:_SALINAS1-FREXP JT 60kV [0] No Fault	P2-1		10.0	9.1	9.1	5.1			6.4				Action Plan. Install shunt capacitor
27	FRSHXPRS 60 kV	P2-1:A19:33:_SALINAS1-FREXP JT 60kV [0] No Fault	P2-1		12.8	11.7	11.7	6.6	6.2	5.7	8.3				Action Plan. Install shunt capacitor
28	WTSNVLLE 60 kV	P2-1:A19:28:_GREN VLY-ERTA JCT 60kV [0] No Fault	P2-1		12.9			11.5			10.8				Action Plan. Watsonville 115 kV Voltage Conversion Project
29	ZACA 115 kV	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-2:A20:33:_Divide-Cabrillo #1 115kV Line	P6												Sensitivity case





ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)										Potential Mitigation Solutions
					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
30	ZACA 115 kV	P1-2:A20:25:_MESA_PGE-DIVVIDE #2 115kV [0] & P1-2:A20:24:_MESA_PGE-DIVVIDE #1 115kV [0]	P6		20.3	9.8		9.3	10.0		14.8				Under review
31	PSA RBLS 70 kV	P7-1:A20:2:_Templeton-Atascadero & Templeton-Paso Robles 70 kV Lines	P7		Voltage Collapse			Voltage Collapse			Voltage Collapse				Under review
32	PURISIMA 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
33	PURISIMA 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						28.2				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
34	S.M.ASSO 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
35	S.M.ASSO 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						27.7				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
36	S.YNZ JT 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
37	S.YNZ JT 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						28.6				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
38	SAN MIGL 70 kV	P7-1:A20:2:_Templeton-Atascadero & Templeton-Paso Robles 70 kV Lines	P7		Voltage Collapse			Voltage Collapse			Voltage Collapse				Under review
39	SISQUOC 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
40	SISQUOC 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						27.5				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.



ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)										Potential Mitigation Solutions
					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
41	SNTAMRTP 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
42	SNTAMRTP 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						27.5				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
43	SURF 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
44	SURF 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						28.7				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
45	UNION OL 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
46	UNION OL 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						23.6				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
47	VAFB A-N 70 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Under review
48	VAFB A-N 70 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						26.2				Under review
49	ZACA 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
50	ZACA 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						28.4				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.



ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %										Potential Mitigation Solutions
					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
1	SISQUOC 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse			Voltage Collapse			Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
2	SNTA MRA 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse			Voltage Collapse			Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
3	SURF 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse	0.90		Voltage Collapse	0.89		Voltage Collapse			Action Plan/Divide SPS. Midway-Andrew 230 kV Project
4	VAFB A-N 70 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse			Voltage Collapse			Voltage Collapse			Under review
5	WTSNVLL 60 kV	P2-3:A19:5:_GRN VLY1 - 1D 115kV & GRN VLY1-ROB ROY #1 line	P2												Action Plan. Watsonville 115 kV Voltage Conversion Project
6	ZACA 115 kV	P2-4:A20:5:_MESA 115 kV CB 102 - Section 2D & 1D	P2			Voltage Collapse						Voltage Collapse			Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
7	AGRILINK 60 kV	P2-1:A19:28:_GREN VLY-ERTA JCT 60kV [0] No Fault	P2-1												
8	BNA VSTA 60 kV	P2-1:A19:33:_SALINAS1-FREXP JT 60kV [0] No Fault	P2-1		0.87	0.88	0.88								Under review
9	ERTA 60 kV	P2-1:A19:28:_GREN VLY-ERTA JCT 60kV [0] No Fault	P2-1												Mitigation under investigation
10	FIRESTNE 60 kV	P2-1:A19:33:_SALINAS1-FREXP JT 60kV [0] No Fault	P2-1		0.89		0.90								Action Plan. Watsonville UVLS/Watsonville 115 kV Voltage Conversion Project
11	FREXP JT 60 kV	P2-1:A19:33:_SALINAS1-FREXP JT 60kV [0] No Fault	P2-1		0.87	0.88	0.88								Load transfer
12	FRSHXPRS 60 kV	P2-1:A19:33:_SALINAS1-FREXP JT 60kV [0] No Fault	P2-1		0.87	0.88	0.88								Action Plan. Watsonville UVLS/Watsonville 115 kV Voltage Conversion Project
13	ZACA 115 kV	P1-2:A20:22:_Mesa-Santa Maria 115kV Line & P1-2:A20:33:_Divide-Cabrillo #1 115kV Line	P6												
14	ZACA 115 kV	P1-2:A20:25:_MESA_PGE-DIVVIDE #2 115kV [0] & P1-2:A20:24:_MESA_PGE-DIVVIDE #1 115kV [0]	P6		0.80				0.90		0.86				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
15	M 115 kV	P1-2:A19:9:_Green Valley-Paul Sweet 115kV Line & P1-4:A19:2:_M	P6			1.11	1.11		1.10	1.11					Add reactive deice
16	PAUL SWT 115 kV	P1-2:A19:9:_Green Valley-Paul Sweet 115kV Line & P1-4:A19:2:_M	P6			1.11	1.11		1.10	1.11					Add reactive deice

Study Area: PG&E Central Coast and Los Padres\_Baseline

Voltage Deviations



ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %										Potential Mitigation Solutions
					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
17	BUELLTON 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Action Plan/Divide SPS. Midway-Andrew 230 kV Project
18	BUELLTON 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						0.73				Action Plan/Divide SPS. Midway-Andrew 230 kV Project
19	CABRILLO 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Action Plan/Divide SPS. Midway-Andrew 230 kV Project
20	CABRILLO 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						0.73				Action Plan/Divide SPS. Midway-Andrew 230 kV Project
21	DIABLOCN 230 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7		Voltage Collapse	Voltage Collapse		Voltage Collapse	Voltage Collapse		0.83				Explore potential mitigation
22	DIVIDE 70 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Action Plan/Divide SPS. Midway-Andrew 230 kV Project
23	DIVIDE 70 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse	Voltage Collapse					0.76				Action Plan/Divide SPS. Midway-Andrew 230 kV Project
24	DIVVIDE 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
25	DIVVIDE 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						0.75				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
26	FAIRWAY 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
27	FAIRWAY 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse				Voltage Collapse		0.76				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
28	FOOTHILL 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			0.70		0.67	0.68						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
29	FOOTHILL 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		0.70										Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
30	FRWAYTP 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.



ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %										Potential Mitigation Solutions
					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
31	FRWAYTP 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						0.76				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
32	GAREY 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
33	GAREY 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						0.75				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
34	GOLDTREE 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			0.71		0.67	0.68						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
35	GOLDTREE 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		0.71										Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
36	LOMPCJ&1 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
37	LOMPCJ&1 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						0.74				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
38	MANVILLE 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7		Voltage Collapse	Voltage Collapse		Voltage Collapse	Voltage Collapse						Action Plan/Divide SPS. Midway-Andrew 230 kV Project
39	MANVILLE 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						0.74				Action Plan/Divide SPS. Midway-Andrew 230 kV Project
40	MESA PGE 230 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Expand Scope of Mesa Undervoltage SPS
41	MESA PGE 230 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						0.71				Expand Scope of Mesa Undervoltage SPS
42	MESA_PGE 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
43	MESA_PGE 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						0.76				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.





ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %										Potential Mitigation Solutions
					2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Winter Peak	2021 Winter Peak	2026 Winter Peak	2018 Spring Off-Peak	2021 Summer Light Load			
44	MORRO BY 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7		0.83	0.83		0.79	0.80						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
45	OCEANO 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Action Plan. Estrella 230 kV Project/ Cayucos Project
46	OCEANO 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						0.81				Action Plan. Estrella 230 kV Project/ Cayucos Project
47	PALMR 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
48	PALMR 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						0.75				Add a second 230/115kV bank at Morro Bay and to re-conductoring of the Midway-Temblor 115kV path.
49	PSA RBLS 70 kV	P7-1:A20:2:_Templeton-Atascadero & Templeton-Paso Robles 70 kV Lines	P7		Voltage Collapse			Voltage Collapse			0.15				Action Plan. Estrella 230 kV Project/ Cayucos Project
50	PURISIMA 115 kV	P7-1:A20:16:_Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			Voltage Collapse		Voltage Collapse	Voltage Collapse						Action Plan/Divide SPS. Midway-Andrew 230 kV Project
51	PURISIMA 115 kV	P7-1:A20:17:_Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		Voltage Collapse						0.74				Action Plan/Divide SPS. Midway-Andrew 230 kV Project



ID	Contingency	Category	Category Description	Transient Stability Performance (Number of voltage and frequency violations)										Potential Mitigation Solutions
				2018 Summer Peak	2021 Summer Peak	2026 Summer Peak	2018 Spring Off-Peak	2021 Summer Light Load	Select..	Select..	Select..	Select..	Select..	
1	Salinas 115kV BAAH Bus #2 (failure of non-redundent relay)	P5					89							Under review with PTO .
2	Salinas 115kV BAAH Bus #2 (failure of non-redundent relay)	P5		100										Under review with PTO .
3	Salinas 115kV BAAH Bus #2 (failure of non-redundent relay)	P5						90						Under review with PTO .
4	Salinas 115kV BAAH Bus #2 (failure of non-redundent relay)	P5			113									Under review with PTO .
5	Salinas 115kV BAAH Bus #2 (failure of non-redundent relay)	P5				39								Under review with PTO .
6	Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7		90										Under review with PTO .
7	Mesa-Divide #1 and #2 115 kV Lines	P7		30										Under review with PTO .
8	Templeton-Atascadero & Templeton-Paso Robles 70 kV Lines	P7					12							Under review with PTO .
9	Templeton-Atascadero & Templeton-Paso Robles 70 kV Lines	P7				2								Under review with PTO .
10	Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7			97									Under review with PTO .
11	Templeton-Atascadero & Templeton-Paso Robles 70 kV Lines	P7						2						Under review with PTO .
12	Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7		94										Under review with PTO .
13	Templeton-Atascadero & Templeton-Paso Robles 70 kV Lines	P7		14										Under review with PTO .
14	Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7			101									Under review with PTO .



Single Contingency Load Drop

ID	Worst Contingency	Category	Category Description	Amount of Load Drop (MW)										Potential Mitigation Solutions
				Select..	Select..	Select..	Select..	Select..	Select..	Select..	Select..	Select..	Select..	
X-SLD-1														

No single contingency resulted in total load drop of more than 250 MW.



Single Source Substation with more than 100 MW Load

ID	Substation	Load Served (MW)										Potential Mitigation Solutions
		Select..	Select..	Select..	Select..	Select..	Select..	Select..	Select..	Select..	Select..	
X-SS-1												

No single source substation with more than 100 MW Load