

Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)									Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2026 Summer Peak	2029 Summer Peak	2034 Summer Peak	2026 Winter Peak	2029 Winter Peak	2034 Winter Peak	2026 Spring Off-Peak	2029 Spring Off-Peak	2026 SP Heavy Renewable & Min Gas Gen	2026 Spring OP Sensitivity	2029 SP High CEC Forecast		
Arco-Cholame 70 kV Line	Base Case	P0	Base Case	65	125	74	52	47	33	39	10	40	39	126	Incorrect Power Factor	
Atascadero-Cayucos 70 kV Line	MORRO BAY 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	Diverge	Diverge	Diverge	41	Diverge	29	Diverge	Diverge	Diverge	Redundant relay installation recommended previously	
	MORRO BAY SW 230-115KV BATT(Failure of Non-Redundant BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	Diverge	Diverge	34	Diverge	30	Diverge	Diverge	Diverge	Redundant battery supply installation recommended previously	
Atascadero-San Luis Obispo 70 kV Line	MORRO BAY 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	Diverge	Diverge	Diverge	25	Diverge	30	Diverge	Diverge	Diverge	Redundant relay installation recommended previously	
	MORRO BAY SW 230-115KV BATT(Failure of Non-Redundant BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	Diverge	Diverge	15	Diverge	31	Diverge	Diverge	Diverge	Redundant battery supply installation recommended previously	
	TEMPLETON-GATES 230KV [5934] & MORRO BAY-TEMPLETON 230KV [5933]	P6	N-1-1	122	103	32	46	58	30	39	13	30	35	106	Project: Estrella Substation Project	
	TEMPLETON-GATES 230KV [5934] & MORRO BAY-TEMPLETON 230KV [5933]	P6	N-1-1	115	100	54	48	54	40	48	10	36	46	102	Project: Estrella Substation Project	
Callender Sw. Sta-Mesa 115 kV Line	MORROBAY 230KV - SECTION 1E & 2E	P2-4	Bus-Tie-Breaker Fault	94	Diverge	161	81	86	37	76	63	119	137	Diverge	Existing UVLS	
	MESA 230 KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Relay	101	101	NA	59	85	72	57	6	46	57	104	Redundant relay installation recommended previously	
	MORRO BAY 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	Diverge	Diverge	Diverge	42	Diverge	65	Diverge	Diverge	Diverge	Redundant relay installation recommended previously	
	MORRO BAY SW 230-115KV BATT(Failure of Non-Redundant BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	Diverge	Diverge	40	Diverge	65	Diverge	Diverge	Diverge	Redundant battery supply installation recommended previously	
	MORROBAY 230/115KV TB 6 & MESA_PGE-SNTA MRA 115KV [0]	P6	N-1-1	117	111	136	56	79	94	54	14	43	50	114	Operations solution/ Generation Redispatch	
	Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7	DCTL	79	119	NA	75	74	92	66	60	110	125	NA	Existing UVLS	
	Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7	DCTL	84	128	144	75	79	37	71	63	115	130	132	Existing UVLS	
Coalinga #1-San Miguel 70 kV Line	PASO ROBLES-TEMPLETON 70KV [9400]	P1	N-1	Diverge	Diverge	38	45	51	4	57	25	15	57	Diverge	Project: Estrella Substation Project	
	MORRO BAY 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	Diverge	Diverge	Diverge	10	Diverge	27	Diverge	Diverge	Diverge	Redundant relay installation recommended previously	
	MORRO BAY SW 230-115KV BATT(Failure of Non-Redundant BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	Diverge	Diverge	9	Diverge	27	Diverge	Diverge	Diverge	Redundant battery supply installation recommended previously	
	TEMPLETON 230-70KV BATT(Failure of Non-Redundant BATT)	P5	Non-Redundant Battery	Diverge	Diverge	44	45	51	5	58	25	15	57	Diverge	Project: Estrella Substation Project	
	ESTRELLA-CALFLATSSS #1 230KV [0] & TEMPLETON-GATES 230KV [5934]	P6	N-1-1	NA	NA	100	NA	NA	9	NA	NA	NA	NA	NA	Continue to monitor	
	Morro Bay-CalFlats SS and Templeton-Gates 230 kV Lines	P7	DCTL	106	104	33	24	22	5	18	38	38	40	106	Project: Estrella Substation Project	
Coburn 230/60 kV Bank #1	DIABLOCNYN2 25.00KV GEN UNIT 1 & COBURN 230/60KV TB 2	P3	G-1/N-1	79	75	NA	91	87	NA	95	8	100	96	74	Sensitivity Only	
Crazy Horse-Moss Landing #1 115 kV Line	SALINAS-MOSSLNSW-DOLAN RD 115KV [0] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	104	112	142	73	83	122	36	9	41	39	114	ISO recommended a RAS	
	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	104	112	142	73	83	120	36	9	41	39	114	ISO recommended a RAS	
Crazy Horse-Moss Landing #2 115 kV Line	SALINAS-MOSSLNSW-DOLAN RD 115KV [0] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	107	115	146	76	87	126	37	9	43	40	118	ISO recommended a RAS	
	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	107	115	146	76	87	125	37	9	43	40	118	ISO recommended a RAS	
	CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910]	P1	N-1	106	118	44	69	85	43	35	6	48	31	121	Project: Crazy Horse Canyon - Salinas - Soledad #1 and #2 115 kV Line Reconducting	

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Crazy Horse-Natividad #1 115 kV Line	MOSS LANDING-SALINAS #2 115KV [2890]	P1	N-1	102	110	45	67	79	44	36	6	46	34	112	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	SALINAS-MOSSLNSW-DOLAN RD 115KV [0]	P1	N-1	102	110	45	67	79	44	36	6	46	34	112	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910] (NTVD SW2-SOLEDAD)	P2-1	Line Section w/o/ Fault	77	102	66	49	65	50	23	10	31	23	105	Project: Salinas Area Reinforcement	
	MOSS LANDING-SALINAS #1 115KV [2880] (MOSSLNSW-DOLAN J1)	P2-1	Line Section w/o/ Fault	105	113	46	69	81	45	39	7	50	37	115	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	CRZY_HRS 115KV - MIDDLE BREAKER BAY 3	P2-3	Non-Bus-Tie-Breaker Fault	79	104	68	49	66	51	23	10	31	23	107	Project: Salinas Area Reinforcement	
	DOLAN RD - 1D 115KV & SALINAS-MOSSLNSW-DOLAN RD LINE	P2-3	Non-Bus-Tie-Breaker Fault	102	110	45	67	79	44	36	6	46	34	112	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	MOSSLNSW 115KV - MIDDLE BREAKER BAY 2	P2-3	Non-Bus-Tie-Breaker Fault	102	110	45	67	79	44	36	6	46	34	112	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	MOSSLNSW 115KV - MIDDLE BREAKER BAY 3	P2-3	Non-Bus-Tie-Breaker Fault	103	110	45	66	78	44	36	6	46	34	112	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	SALINAS 115KV - MIDDLE BREAKER BAY 3	P2-3	Non-Bus-Tie-Breaker Fault	77	101	66	49	65	50	23	10	31	23	104	Project: Salinas Area Reinforcement	
	SALINAS 115KV - MIDDLE BREAKER BAY 4	P2-3	Non-Bus-Tie-Breaker Fault	102	110	45	67	79	44	36	6	46	34	112	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	DOLAN ROAD 115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	102	110	45	67	79	44	36	6	46	34	112	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	23	NA	NA	Diverge	Redundant battery supply installation recommended previously	
	SALINAS-MOSSLNSW-DOLAN RD 115KV [0] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	224	240	105	136	161	100	74	14	92	74	245	ISO recommended a RAS	
	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	147	171	48	81	94	41	51	18	54	62	175	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
Moss Landing - Green Valley #1 and #2 115 kV Lines	P7	DCTL	Diverge	71	28	Diverge	54	28	Diverge	4	45	Diverge	72	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring		
Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	224	240	105	136	161	99	74	14	92	74	245	ISO recommended a RAS		
Crazy Horse-Soledad 115 kV Line	CRAZY HORSE CANYON-SALINAS-SOLEDAD #1 115KV [2900]	P1	N-1	106	118	44	69	85	43	35	6	48	31	121	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	MOSS LANDING-SALINAS #2 115KV [2890]	P1	N-1	102	110	45	67	79	44	36	6	46	34	112	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	SALINAS-MOSSLNSW-DOLAN RD 115KV [0]	P1	N-1	102	110	45	67	79	44	36	6	46	34	112	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	CRAZY HORSE CANYON-SALINAS-SOLEDAD #1 115KV [2900] (NTVD SW1-SOLEDAD)	P2-1	Line Section w/o/ Fault	77	102	66	49	65	50	23	10	31	23	105	Project: Salinas Area Reinforcement	
	MOSS LANDING-SALINAS #1 115KV [2880] (MOSSLNSW-DOLAN J1)	P2-1	Line Section w/o/ Fault	105	113	46	69	81	45	39	7	50	37	115	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	CRZY_HRS 115KV - MIDDLE BREAKER BAY 4	P2-3	Non-Bus-Tie-Breaker Fault	105	118	43	69	85	43	35	7	48	31	120	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	MOSSLNSW 115KV - MIDDLE BREAKER BAY 2	P2-3	Non-Bus-Tie-Breaker Fault	102	110	45	67	79	44	36	6	46	34	112	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	MOSSLNSW 115KV - MIDDLE BREAKER BAY 3	P2-3	Non-Bus-Tie-Breaker Fault	103	110	45	66	78	44	36	6	46	34	112	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
SALINAS 115KV - MIDDLE BREAKER BAY 5	P2-3	Non-Bus-Tie-Breaker Fault	106	118	44	69	85	43	35	6	48	31	121	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring		

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	DOLAN ROAD 115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	102	110	45	67	79	44	36	6	46	34	112	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	23	NA	NA	Diverge	Redundant battery supply installation recommended previously	
	SALINAS-MOSSLSNW-DOLAN RD 115KV [0] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	224	240	105	136	161	100	74	14	92	74	245	ISO recommended a RAS	
	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	147	171	48	81	94	41	51	18	54	62	175	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	Moss Landing - Green Valley #1 and #2 115 kV Lines	P7	DCTL	Diverge	71	28	Diverge	54	28	Diverge	4	45	Diverge	72	Project: Crazy Horse Canyon – Salinas – Soledad #1 and #2 115 kV Line Reconductoring	
	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	224	240	105	136	161	99	74	14	92	74	245	ISO recommended a RAS	
Divide-Cabrillo 115 kV Line No. 1	MESA-SISQUOC 115KV [2460] & MESA_PGE-SNTA MRA 115KV [0]	P6	N-1-1	64	62	166	28	35	41	31	6	28	30	63	Continue to monitor	
ESTRELLA-PSA RBL5 70 kV	MORRO BAY 230KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	NA	NA	Diverge	NA	NA	38	NA	NA	NA	NA	NA	Redundant relay installation recommended previously	
	MORRO BAY SW 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	NA	NA	Diverge	NA	NA	35	NA	NA	NA	NA	NA	Redundant battery supply installation recommended previously	
	MORROBAY-ESTRELLA #1 230KV [0] & TEMPLETON-GATES 230KV [5934]	P6	N-1-1	NA	NA	103	NA	NA	7	NA	NA	NA	NA	NA	Continue to monitor	
	Morro Bay-CalFlats SS and Templeton-Gates 230 kV Lines	P7	DCTL	NA	NA	103	NA	NA	7	NA	NA	NA	NA	NA	Continue to monitor	
Green Valley 115/60 Transformer #1	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	112	NA	NA	Diverge	Redundant battery supply installation recommended previously	
	SALINAS 115KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	213	Diverge	Diverge	210	238	60	206	238	Diverge	Redundant relay installation recommended previously	
	SALINAS-MOSSLSNW-DOLAN RD 115KV [0] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	86	90	112	74	77	103	38	22	38	39	92	Continue to monitor	
	Moss Landing - Green Valley #1 and #2 115 kV Lines	P7	DCTL	Diverge	27	52	Diverge	62	69	Diverge	28	84	Diverge	27	Project: Morgan Hill Area Reinforcement	
	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	86	90	112	74	77	102	38	22	38	39	92	Continue to monitor	
Green Valley-Morgan Hill 115 kV	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	8	NA	NA	Diverge	Redundant battery supply installation recommended previously	
Green Valley-Watsonville 60 kV	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	73	NA	NA	Diverge	Redundant battery supply installation recommended previously	
	SALINAS 115KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	161	Diverge	Diverge	124	177	43	154	177	Diverge	Redundant relay installation recommended previously	
	MOSS LANDING-GREEN VALLEY #2 115KV [2860] & MOSS LANDING-GREEN VALLEY #1 115KV [2850]	P6	N-1-1	Diverge	31	44	Diverge	36	45	Diverge	19	106	Diverge	32	Project: Morgan Hill Area Reinforcement	
	Moss Landing - Green Valley #1 and #2 115 kV Lines	P7	DCTL	Diverge	19	41	Diverge	35	43	Diverge	19	108	Diverge	19	Project: Morgan Hill Area Reinforcement	
Lagunitas 60 kV Tap	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	122	NA	NA	Diverge	Redundant battery supply installation recommended previously	
	SALINAS 115KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	190	Diverge	Diverge	150	244	63	233	244	Diverge	Redundant relay installation recommended previously	
	MOSS LANDING-GREEN VALLEY #1 115KV [2850] & MOSS LANDING-GREEN VALLEY #2 115KV [2860]	P6	N-1-1	Diverge	83	92	Diverge	77	88	Diverge	21	186	Diverge	84	Project: Morgan Hill Area Reinforcement	
	Moss Landing - Green Valley #1 and #2 115 kV Lines	P7	DCTL	Diverge	83	92	Diverge	77	88	Diverge	21	186	Diverge	84	Project: Morgan Hill Area Reinforcement	
Mesa-Santa Maria 115 kV Line	MORROBAY 230/115KV TB 6	P1	N-1	88	88	101	54	70	76	44	7	36	41	89	Continue to monitor	
	MORROBAY 230KV SECTION 1D	P2-2	Bus Fault	91	90	100	57	76	82	46	9	39	42	91	Continue to monitor	
	MORROBAY 230/115KV TB 6 & CALLENDER SW STA-MESA 115KV [1210]	P6	N-1-1	112	110	129	67	89	99	54	10	44	51	112	Operations solution/ Generation Redispatch	
	Mesa-Divide #1 and #2 115 kV Lines	P7	DCTL	76	74	101	51	70	67	36	6	27	33	76	Continue to monitor	

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	Mesa-Sisquoc and Callender Sw Sta-Mesa 115 kV Lines	P7	DCTL	91	88	102	52	70	76	44	4	36	40	90	Continue to monitor	
Morro Bay 230/115 Transformer No. 6	MESA_PGE 115KV - SECTION 2D & 1D	P2-4	Bus-Tie-Breaker Fault	Diverge	Diverge	Diverge	32	Diverge	56	64	3	52	62	Diverge	Existing UVLS	
	MORROBAY 230KV - SECTION 1E & 2E	P2-4	Bus-Tie-Breaker Fault	108	Diverge	145	73	84	32	67	26	89	100	Diverge	Existing UVLS	
	MESA 230 KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	131	134	76	76	104	108	65	14	56	66	138	Redundant relay installation recommended previously	
	MESA 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	32	Diverge	56	65	1	55	65	Diverge	Install redundant battery supply	
	MORRO BAY-DIABLO 230KV [5260] & MORRO BAY-MESA 230KV [5290]	P6	N-1-1	115	145	154	84	96	44	76	41	99	110	149	Existing UVLS	
	Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7	DCTL	113	146	76	82	95	117	74	39	97	108	65	Existing UVLS	
	Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7	DCTL	115	145	154	83	96	43	76	41	99	110	149	Existing UVLS	
Morro Bay-SLO 115 kV Line No. 2	MESA_PGE 115KV - SECTION 2D & 1D	P2-4	Bus-Tie-Breaker Fault	Diverge	Diverge	Diverge	24	Diverge	42	39	2	32	38	Diverge	Existing UVLS	
Moss Landing 230/115 kV Bank #1	MOSSLNSW 230/115KV TB 2 & MOSSLNSW 230/115KV TB 4	P6	N-1-1	80	91	100	74	77	111	44	29	58	60	92	Continue to monitor	
Moss Landing 230/115 kV Bank #2	MOSSLNSW 230/115KV TB 1 & MOSSLNSW 230/115KV TB 4	P6	N-1-1	80	91	100	74	77	111	44	29	58	60	92	Continue to monitor	
Moss Landing 230/115 kV Bank #3	MOSSLNSW 230/115KV TB 1 & MOSSLNSW 230/115KV TB 4	P6	N-1-1	80	91	100	74	77	111	44	29	58	60	92	Continue to monitor	
Moss Landing 230/115 kV Bank #4	MOSSLNSW 230/115KV TB 1 & MOSSLNSW 230/115KV TB 2	P6	N-1-1	88	98	111	81	77	111	56	29	65	71	100	Continue to monitor	
Moss Landing-Green Valley #1 115 kV Line	MOSS LANDING-GREEN VALLEY #2 115KV [2860] & GREENVALLEY-MRGN HIL #1 115KV [0]	P6	N-1-1	NA	75	85	NA	80	102	NA	10	NA	NA	77	Continue to monitor	
Moss Landing-Green Valley #2 115 kV Line	MOSS LANDING-GREEN VALLEY #1 115KV [2850] & GREENVALLEY-MRGN HIL #1 115KV [0]	P6	N-1-1	NA	84	95	NA	82	104	NA	11	NA	NA	86	Continue to monitor	
Moss Landing-Q1374 230 kV tie-line	MOSS LANDING-LAS AGUILAS SW STA - 230 KV 230KV [5340] & MOSSLNSW SVD=V	P6	N-1-1	33	0	34	0	50	11	57	91	67	103	0	Sensitivity Only	
Moss Landing-Salinas #1 115 kV Line	MOSS LANDING-SALINAS #2 115KV [2890]	P1	N-1	81	86	106	64	71	98	33	6	39	34	88	Continue to monitor	
	MOSS LANDING-SALINAS #2 115KV [2890] (MOSSLNSW-DOLAN J2)	P2-1	Line Section w/o/ Fault	81	86	106	64	71	97	33	8	39	34	87	Continue to monitor	
	MOSS LANDING-SALINAS #2 115KV [2890] (SALINAS-DOLAN J2)	P2-1	Line Section w/o/ Fault	81	86	106	64	71	98	33	6	39	34	88	Continue to monitor	
	MOSSLNSW 115KV - MIDDLE BREAKER BAY 3	P2-3	Non-Bus-Tie-Breaker Fault	81	86	107	63	71	98	33	6	39	34	88	Continue to monitor	
	SALINAS 115KV - MIDDLE BREAKER BAY 4	P2-3	Non-Bus-Tie-Breaker Fault	81	86	106	64	71	98	33	6	39	34	88	Continue to monitor	
	MOSS LANDING-CRAZY HORSE CANYON #2 115KV [2983] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	108	115	142	81	92	129	41	10	49	44	117	Operations solution/ Generation Redispatch	
	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	108	115	141	79	90	126	41	11	48	44	118	ISO recommended a RAS	
SALINAS-MOSSLNSW-DOLAN RD 115KV [0]	SALINAS-MOSSLNSW-DOLAN RD 115KV [0]	P1	N-1	81	86	106	64	71	98	33	8	39	34	88	Continue to monitor	
	MOSS LANDING-SALINAS #1 115KV [2880] (MOSSLNSW-DOLAN J1)	P2-1	Line Section w/o/ Fault	79	84	105	62	69	95	31	7	36	32	86	Continue to monitor	
	MOSS LANDING-SALINAS #1 115KV [2880] (SALINAS-DOLAN J1)	P2-1	Line Section w/o/ Fault	77	82	102	60	67	92	29	5	33	30	84	Continue to monitor	

Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)									Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2026 Summer Peak	2029 Summer Peak	2034 Summer Peak	2026 Winter Peak	2029 Winter Peak	2034 Winter Peak	2026 Spring Off-Peak	2029 Spring Off-Peak	2026 SP Heavy Renewable & Min Gas Gen	2026 Spring OP Sensitivity	2029 SP High CEC Forecast		
Moss Landing-Salinas #2 115 kV Line	DOLAN RD - 1D 115KV & SALINAS-MOSSLNSW-DOLAN RD LINE	P2-3	Non-Bus-Tie-Breaker Fault	81	86	106	64	71	98	33	8	39	34	88	Continue to monitor	
	MOSSLNSW 115KV - MIDDLE BREAKER BAY 2	P2-3	Non-Bus-Tie-Breaker Fault	81	86	107	64	71	98	33	8	39	34	88	Continue to monitor	
	DOLAN ROAD 115KV BATT (FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	81	86	106	64	71	98	33	8	39	34	88	Continue to monitor	
	MOSS LANDING-CRAZY HORSE CANYON #1 115KV [2930] MOAS OPENED ON PRNDL J1_PRUNEDLE & SALINAS-MOSSLNSW-DOLAN RD 115KV [0]	P6	N-1-1	108	115	142	82	92	130	41	10	49	44	117	Operations solution/ Generation Redispatch	
	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	104	112	137	74	84	118	37	9	43	40	114	ISO recommended a RAS	
MOSSLNSW-LASAGUILASS #2 230KV	Base Case	P0	Base Case	43	NA	NA	18	NA	NA	19	NA	137	33	NA	Sensitivity Only	
	COBURN-LASAGUILASS #1 230KV [0]	P1	N-1	31	NA	NA	14	NA	NA	11	NA	109	33	NA	Sensitivity Only	
	KNGCTYCGN 60/13.8KV TB 1	P1	N-1	30	NA	NA	16	NA	NA	12	NA	100	26	NA	Sensitivity Only	
	KNGCTYCGNSTG 13.80KV & KNGCTYCGNCTG 13.80KV GEN UNITS	P1	N-1	30	NA	NA	16	NA	NA	12	NA	100	26	NA	Sensitivity Only	
	MOSS LANDING-COBURN 230KV [5330]	P1	N-1	40	NA	NA	24	NA	NA	20	NA	121	22	NA	Sensitivity Only	
	MOSSLAND 500/230KV TB 9	P1	N-1	39	NA	NA	13	NA	NA	7	NA	109	35	NA	Sensitivity Only	
	COBURN 230KV SECTION 1D	P2-2	Bus Fault	36	NA	NA	20	NA	NA	17	NA	117	26	NA	Sensitivity Only	
	COBURN 230KV SECTION 1E	P2-2	Bus Fault	31	NA	NA	14	NA	NA	11	NA	109	33	NA	Sensitivity Only	
	MOSSLNSW 230KV - MIDDLE BREAKER BAY 6	P2-3	Non-Bus-Tie-Breaker Fault	50	NA	NA	36	NA	NA	34	NA	121	9	NA	Sensitivity Only	
	MOSSLNSW 230KV - MIDDLE BREAKER BAY 7	P2-3	Non-Bus-Tie-Breaker Fault	39	NA	NA	13	NA	NA	7	NA	109	35	NA	Sensitivity Only	
	COBURN 230KV - SECTION 1D & 1E	P2-4	Bus-Tie-Breaker Fault	34	NA	NA	17	NA	NA	14	NA	113	29	NA	Sensitivity Only	
	Q1374BESS3 0.50KV GEN UNIT 3 & MOSS LANDING-COBURN 230KV [5330]	P3	G-1/ N-1	40	NA	NA	24	NA	NA	20	NA	119	23	NA	Sensitivity Only	
	COBURN 230-60KV BATT (FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	34	NA	NA	17	NA	NA	14	NA	113	29	NA	Sensitivity Only	
	DIABLO CANYON 500-230KV BATT (FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	29	NA	NA	13	NA	NA	10	NA	103	29	NA	Sensitivity Only	
	MOSS LANDING-COBURN 230KV [5330] & MOSSLAND 500/230KV TB 9	P6	N-1-1	51	NA	NA	21	NA	NA	12	NA	135	34	NA	Sensitivity Only	
Crazy Horse - San Benito & Crazy Horse - Hollister 115 kV Lines	P7	DCTL	29	NA	NA	15	NA	NA	12	NA	100	26	NA	Sensitivity Only		
Moss Landing - Coburn & Coburn - PANOCHE 230 kV Lines	P7	DCTL	34	NA	NA	17	NA	NA	14	NA	113	29	NA	Sensitivity Only		
MORROBAY 230KV - SECTION 1E & 2E	P2-4	Bus-Tie-Breaker Fault	90	Diverge	162	81	88	33	73	67	119	134	Diverge	Existing UVLS		
MESA 230 KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	101	102	7	60	88	74	52	4	44	52	105	Redundant relay installation recommended previously		
MORRO BAY 230KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	Diverge	Diverge	Diverge	37	Diverge	69	Diverge	Diverge	Diverge	Redundant relay installation recommended previously		

Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)									Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2026 Summer Peak	2029 Summer Peak	2034 Summer Peak	2026 Winter Peak	2029 Winter Peak	2034 Winter Peak	2026 Spring Off-Peak	2029 Spring Off-Peak	2026 SP Heavy Renewable & Min Gas Gen	2026 Spring OP Sensitivity	2029 SP High CEC Forecast		
Oceano-Callender Sw. Sta 115 kV Line	MORRO BAY SW 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	Diverge	Diverge	35	64	69	Diverge	Diverge	Diverge	Redundant battery supply installation recommended previously	
	MORRO BAY-MESA 230KV [5290] & MORRO BAY-DIABLO 230KV [5260]	P6	N-1-1	82	128	147	77	81	33	69	67	115	128	132	Existing UVLS	
	Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7	DCTL	76	121	7	75	76	94	65	64	111	123	11	Existing UVLS	
	Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7	DCTL	82	128	146	76	81	33	69	67	115	128	132	Existing UVLS	
Salinas 115/60 kV Bank #2	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	13	NA	NA	Diverge	Redundant battery supply installation recommended previously	
Salinas-Firestone #1 115 kV Line	Base Case	P0	Base Case	NA	NA	41	NA	NA	35	NA	NA	NA	NA	NA	Project: Salinas Area Reinforcement	
	SALINAS-MOSSLNSW-DOLAN RD 115KV [0] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	NA	NA	47	NA	NA	42	NA	NA	NA	NA	NA	Project: Salinas Area Reinforcement	
Salinas-Firestone #1 60 kV Line	Base Case	P0	Base Case	112	108	NA	65	65	NA	39	21	56	39	110	Project: Salinas Area Reinforcement	
	SALINAS-FIRESTONE #2 60KV [7910]	P1	N-1	189	190	NA	120	125	NA	56	17	87	56	192	Project: Salinas Area Reinforcement	
	MLPB1CTG1 18.00KV & MLPB1CTG2 18.00KV & MLPB1STG1 18.00KV GEN UNITS & MOSSLAND 500/230KV TB 9	P3	G-1/ N-1	96	109	NA	65	65	NA	39	21	56	39	110	Project: Salinas Area Reinforcement	
	MOSSLNSW 230/115KV TB 1 & MOSSLNSW 230/115KV TB 4	P6	N-1-1	96	108	NA	65	65	NA	39	21	56	39	110	Project: Salinas Area Reinforcement	
	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	104	101	NA	61	61	NA	35	18	49	34	103	Project: Salinas Area Reinforcement	
Salinas-Firestone #2 115 kV Line	Base Case	P0	Base Case	NA	NA	32	NA	NA	27	NA	NA	NA	NA	NA	Project: Salinas Area Reinforcement	
	SALINAS-MOSSLNSW-DOLAN RD 115KV [0] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	NA	NA	37	NA	NA	32	NA	NA	NA	NA	NA	Project: Salinas Area Reinforcement	
	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	NA	NA	37	NA	NA	32	NA	NA	NA	NA	NA	Project: Salinas Area Reinforcement	
Salinas-Firestone #2 60 kV Line	Base Case	P0	Base Case	106	105	NA	64	65	NA	34	13	51	34	106	Project: Salinas Area Reinforcement	
	SALINAS1-FIRESTONE 60KV [0]	P1	N-1	195	196	NA	121	128	NA	56	17	88	56	198	Project: Salinas Area Reinforcement	
	SALINAS-FIRESTONE #2 60KV [7910]	P1	N-1	184	186	NA	117	121	NA	53	16	83	53	187	Project: Salinas Area Reinforcement	
	SALINAS-FIRESTONE #2 60KV [7910] (2)	P1	N-1	188	191	NA	119	124	NA	53	16	84	53	192	Project: Salinas Area Reinforcement	
	SALINAS-MOSSLNSW-DOLAN RD 115KV [0] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	100	100	NA	64	65	NA	34	13	51	34	101	Project: Salinas Area Reinforcement	
	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	100	100	NA	60	61	NA	30	12	45	30	101	Project: Salinas Area Reinforcement	
Salinas-Laureles 60 kV Line	Base Case	P0	Base Case	80	80	103	48	55	73	28	15	12	28	82	Continue to monitor	
	SALINAS-MOSSLNSW-DOLAN RD 115KV [0] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	75	76	107	48	55	79	28	15	12	28	78	Continue to monitor	
	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	75	76	107	45	52	78	25	13	10	25	78	Continue to monitor	
San Luis Obispo-Oceano 115 kV Line	MORROBAY 230KV - SECTION 1E & 2E	P2-4	Bus-Tie-Breaker Fault	98	Diverge	150	90	100	19	75	47	100	120	Diverge	Existing UVLS	
	MESA 230 KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	111	115	55	76	104	99	58	3	43	58	119	Redundant relay installation recommended previously	
	MORRO BAY 230KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	Diverge	Diverge	Diverge	23	Diverge	49	Diverge	Diverge	Diverge	Redundant relay installation recommended previously	
	MORRO BAY SW 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	Diverge	Diverge	21	Diverge	50	Diverge	Diverge	Diverge	Redundant battery supply installation recommended previously	
	MORRO BAY-DIABLO 230KV [5260] & MORRO BAY-MESA 230KV [5290]	P6	N-1-1	93	133	140	87	96	17	72	47	98	116	137	Existing UVLS	
	Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7	DCTL	89	131	56	85	92	112	69	45	94	112	46	Existing UVLS	
	Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7	DCTL	93	133	140	86	96	15	72	47	98	116	137	Existing UVLS	

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				2026 Summer Peak	2029 Summer Peak	2034 Summer Peak	2026 Winter Peak	2029 Winter Peak	2034 Winter Peak	2026 Spring Off-Peak	2029 Spring Off-Peak	2026 SP Heavy Renewable & Min Gas Gen	2026 Spring OP Sensitivity	2029 SP High CEC Forecast		
San Luis Obispo-Santa Maria 115 kV Line	MESA_PGE 115KV - SECTION 2D & 1D	P2-4	Bus-Tie-Breaker Fault	Diverge	Diverge	Diverge	NA	Diverge	NA	102	6	77	102	Diverge	Existing UVLS	
	MORROBAY 230KV - SECTION 1E & 2E	P2-4	Bus-Tie-Breaker Fault	128	Diverge	199	109	119	17	98	65	135	160	Diverge	Existing UVLS	
	MESA 230 KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	144	150	NA	91	124	114	76	2	58	76	154	Redundant relay installation recommended previously	
	MESA 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	NA	Diverge	NA	102	5	77	101	Diverge	Install redundant battery supply	
	MORRO BAY 230KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	Diverge	Diverge	Diverge	25	Diverge	67	Diverge	Diverge	Diverge	Redundant relay installation recommended previously	
	MORRO BAY SW 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	Diverge	Diverge	21	Diverge	68	Diverge	Diverge	Diverge	Redundant battery supply installation recommended previously	
	DIABLO-MESA 230KV [4620] & MORRO BAY-MESA 230KV [5290]	P6	N-1-1	115	170	NA	102	109	132	90	62	127	148	NA	Existing UVLS	
	Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7	DCTL	115	170	NA	103	109	132	90	62	127	149	NA	Existing UVLS	
Morro Bay-Mesa and Morro Bay- Diablo 230 kV Lines	P7	DCTL	120	174	184	104	114	13	94	65	132	153	179	Existing UVLS		
San Miguel-Paso Robles 70 kV Line	PASO ROBLES-TEMPLETON 70KV [9400]	P1	N-1	Diverge	Diverge	NA	1	7	NA	38	21	1	38	Diverge	Project: Estrella Substation Project	
	TEMPLETON 230-70KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	Diverge	Diverge	NA	1	7	NA	38	21	1	38	Diverge	Project: Estrella Substation Project	
Santa Maria-Sisquoc 115 kV Line	MESA_PGE 115KV - SECTION 2D & 1D	P2-4	Bus-Tie-Breaker Fault	Diverge	Diverge	Diverge	NA	Diverge	NA	34	3	31	34	Diverge	Existing UVLS	
	MESA 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	NA	Diverge	NA	63	8	42	63	Diverge	Install redundant battery supply	
Santa Ynez Sw.Sta-Cabrillo 115 kV Line	MESA-SISQUOC 115KV [2460] & MESA_PGE-SNTA MRA 115KV [0]	P6	N-1-1	57	57	161	23	31	35	27	5	23	25	58	Continue to monitor	
Sisquoc-Santa Ynez Sw.Sta. 115 kV Line	MESA-SISQUOC 115KV [2460] & MESA_PGE-SNTA MRA 115KV [0]	P6	N-1-1	69	32	119	28	19	19	33	1	24	30	33	Review Project: South of Mesa	
Soledad #1 60 kV Line(Gonzales 60 kV Tap #1)	Base Case	P0	Base Case	58	136	NA	40	76	NA	18	36	10	18	137	Project: Salinas Area Reinforcement	
	CRAZY HORSE CANYON-SALINAS-SOLEDAD #1 115KV [2900]	P1	N-1	55	130	NA	38	74	NA	16	32	9	16	132	Project: Salinas Area Reinforcement	
	CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910]	P1	N-1	55	130	NA	38	74	NA	16	32	9	16	132	Project: Salinas Area Reinforcement	
	MOSS LANDING-CRAZY HORSE CANYON #1 115KV [2930] MOAS OPENED ON PRNDL J1_PRUNEDLE	P1	N-1	52	123	NA	38	71	NA	16	32	9	16	125	Project: Salinas Area Reinforcement	
	MOSS LANDING-SALINAS #2 115KV [2890]	P1	N-1	52	123	NA	38	71	NA	16	32	9	16	125	Project: Salinas Area Reinforcement	
	SALINAS-MOSSLNSW-DOLAN RD 115KV [0]	P1	N-1	52	123	NA	38	71	NA	16	32	9	16	125	Project: Salinas Area Reinforcement	
	CRAZY HORSE CANYON-SALINAS-SOLEDAD #1 115KV [2900] (NTVD SW1-SOLEDAD)	P2-1	Line Section w/o Fault	55	130	NA	38	74	NA	16	32	9	16	132	Project: Salinas Area Reinforcement	
	CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910] (NTVD SW2-SOLEDAD)	P2-1	Line Section w/o Fault	55	130	NA	38	74	NA	16	32	9	16	132	Project: Salinas Area Reinforcement	
	CRZY_HRS 115KV - MIDDLE BREAKER BAY 3	P2-3	Non-Bus-Tie-Breaker Fault	56	133	NA	38	75	NA	16	32	9	16	136	Project: Salinas Area Reinforcement	
	CRZY_HRS 115KV - MIDDLE BREAKER BAY 4	P2-3	Non-Bus-Tie-Breaker Fault	55	130	NA	38	74	NA	16	32	9	16	133	Project: Salinas Area Reinforcement	
	SALINAS 115KV - MIDDLE BREAKER BAY 5	P2-3	Non-Bus-Tie-Breaker Fault	55	130	NA	38	74	NA	16	32	9	16	132	Project: Salinas Area Reinforcement	

Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)									Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2026 Summer Peak	2029 Summer Peak	2034 Summer Peak	2026 Winter Peak	2029 Winter Peak	2034 Winter Peak	2026 Spring Off-Peak	2029 Spring Off-Peak	2026 SP Heavy Renewable & Min Gas Gen	2026 Spring OP Sensitivity	2029 SP High CEC Forecast		
	DOLAN ROAD 115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	52	123	NA	38	71	NA	16	32	9	16	125	Project: Salinas Area Reinforcement	
	PRUNEDALE 115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	52	123	NA	38	71	NA	16	32	9	16	125	Project: Salinas Area Reinforcement	
	CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910] & SALINAS-MOSSLSNW-DOLAN RD 115KV [0]	P6	N-1-1	57	135	NA	38	75	NA	16	32	9	16	138	Project: Salinas Area Reinforcement	
	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	57	132	NA	38	74	NA	16	32	9	16	134	Project: Salinas Area Reinforcement	
	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	58	135	NA	38	76	NA	16	32	9	16	138	Project: Salinas Area Reinforcement	
Soledad-Soledad 4M 60/115 kV Transformer	SOLEDAD 115/115KV TB 1 (2)	P1	N-1	62	109	29	47	82	26	14	32	4	14	112	Project: Salinas Area Reinforcement	
	SOLEDAD 115KV - RING R6 & R5	P2-3	Non-Bus-Tie-Breaker Fault	62	109	29	47	82	27	14	32	4	14	112	Project: Salinas Area Reinforcement	
	SOLEDAD 115/115KV TB 1	P1	N-1	62	109	29	47	82	26	14	32	2	14	112	Project: Salinas Area Reinforcement	
	SOLEDAD 115KV - RING R2 & R1	P2-3	Non-Bus-Tie-Breaker Fault	62	109	29	46	82	27	14	32	4	14	112	Project: Salinas Area Reinforcement	
	SOLEDAD 115KV - RING R3 & R2	P2-3	Non-Bus-Tie-Breaker Fault	62	109	29	46	82	27	14	32	4	14	112	Project: Salinas Area Reinforcement	
Temblor-San Luis Obispo 115 kV Line	MORROBAY 230KV - SECTION 1E & 2E	P2-4	Bus-Tie-Breaker Fault	85	Diverge	104	87	100	52	86	68	72	104	Diverge	Existing UVLS	
	MORRO BAY 230KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	Diverge	Diverge	Diverge	82	Diverge	102	Diverge	Diverge	Diverge	Redundant relay installation recommended previously	
	MORRO BAY SW 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	Diverge	Diverge	72	Diverge	104	Diverge	Diverge	Diverge	Redundant battery supply installation recommended previously	
Templeton 230/70 kV Transformer	MORRO BAY 230KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	Diverge	Diverge	Diverge	35	Diverge	19	Diverge	Diverge	Diverge	Redundant relay installation recommended previously	
	MORRO BAY SW 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	Diverge	Diverge	31	Diverge	20	Diverge	Diverge	Diverge	Redundant battery supply installation recommended previously	
Templeton-Atascadero 70 kV Line	MORRO BAY 230KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	Diverge	Diverge	Diverge	52	Diverge	32	Diverge	Diverge	Diverge	Redundant relay installation recommended previously	
	MORRO BAY SW 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	Diverge	Diverge	Diverge	Diverge	Diverge	42	Diverge	33	Diverge	Diverge	Diverge	Redundant battery supply installation recommended previously	
Watsonville-Salinas 60 kV	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	128	NA	NA	Diverge	Redundant battery supply installation recommended previously	
	SALINAS 115KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	208	Diverge	Diverge	157	249	63	216	249	Diverge	Redundant relay installation recommended previously	
	MOSS LANDING-GREEN VALLEY #1 115KV [2850] & MOSS LANDING-GREEN VALLEY #2 115KV [2860]	P6	N-1-1	Diverge	83	92	Diverge	77	88	Diverge	21	188	Diverge	84	Project: Morgan Hill Area Reinforcement	
	Moss Landing - Green Valley #1 and #2 115 kV Lines	P7	DCTL	Diverge	83	92	Diverge	77	88	Diverge	21	188	Diverge	84	Project: Morgan Hill Area Reinforcement	

Substation	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)								Voltage PU (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2026 Summer Peak	2029 Summer Peak	2034 Summer Peak	2026 Winter Peak	2029 Winter Peak	2034 Winter Peak	2026 Spring Off-Peak	2029 Spring Off-Peak	2026 SP Heavy Renewable & Min Gas Gen	2026 Spring OP Sensitivity	2029 SP High CEC Forecast	
SOLEDAD 115 kV	Base Case	P0	Base Case	0.96	0.96	0.94	1.00	0.99	0.95	1.03	1.05	1.01	1.03	0.96	Continue to monitor
LAURELES 60 kV	Base Case	P0	Base Case	0.95	0.98	0.92	0.99	0.99	0.94	1.02	1.04	1.02	1.03	0.98	Continue to monitor
SPENCE 60 kV	Base Case	P0	Base Case	0.93	0.97	NA	0.99	0.98	NA	1.02	1.03	1.00	1.03	0.97	Project: Salinas Area Reinforcement
SPENCE 115 kV	Base Case	P0	Base Case	NA	NA	0.95	NA	NA	0.96	NA	NA	NA	NA	NA	Project: Salinas Area Reinforcement
SOLEDAD 60 kV	Base Case	P0	Base Case	0.96	0.95	0.94	1.01	0.99	0.95	1.03	1.05	1.01	1.03	0.95	Continue to monitor
SAN MIGL 70 kV	Base Case	P0	Base Case	0.94	0.96	0.97	0.98	1.00	0.98	1.02	1.04	1.00	1.02	0.96	Project: Estrella Substation Project
SOLEDAD 115 kV	CRAZY HORSE CANYON-SALINAS-SOLEDAD #1 115KV [2900]	P1	N-1	0.91	0.89	0.90	0.98	0.96	0.92	1.02	1.05	0.99	1.02	0.89	Project: Salinas Area Reinforcement
SOLEDAD 60 kV	CRAZY HORSE CANYON-SALINAS-SOLEDAD #1 115KV [2900]	P1	N-1	0.91	0.89	0.90	0.99	0.95	0.92	1.02	1.06	0.99	1.02	0.88	Project: Salinas Area Reinforcement
SOLEDAD 115 kV	CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910]	P1	N-1	0.91	0.89	0.90	0.98	0.96	0.92	1.02	1.05	0.99	1.02	0.89	Project: Salinas Area Reinforcement
SOLEDAD 60 kV	CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910]	P1	N-1	0.91	0.89	0.90	0.99	0.95	0.92	1.02	1.06	0.99	1.02	0.88	Project: Salinas Area Reinforcement
SNBENITO 115 kV	CRAZY HORSE CANYON-SAN BENITO 115KV [2152]	P1	N-1	0.93	0.96	0.89	1.01	0.99	0.92	1.01	1.05	1.01	1.01	0.95	Continue to monitor
PSA RBLs 70 kV	PASO ROBLES-TEMPLETON 70KV [9400]	P1	N-1	Diverge	Diverge	0.95	0.85	0.86	0.97	0.95	1.06	0.98	0.95	Diverge	Project: Estrella Substation Project
SAN MIGL 70 kV	PASO ROBLES-TEMPLETON 70KV [9400]	P1	N-1	Diverge	Diverge	0.97	0.85	0.87	0.98	0.96	1.05	0.98	0.96	Diverge	Project: Estrella Substation Project
SPENCE 60 kV	SALINAS1-FIRESTONE 60KV [0]	P1	N-1	0.86	0.91	NA	0.97	0.94	NA	1.02	1.03	0.98	1.03	0.91	Project: Salinas Area Reinforcement
SPENCE 60 kV	SALINAS-FIRESTONE #2 60KV [7910]	P1	N-1	0.89	0.94	NA	0.98	0.96	NA	1.02	1.03	0.99	1.03	0.94	Project: Salinas Area Reinforcement
SPENCE 60 kV	SALINAS-FIRESTONE #2 60KV [7910] (2)	P1	N-1	0.87	0.92	NA	0.97	0.95	NA	1.02	1.03	0.98	1.03	0.92	Project: Salinas Area Reinforcement
SAN MIGL 70 kV	SAN MIGUEL-PASO ROBLES 70KV [9390]	P1	N-1	0.80	0.82	NA	0.83	0.89	NA	0.97	1.02	0.97	0.97	0.82	Project: Estrella Substation Project
SAN MIGL 70 kV	SAN MIGL-UNIONPGAE #1 70KV [0]	P1	N-1	NA	NA	0.73	NA	NA	0.82	NA	NA	NA	NA	NA	Potential Network Upgrade (New Line)
SOLEDAD 115 kV	CRAZY HORSE CANYON-SALINAS-SOLEDAD #1 115KV [2900] (NTVD SW1-SOLEDAD)	P2-1	Line Section w/o Fault	0.91	0.90	0.90	0.98	0.96	0.92	1.02	1.05	0.99	1.02	0.89	Sensitivity Only
SOLEDAD 60 kV	CRAZY HORSE CANYON-SALINAS-SOLEDAD #1 115KV [2900] (NTVD SW1-SOLEDAD)	P2-1	Line Section w/o Fault	0.91	0.89	0.90	0.99	0.95	0.92	1.02	1.06	0.99	1.02	0.88	Project: Salinas Area Reinforcement
SOLEDAD 115 kV	CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910] (NTVD SW2-SOLEDAD)	P2-1	Line Section w/o Fault	0.91	0.90	0.90	0.98	0.96	0.92	1.02	1.05	0.99	1.02	0.89	Sensitivity Only
SOLEDAD 60 kV	CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910] (NTVD SW2-SOLEDAD)	P2-1	Line Section w/o Fault	0.91	0.89	0.90	0.99	0.95	0.92	1.02	1.06	0.99	1.02	0.88	Project: Salinas Area Reinforcement
SOLEDAD 115 kV	CRZY_HRS 115KV - MIDDLE BREAKER BAY 3	P2-3	Non-Bus-Tie Breaker	0.89	0.87	0.88	0.98	0.95	0.90	1.01	1.06	0.99	1.01	0.87	Operations solution
SOLEDAD 60 kV	CRZY_HRS 115KV - MIDDLE BREAKER BAY 3	P2-3	Non-Bus-Tie Breaker	0.89	0.87	0.88	0.98	0.94	0.89	1.02	1.06	0.99	1.01	0.86	Operations Solution
SOLEDAD 115 kV	CRZY_HRS 115KV - MIDDLE BREAKER BAY 4	P2-3	Non-Bus-Tie Breaker	0.91	0.89	0.90	0.98	0.96	0.91	1.02	1.05	0.99	1.02	0.89	Operations solution
SOLEDAD 60 kV	CRZY_HRS 115KV - MIDDLE BREAKER BAY 4	P2-3	Non-Bus-Tie Breaker	0.91	0.89	0.90	0.99	0.95	0.91	1.02	1.06	0.99	1.02	0.88	Project: Salinas Area Reinforcement
SNBENITO 115 kV	CRZY_HRS 115KV - MIDDLE BREAKER BAY 5	P2-3	Non-Bus-Tie Breaker	0.91	0.93	0.86	1.00	0.98	0.90	1.01	1.05	1.01	1.00	0.93	Continue to monitor
SOLEDAD 115 kV	SALINAS 115KV - MIDDLE BREAKER BAY 3	P2-3	Non-Bus-Tie Breaker	0.92	0.90	0.91	0.98	0.96	0.93	1.02	1.05	0.99	1.02	0.89	Operations solution
SOLEDAD 60 kV	SALINAS 115KV - MIDDLE BREAKER BAY 3	P2-3	Non-Bus-Tie Breaker	0.91	0.89	0.91	0.99	0.96	0.92	1.02	1.05	0.99	1.02	0.89	Project: Salinas Area Reinforcement
SOLEDAD 115 kV	SALINAS 115KV - MIDDLE BREAKER BAY 5	P2-3	Non-Bus-Tie Breaker	0.91	0.89	0.90	0.98	0.96	0.92	1.02	1.05	0.99	1.02	0.89	Operations solution
SOLEDAD 60 kV	SALINAS 115KV - MIDDLE BREAKER BAY 5	P2-3	Non-Bus-Tie Breaker	0.91	0.89	0.90	0.99	0.95	0.92	1.02	1.06	0.99	1.02	0.88	Project: Salinas Area Reinforcement
SAN MIGL 70 kV	ESTRELLA 230KV - MIDDLE BREAKER BAY 1	P2-3	Non-Bus-Tie Breaker	NA	NA	0.89	NA	NA	0.94	NA	NA	NA	NA	NA	Potential Network Upgrade (New Line)
SOLEDAD 115 kV	MLPB1CTG1 18.00KV & MLPB1CTG2 18.00KV & MLPB1STG1 18.00KV GEN UNITS & CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910]	P3	G-1/N-1	0.91	0.89	0.90	0.98	0.96	0.92	1.02	1.05	0.99	1.02	0.88	Project: Salinas Area Reinforcement
SOLEDAD 60 kV	MLPB1CTG1 18.00KV & MLPB1CTG2 18.00KV & MLPB1STG1 18.00KV GEN UNITS & CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910]	P3	G-1/N-1	0.90	0.88	0.90	0.99	0.95	0.92	1.02	1.06	0.99	1.02	0.88	Project: Salinas Area Reinforcement
SPENCE 60 kV	MLPB2CTG3 18.00KV & MLPB2CTG4 18.00KV & MLPB2STG2 18.00KV GEN UNITS & SALINAS1-FIRESTONE 60KV [0]	P3	G-1/N-1	0.86	0.91	NA	0.97	0.94	NA	1.02	1.03	0.98	1.02	0.91	Project: Salinas Area Reinforcement
SAN MIGL 70 kV	MLPB1CTG1 18.00KV & MLPB1CTG2 18.00KV & MLPB1STG1 18.00KV GEN UNITS & SAN MIGL-UNIONPGAE #1 70KV [0]	P3	G-1/N-1	NA	NA	0.73	NA	NA	0.82	NA	NA	NA	NA	NA	Potential Network Upgrade (New Line)
CRZY_HRS 115 kV	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery Supply	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	1.57	NA	NA	Diverge	Redundant battery supply installation recommended previously
SOLEDAD 115 kV	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery Supply	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	1.57	NA	NA	Diverge	Redundant battery supply installation recommended previously
SALINAS 115 kV	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery Supply	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	1.56	NA	NA	Diverge	Redundant battery supply installation recommended previously
SNBENITO 115 kV	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery Supply	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	1.57	NA	NA	Diverge	Redundant battery supply installation recommended previously

2024-2025 ISO Reliability Assessment - Study Results

Study Area: **PG&E Central Coast & Los Padres**

Low Voltages



Substation	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)								Voltage PU (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2026 Summer Peak	2029 Summer Peak	2034 Summer Peak	2026 Winter Peak	2029 Winter Peak	2034 Winter Peak	2026 Spring Off-Peak	2029 Spring Off-Peak	2026 SP Heavy Renewable & Min Gas Gen	2026 Spring OP Sensitivity	2029 SP High CEC Forecast	
SALINAS2 60 kV	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery Supply	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	1.44	NA	NA	Diverge	Redundant battery supply installation recommended previously
SALINAS1 60 kV	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery Supply	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	1.44	NA	NA	Diverge	Redundant battery supply installation recommended previously
LAURELES 60 kV	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery Supply	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	1.45	NA	NA	Diverge	Redundant battery supply installation recommended previously
SPENCE 60 kV	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery Supply	NA	Diverge	NA	NA	Diverge	NA	NA	1.44	NA	NA	Diverge	Redundant battery supply installation recommended previously
SOLEDAD 60 kV	MOSS LANDING 230-115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery Supply	NA	Diverge	Diverge	NA	Diverge	Diverge	NA	1.57	NA	NA	Diverge	Redundant battery supply installation recommended previously
SALINAS2 60 kV	SALINAS 115KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	0.36	Diverge	Diverge	0.38	0.44	1.01	0.34	0.44	Diverge	Redundant relay installation recommended previously
SALINAS1 60 kV	SALINAS 115KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	0.36	Diverge	Diverge	0.38	0.44	1.01	0.34	0.44	Diverge	Redundant relay installation recommended previously
LAURELES 60 kV	SALINAS 115KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	0.31	Diverge	Diverge	0.33	0.44	1.03	0.34	0.44	Diverge	Redundant relay installation recommended previously
SPENCE 60 kV	SALINAS 115KV BAAH BUS #1 OR #2 (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundant Relay	Diverge	Diverge	NA	Diverge	Diverge	NA	0.44	1.01	0.33	0.44	Diverge	Redundant relay installation recommended previously
PSA RBL5 70 kV	TEMPLETON 230-70KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery Supply	Diverge	Diverge	0.95	0.85	0.86	0.97	0.95	1.06	0.98	0.95	Diverge	Project: Estrella Substation Project
SAN MIGL 70 kV	TEMPLETON 230-70KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundant Battery Supply	Diverge	Diverge	0.97	0.85	0.87	0.98	0.96	1.05	0.98	0.96	Diverge	Project: Estrella Substation Project
SISQUOC 115 kV	MESA_PGE-SNTA MRA 115KV [0] & MESA-SISQUOC 115KV [2460]	P6	N-1-1	0.90	0.92	0.47	0.98	0.96	0.97	0.98	1.05	0.98	0.98	Diverge	Continue to monitor
MESA PGE 230 kV	MORRO BAY-MESA 230KV [5290] & DIABLO-MESA 230KV [4620]	P6	N-1-1	1.03	0.79	NA	1.01	1.02	1.00	1.03	1.03	1.03	1.03	Diverge	Existing UVLS
SNTA MRA 115 kV	MORRO BAY-MESA 230KV [5290] & DIABLO-MESA 230KV [4620]	P6	N-1-1	1.02	0.90	NA	1.03	1.02	1.02	1.02	1.04	1.02	1.02	Diverge	Existing UVLS
DIABLOCN 230 kV	MORRO BAY-MESA 230KV [5290] & MORRO BAY-DIABLO 230KV [5260]	P6	N-1-1	1.05	0.87	0.99	1.04	1.04	1.04	1.03	1.03	1.05	1.03	0.87	Existing UVLS
MORRO BY 115 kV	MORROBAY 230/115KV TB 6 & CALLENDER SW STA-MESA 115KV [1210]	P6	N-1-1	0.92	0.92	0.87	0.97	0.95	0.95	0.99	1.07	1.00	0.99	Diverge	Continue to monitor
SN LS OB 115 kV	MORROBAY 230/115KV TB 6 & CALLENDER SW STA-MESA 115KV [1210]	P6	N-1-1	0.93	0.92	0.87	0.97	0.95	0.95	0.99	1.06	1.00	0.99	Diverge	Continue to monitor
OCEANO 115 kV	MORROBAY 230/115KV TB 6 & CALLENDER SW STA-MESA 115KV [1210]	P6	N-1-1	0.90	0.89	0.83	0.95	0.93	0.93	0.97	1.07	0.99	0.97	0.89	Operations Solution/ Generation Redispatch
CALLENDERSS 115 kV	MORROBAY 230/115KV TB 6 & CALLENDER SW STA-MESA 115KV [1210]	P6	N-1-1	0.90	0.89	0.82	0.95	0.93	0.93	0.97	1.07	0.98	0.97	0.88	Operations Solution/ Generation Redispatch
SNBENITO 115 kV	MOSS LANDING-CRAZY HORSE CANYON #2 115KV [2983] & MOSS LANDING-CRAZY HORSE CANYON #1 115KV [2930] MOAS OPENED ON PRNDL J1_PRUNEDLE	P6	N-1-1	0.89	Diverge	0.84	1.00	0.97	0.87	1.02	1.05	1.00	1.01	Diverge	ISO recommended a RAS
SPENCE 60 kV	MOSS LANDING-CRAZY HORSE CANYON #2 115KV [2983] & MOSS LANDING-CRAZY HORSE CANYON #1 115KV [2930] MOAS OPENED ON PRNDL J1_PRUNEDLE	P6	N-1-1	0.93	Diverge	NA	0.98	0.96	NA	1.02	1.03	0.99	1.02	Diverge	Project: Salinas Area Reinforcement
SPENCE 115 kV	MOSS LANDING-CRAZY HORSE CANYON #2 115KV [2983] & MOSS LANDING-CRAZY HORSE CANYON #1 115KV [2930] MOAS OPENED ON PRNDL J1_PRUNEDLE	P6	N-1-1	NA	NA	0.88	NA	NA	0.91	NA	NA	NA	NA	NA	Operations Solution/ Generation Redispatch
GREENVALLEY 115 kV	MOSS LANDING-GREEN VALLEY #2 115KV [2860] & MOSS LANDING-GREEN VALLEY #1 115KV [2850]	P6	N-1-1	Diverge	1.01	0.93	Diverge	1.01	0.93	Diverge	1.04	0.56	Diverge	Diverge	Project: Morgan Hill Area Reinforcement
CMP EVRS 115 kV	MOSS LANDING-GREEN VALLEY #2 115KV [2860] & MOSS LANDING-GREEN VALLEY #1 115KV [2850]	P6	N-1-1	Diverge	1.03	0.93	Diverge	1.03	0.94	Diverge	1.04	0.57	Diverge	Diverge	Project: Morgan Hill Area Reinforcement
PAUL SWT 115 kV	MOSS LANDING-GREEN VALLEY #2 115KV [2860] & MOSS LANDING-GREEN VALLEY #1 115KV [2850]	P6	N-1-1	Diverge	1.03	0.94	Diverge	1.03	0.94	Diverge	1.03	0.57	Diverge	Diverge	Project: Morgan Hill Area Reinforcement
ROB ROY 115 kV	MOSS LANDING-GREEN VALLEY #2 115KV [2860] & MOSS LANDING-GREEN VALLEY #1 115KV [2850]	P6	N-1-1	Diverge	1.02	0.93	Diverge	1.02	0.93	Diverge	1.04	0.57	Diverge	Diverge	Project: Morgan Hill Area Reinforcement
SOLEDAD 115 kV	SALINAS-MOSSLSNW-DOLAN RD 115KV [0] & CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910]	P6	N-1-1	0.88	0.87	0.86	0.97	0.94	0.88	1.01	1.06	0.98	1.01	0.86	Operations Solution/ Generation Redispatch

2024-2025 ISO Reliability Assessment - Study Results

Study Area: **PG&E Central Coast & Los Padres**

Low Voltages



Substation	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)								Voltage PU (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2026 Summer Peak	2029 Summer Peak	2034 Summer Peak	2026 Winter Peak	2029 Winter Peak	2034 Winter Peak	2026 Spring Off-Peak	2029 Spring Off-Peak	2026 SP Heavy Renewable & Min Gas Gen	2026 Spring OP Sensitivity	2029 SP High CEC Forecast	
SOLEDAD 60 kV	SALINAS-MOSSLSNSW-DOLAN RD 115KV [0] & CRAZY HORSE CANYON-SALINAS-SOLEDAD #2 115KV [2910]	P6	N-1-1	0.88	0.86	0.86	0.98	0.94	0.88	1.02	1.06	0.98	1.02	0.85	Operations Solution/ Generation Redispatch
LAURELES 60 kV	SALINAS-MOSSLSNSW-DOLAN RD 115KV [0] & MOSS LANDING-CRAZY HORSE CANYON #1 115KV [2930] MOAS OPENED ON PRNDL J1_PRUNEDLE	P6	N-1-1	0.95	Diverge	0.89	0.98	0.96	0.92	1.02	1.04	1.01	1.02	Diverge	Operations Solution/ Generation Redispatch
SALINAS 115 kV	SALINAS-MOSSLSNSW-DOLAN RD 115KV [0] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	0.88	0.89	0.80	0.98	0.94	0.82	1.02	1.05	0.99	1.02	0.88	Operations Solution/ Generation Redispatch
SALINAS2 60 kV	SALINAS-MOSSLSNSW-DOLAN RD 115KV [0] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	0.93	0.95	0.85	0.98	0.98	0.88	1.02	1.03	0.99	1.02	Diverge	Continue to monitor
SALINAS1 60 kV	SALINAS-MOSSLSNSW-DOLAN RD 115KV [0] & MOSS LANDING-SALINAS #2 115KV [2890]	P6	N-1-1	0.93	0.95	0.85	0.98	0.98	0.88	1.02	1.03	0.99	1.02	Diverge	Continue to monitor
SAN MIGL 70 kV	TEMPLETON-GATES 230KV [5934] & MORRO BAY-TEMPLETON 230KV [5933]	P6	N-1-1	0.64	0.78	0.97	0.91	0.94	0.98	0.98	1.05	0.96	0.97	0.76	Project: Estrella Substaion Project
TEMLT7 70 kV	TEMPLETON-GATES 230KV [5934] & MORRO BAY-TEMPLETON 230KV [5933]	P6	N-1-1	0.69	0.81	0.97	0.94	0.95	0.98	0.99	1.05	0.96	0.98	0.80	Project: Estrella Substation Project
PSA RBL5 70 kV	TEMPLETON-GATES 230KV [5934] & MORRO BAY-TEMPLETON 230KV [5933]	P6	N-1-1	0.64	0.78	0.96	0.93	0.95	0.98	0.98	1.07	0.95	0.98	0.77	Project: Estrella Substation Project
ATASCDRO 70 kV	TEMPLETON-GATES 230KV [5934] & MORRO BAY-TEMPLETON 230KV [5933]	P6	N-1-1	0.78	0.88	0.98	0.96	0.97	0.98	1.00	1.05	0.98	1.00	0.86	Project: Estrella Substation Project
CAYUCOS 70 kV	TEMPLETON-GATES 230KV [5934] & MORRO BAY-TEMPLETON 230KV [5933]	P6	N-1-1	0.85	Diverge	0.98	0.97	0.98	0.98	1.00	1.04	0.99	1.00	Diverge	Project: Estrella Substation Project
MESA PGE 230 kV	Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7	DCTL	1.03	0.79	NA	1.00	1.03	1.00	1.03	1.03	1.03	1.03	NA	Existing UVLS
SNTA MRA 115 kV	Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7	DCTL	1.02	0.90	NA	1.03	1.02	1.02	1.02	1.04	1.02	1.02	NA	Existing UVLS
SNTAMRTP 115 kV	Morro Bay-Mesa and Diablo-Mesa 230 kV Lines	P7	DCTL	1.02	0.90	NA	1.04	1.02	1.02	1.02	1.04	1.02	1.02	NA	Existing UVLS
DIABLOCN 230 kV	Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7	DCTL	1.05	0.87	0.99	1.03	1.04	1.04	1.03	1.03	1.05	1.03	0.87	Existing UVLS
MESA PGE 230 kV	Morro Bay-Mesa and Morro Bay-Diablo 230 kV Lines	P7	DCTL	1.03	0.84	0.93	1.01	1.03	1.03	1.03	1.03	1.03	1.03	0.84	Existing UVLS
CRZY_HRS 115 kV	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	0.91	0.92	0.86	1.00	0.97	0.88	1.02	1.05	1.00	1.02	0.92	continue to monitor
SOLEDAD 115 kV	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	0.88	0.89	0.84	0.99	0.95	0.87	1.02	1.06	0.99	1.02	0.88	ISO recommended a RAS
SALINAS 115 kV	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	0.93	0.95	0.90	1.01	0.98	0.91	1.03	1.05	1.01	1.03	0.94	continue to monitor
SNBENITO 115 kV	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	0.89	0.91	0.84	1.00	0.97	0.87	1.02	1.05	1.00	1.01	0.90	ISO recommended a RAS
LAURELES 60 kV	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	0.95	0.95	0.90	0.98	0.96	0.92	1.02	1.04	1.01	1.03	0.95	continue to monitor
SPENCE 60 kV	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	0.93	0.94	NA	0.98	0.96	NA	1.02	1.03	0.99	1.03	0.94	Project: Salinas Area Reinforcement
SPENCE 115 kV	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	NA	NA	0.88	NA	NA	0.90	NA	NA	NA	NA	NA	continue to monitor
SOLEDAD 60 kV	Moss Landing - Crazy Horse #1 and #2 115 kV Lines	P7	DCTL	0.88	0.88	0.84	0.99	0.95	0.86	1.02	1.06	0.99	1.02	0.87	ISO recommended a RAS
GREENVALLEY 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	P7	DCTL	Diverge	1.01	0.93	Diverge	1.01	0.93	Diverge	1.04	0.56	Diverge	1.01	Project: Morgan Hill Area Reinforcement
CMP EVRS 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	P7	DCTL	Diverge	1.04	0.93	Diverge	1.03	0.94	Diverge	1.04	0.57	Diverge	1.04	Project: Morgan Hill Area Reinforcement
PAUL SWT 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	P7	DCTL	Diverge	1.03	0.94	Diverge	1.03	0.94	Diverge	1.03	0.57	Diverge	1.03	Project: Morgan Hill Area Reinforcement
ROB ROY 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	P7	DCTL	Diverge	1.02	0.93	Diverge	1.02	0.93	Diverge	1.04	0.57	Diverge	1.02	Project: Morgan Hill Area Reinforcement
CRZY_HRS 115 kV	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	0.94	0.94	0.89	1.00	0.98	0.91	1.03	1.04	1.01	1.03	0.94	Continue to monitor
SOLEDAD 115 kV	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	0.87	0.86	0.80	0.98	0.93	0.83	1.02	1.06	0.99	1.02	0.86	ISO recommended a RAS
SALINAS 115 kV	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	0.88	0.89	0.80	0.98	0.94	0.83	1.02	1.05	0.99	1.02	0.88	ISO recommended a RAS
SNBENITO 115 kV	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	0.92	0.93	0.87	1.00	0.97	0.89	1.03	1.04	1.01	1.02	0.93	Continue to monitor
SALINAS2 60 kV	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	0.93	0.95	0.85	0.98	0.98	0.89	1.02	1.03	0.99	1.02	0.94	Continue to monitor
SALINAS1 60 kV	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	0.93	0.95	0.85	0.98	0.98	0.89	1.02	1.03	0.99	1.02	0.94	Continue to monitor
LAURELES 60 kV	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	0.89	0.92	0.78	0.97	0.96	0.83	1.01	1.04	0.99	1.01	0.91	Review and monitor power factor
SPENCE 60 kV	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	0.87	0.91	NA	0.97	0.95	NA	1.01	1.03	0.97	1.02	0.90	Review and monitor power factor
SPENCE 115 kV	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	NA	NA	0.78	NA	NA	0.81	NA	NA	NA	NA	NA	Review and monitor power factor
SOLEDAD 60 kV	Moss Landing - Salinas #1 and #2 115 kV Lines	P7	DCTL	0.86	0.86	0.80	0.98	0.93	0.83	1.02	1.06	0.99	1.02	0.85	ISO recommended a RAS

Substation	Contingency	Category	Category Description	Post Cont. Voltage Deviation % (Baseline Scenarios)									Post Cont. Voltage Deviation % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2026 Summer Peak	2029 Summer Peak	2034 Summer Peak	2026 Winter Peak	2029 Winter Peak	2034 Winter Peak	2026 Spring Off-Peak	2029 Spring Off-Peak	2026 SP Heavy Renewable & Min Gas Gen	2026 Spring OP Sensitivity	2029 SP High CEC Forecast		
PSA RBLS 70 kV	PASO ROBLES-TEMPLETON 70KV [9400]	P1	N-1	Diverge	Diverge	4	16	16	3	7	-1	3	7	Diverge	Project: Estrella Substation Project	
SAN MIGL 70 kV	PASO ROBLES-TEMPLETON 70KV [9400]	P1	N-1	Diverge	Diverge	0	13	13	0	6	-1	3	6	Diverge	Project: Estrella Substation Project	
SAN MIGL 70 kV	SAN MIGL-UNIONPGAE #1 70KV [0]	P1	N-1	NA	NA	25	NA	NA	17	NA	NA	NA	NA	NA	Potential Network Upgrade (New Line)	
SAN MIGL 70 kV	SAN MIGUEL-PASO ROBLES 70KV [9390]	P1	N-1	15	14	NA	15	11	NA	5	2	4	5	15	Project: Estrella Substation Project	

Contingency	Category	Category Description	Transient Stability Performance					Potential Mitigation Solutions
			Baseline Scenarios			Sensitivity Scenarios		
			2026 Spring Off-Peak	2029 Summer Peak	2034 Summer Peak	2026 OP Sensitivity	2029 SP High CEC Forecast	
Tran MOSSLNSW 230/115 kV bk 4	P1	N-1	No Issues	Numerical Solution Issue	Numerical Solution Issue	No Issues	No Issues	Simulations with lower timestep resulted in acceptable system response.
Tran MOSSLNSW 500-230 kV bk 9	P1	N-1	No Issues	No Issues	No Issues	No Issues	Numerical Solution Issue	Simulations with lower timestep resulted in acceptable system response.
Line MOSSLNSW to MLPB2 230 kV ckt 1	P2-1	Section w/o Fault	No Issues	No Issues	Consequential Generation Loss	No Issues	No Issues	Consequential Generation Loss.
Bus fault at MOSSLNSW 230 kV	P2-2	Bus Fault	No Issues	Numerical Solution Issue	Numerical Solution Issue	No Issues	Numerical Solution Issue	Simulations with lower timestep resulted in acceptable system response.
Internal fault at non-Bus-tie Breaker 2322 at MOSSLNSW 230 kV	P2-3	Non Tie-Breaker Fault	No Issues	Numerical Solution Issue	Numerical Solution Issue	No Issues	Numerical Solution Issue	Simulations with lower timestep resulted in acceptable system response.
Internal fault at Bue-tie Breaker 502 at MORROBAY 230 kV	P2-4	Tie-Breaker Fault	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Criteria Violations observed with 3-Phase Fault Simulations, working with PTO for SLG fault information.
Stuck Breaker Morro Bay 472 protecting line TEMPLETN to MORROBAY 230 kV ckt 1	P4	Stuck Breaker	No Issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	No Issues	Potential WECC/NERC criteria violation	Criteria Violations observed with 3-Phase Fault Simulations, working with PTO for SLG fault information.
Stuck Bue-tie Breaker 502 protecting Substation Bus MORROBAY 230 kV Section 1E	P4	Stuck Breaker	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Criteria Violations observed with 3-Phase Fault Simulations, working with PTO for SLG fault information.
Stuck Breaker Coburn 52 protecting Gen BAF COG2 13.8 kV Unit 1	P4	Stuck Breaker	No Issues	No Issues	Consequential Generation Loss	No Issues	No Issues	Consequential Generation Loss.
Failure of Mesa 115 kV CB 192 control circuits due to non-redundant DC panel with fault for SVD MESA_PGE 115 kV id v (ALL 115 kV clears remotely)	P5	Non-Redundant DC Panel	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	No Issues	Potential WECC/NERC criteria violation	No Issues	Install Redundant Panel
Failure of non-redundant bus differential relay protecting Substation Bus MORROBAY 230 kV (ALL 230 kV elements clear remotely)	P5	Non-Redundant Relay	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	No Issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Install Redundant Battery Supply
SLG @ bus [35910] CRZY_HRS 115kV with Outage Local DC Supply	P5	Non-Redundant Battery	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	No Issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Install Redundant Battery Supply
Failure of non-redundant Station DC Battery Supplying Morro Bay SW 230-115 kV Batt	P5	Non-Redundant Battery	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Install Redundant Battery Supply
Failure of non-redundant relay on Mesa CB 192 protecting SVD MESA_PGE 115 kV id v	P5	Non-Redundant Relay	No Issues	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	Install Redundant Relay
Fault on Line Morro Bay-Mesa 230 kV Line with Loss of Line Morro Bay - Diablo Canyon 230 kV	P6	N-1-1	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	Potential WECC/NERC criteria violation	Potential Mitigation
Fault on Tran Mesa 230/115 kV bk 2 with Loss of Tran Mesa 230/115 kV bk 3	P6	N-1-1	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	Potential WECC/NERC criteria violation	Potential Mitigation



Worst Contingency	Category	Category Description	Amount of Load Drop (MW)										Potential Mitigation Solutions	
			2026 Summer Peak	2029 Summer Peak	2034 Summer Peak	2026 Winter Peak	2029 Winter Peak	2034 Winter Peak	2026 Spring Off-Peak	2029 Spring Off-Peak	2026 SP Heavy Renewable & Min Gas Gen	2026 Spring OP Sensitivity		2029 SP High CEC Forecast

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

Substation	Load Served (MW)											Potential Mitigation Solutions	
	2026 Summer Peak	2026 Summer Peak	2029 Summer Peak	2034 Summer Peak	2026 Winter Peak	2029 Winter Peak	2034 Winter Peak	2026 Spring Off-Peak	2029 Spring Off-Peak	2026 SP Heavy Renewable & Min Gas Gen	2026 Spring OP Sensitivity		2029 SP High CEC Forecast

No single source substation with more than 100 MW