2026-2027 ISO Reliability Assessment - Final Study Results
Study Area: PG&E North Coast & North Bay
Thermal Overloads

California ISO

Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)									Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2028 Summer Peak	2031 Summer Peak	2036 Summer Peak	2028 Winter Peak	2031 Winter Peak	2041 Winter Peak	2028 Spring Off-Peak	2031 Spring Off-Peak	2036 Summer-Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
CLEAR LAKE-HOPLAND 60KV	EGLE RCK 115/60KV TB 1	P1	N-1	128	83	97	59	47	71	64	4	24	58	64	87	Project; Clearlake-Hopland 60 KV line reconductoring
	EGLE RCK 115KV SECTION MA	P2	Bus	Diverge	Diverge	100	62	Diverge	Diverge	67	3	27	61	67	Diverge	Continue to monitor
	GEYSER78 13.80KV GEN UNIT 2 and KONOCTI-EAGLE ROCK 60KV	P3	G-1/N-1	130	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Project; Clearlake-Hopland 60 KV line reconductoring
	EGLE RCK 115/60KV TB 1 and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE	P6	N-1-1	141	Diverge	104	< 100	< 100	102	< 100	< 100	< 100	< 100	< 100	Diverge	Project under development
	KONOCTI-EAGLE ROCK 60KV	P1	N-1	128	83	97	59	47	71	65	4	24	58	64	87	Project; Clearlake-Hopland 60 KV line reconductoring
	EGLE RCK - MA 115KV & EGLE RCK-HOMSTKTP-CORTINA LINE	P2	Breaker	Diverge	Diverge	102	62	Diverge	Diverge	69	3	28	61	68	Diverge	Project under development
	EGLE RCK - MA 115KV & EAGLE ROCK-REDBUD LINE	P2	Breaker	Diverge	Diverge	100	62	Diverge	Diverge	67	3	27	61	67	Diverge	Project under development
	EGLE RCK - MA 115KV & EGLE RCK-FULTON-SILVERDO LINE	P2	Breaker	Diverge	Diverge	100	62	Diverge	Diverge	67	3	27	60	67	Diverge	Project under development
	MENDOCNO 115/60KV TB 1 and MENDOCNO 115/60KV TB 3	P6	N-1-1	< 100	111	131	< 100	144	Diverge	< 100	< 100	< 100	< 100	< 100	115	Project under development
	GEYSER17 13.80KV GEN UNIT 1 and KONOCTI-EAGLE ROCK 60KV	P3	G-1/N-1	< 100	< 100	133	< 100	< 100	119	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
CLEAR LAKE-KONOCTI 60KV	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	123	157	172	53	133	Diverge	54	30	95	59	54	160	Project; Clearlake-Hopland 60 KV line reconductoring
	KONOCTI-EAGLE ROCK 60KV	P1	N-1	98	116	132	46	58	94	46	10	30	42	46	122	Project under development
	EGLE RCK 115/60KV TB 1	P1	N-1	98	115	132	46	58	94	46	10	30	42	46	122	Project under development
	EGLE RCK - MA 115KV & EAGLE ROCK-REDBUD LINE	P2	Breaker	Diverge	Diverge	128	46	Diverge	Diverge	46	10	30	42	46	Diverge	Project under development
	EGLE RCK 115KV SECTION MA	P2	Bus	Diverge	Diverge	128	46	Diverge	Diverge	46	10	30	42	46	Diverge	Project under development
	EGLE RCK - MA 115KV & EGLE RCK-FULTON-SILVERDO LINE	P2	Breaker	Diverge	Diverge	128	46	Diverge	Diverge	46	10	30	42	46	Diverge	Project under development
	EGLE RCK - MA 115KV & EGLE RCK-HOMSTKTP-CORTINA LINE	P2	Breaker	Diverge	Diverge	123	46	Diverge	Diverge	45	10	30	42	45	Diverge	Project under development
CORONA-LAKEVILLE 115KV	FULTON 115KV - SECTION 2D & 1D	P2	Breaker	157	139	65	99	117	49	85	27	36	92	85	145	Project: Santa Rosa 115 kV Lines Reconductoring Project
	CLOVRDLE1-25 25.00KV GEN UNIT VG and GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	110	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	UKIAH-HOPLAND-CLOVERDALE 115KV and MENDOCINO-REDBUD 115KV	P6	N-1-1	100	111	147	< 100	108	Diverge	< 100	< 100	< 100	< 100	< 100	117	Operating solution
	UKIAH-HOPLAND-CLOVERDALE 115KV and KONOCTI-EAGLE ROCK 60KV	P6	N-1-1	101	Diverge	111	< 100	115	132	< 100	< 100	< 100	< 100	< 100	113	Operating solution
	MENDOCINO-REDBUD 115KV and UKIAH-HOPLAND-CLOVERDALE 115KV	P6	N-1-1	< 100	101	132	< 100	108	Diverge	< 100	< 100	< 100	< 100	< 100	107	Operating solution
CORTINA-MENDOCINO #1 115KV	EGLE RCK - MA 115KV & EGLE RCK-HOMSTKTP-CORTINA LINE	P2	Breaker	Diverge	Diverge	156	44	Diverge	Diverge	31	20	77	44	33	Diverge	Project: Eagle Rock-Cortina 115 kV Line (Lower Lake Sw Sta-Highland J2-Cache J)
	CLOVRDLE - 1D 115KV & GEYSERS #3-CLOVERDALE LINE	P2	Breaker	78	78	81	29	68	102	23	10	57	30	25	81	Continue to monitor
	EGLE RCK - MA 115KV & EAGLE ROCK-REDBUD LINE	P2	Breaker	Diverge	Diverge	133	36	Diverge	Diverge	24	22	71	33	25	Diverge	Project under development
	EGLE RCK 115KV SECTION MA	P2	Bus	Diverge	Diverge	133	36	Diverge	Diverge	24	22	71	33	25	Diverge	Project: Eagle Rock-Cortina 115 kV Line (Lower Lake Sw Sta-Highland J2-Cache J)
	EGLE RCK - MA 115KV & EGLE RCK-FULTON-SILVERDO LINE	P2	Breaker	Diverge	Diverge	133	36	Diverge	Diverge	24	22	71	33	25	Diverge	Project: Eagle Rock-Cortina 115 kV Line (Lower Lake Sw Sta-Highland J2-Cache J)
EAGLE ROCK-REDBUD 115KV	CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE and GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR	P6	N-1-1	138	154	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	157	Project under development
	CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE and UKIAH-HOPLAND-CLOVERDALE 115KV	P6	N-1-1	125	144	100	< 100	Diverge	176	< 100	< 100	< 100	< 100	< 100	183	Project under development
	CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE and GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR	P6	N-1-1	164	183	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	186	Project under development
	REDBUD-D1-25 25.00KV GEN UNIT VG and UKIAH-HOPLAND-CLOVERDALE 115KV	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	116	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	UKIAH-HOPLAND-CLOVERDALE 115KV and KONOCTI-EAGLE ROCK 60KV	P6	N-1-1	< 100	Diverge	< 100	< 100	113	< 100	< 100	< 100	< 100	< 100	< 100	119	Operating solution
EGLE RCK 115/60KV TB 1	MENDOCINO-REDBUD 115KV and UKIAH-HOPLAND-CLOVERDALE 115KV	P6	N-1-1	< 100	112	159	< 100	121	Diverge	< 100	< 100	< 100	< 100	< 100	119	Operating solution
	CLOVRDLE1-25 25.00KV GEN UNIT VG and GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR	P3	G-1/N-1	< 100	< 100	100	< 100	< 100	117	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	113	131	149	63	124	Diverge	51	11	68	50	51	133	Project under development
	GEYSERS #3-CLOVERDALE 115KV (CLOVRDLE-AIDLINJCT)	P2	Line Section w/o Fault	82	93	101	65	81	101	55	19	57	54	55	95	Continue to monitor
	CLOVRDLE - 1D 115KV & UKIAH-HOPLAND-CLOVERDALE LINE	P2	Breaker	79	90	98	63	79	111	55	18	55	52	54	91	Continue to monitor
	CLOVRDLE 115KV SECTION 1D	P2	Bus	78	89	97	63	79	112	53	19	55	52	53	91	Continue to monitor
	UKIAH-HOPLAND-CLOVERDALE 115KV	P1	N-1	78	88	96	62	78	115	54	18	54	52	53	90	Continue to monitor
	UKIAH-HOPLAND-CLOVERDALE 115KV (HPLND JT-CLOVRDLE)	P2	Line Section w/o Fault	76	88	96	62	78	115	53	19	54	52	52	89	Continue to monitor
	UKIAH - 1E 115KV & UKIAH-HOPLAND-CLOVERDALE LINE	P2	Breaker	77	86	94	61	76	111	53	18	54	51	52	88	Continue to monitor
EGLE RCK-HOMSTKTP-CORTINA 115KV	GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE	P6	N-1-1	115	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	Diverge	Operating solution
	EGLE RCK 115/60KV TB 1 and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE	P6	N-1-1	106	Diverge	103	< 100	114	105	< 100	< 100	< 100	< 100	< 100	Diverge	Operating solution
	CORTINA-MENDOCINO #1 115KV (INDIANVLYPH-LUCERNJ1)	P2	Line Section w/o Fault	100	77	82	5	65	89	6	67	45	1	2	83	Project: Eagle Rock-Cortina 115 kV Line (Lower Lake Sw Sta-Highland J2-Cache J)
	INDIANVLYPH 115KV SECTION 1D	P2	Bus	100	77	82	5	65	89	7	68	45	1	2	83	Project under development
FTCH MTN - HDSBGTP1 60KV	GEYSER14 13.80KV GEN UNIT 1 and FULTON-WINDSOR 60KV	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	118	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	FULTON-WINDSOR 60KV	P1	N-1	66	71	89	44	67	108	42	27	69	36	42	73	Continue to monitor
	FULTON 115/60KV TB 1 and FULTON 115/60KV TB 2	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
FULTON 230/115KV TB 9	RINCON 1-25 25.00KV GEN UNIT VG and FULTON 230/115KV TB 4	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	102	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	FULTON 230KV - MIDDLE BREAKER BAY 1	P2	Breaker	86	93	93	57	83	103	47	34	47	52	47	95	Continue to monitor
FULTON-CALISTOGA 60KV	GEYSER17 13.80KV GEN UNIT 1 and LAKEVILLE #1 60KV	P3	G-1/N-1	109	110	132	< 100	< 100	182	< 100	< 100	< 100	< 100	< 100	113	Potential nearby project : Lakeville 60 kV Area Reinforcement
	FULTON 230/115KV TB 9 and FULTON 230/115KV TB 4	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	110	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	LAKEVILLE #1 60KV	P1	N-1	105	110	132	43	73	135	47	13	82	49	47	113	Potential nearby project: Lakeville 60 kV Area Reinforcement
FULTON-COTATI-SONOMALDFL 60KV	SONOMALDFL2 4.16KV GEN UNIT 5 and LAKEVILLE #2 60KV MOAS OPENED ON PETLMA A_LKVLE JT	P3	G-1/N-1	< 100	< 100	101	< 100	< 100	147	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	LAKEVILLE #2 60KV MOAS OPENED ON PETLMA A_LKVLE JT	P1	N-1	74	82	100	37	66	104	42	1	43	26	44	85	Continue to monitor
	SONOMALDFL1 4.16KV GEN UNIT 1 and LAKEVILLE #2 60KV MOAS OPENED ON PETLMA A_LKVLE JT	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	160	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	GEYSER14 13.80KV GEN UNIT 1 and LAKEVILLE #2 60KV MOAS OPENED ON PETLMA A_LKVLE JT	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	159	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	NA	350	364	NA	256	Diverge	NA	73	281	NA	NA	352	Project: Lakeville 60 kV Area Reinforcement
	GEYSER14 13.80KV GEN UNIT 1 and FULTON-COTATI-SONOMALDFL 60KV MOAS OPENED ON LAGUNATP_LAGUNA	P3	G-1/N-1	103	115	132	< 100	119	158	< 100	< 100	< 100	< 100	< 100	118	Project: Lakeville 60 kV Area Reinforcement
	FULTON-COTATI-SONOMALDFL 60KV MOAS OPENED ON LAGUNATP_LAGUNA	P1	N-1	103	115	132	NA	NA	115	NA	NA	NA	NA	NA	118	Project: Lakeville 60 kV Area Reinforcement
	LAKEVILLE 115KV - SECTION 1D & 2D	P2	Breaker	NA	85	102	NA	49	73	NA	22	33	NA	NA	89	Continue to monitor
FULTON-HOPLAND 60KV	FULTON-WINDSOR 60KV	P1	N-1	66	71	89	44	67	108	42	27	69	36	42	73	Continue to monitor
	CLOVRDLE1-25 25.00KV GEN UNIT VG and FULTON-WINDSOR 60KV	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	103	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	FULTON 115/60KV TB 2 and FULTON 115/60KV TB 1	P6	N-1-1	122	121	127	130	124	Diverge	127	< 100	126	113	127	121	Operating solution
	GEYSER14 13.80KV GEN UNIT 1 and FULTON-WINDSOR 60KV	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	118	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	124	121	126	93	87	Diverge	128	37	124	113	128	121	Project under development
	FULTON 115/60KV TB 1 and FULTON 115/60KV TB 2	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
FULTON-PUEBLO 115KV	SONOMALDFL2 4.16KV GEN UNIT 9 and SONOMA-PUEBLO 115KV	P3	G-1/N-1	< 100	162	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	163	Project: Lakeville 60 kV Area Reinforcement
	CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE and SONOMA-PUEBLO 115KV	P6	N-1-1	< 100	162	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Diverge	Project: Lakeville 60 kV Area Reinforcement
	LAKEVILLE-SONOMA #2 115KV and LAKEVILLE-SONOMA #1 115KV	P6	N-1-1	< 100	119	112	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	120	Operating solution
	LAKEVILLE 115KV - SECTION 1D & 2D	P2	Breaker	117	180	172	41	46	54	46	10	45	60	45	180	Project: Lakeville 60 kV Area Reinforcement
	SONOMA 115KV SECTION 1E	P2	Bus	64	162	77	20	26	30	23	6	27	39	23	163	Project: Lakeville 60 kV Area Reinforcement
	SONOMA 115KV - SECTION 1D & 1E	P2	Breaker	64	162	77	20	26	30	23	6	27	39	23	163	Project: Lakeville 60 kV Area Reinforcement
	SONOMA-PUEBLO 115KV	P1	N-1	64	162	76	20	26	30	23	6	27	39	23	163	Project: Lakeville 60 kV Area Reinforcement
	SONOMA-PUEBLO 115KV and SILVERDO-FULTON-EGLE RCK 115KV	P6	N-1-1	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Diverge	Continue to monitor
FULTON-SANTA ROSA #1 115KV	CORONA-LAKEVILLE 115KV and FULTON-SANTA ROSA #2 115KV	P6	N-1-1	138	142	< 100	< 100	113	< 100	< 100	< 100	< 100	< 100	< 100	146	Operating solution
FULTON-SANTA ROSA #2 115KV	CORONA-LAKEVILLE 115KV and FULTON-SANTA ROSA #1 115KV	P6	N-1-1	137	141	< 100	< 100	113	< 100	< 100	< 100	< 100	< 100	< 100	145	Operating solution
FULTON-WINDSOR 60KV	IGNACIO-SOBRANTE 230KV and FULTON-HOPLAND 60KV MOAS OPENED ON HDSBGTP1_FTCHMTNP	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	113	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	GEYSER14 13.80KV GEN UNIT 1 and FULTON-HOPLAND 60KV MOAS OPENED ON HDSBGTP1_FTCHMTNP	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	113	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	FULTON-HOPLAND 60KV MOAS OPENED ON HDSBGTP1_FTCHMTNP	P1	N-1	65	70	87	44	67	106	41	26	68	35	41	72	Continue to monitor
	FULTON - HOPLAND 60 KV & GEYSER 12 - FULTON & GEYSER 17 - FULTON 230 KV LINES	P7	DCTL	64	70	88	44	67	105	41	27	68	35	41	72	Continue to monitor
	FULTON-HOPLAND 60KV & GEYSERS #17-FULTON 230KV & EAGLE ROCK-FULTON-SILVERADO 115KV LINES	P7	DCTL	64	70	86	44	67	105	42	27	68	36	41	72	Continue to monitor
GEYSERS #3-CLOVERDALE 115KV	EGLE RCK 115/60KV TB 1 and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE	P6	N-1-1	< 100	Diverge	< 100	< 100	118	< 100	< 100	< 100	< 100	< 100	< 100	Diverge	Operating solution
	CLOVRDLE1-25 25.00KV GEN UNIT VG and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	105	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	112	118	118	52	92	Diverge	52	31	81	66	53	122	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-Cloverdale)
	FULTON 115/60KV TB 1 and FULTON 115/60KV TB 2	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
HARTLEY-CLEARLAKE 60KV	MENDOCINO-REDBUD 115KV and UKIAH-HOPLAND-CLOVERDALE 115KV	P6	N-1-1	< 100	< 100	122	< 100	104	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	Operating solution
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	117	132	149	36	108	Diverge	37	18	76	34	37	133	Project under development
HGHWY J2 - HIGHWAY 115KV	Base Case	P0	Base Case	98	104	114	52	63	81	57	16	62	60	57	107	Potential nearby project, North Tower 115 kV Looping Project
	LAKEVILE 230KV - SECTION 2E & 2D	P2	Breaker	92	98	107	48	59	79	51	14	55	53	50	101	Continue to monitor
	LAKEVILE 230KV - SECTION 2E & 1E	P2	Breaker	90	96	105	48	59	78	51	14	55	53	50	99	Continue to monitor
	LAKEVILE 230KV - SECTION 1D & 1E	P2	Breaker	90	95	105	48	61	79	51	14	55	53	50	97	Continue to monitor
	FULTON SVD=V	P1	N-1	89	95	103	48	59	76	51	14	55	53	50	98	Continue to monitor
	IGNACIO 230/115KV TB 6	P1	N-1	89	94	104	48	59	76	51	14	55	53	50	97	Continue to monitor
	LAKEVILE - 2E 230KV & FULTON-LAKEVILLE LINE	P2	Breaker	89	94	104	48	59	76	51	14	55	53	50	97	Continue to monitor
	LAKEVILE - 2E 230KV & GEYSR18-LAKEVILE-GEYSR20-GEYSR13 LINE	P2	Breaker	89	94	104	48	59	76	51	14	55	53	50	97	Continue to monitor
	FULTON - HOPLAND 60 KV & GEYSER 12 - FULTON & GEYSER 17 - FULTON 230 KV LINES	P7	DCTL	87	94	103	48	59	76	51	14	55	53	50	97	Continue to monitor
	GEYSER 12 - FULTON& GEYSER 17 - FULTON 230 KV LINES	P7	DCTL	87	94	103	48	59	76	51	14	55	53	50	97	Continue to monitor
	IGNACIO 230/115KV TB 4	P1	N-1	87	92	103	48	59	76	51	14	55	53	50	94	Continue to monitor
HPLND JT 115/60KV TB 2	MENDOCNO 115/60KV TB 1 and MENDOCNO 115/60KV TB 3	P6	N-1-1	141	168	193	< 100	178	Diverge	< 100	< 100	100	< 100	< 100	174	Project under development
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	124	148	157	148	148	Diverge	148	55	153	135	147	146	Project under development
	RINCON 1-25 25.00KV GEN UNIT VG and EGLE RCK 115/60KV TB 1	P3	G-1/N-1	< 100	< 100	119	< 100	< 100	130	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	82	116	137	74	124	Diverge	65	33	102	56	66	113	Project under development
	UKIAH-HOPLAND-CLOVERDALE 115KV (UKIAH-HPLND JT)	P2	Line Section w/o Fault	76	95	103	77	94	143	70	50	88	71	70	97	Continue to monitor
	KONOCTI-EAGLE ROCK 60KV	P1	N-1	104	104	116	78	89	132	70	24	76	62	70	109	Project under development
	EGLE RCK 115/60KV TB 1	P1	N-1	104	104	116	78	89	132	69	24	76	62	70	109	Project under development
	UKIAH 115KV SECTION 1E	P2	Bus	73	93	100	75	91	139	69	50	87	71	69	94	Continue to monitor
	UKIAH 115KV - SECTION 1D & 1E	P2	Breaker	67	85	91	71	84	130	66	46	80	64	66	86	Continue to monitor
HUMB 115 PST	GEYSER14 13.80KV GEN UNIT 1 and MENDOCINO-PHILO JCT-HOPLAND 60KV MOAS OPENED ON PHLO JCT_HPLND JT	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
IGNACIO 115/60KV TB 1	IGNACIO 115/60KV TB 3	P1	N-1	63	68	86	51	73	107	41	4	39	30	41	70	Continue to monitor
IGNACIO 115/60KV TB 3	IGNACIO 115/60KV TB 1	P1	N-1	63	68	86	50	73	107	41	9	39	29	41	70	Continue to monitor
IGNACIO 230/115KV TB 4	GEYSER17 13.80KV GEN UNIT 1 and IGNACIO 230/115KV TB 6	P3	G-1/N-1	< 100	< 100	110	< 100	< 100	129	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	EGLE RCK 115/60KV TB 1 and IGNACIO 230/115KV TB 6	P6	N-1-1	< 100	< 100	110	< 100	< 100	129	< 100	< 100	< 100	< 100	< 100	Diverge	Continue to monitor
	IGNACIO 230/115KV TB 6	P1	N-1	85	91	110	66	89	129	54	11	62	48	54	93	Continue to monitor
IGNACIO 230/115KV TB 6	GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR and IGNACIO 230/115KV TB 4	P6	N-1-1	< 100	< 100	110	< 100	< 100	129	< 100	< 100	< 100	< 100	< 100	Diverge	Continue to monitor
	GEYSER14 13.80KV GEN UNIT 1 and IGNACIO 230/115KV TB 4	P3	G-1/N-1	< 100	< 100	110	< 100	< 100	130	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	IGNACIO 230/115KV TB 4	P1	N-1	85	91	110	66	89	129	54	11	62	48	54	93	Continue to monitor
IGNACIO-BOLINAS #2 60KV	GEYSER14 13.80KV GEN UNIT 1 and IGNACIO-BOLINAS #1 60KV	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	169	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	IGNACIO-BOLINAS #1 60KV	P1	N-1	27	33	46	17	59	136	18	6	53	4	18	34	Continue to monitor

2026-2027 ISO Reliability Assessment - Final Study Results
Study Area: PG&E North Coast & North Bay
Thermal Overloads

California ISO

Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)									Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2028 Summer Peak	2031 Summer Peak	2036 Summer Peak	2028 Winter Peak	2031 Winter Peak	2041 Winter Peak	2028 Spring Off-Peak	2031 Spring Off-Peak	2036 Summer-Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
IGNACIO-LAS GALLINAS 115KV	GEYSER14 13.80KV GEN UNIT 1 and IGNACIO-SAN RAFAEL #1 115KV	P3	G-1/N-1	< 100	< 100	105	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	IGNACIO-SAN RAFAEL #1 115KV and IGNACIO 230/115KV TB 6	P6	N-1-1	< 100	< 100	109	< 100	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	IGNACIO-SAN RAFAEL #1 115KV	P1	N-1	95	82	105	67	58	76	60	11	51	56	60	85	Continue to monitor
IGNACIO-MARE ISLAND #2 115KV	GEYSER14 13.80KV GEN UNIT 1 and JAMESON CANYON PUMPING PLANT TAP 115KV MOAS OPENED ON SKGGS J1 HGHWY J1	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	164	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	EGLE RCK 115/60KV TB 1 and JAMESON CANYON PUMPING PLANT TAP 115KV MOAS OPENED ON SKGGS J1 HGHWY J1	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	164	< 100	< 100	< 100	< 100	< 100	Diverge	Continue to monitor
	JAMESON CANYON PUMPING PLANT TAP 115KV MOAS OPENED ON SKGGS J1_HGHWY J1	P1	N-1	88	92	99	59	89	153	53	20	88	55	53	95	Continue to monitor
	JMSCNPMP - 1D 115KV & JAMESON CANYON PUMPING PLANT TAP LINE	P2	Breaker	88	92	99	59	89	153	53	20	88	55	53	95	Continue to monitor
IGNACIO-SAN RAFAEL #1 115KV	IGNACIO-LAS GALLINAS 115KV and IGNACIO 230/115KV TB 6	P6	N-1-1	109	< 100	112	< 100	< 100	101	< 100	< 100	< 100	< 100	< 100	< 100	Operating solution
	EXXON_BH 12.47KV GEN UNIT 1 and IGNACIO-LAS GALLINAS 115KV	P3	G-1/N-1	106	< 100	108	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Ignacio Area Reinforcement
	IGNACIO-LAS GALLINAS 115KV	P1	N-1	105	84	108	80	59	76	66	11	51	62	66	86	Ignacio Area Reinforcement
IGNACIO-STAFFORD 60KV	GEYSER14 13.80KV GEN UNIT 1 and IGNACIO-BOLINAS #1 60KV	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	118	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	IGNACIO-BOLINAS #1 60KV	P1	N-1	70	77	89	52	70	118	42	10	43	33	41	78	Continue to monitor
JAMESON CANYON PUMPING PLANT TAP 115KV	LAKEVILLE-IGNACIO #1 230KV and LAKEVILLE-IGNACIO #2 230KV	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	103	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
KONOCTI-EAGLE ROCK 60KV	MENDOCINO-REDBUD 115KV and UKIAH-HOPLAND-CLOVERDALE 115KV	P6	N-1-1	108	< 100	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	Project:Konocti-Eagle Rock 60 kV reconductoring
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	138	79	89	61	54	Diverge	58	5	41	57	58	82	Project:Konocti-Eagle Rock 60 kV reconductoring
LAKEVILE 230/60KV TB 3	GEYSER14 13.80KV GEN UNIT 1 and LAKEVILE 230/60KV TB 5	P3	G-1/N-1	< 100	< 100	112	< 100	< 100	140	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	FULTON 115/60KV TB 2 and FULTON 115/60KV TB 1	P6	N-1-1	< 100	< 100	107	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	LAKEVILE 230KV - SECTION 1D & 1E	P2	Breaker	73	96	114	54	92	143	44	15	64	30	44	99	Continue to monitor
	LAKEVILE 230KV SECTION 1D	P2	Bus	73	95	112	54	90	140	44	16	61	30	44	98	Continue to monitor
	LAKEVILE 230KV - SECTION 2D & 1D	P2	Breaker	73	93	111	54	90	139	44	15	61	30	44	96	Continue to monitor
	LAKEVILE 230/60KV TB 5	P1	N-1	73	93	110	54	89	138	44	16	60	30	44	96	Continue to monitor
LAKEVILLE #2 60KV	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	34	95	107	25	97	Diverge	20	14	73	12	20	96	Continue to monitor
	GEYSER14 13.80KV GEN UNIT 1 and LAKEVILLE-PETALUMA C 60KV	P3	G-1/N-1	< 100	103	119	< 100	100	157	< 100	< 100	< 100	< 100	< 100	105	Project: Lakeville 60 kV Area Reinforcement
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	3	226	236	2	203	Diverge	2	50	205	2	2	228	Project: Lakeville 60 kV Area Reinforcement
	LAKEVILLE-PETALUMA C 60KV	P1	N-1	89	100	117	52	83	131	50	13	66	43	49	103	Continue to monitor
LAKEVILLE-IGNACIO #2 230KV	LAKEVILLE-IGNACIO #1 230KV and IGNACIO-SOBRANTE 230KV	P6	N-1-1	< 100	< 100	107	< 100	< 100	130	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
LAKEVILLE-PETALUMA C 60KV	LAKEVILLE-PETALUMA C 60KV	P1	N-1	NA	NA	109	NA	NA	NA	NA	NA	NA	NA	NA	NA	Continue to monitor
	SONOMALDFL1 4.16KV GEN UNIT 2 and LAKEVILLE-PETALUMA C 60KV	P3	G-1/N-1	< 100	< 100	109	< 100	< 100	104	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	Base Case	P0	Base Case	88	91	108	50	69	87	50	15	53	42	49	94	Continue to monitor
LAKEVILLE-SONOMA #1 115KV	FULTON-PUEBLO 115KV and LAKEVILLE-SONOMA #2 115KV	P6	N-1-1	< 100	137	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	139	Project: Lakeville 60 kV Area Reinforcement
LAKEVILLE-SONOMA #2 115KV	GEYSER14 13.80KV GEN UNIT 1 and LAKEVILLE-SONOMA #1 115KV	P3	G-1/N-1	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	102	Sensitivity only
	LAKEVILLE 115KV SECTION 1D	P2	Bus	78	101	87	29	36	54	29	13	43	32	29	104	Project: Lakeville 60 kV Area Reinforcement
	LAKEVILLE-SONOMA #1 115KV	P1	N-1	72	98	82	27	32	48	28	12	39	31	28	100	Sensitivity only
	GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR and LAKEVILLE-SONOMA #1 115KV	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Diverge	Continue to monitor
LAS GALLINAS-SAN RAFAEL 115KV	IGNACIO-SAN RAFAEL #1 115KV and IGNACIO 230/115KV TB 6	P6	N-1-1	< 100	< 100	116	< 100	< 100	113	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	GEYSER14 13.80KV GEN UNIT 1 and IGNACIO-SAN RAFAEL #1 115KV	P3	G-1/N-1	< 100	< 100	112	< 100	< 100	111	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	IGNACIO-SAN RAFAEL #1 115KV	P1	N-1	80	74	112	54	72	96	52	11	57	46	52	76	Continue to monitor
MENDOCINO-HARTLEY 60KV	CLOVRDLE1-25 25.00KV GEN UNIT VG and KONOCTI-EAGLE ROCK 60KV	P3	G-1/N-1	< 100	< 100	166	< 100	< 100	151	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	UKIAH-HOPLAND-CLOVERDALE 115KV and KONOCTI-EAGLE ROCK 60KV	P6	N-1-1	102	Diverge	147	< 100	113	142	< 100	< 100	< 100	< 100	< 100	142	Operating solution
	KONOCTI-EAGLE ROCK 60KV	P1	N-1	84	137	165	44	87	125	43	14	45	37	44	143	Project under development
	EGLE RCK 115/60KV TB 1	P1	N-1	84	136	165	44	86	125	44	14	45	37	44	143	Project under development
	EGLE RCK - MA 115KV & EGLE RCK-FULTON-SILVERDO LINE	P2	Breaker	Diverge	Diverge	163	41	Diverge	Diverge	40	17	42	34	41	Diverge	Continue to monitor
	EGLE RCK - MA 115KV & EAGLE ROCK-REDBUD LINE	P2	Breaker	Diverge	Diverge	163	41	Diverge	Diverge	40	17	42	34	41	Diverge	Continue to monitor
	EGLE RCK 115KV SECTION MA	P2	Bus	Diverge	Diverge	164	41	Diverge	Diverge	40	17	42	34	41	Diverge	Continue to monitor
	EGLE RCK - MA 115KV & EGLE RCK-HOMESTKTP-CORTINA LINE	P2	Breaker	Diverge	Diverge	161	40	Diverge	Diverge	37	18	40	33	38	Diverge	Continue to monitor
	MENDOCNO 115/60KV TB 1 and MENDOCNO 115/60KV TB 3	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
MENDOCINO-PHILO JCT-HOPLAND 60KV	UKIAH-HOPLAND-CLOVERDALE 115KV (UKIAH-HPLND JT)	P2	Line Section w/o Fault	32	51	52	31	61	103	24	45	41	35	21	52	Continue to monitor
	MENDOCNO 115/60KV TB 3 and MENDOCNO 115/60KV TB 1	P6	N-1-1	110	150	220	< 100	222	Diverge	< 100	< 100	119	< 100	< 100	156	Operating solution
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	146	179	201	57	192	Diverge	42	29	111	43	41	181	Project under development
	FULTON 115/60KV TB 2 and FULTON 115/60KV TB 1	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
MENDOCINO-REDBUD 115KV	UKIAH-HOPLAND-CLOVERDALE 115KV and KONOCTI-EAGLE ROCK 60KV	P6	N-1-1	< 100	Diverge	139	< 100	< 100	190	< 100	< 100	< 100	< 100	< 100	107	Continue to monitor
	GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE	P6	N-1-1	130	< 100	< 100	< 100	Diverge	138	< 100	< 100	< 100	< 100	< 100	Diverge	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-Cloverdale)
	CLOVRDLE1-25 25.00KV GEN UNIT VG and GEYSER3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	116	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	GEYSERS #3-CLOVERDALE 115KV (CLOVRDLE-AIDLINJCT)	P2	Line Section w/o Fault	61	79	102	47	61	62	51	47	66	58	50	80	Continue to monitor
MENDOCINO-WILLITS 60KV	UKIAH-HOPLAND-CLOVERDALE 115KV and EGLE RCK 115/60KV TB 1	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	112	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	GEYSER78 13.80KV GEN UNIT 2 and MENDOCINO-PHILO JCT-HOPLAND 60KV MOAS OPENED ON PHLO JCT_HPLND JT	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
MENDOCINO-WILLITS-FORT BRAGG 60KV	RINCON 1-25 25.00KV GEN UNIT VG and PHILO JCT-ELK 60KV MOAS OPENED ON ELK_PHILO	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
MENDOCNO115/60KV TB	EGLE RCK 115/60KV TB 1 and MENDOCNO 115/60KV TB 3	P6	N-1-1	< 100	106	124	< 100	101	162	< 100	< 100	< 100	< 100	< 100	Diverge	Operating solution
	RINCON 1-25 25.00KV GEN UNIT VG and MENDOCNO 115/60KV TB 3	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	119	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	MENDOCNO 115/60KV TB 3	P1	N-1	57	71	82	38	76	118	29	17	51	25	29	72	Continue to monitor
	UKIAH-HOPLAND-CLOVERDALE 115KV (HPLND JT-CLOVRDLE)	P2	Line Section w/o Fault	102	35	38	21	44	47	14	47	65	16	58	46	Project: Ukiah-Hopland-Cloverdale 115 kV Line (Cloverdale-Hopland J)
NRTH TWR-OLEUM-CHRISTIE 115KV	NRTH TWR - 1D 115KV & NRTH TWR-SOBRANTE LINE	P2	Breaker	NA	NA	116	NA	NA	NA	NA	NA	NA	NA	NA	NA	Continue to monitor
	NRTH TWR 115KV - SECTION 1D & 1E	P2	Breaker	NA	NA	116	NA	NA	NA	NA	NA	NA	NA	NA	NA	Continue to monitor
	NRTH TWR 115KV SECTION 1D	P2	Bus	NA	NA	116	NA	NA	NA	NA	NA	NA	NA	NA	NA	Continue to monitor
	NRTH TWR - 1D 115KV & NRTH TWR-MARTNZ D LINE	P2	Breaker	NA	NA	116	NA	NA	NA	NA	NA	NA	NA	NA	NA	Continue to monitor
	NRTH TWR 115KV SECTION 1E	P2	Bus	131	NA	NA	NA	NA	NA	107	NA	108	NA	109	NA	Project: North Tower 115 kV Looping Project
	NRTH TWR 115KV SECTION 1G	P2	Bus	131	NA	NA	NA	NA	NA	107	NA	108	NA	109	NA	Project: North Tower 115 kV Looping Project
	NRTH TWR 115KV SECTION 1F	P2	Bus	131	NA	NA	NA	NA	NA	107	NA	108	NA	109	NA	Project: North Tower 115 kV Looping Project
	NRTH TWR 115KV - SECTION 1E & 1F	P2	Breaker	131	NA	NA	NA	NA	NA	107	NA	108	NA	109	NA	Project: North Tower 115 kV Looping Project
	NRTH TWR 115KV - SECTION 1F & 1G	P2	Breaker	131	NA	NA	NA	NA	NA	107	NA	108	NA	109	NA	Project: North Tower 115 kV Looping Project
NTWRJCT1-CORDELLT 115KV	JAMESON CANYON PUMPING PLANT TAP 115KV MOAS OPENED ON SKGGS J1_HGHWY J1 and IGNACIO 230/115KV TB 6	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	120	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
NTWRJCT1-JMSN JCT 115KV	NRTH TWR 115KV SECTION 1F	P2	Bus	131	97	97	39	79	74	108	4	109	97	109	98	Project: North Tower 115 kV Looping Project
	NRTH TWR 115KV SECTION 1G	P2	Bus	131	97	97	39	79	74	108	4	109	97	109	98	Project: North Tower 115 kV Looping Project
	NRTH TWR 115KV - SECTION 1E & 1F	P2	Breaker	131	97	97	39	79	74	108	4	109	97	109	98	Project: North Tower 115 kV Looping Project
	NRTH TWR 115KV SECTION 1E	P2	Bus	131	97	97	39	79	74	108	4	109	97	109	98	Project: North Tower 115 kV Looping Project
	NRTH TWR 115KV - SECTION 1F & 1G	P2	Breaker	131	97	97	39	79	74	108	4	109	97	109	98	Project: North Tower 115 kV Looping Project
	NRTH TWR - 1D 115KV & NRTH TWR-SOBRANTE LINE	P2	Breaker	NA	92	116	NA	60	88	NA	14	57	NA	NA	95	Continue to monitor
	NRTH TWR - 1D 115KV & NRTH TWR-MARTNZ D LINE	P2	Breaker	NA	92	116	NA	60	88	NA	14	57	NA	NA	95	Continue to monitor
	NRTH TWR 115KV - SECTION 1D & 1E	P2	Breaker	92	92	116	57	60	88	62	14	57	53	62	95	Continue to monitor
	NRTH TWR 115KV SECTION 1D	P2	Bus	92	92	116	57	60	88	62	14	57	53	62	95	Continue to monitor
PETC_JCT - PETLMA A 60KV	GEYSER14 13.80KV GEN UNIT 1 and LAKEVILLE-PETALUMA C 60KV	P3	G-1/N-1	< 100	108	122	< 100	< 100	122	< 100	< 100	< 100	< 100	< 100	109	Project: Lakeville 60 kV Area Reinforcement
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	<100	236	245	<100	170	Diverge	<100	49	190	<100	<100	237	Project: Lakeville 60 kV Area Reinforcement
	LAKEVILLE-PETALUMA C 60KV	P1	N-1	91	103	120	45	64	86	51	16	47	44	51	106	Project: Lakeville 60 kV Area Reinforcement
SANTA ROSA-CORONA 115KV	FULTON 115KV - SECTION 2D & 1D	P2	Breaker	163	147	59	109	106	40	88	29	31	99	87	153	Project: SantaRosa 11KV reconductoring
SKGGS - HGHWY 115KV	GEYSER14 13.80KV GEN UNIT 1 and JAMESON CANYON PUMPING PLANT TAP 115KV MOAS OPENED ON SKGGS J1 HGHWY J1	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	164	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	EGLE RCK 115/60KV TB 1 and JAMESON CANYON PUMPING PLANT TAP 115KV MOAS OPENED ON SKGGS J1 HGHWY J1	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	164	< 100	< 100	< 100	< 100	< 100	Diverge	Continue to monitor
	JMSCNPMP - 1D 115KV & JAMESON CANYON PUMPING PLANT TAP LINE	P2	Breaker	88	93	99	59	89	153	53	20	88	55	53	95	Continue to monitor
	JAMESON CANYON PUMPING PLANT TAP 115KV MOAS OPENED ON SKGGS J1_HGHWY J1	P1	N-1	88	93	99	59	89	153	53	20	88	55	53	95	Continue to monitor
SNTA RSA-BELLVUE 115KV	FULTON 115KV - SECTION 2D & 1D	P2	Breaker	107	109	43	68	75	28	58	20	22	65	58	113	Project: Santa Rosa 115 kV Lines Reconductoring Project
SONOMA-PUEBLO 115KV	GEYSER14 13.80KV GEN UNIT 1 and FULTON-PUEBLO 115KV	P3	G-1/N-1	< 100	189	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	192	Project: Lakeville 60 kV Area Reinforcement
	FULTON-PUEBLO 115KV (PUEBLOJT-PUEBLO)	P2	Line Section w/o Fault	78	188	91	30	40	46	29	7	35	48	29	191	Project: Lakeville 60 kV Area Reinforcement
	FULTON-PUEBLO 115KV	P1	N-1	77	188	91	30	40	46	29	7	35	48	29	191	Project: Lakeville 60 kV Area Reinforcement
	FULTON - 1D 115KV & FULTON-PUEBLO LINE	P2	Breaker	77	188	91	30	40	47	29	7	35	48	29	189	Project: Lakeville 60 kV Area Reinforcement
	FULTON-PUEBLO 115KV (STHELNJ1-PUEBLOJT)	P2	Line Section w/o Fault	77	187	90	30	39	46	28	6	35	48	28	190	Project: Lakeville 60 kV Area Reinforcement
	FULTON-PUEBLO 115KV (SILVRDJ1-STHELNJ1)	P2	Line Section w/o Fault	77	185	90	29	39	46	28	5	36	47	28	189	Project: Lakeville 60 kV Area Reinforcement
	FULTON 115KV SECTION 1D	P2	Bus	76	185	90	29	39	47	28	5	36	47	28	188	Project: Lakeville 60 kV Area Reinforcement
	EGLE RCK-FULTON-SILVERDO 115KV	P1	N-1	72	110	75	27	38	53	24	14	45	34	24	112	Project: Lakeville 60 kV Area Reinforcement
	SILVERDO-FULTON-EGLE RCK 115KV	P1	N-1	72	110	75	27	38	53	24	14	45	34	24	112	Project: Lakeville 60 kV Area Reinforcement
	FULTON - HOPLAND 60 KV & GEYSER 12 - FULTON & GEYSER 17 - FULTON 230 KV LINES	P7	DCTL	64	102	72	25	37	51	23	12	35	31	24	105	Project: Lakeville 60 kV Area Reinforcement
	GEYSER 12 - FULTON& GEYSER 17 - FULTON 230 KV LINES	P7	DCTL	63	101	71	25	37	51	23	12	35	31	23	104	Project: Lakeville 60 kV Area Reinforcement
	FULTON 230/115KV TB 9	P1	N-1	62	99	65	19	32	47	15	14	32	25	16	101	Sensitivity only
	Base Case	P0	Base Case	62	102	65	17	28	42	14	19	33	23	15	104	Project: Lakeville 60 kV Area Reinforcement
	FULTON SVD=V	P1	N-1	57	102	60	15	26	40	12	14	29	22	13	104	Project: Lakeville 60 kV Area Reinforcement
	EGLE RCK 115/60KV TB 1 and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE	P6	N-1-1	< 100	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Diverge	Continue to monitor
TULUCAY-NAPA #1 60KV	GEYSER14 13.80KV GEN UNIT 1 and TULUCAY-NAPA #2 60KV	P3	G-1/N-1	< 100	< 100	104	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	TULUCAY-NAPA #2 60KV	P1	N-1	88	96	104	49	45	52	56	16	57	64	56	97	Continue to monitor
TULUCAY-NAPA #2 60KV	GEYSER14 13.80KV GEN UNIT 1 and TULUCAY-NAPA #1 60KV MOAS OPENED ON TULCAY1_TULCY JT	P3	G-1/N-1	< 100	< 100	104	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	TULUCAY-NAPA #1 60KV MOAS OPENED ON TULCAY1_TULCY JT	P1	N-1	89	96	104	49	47	54	58	18	60	65	58	98	Continue to monitor
TULUCAY-VACA 230KV	GEYSER14 13.80KV GEN UNIT 1 and VACA-LAKEVILLE #1 230KV	P3	G-1/N-1	< 100	< 100	104	< 100	< 100	109	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	LAKEVILE 230KV - SECTION 2E & 1E	P2	Breaker	121	115	126	46	83	118	63	21	71	55	69	119	Project: Vaca Dixon-Lakeville 230 kV Corridor Series Compensation
	FULTON - HOPLAND 60 KV & GEYSER 12 - FULTON & GEYSER 17 - FULTON 230 KV LINES	P7	DCTL	90	96	101	37	68	93	49	15	70	42	52	96	Continue to monitor
	EGLE RCK 115/60KV TB 1 and GEYSR18-LAKEVILE-GEYSR20-GEYSR13 230KV MOAS OPENED ON G13TT1_8_SANTAFE	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Diverge	Continue to monitor
UKIAH-HOPLAND-CLOVERDALE 115KV	EAGLE ROCK-REDBUD 115KV (2) and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE	P6	N-1-1	< 100	< 100	< 100	< 100	122	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Operating solution
	EGLE RCK 115/60KV TB 1 and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE	P6	N-1-1	< 100	Diverge	108	< 100	106	128	< 100	< 100	< 100	< 100	< 100	Diverge	Operating solution
	REDBUD-D1-25 25.00KV GEN UNIT VG and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1_LUCERNE	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	102	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	97	104	119	40	72	Diverge	46	31	73	59	46	108	Project: Ukiah-Hopland-Cloverdale 115 kV Line (Cloverdale-Hopland J)
VACA-LAKEVILLE #1 230KV	GEYSER14 13.80KV GEN UNIT 1 and TULUCAY-VACA 230KV	P3	G-1/N-1	< 100	< 100	104	< 100	< 100	109	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	EGLE RCK 115/60KV TB 1 and TULUCAY-VACA 230KV	P6	N-1-1	< 100	< 100	102	< 100	< 100	106	< 100	< 100	< 100	< 100	< 100	Diverge	Continue to monitor
	LAKEVILE 230KV - SECTION 2E & 2D	P2	Breaker	125	117	130	44	84	131	53	34	NA	41	61	122	Project: Vaca Dixon-Lakeville 230 kV Corridor Series Compensation
VACA-PARKWAY 230KV	VACA- LAKEVILLE #1 & TULUCAY - VACA 230 KV LINE	P7	DCTL	103	69	104	39	55	100	75	12	87	70	77	71	Potential nearby project, Vaca Dixon-Lakeville 230 kV Corridor Series Compensation
	UKIAH-HOPLAND-CLOVERDALE 115KV and WINDSOR-FTCH MTN 60KV MOAS OPENED ON HDSBGTP2_HELDSBRG	P6	N-1-1	< 100	< 100	103	< 100	< 100	128	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	WINDSOR-FTCH MTN 60KV MOAS OPENED ON HDSBGTP2_HELDSBRG	P1	N-1	NA	NA	101	NA	NA	NA	NA	NA	110	NA	NA	NA	Continue to monitor
	GEYSER14 13.80KV GEN UNIT 1 and FULTON-WINDSOR 60KV	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	102	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor
	GEYSER14 13.80KV GEN UNIT 1 and WINDSOR-FTCH MTN 60KV MOAS OPENED ON HDSBGTP2_HELDSBRG	P3	G-1/N-1	< 100	< 100	101	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Continue to monitor

2026-2027 ISO Reliability Assessment - Final Study Results
Study Area: PG&E North Coast & North Bay
Thermal Overloads

California ISO

Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)									Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2028 Summer Peak	2031 Summer Peak	2036 Summer Peak	2028 Winter Peak	2031 Winter Peak	2041 Winter Peak	2028 Spring Off-Peak	2031 Spring Off-Peak	2036 Summer-Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
WINDSOR-FTCH MTN 60KV	Base Case	P0	Base Case	83	95	116	32	63	97	40	62	127	82	40	98	Continue to monitor
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	51	94	100	30	65	Diverge	40	64	156	86	39	95	Continue to monitor
	FULTON-WINDSOR 60KV	P1	N-1	75	86	107	30	63	100	34	53	114	73	34	89	Continue to monitor
	FULTON-HOPLAND 60KV & GEYSERS #17-FULTON 230KV & EAGLE ROCK-FULTON-SILVERADO 115KV LINES	P7	DCTL	74	85	105	30	62	96	34	53	113	72	34	88	Continue to monitor
	FULTON-HOPLAND 60KV MOAS OPENED ON HDSBGTP1_FTCHMTNP	P1	N-1	74	85	106	30	62	97	34	53	113	70	34	88	Continue to monitor
	FULTON - HOPLAND 60 KV & GEYSER 12 - FULTON & GEYSER 17 - FULTON 230 KV LINES	P7	DCTL	73	85	108	30	62	96	34	53	113	70	34	88	Continue to monitor
	LAKEVLLE 115KV - SECTION 1D & 2D	P2	Breaker	71	82	102	30	59	91	34	53	109	70	34	84	Continue to monitor
	FULTON SVD=V	P1	N-1	71	82	102	30	59	91	34	53	109	70	34	84	Continue to monitor
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	73	84	103	30	61	Diverge	34	53	109	70	34	87	Continue to monitor
WOHLER-FULTON 60KV	GEYSER14 13.80KV GEN UNIT 1 and FULTON-COTATI-SONOMALDFL 60KV MOAS OPENED ON LAGUNATP_LAGUNA	P3	G-1/N-1	< 100	< 100	103	< 100	105	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Potential nearby project, Santa Rosa 115 kV Lines Reconductoring Project / Lakeville 60 kV Area Reinforcement
	FULTON-COTATI-SONOMALDFL 60KV MOAS OPENED ON LAGUNATP_LAGUNA	P1	N-1	81	87	103	40	75	108	46	14	35	29	45	90	Continue to monitor
	Base Case	P0	Base Case	52	57	68	27	63	105	30	17	38	25	30	60	Continue to monitor

Substation	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)									Voltage PU (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2028 Summer Peak	2031 Summer Peak	2036 Summer Peak	2028 Winter Peak	2031 Winter Peak	2041 Winter Peak	2028 Spring Off-Peak	2031 Spring Off-Peak	2036 Summer-Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
ARCATA 60.0 kV	KONOCTI-EAGLE ROCK 60KV and GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT AIDLINGYSR	P6	N-1-1	> 0.9	> 0.9	> 0.9	> 0.9	0.38	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Project under development
BELLVUE 115.0 kV	FULTON 115KV - SECTION 2D & 1D	P2	Breaker	0.82	0.84	0.86	0.88	0.85	0.96	0.91	0.94	0.99	0.88	0.91	0.83	Potential nearby project Santa Rosa 115 kV Lines
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.64	0.64	0.83	0.90	0.85	0.91	0.92	0.96	0.98	0.89	0.92	0.63	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.88	0.89	0.91	0.92	0.90	Diverge	0.93	0.95	0.99	0.92	0.94	0.90	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.83	0.87	0.88	0.85	Diverge	0.90	0.94	0.99	0.88	0.91	0.83	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY FULTON 230-115-60KV BATT	P5	Non-Redundant Battery/Relay	NA	0.81	0.86	NA	0.86	0.96	NA	0.95	0.99	NA	NA	0.77	Install redundant battery/relay supply
CARQUINZ 115.0 kV	JAMESON CANYON PUMPING PLANT TAP 115KV MOAS OPENED ON SKGGS J1_HGHWY J1 and IGNACIO 230/115KV TB 6	P6	N-1-1	0.89	> 0.9	0.89	> 0.9	> 0.9	0.86	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Potential nearby project, North Tower 115 kV Looping Project
	JAMESON CANYON PUMPING PLANT TAP 115KV MOAS OPENED ON SKGGS J1_HGHWY J1	P1	N-1	0.92	0.92	0.93	0.97	0.93	0.89	0.98	1.03	1.00	0.96	0.98	0.92	Continue to monitor
	JMSCNPMP - 1D 115KV & JAMESON CANYON PUMPING PLANT TAP LINE	P2	Breaker	0.92	0.92	0.93	0.97	0.93	0.89	0.98	1.03	1.00	0.96	0.98	0.92	Continue to monitor
	FULTON 230 KV BAAH BUS #2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.93	0.93	0.89	1.00	0.94	0.92	1.00	1.03	1.04	0.98	1.00	0.92	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY FULTON 230-115-60KV BATT	P5	Non-Redundant Battery/Relay	NA	0.91	0.88	NA	0.94	0.93	NA	1.03	1.03	NA	NA	0.89	Install redundant battery/relay supply
CLOVRDLE 115.0 kV	CLOVRDLE1-25 25.00KV GEN UNIT VG and GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT AIDLINGYSR	P3	G-1/N-1	> 0.9	> 0.9	0.89	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Continue to monitor
	GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1 LUCERNE	P6	N-1-1	0.49	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-Cloverdale)
	GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT AIDLINGYSR	P1	N-1	0.90	0.97	0.98	0.98	0.97	1.01	0.96	1.02	0.99	0.96	0.96	0.94	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-
	GEYSERS #3-CLOVERDALE 115KV (CLOVRDLE-AIDLINJCT)	P2	Line Section w/o Fault	0.90	0.97	0.98	0.98	0.97	1.01	0.96	1.02	0.99	0.96	0.96	0.94	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-
	GEYSERS #3-CLOVERDALE 115KV (AIDLINJCT-GEYSERS34)	P2	Line Section w/o Fault	0.89	1.01	0.99	1.01	1.01	1.01	1.00	1.03	1.02	0.99	1.00	1.00	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-
	AIDLINGYSR - 1D 115KV & MISSION POWER TAP LINE	P2	Breaker	0.90	0.97	0.98	0.98	0.97	1.01	0.96	1.02	0.99	0.96	0.96	0.94	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-
	GEYSERS34 115KV - RING R2 & R1	P2	Breaker	0.89	0.96	0.98	0.99	0.97	1.01	0.96	1.02	1.00	0.96	0.96	0.93	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-
	GEYSERS34 115KV - RING R2 & R3	P2	Breaker	0.89	0.96	0.98	0.99	0.97	1.01	0.96	1.02	1.00	0.96	0.96	0.93	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-
	GEYSERS34 115KV - RING R1 & R3	P2	Breaker	0.89	1.01	0.99	1.01	1.01	1.01	1.00	1.04	1.02	0.99	1.00	1.00	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	0.82	0.89	0.92	1.00	0.90	Diverge	1.01	1.03	1.01	0.98	1.01	0.87	Project under development
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	0.89	0.96	0.9728	0.97	0.96	Diverge	0.98	1.02	0.99	0.98	0.98	0.95	Potential nearby project Geyser #3-Cloverdale 115 kV Line
	MENDOCINO 115 KV BUS 1&2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.84	0.93	0.94	1.01	0.91	Diverge	1.02	1.04	1.02	1.00	1.02	0.90	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.58	0.68	0.96	0.99	0.95	0.99	0.99	1.02	1.01	0.97	0.99	0.64	Install redundant battery/relay supply
	EAGLE ROCK 115KV(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.73	0.98	1.01	0.98	Diverge	1.00	1.03	1.03	0.99	1.00	Diverge	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.86	0.96	0.97	0.97	0.96	Diverge	0.98	1.02	0.99	0.98	0.98	0.96	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.91	0.97	0.97	0.94	Diverge	0.98	1.01	0.99	0.97	0.98	0.88	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY EGLE ROCK 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.52	Diverge	0.98	1.01	Diverge	Diverge	1.00	1.03	1.02	0.99	1.00	Diverge	Install redundant battery/relay supply
CORONA 115.0 kV	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.84	0.83	0.91	0.96	0.94	0.95	0.97	0.98	0.98	0.96	0.97	0.83	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY FULTON 230-115-60KV BATT	P5	Non-Redundant Battery/Relay	NA	0.92	0.93	NA	0.95	0.97	NA	0.98	0.99	NA	NA	0.89	Install redundant battery/relay supply
COTATI 60.0 kV	FULTON 115/60KV TB 1 and FULTON 115/60KV TB 2	P6	N-1-1	0.21	> 0.9	0.53	0.33	0.56	> 0.9	0.37	> 0.9	0.69	0.42	0.39	> 0.9	Project: Lakeville 60 kV Area Reinforcement
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	0.21	0.58	0.53	0.34	0.56	Diverge	0.38	0.92	0.68	0.40	0.36	0.57	Project: Lakeville 60 kV Area Reinforcement
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.49	0.69	0.84	0.91	0.88	0.93	0.95	1.00	1.02	0.91	0.94	0.67	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.20	0.58	0.54	0.34	0.56	Diverge	0.38	0.91	0.69	0.40	0.36	0.58	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.58	0.54	0.33	0.55	Diverge	0.38	0.91	0.69	0.40	0.36	0.57	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY LAKEVILLE 230-115-60KV BATT	P5	Non-Redundant Battery/Relay	NA	Diverge	Diverge	NA	0.81	Diverge	NA	1.00	0.98	NA	NA	Diverge	Install redundant battery/relay supply
EGLE RCK 60.0 kV	EGLE RCK 115/60KV TB 1	P1	N-1	0.81	0.71	0.61	0.89	0.82	0.78	0.91	1.02	1.01	0.91	0.91	0.69	Project under development
	EGLE RCK 115KV SECTION MA	P2	Bus	Diverge	Diverge	0.58	0.89	Diverge	Diverge	0.91	1.02	1.01	0.91	0.91	Diverge	Project under development
	EGLE RCK - MA 115KV & EGLE RCK-FULTON-SILVERDO LINE	P2	Breaker	Diverge	Diverge	0.58	0.89	Diverge	Diverge	0.91	1.02	1.01	0.91	0.91	Diverge	Project under development
	EGLE RCK - MA 115KV & EAGLE ROCK-REDBUD LINE	P2	Breaker	Diverge	Diverge	0.58	0.89	Diverge	Diverge	0.91	1.02	1.01	0.91	0.91	Diverge	Project under development
	EGLE RCK - MA 115KV & EGLE RCK-HOMSTKTP-CORTINA LINE	P2	Breaker	Diverge	Diverge	0.56	0.89	Diverge	Diverge	0.93	1.02	1.01	0.91	0.93	Diverge	Potential nearby project, Eagle Rock-Cortina 115 kV Line
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.64	0.74	1.02	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	0.70	Install redundant battery/relay supply
	EAGLE ROCK 115KV(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.46	0.59	0.89	0.83	Diverge	0.91	1.02	1.01	0.91	0.91	Diverge	Install redundant battery/relay supply
	CLOVRDLE1-25 25.00KV GEN UNIT VG and EGLE RCK 115/60KV TB 1	P3	G-1/N-1	> 0.9	> 0.9	0.60	> 0.9	> 0.9	0.76	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Continue to monitor
	EGLE RCK 115/60KV TB 1 and UKIAH-HOPLAND-CLOVERDALE 115KV	P6	N-1-1	0.59	> 0.9	0.44	0.85	0.50	0.44	0.90	> 0.9	> 0.9	0.92	0.93	> 0.9	Project under development
EGLE RCK 115.0 kV	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	0.89	0.96	0.97	1.02	0.97	Diverge	1.03	1.04	1.03	1.01	1.03	0.94	Project under development
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.62	0.71	0.96	1.00	0.96	1.00	1.00	1.03	1.02	0.99	1.00	0.68	Install redundant battery/relay supply
FULTON 60.0 kV	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	0.26	0.42	0.36	0.37	0.39	Diverge	0.41	0.86	0.51	0.43	0.40	0.40	Potential nearby project, Lakeville 60 kV Area
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.51	0.55	0.79	0.92	0.84	0.92	0.95	1.00	1.00	0.91	0.95	0.53	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.25	0.41	0.36	0.37	0.39	Diverge	0.41	0.85	0.51	0.43	0.40	0.40	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.41	0.36	0.37	0.39	Diverge	0.41	0.85	0.51	0.43	0.40	0.39	Install redundant battery/relay supply
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	0.23	0.41	0.35	0.34	0.38	Diverge	0.39	0.86	0.52	0.40	0.38	0.40	Potential nearby project, Lakeville 60 kV Area
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.56	0.59	0.83	0.94	0.86	0.95	0.97	1.01	1.03	0.93	0.97	0.57	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.22	0.41	0.36	0.34	0.38	Diverge	0.39	0.85	0.52	0.40	0.38	0.40	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.40	0.35	0.34	0.38	Diverge	0.39	0.86	0.52	0.40	0.37	0.38	Install redundant battery/relay supply
FULTON 115.0 kV	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.54	0.56	0.79	0.88	0.82	0.90	0.91	0.95	0.97	0.87	0.91	0.54	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.91	0.90	0.90	0.98	0.94	0.98	0.99	1.01	1.03	0.96	0.98	0.90	Install redundant battery/relay supply
FULTON 230.0 kV	FULTON 230 KV BAAH BUS #2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.90	0.89	0.88	0.96	0.92	0.95	0.97	0.99	1.00	0.95	0.97	0.89	Install redundant battery/relay supply
GYSRVLLE 60.0 kV	FULTON 115/60KV TB 1 and FULTON 115/60KV TB 2	P6	N-1-1	0.26	> 0.9	0.35	0.36	0.39	> 0.9	0.40	0.86	0.51	0.45	0.42	> 0.9	Potential nearby project, Lakeville 60 kV Area
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	0.26	0.40	0.35	0.36	0.39	Diverge	0.41	0.85	0.51	0.43	0.40	0.39	Continue to monitor
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.50	0.53	0.78	0.92	0.83	0.91	0.95	0.99	1.00	0.91	0.95	0.51	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.93	0.92	0.90	1.01	0.96	0.99	1.01	1.02	1.01	0.99	1.01	0.92	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.25	0.40	0.35	0.36	0.38	Diverge	0.41	0.85	0.50	0.43	0.40	0.39	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.39	0.35	0.36	0.38	Diverge	0.41	0.85	0.51	0.43	0.39	0.38	Install redundant battery/relay supply
HARTLEY 60.0 kV	CLOVRDLE1-25 25.00KV GEN UNIT VG and KONOCTI-EAGLE ROCK 60KV	P3	G-1/N-1	> 0.9	> 0.9	0.74	> 0.9	> 0.9	0.83	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Continue to monitor
	KONOCTI-EAGLE ROCK 60KV and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1 LUCERNE	P6	N-1-1	> 0.9	> 0.9	> 0.9	> 0.9	0.50	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Continue to monitor
	KONOCTI-EAGLE ROCK 60KV	P1	N-1	0.89	0.82	0.74	0.94	0.87	0.85	0.95	1.02	1.01	0.95	0.95	0.81	Project under development
	EGLE RCK 115/60KV TB 1	P1	N-1	0.89	0.82	0.74	0.94	0.87	0.85	0.95	1.02	1.01	0.95	0.95	0.81	Project under development
	EGLE RCK 115KV SECTION MA	P2	Bus	Diverge	Diverge	0.71	0.94	Diverge	Diverge	0.95	1.02	1.01	0.95	0.95	Diverge	Project under development
	EGLE RCK - MA 115KV & EGLE RCK-FULTON-SILVERDO LINE	P2	Breaker	Diverge	Diverge	0.71	0.94	Diverge	Diverge	0.95	1.02	1.01	0.95	0.95	Diverge	Project under development
	EGLE RCK - MA 115KV & EAGLE ROCK-REDBUD LINE	P2	Breaker	Diverge	Diverge	0.71	0.94	Diverge	Diverge	0.95	1.02	1.01	0.95	0.95	Diverge	Project under development
	EGLE RCK - MA 115KV & EGLE RCK-HOMSTKTP-CORTINA LINE	P2	Breaker	Diverge	Diverge	0.68	0.94	Diverge	Diverge	0.97	1.02	1.01	0.95	0.97	Diverge	Potential nearby project Eagle Rock-Cortina 115 kV Line
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	0.67	0.77	0.70	0.96	0.73	Diverge	0.97	1.01	1.01	0.97	0.98	0.74	Project under development
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	0.85	0.96	0.94	0.94	0.95	Diverge	0.96	1.01	1.00	0.96	0.96	0.96	Project under development
	MENDOCINO 115 KV BUS 1&2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.71	0.87	0.72	0.98	0.75	Diverge	0.99	1.03	1.02	0.98	0.99	0.78	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.53	0.66	0.95	0.98	0.97	0.99	0.99	1.02	1.02	0.99	0.99	0.60	Install redundant battery/relay supply
	EAGLE ROCK 115KV(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.56	0.72	0.94	0.89	Diverge	0.95	1.02	1.01	0.95	0.95	Diverge	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.82	0.96	0.94	0.94	0.95	Diverge	0.96	1.02	1.00	0.96	0.96	0.96	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.92	0.94	0.94	0.95	Diverge	0.96	1.01	1.00	0.96	0.96	0.89	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY EGLE ROCK 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.45	Diverge	0.71	0.94	Diverge	Diverge	0.95	1.02	1.01	0.95	0.95	Diverge	Install redundant battery/relay supply
HGHLAND 115.0 kV	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.70	0.80	0.96	1.00	0.97	0.98	1.00	1.03	1.02	0.98	1.00	0.78	Install redundant battery/relay supply
IGNACIO 230.0 kV	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.90	0.90	0.90	0.98	0.95	0.96	0.98	1.01	1.02	0.96	0.98	0.90	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.92	0.92	0.90	0.98	0.94	0.96	0.98	1.00	1.02	0.96	0.97	0.92	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY FULTON 230-115-60KV BATT	P5	Non-Redundant Battery/Relay	NA	0.91	0.89	NA	0.94	0.96	NA	1.00	1.02	NA	NA	0.89	Install redundant battery/relay supply
KONOCTI6 60.0 kV	CLOVRDLE1-25 25.00KV GEN UNIT VG and KONOCTI-EAGLE ROCK 60KV	P3	G-1/N-1	> 0.9	> 0.9	0.60	> 0.9	> 0.9	0.76	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Project under development
	EGLE RCK 115/60KV TB 1 and UKIAH-HOPLAND-CLOVERDALE 115KV	P6	N-1-1	0.59	> 0.9	0.44	0.85	0.50	0.44	0.90	> 0.9	> 0.9	0.92	0.93	> 0.9	Project under development
	KONOCTI-EAGLE ROCK 60KV	P1	N-1	0.80	0.71	0.61	0.89	0.81	0.78	0.91	1.02	1.01	0.91	0.91	0.68	Project under development
	EGLE RCK 115/60KV TB 1	P1	N-1	0.81	0.71	0.61	0.89	0.82	0.78	0.91	1.02	1.01	0.91	0.91	0.69	Project under development
	EGLE RCK 115KV SECTION MA	P2	Bus	Diverge	Diverge	0.58	0.89	Diverge	Diverge	0.91	1.02	1.01	0.91	0.91	Diverge	Project under development
	EGLE RCK - MA 115KV & EGLE RCK-FULTON-SILVERDO LINE	P2	Breaker	Diverge	Diverge	0.58	0.89	Diverge	Diverge	0.91	1.02	1.01	0.91	0.91	Diverge	Project under development
	EGLE RCK - MA 115KV & EAGLE ROCK-REDBUD LINE	P2	Breaker	Diverge	Diverge	0.58	0.89	Diverge	Diverge	0.91	1.02	1.01	0.91	0.91	Diverge	Project under development
	EGLE RCK - MA 115KV & EGLE RCK-HOMSTKTP-CORTINA LINE	P2	Breaker	Diverge	Diverge	0.56	0.89	Diverge	Diverge	0.93	1.02	1.01	0.91	0.93	Diverge	Potential nearby project Eagle Rock-Cortina 115 kV Line
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	0.81	0.92	0.90	1.00	0.92	Diverge	1.00	1.03	1.04	1.00	1.01	0.90	Project under development
	MENDOCINO 115 KV BUS 1&2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.84	0.99	0.91	1.00	0.94	Diverge	1.00	1.03	1.04	1.00	1.01	0.93	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.56	0.69	1.00	1.00	1.02	1.04	1.00	1.03	1.04	1.00	1.01	0.65	Install redundant battery/relay supply
	EAGLE ROCK 115KV(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.46	0.59	0.89	0.83	Diverge	0.91	1.02	1.01	0.91	0.91	Diverge	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.87	1.01	1.00	0.98	1.01	Diverge	0.99	1.03	1.04	0.99	0.99	1.01	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY EGLE ROCK 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.39	Diverge	0.58	0.89	Diverge	Diverge	0.91	1.02	1.01	0.90	0.91	Diverge	Install redundant battery/relay supply
LAKEVILE 230.0 kV	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.89	0.88	0.90	0.98	0.95	0.95	0.98	1.01	1.01	0.97	0.98	0.88	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY FULTON 230-115-60KV BATT	P5	Non-Redundant Battery/Relay	NA	0.91	0.90	NA	0.95	0.97	NA	1.00	1.01	NA	NA	0.89	Install redundant battery/relay supply
LAKEVLLE 60.0 kV	LAKEVILE 230/60KV TB 3 and LAKEVILE 230/60KV TB 5	P6	N-1-1	> 0.9	> 0.9	0.40	> 0.9	0.46	0.36	> 0.9	> 0.9	0.86	> 0.9	> 0.9	> 0.9	Continue to monitor
LS GLLNS 115.0 kV	IGNACIO-LAS GALLINAS 115KV and IGNACIO 230/115KV TB 6	P6	N-1-1	> 0.9	> 0.9	0.89	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Continue to monitor
	STATION DC BATTERY SUPPLY FULTON 230-115-60KV BATT	P5	Non-Redundant Battery/Relay	NA	0.92	0.90	NA	0.96	1.00	NA	1.04	1.06	NA	NA	0.91	Install redundant battery/relay supply
LUCERNE 115.0 kV	EAGLE ROCK-REDBUD 115KV and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1 LUCERNE	P6	N-1-1	> 0.9	> 0.9	> 0.9	> 0.9	0.55	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Continue to monitor
	MENDOCNO - 2D 115KV & CORTINA-MENDOCINO #1 LINE	P2	Breaker	0.89	0.95	0.96	1.00	0.95	0.95	1.01	1.04	1.03	0.98	1.01	0.94	Project: Eagle Rock-Cortina 115 kV Line (Lower Lake Sw Sta-
	EGLE RCK - MA 115KV & EGLE RCK-HOMSTKTP-CORTINA LINE	P2	Breaker	Diverge	Diverge	0.87	0.98	Diverge	Diverge	1.01	1.04	1.00	0.98	1.01	Diverge	Potential nearby project Eagle Rock-Cortina 115 kV Line
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.68	0.79	0.97	1.00	0.97	0.98	0.99	1.03	1.01	0.97	0.99	0.75	Install redundant battery/relay supply
	EAGLE ROCK 115KV(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.78	0.91	1.01	0.96	Diverge	0.99	1.04	1.01	0.98	0.99	Diverge	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.89	0.97	0.97	0.99	0.97	Diverge	1.00	1.02	1.00	0.99	0.99	0.97	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY EGLE ROCK 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.63	Diverge	0.90	1.00	Diverge	Diverge	0.99	1.04	1.01	0.97	0.99	Diverge	Install redundant battery/relay supply
LYTNVLLE 60.0 kV	GEYSER17 13.80KV GEN UNIT 1 and LAYTONVILLE-WILLITS 60KV	P3	G-1/N-1	0.70	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Project under development
	GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1 LUCERNE	P6	N-1-1	0.45	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-Cloverdale)
	LAYTONVILLE-WILLITS 60KV	P1	N-1	0.73	NA	NA	0.98	NA	NA	1.00	NA	NA	0.94	1.00	NA	Project under development
	MENDOCNO 115KV SECTION 1D	P2	Bus	0.93	1.03	0.89	0.99	0.95	0.98	1.00	1.00	1.04	0.99	1.00	0.94	Project under development
	MENDOCNO 115KV SECTION 2D	P2	Bus	0.86	0.96	0.93	1.00	0.94	0.99	1.00	1.00	1.04	0.99	1.00	0.95	Project under development
	MENDOCNO - 1D 115KV & MENDOCINO-UKIAH LINE	P2	Breaker	0.93	1.03	0.89	0.99	0.95	0.98	1.00	1.00	1.04	0.99	1.00	0.94	Continue to monitor
	MENDOCNO - 1D 115KV & MENDOCINO-REDBUD LINE	P2	Breaker	0.93	0.95	0.89	0.99	0.95	0.98	1.00	1.00	1.04	0.99	1.00	0.98	Continue to monitor
	MENDOCNO - 2D 115KV & CORTINA-MENDOCINO #1 LINE	P2	Breaker	0.83	0.94	0.93	0.99	0.93	0.98	1.00	1.00	1.04	0.98	1.00	0.93	Project: Eagle Rock-Cortina 115 kV Line (Lower Lake Sw Sta-
	EGLE RCK - MA 115KV & EGLE RCK-HOMSTKTP-CORTINA LINE	P2	Breaker	Diverge	Diverge	0.88	0.99	Diverge	Diverge	1.00	1.00	1.04	0.98	1.00	Diverge	Project under development
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	0.51	0.55	0.47	0.96	0.49	Diverge	0.97	0.99	1.06	0.94	0.97	0.53	Project under development
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	0.86	0.96	0.95	0.99	0.95	Diverge	1.00	1.00	1.04	0.99	1.00	0.95	Project under development
	MENDOCINO 115 KV BUS 1&2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.53	0.71	0.50	0.98	0.51	Diverge	1.00	1.03	1.06	0.96	0.99	0.58	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.54	0.63	0.96	0.99	0.95	1.00	1.00	1.00	1.04	0.98	1.00	0.57	Install redundant battery/relay supply
	EAGLE ROCK 115KV(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.65	0.93	0.99	0.96	Diverge	1.00	1.00	1.04	0.98	1.00	Diverge	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.85	0.96	0.95	1.00	0.94	Diverge	1.00	1.00	1.04	1.00	1.00	0.95	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.91	0.95	1.00	0.93	Diverge	1.00	1.00	1.04	0.99	1.00	0.87	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY MENDOCINO 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.32	NA	NA	0.49	NA	NA	0.56	NA	NA	0.43	0.57	NA	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY EGLE ROCK 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.48	Diverge	0.92	0.99	Diverge	Diverge	1.00	1.00	1.04	0.98	0.99	Diverge	Install redundant battery/relay supply
MENDOCNO 115.0 kV	GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1 LUCERNE	P6	N-1-1	0.51	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-Cloverdale)
	MENDOCNO 115KV SECTION 2D	P2	Bus	0.89	0.94	0.93	1.00	0.94	0.94	1.01	1.04	1.03	0.98	1.01	0.94	Project under development
	MENDOCNO - 2D 115KV & CORTINA-MENDOCINO #1 LINE	P2	Breaker	0.86	0.93	0.93	1.00	0.93	0.93	1.01	1.04	1.03	0.97	1.01	0.92	Project: Eagle Rock-Cortina 115 kV Line (Lower Lake Sw Sta-
	EGLE RCK - MA 115KV & EGLE RCK-HOMSTKTP-CORTINA LINE	P2	Breaker	Diverge	Diverge	0.88	0.98	Diverge	Diverge	1.01	1.03	1.01	0.99	1.01	Diverge	Project under development
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	0.87	0.95	0.94	0.97	0.95	Diverge	0.99	1.02	0.98	0.99	0.99	0.94	Project under development
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.57	0.68	0.96	1.00	0.97	1.00	0.99	1.02	1.01	0.97	0.98	0.63	Install redundant battery/relay supply
	EAGLE ROCK 115KV(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.69	0.91	1.01	0.96	Diverge	0.99	1.04	1.02	0.98	0.98	Diverge	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.85	0.96	0.95	0.98	0.95	Diverge	0.99	1.01	0.98	0.99	0.99	0.95	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.90	0.94	0.97	0.93	Diverge	0.99	1.01	0.98	0.99	0.98	0.87	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY EGLE ROCK 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.51	Diverge	0.91	1.00	Diverge	Diverge	0.98	1.04	1.02	0.97	0.98	Diverge	Install redundant battery/relay supply
MENDOCNO 60.0 kV	GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1 LUCERNE	P6	N-1-1	0.54	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-Cloverdale)
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	0.58	0.65	0.58	0.97	0.59	Diverge	0.98	1.00	1.00	0.96	0.98	0.62	Project under development
	MENDOCINO 115 KV BUS 1&2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.63	0.79	0.61	1.00	0.62	Diverge	1.01	1.05	1.03	0.99	1.01	0.67	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.61	0.73	1.02	1.02	1.01	1.02	1.01	1.01	1.01	1.01	1.01	0.68	Install redundant battery/relay supply

Substation	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)								Voltage PU (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2028 Summer Peak	2031 Summer Peak	2036 Summer Peak	2028 Winter Peak	2031 Winter Peak	2041 Winter Peak	2028 Spring Off-Peak	2031 Spring Off-Peak	2036 Summer-Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
	EAGLE ROCK 115KV(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.72	0.99	1.02	1.02	Diverge	1.01	1.01	1.01	1.01	1.01	Diverge	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY EGLE ROCK 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.55	Diverge	0.98	1.01	Diverge	Diverge	1.01	1.01	1.01	1.01	1.01	Diverge	Install redundant battery/relay supply
PETLMA A 60.0 kV	LAKEVLE 230/60KV TB 3 and LAKEVLE 230/60KV TB 5	P6	N-1-1	> 0.9	> 0.9	0.55	> 0.9	0.59	0.48	> 0.9	> 0.9	0.88	> 0.9	> 0.9	> 0.9	Continue to monitor
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	0.99	0.73	0.71	1.02	0.72	Diverge	1.01	0.96	0.79	1.00	1.02	0.73	Project: Lakeville 60 kV Area Reinforcement
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.99	0.79	0.90	0.99	0.93	0.95	1.00	1.00	1.02	0.99	1.01	0.78	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.99	0.74	0.71	1.00	0.72	Diverge	1.01	0.95	0.80	0.99	1.02	0.74	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.74	0.71	1.00	0.72	Diverge	1.00	0.95	0.80	0.99	1.01	0.73	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY LAKEVILLE 230-115-60KV BATT	P5	Non-Redundant Battery/Relay	NA	Diverge	Diverge	NA	0.74	Diverge	NA	0.98	0.96	NA	NA	Diverge	Install redundant battery/relay supply
PUEBLO 115.0 kV	GEYSER17_13.8DKV GEN UNIT 1 and SONOMA-PUEBLO 115KV	P3	G-1/N-1	> 0.9	0.53	0.89	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	0.55	Project: Lakeville 60 kV Area Reinforcement
	LAKEVILLE-SONOMA #2 115KV and LAKEVILLE-SONOMA #1 115KV	P6	N-1-1	0.79	> 0.9	0.63	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Project: Lakeville 60 kV Area Reinforcement
	Base Case	P0	Base Case	0.96	0.86	0.95	1.00	0.99	1.01	0.99	1.02	1.01	0.98	1.00	0.86	Project: Lakeville 60 kV Area Reinforcement
	EGLE RCK-FULTON-SILVERDO 115KV	P1	N-1	0.94	0.84	0.94	0.99	0.98	1.00	0.99	1.02	1.01	0.97	0.99	0.83	Project: Lakeville 60 kV Area Reinforcement
	FULTON-GEYSR16-GEYSR12-GEYSR14 230KV MOAS OPENED ON G16TO 2 WESTFORDFLAT	P1	N-1	0.96	0.86	0.95	0.99	0.99	1.00	0.99	1.01	1.01	0.98	0.99	0.85	Project: Lakeville 60 kV Area Reinforcement
	FULTON-PUEBLO 115KV	P1	N-1	0.92	0.71	0.91	0.97	0.96	0.98	0.97	0.99	0.99	0.94	0.97	0.70	Project: Lakeville 60 kV Area Reinforcement
REDBUD-D 115.0 kV	EAGLE ROCK-REDBUD 115KV and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1 LUCERNE	P6	N-1-1	> 0.9	> 0.9	> 0.9	> 0.9	0.54	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Continue to monitor
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	0.88	0.95	1.00	1.02	0.96	Diverge	1.02	1.04	1.04	1.01	1.02	0.94	Continue to monitor
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.59	0.69	0.99	1.00	0.96	1.00	1.00	1.03	1.02	0.98	0.99	0.65	Install redundant battery/relay supply
	EAGLE ROCK 115KV(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.69	0.99	1.01	0.96	Diverge	0.99	1.04	1.02	0.97	0.98	Diverge	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.88	0.99	1.00	1.00	0.98	Diverge	1.01	1.02	1.01	1.00	1.00	0.98	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY EGLE ROCK 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.49	Diverge	0.99	1.00	Diverge	Diverge	0.98	1.03	1.02	0.96	0.98	Diverge	Install redundant battery/relay supply
SAN RAFL 115.0 kV	IGNACIO-LAS GALLINAS 115KV and IGNACIO 230/115KV TB 6	P6	N-1-1	> 0.9	> 0.9	0.90	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Continue to monitor
	FULTON 230 KV BAAH BUS #2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.93	0.94	0.90	1.00	0.96	0.99	1.00	1.04	1.07	0.98	1.00	0.93	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY FULTON 230-115-60KV BATT	P5	Non-Redundant Battery/Relay	NA	0.92	0.89	NA	0.95	0.99	NA	1.03	1.06	NA	NA	0.90	Install redundant battery/relay supply
SILVERDO 115.0 kV	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.52	0.53	0.80	0.90	0.83	0.92	0.93	0.97	0.98	0.89	0.92	0.51	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.90	0.89	0.90	0.98	0.94	0.98	0.99	1.01	1.03	0.96	0.98	0.88	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.86	0.95	0.97	0.95	Diverge	0.99	1.02	1.02	0.96	0.98	0.83	Install redundant battery/relay supply
SNTA RSA 115.0 kV	FULTON 115KV - SECTION 2D & 1D	P2	Breaker	0.79	0.81	0.84	0.86	0.83	0.96	0.89	0.93	0.99	0.86	0.89	0.80	Project: Santa Rosa 115 kV Lines Reconductoring Project
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.57	0.58	0.80	0.88	0.82	0.90	0.91	0.95	0.97	0.87	0.91	0.57	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.90	0.89	0.90	0.96	0.93	0.98	0.97	0.99	1.02	0.95	0.97	0.89	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.86	0.88	0.90	0.91	0.88	Diverge	0.92	0.95	0.99	0.90	0.93	0.88	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.80	0.85	0.86	0.83	Diverge	0.89	0.93	0.99	0.86	0.89	0.80	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY FULTON 230-115-60KV BATT	P5	Non-Redundant Battery/Relay	NA	0.76	0.84	NA	0.83	0.96	NA	0.93	0.99	NA	NA	0.73	Install redundant battery/relay supply
	Base Case	P5	Non-Redundant Battery/Relay	0.80	NA	NA	0.86	NA	NA	0.89	NA	NA	0.86	0.89	NA	Install redundant battery/relay supply
SONOMA 115.0 kV	LAKEVILLE-SONOMA #2 115KV and LAKEVILLE-SONOMA #1 115KV	P6	N-1-1	0.75	> 0.9	0.57	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	0.92	> 0.9	> 0.9	Project: Lakeville 60 kV Area Reinforcement
	LAKEVLE 115KV - SECTION 1D & 2D	P2	Breaker	0.75	0.45	0.56	0.92	0.91	0.98	0.94	1.04	1.05	0.89	0.95	0.44	Project: Lakeville 60 kV Area Reinforcement
	LAKEVILLE 115 KV BUS 1&2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.75	0.45	0.56	0.92	0.91	0.98	0.94	1.04	1.05	0.89	0.95	0.44	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.90	0.86	0.95	0.97	0.97	0.98	0.98	0.98	0.99	0.97	0.98	0.86	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY LAKEVILLE 230-115-60KV BATT	P5	Non-Redundant Battery/Relay	NA	Diverge	Diverge	NA	0.86	Diverge	NA	1.02	1.03	NA	NA	Diverge	Install redundant battery/relay supply
UKIAH 115.0 kV	CLOVRDLE1-2S 25.00KV GEN UNIT VG and MENDOCINO-UKIAH 115KV MOAS OPENED ON MENDOCNO CALPELLA	P3	G-1/N-1	> 0.9	> 0.9	0.89	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Continue to monitor
	GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1 LUCERNE	P6	N-1-1	0.49	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-Cloverdale)
	MENDOCINO-UKIAH 115KV MOAS OPENED ON MENDOCNO CALPELLA	P1	N-1	0.89	0.94	0.91	0.98	0.95	0.96	0.99	1.01	1.00	0.95	0.99	0.93	Project under development
	MENDOCINO-UKIAH 115KV (MENDOCNO-CALPELLA)	P2	Line Section w/o Fault	0.89	0.94	0.91	0.98	0.95	0.96	0.99	1.01	1.00	0.95	0.99	0.93	Project under development
	MENDOCNO 115KV SECTION 1D	P2	Bus	0.90	0.94	0.90	0.97	0.95	0.96	0.99	1.01	1.00	0.95	0.99	0.91	Project under development
	MENDOCNO 115KV SECTION 2D	P2	Bus	0.89	0.94	0.93	1.00	0.94	0.94	1.01	1.03	1.03	0.98	1.01	0.93	Project under development
	MENDOCNO - 1D 115KV & MENDOCINO-UKIAH LINE	P2	Breaker	0.90	0.94	0.90	0.97	0.95	0.96	0.99	1.01	1.00	0.95	0.99	0.91	Project under development
	MENDOCNO - 1D 115KV & MENDOCINO-REDBUD LINE	P2	Breaker	0.90	0.92	0.90	0.97	0.95	0.96	0.99	1.01	0.99	0.95	0.99	0.93	Project under development
	MENDOCNO - 2D 115KV & CORTINA-MENDOCINO #1 LINE	P2	Breaker	0.86	0.93	0.92	0.99	0.93	0.93	1.00	1.03	1.03	0.97	1.00	0.92	Project: Eagle Rock-Cortina 115 kV Line (Lower Lake Sw Sta-
	EGLE RCK - MA 115KV & EGLE RCK-HOMSTKTP-CORTINA LINE	P2	Breaker	Diverge	Diverge	0.88	0.97	Diverge	Diverge	1.00	1.02	1.00	0.98	1.00	Diverge	Project under development
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	0.72	0.80	0.79	0.96	0.80	Diverge	0.98	1.01	0.99	0.93	0.98	0.78	Project under development
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	0.85	0.93	0.92	0.95	0.93	Diverge	0.97	1.01	0.96	0.97	0.97	0.92	Project under development
	MENDOCINO 115 KV BUS 1&2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.76	0.86	0.83	0.98	0.83	Diverge	1.00	1.02	1.00	0.96	1.00	0.81	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.55	0.66	0.95	0.99	0.95	0.98	0.98	1.02	1.00	0.96	0.98	0.61	Install redundant battery/relay supply
	EAGLE ROCK 115KV(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.68	0.91	1.00	0.95	Diverge	0.98	1.03	1.01	0.97	0.98	Diverge	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.83	0.93	0.93	0.95	0.93	Diverge	0.97	1.00	0.96	0.97	0.97	0.93	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.88	0.92	0.95	0.91	Diverge	0.97	1.00	0.96	0.96	0.96	0.85	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY MENDOCINO 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.88	0.93	0.91	0.97	0.94	0.96	0.98	1.00	0.99	0.94	0.98	0.93	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY EGLE ROCK 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.50	Diverge	0.91	1.00	Diverge	Diverge	0.98	1.03	1.01	0.96	0.98	Diverge	Install redundant battery/relay supply
WILLITS 60.0 kV	GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR and CORTINA-MENDOCINO #1 115KV MOAS OPENED ON LUCERNJ1 LUCERNE	P6	N-1-1	0.49	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-Cloverdale)
	MENDOCNO - 2D 115KV & CORTINA-MENDOCINO #1 LINE	P2	Breaker	0.89	0.97	0.96	1.00	0.96	0.97	1.00	1.01	1.01	1.00	1.00	0.96	Project: Eagle Rock-Cortina 115 kV Line (Lower Lake Sw Sta-
	MENDOCNO 115KV - SECTION 1D & 2D	P2	Breaker	0.54	0.60	0.52	0.96	0.53	Diverge	0.97	1.00	1.01	0.96	0.97	0.57	Project under development
	MENDOCINO 115 KV BUS 1&2 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.58	0.75	0.55	0.99	0.56	Diverge	1.00	1.04	1.03	0.98	1.00	0.62	Install redundant battery/relay supply
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.56	0.67	0.99	1.01	0.98	0.99	1.00	1.01	1.01	1.00	1.00	0.62	Install redundant battery/relay supply
	EAGLE ROCK 115KV(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.70	0.95	1.00	0.99	Diverge	1.00	1.01	1.01	1.00	1.00	Diverge	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.88	0.99	0.97	1.00	0.98	Diverge	1.00	1.01	1.01	1.01	1.00	0.98	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY MENDOCINO 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.23	NA	NA	0.43	NA	NA	0.50	NA	NA	0.36	0.50	NA	Install redundant battery/relay supply
	STATION DC BATTERY SUPPLY EGLE ROCK 115-60KV BATT	P5	Non-Redundant Battery/Relay	0.50	Diverge	0.95	1.00	Diverge	Diverge	1.00	1.01	1.01	1.00	1.00	Diverge	Install redundant battery/relay supply
WINDSOR 60.0 kV	FULTON 115/60KV TB 1 and FULTON 115/60KV TB 2	P6	N-1-1	0.25	> 0.9	0.35	0.35	0.38	> 0.9	0.39	0.85	0.51	0.44	0.41	> 0.9	Project: Lakeville 60 kV Area Reinforcement
	FULTON-WINDSOR 60KV	P1	N-1	0.95	0.95	0.92	0.98	0.94	0.90	0.98	1.00	0.96	0.98	0.98	0.95	Continue to monitor
	FULTON 115KV - SECTION 2F & 1F	P2	Breaker	0.25	0.41	0.35	0.36	0.38	Diverge	0.40	0.85	0.51	0.42	0.39	0.40	Project: Lakeville 60 kV Area Reinforcement
	FULTON 230 KV BAAH BUS #1 (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.52	0.55	0.80	0.92	0.84	0.92	0.95	1.00	1.01	0.91	0.95	0.53	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION D(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.24	0.41	0.35	0.36	0.38	Diverge	0.40	0.85	0.50	0.42	0.39	0.40	Install redundant battery/relay supply
	FULTON BUS 115 KV 1 & 2 SECTION E/F(FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	0.40	0.35	0.35	0.38	Diverge	0.40	0.85	0.51	0.42	0.39	0.38	Install redundant battery/relay supply

Substation	Contingency	Category	Category Description	Post Cont. Voltage Deviation % (Baseline Scenarios)									Post Cont. Voltage Deviation % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2028 Summer Peak	2031 Summer Peak	2036 Summer Peak	2028 Winter Peak	2031 Winter Peak	2041 Winter Peak	2028 Spring Off-Peak	2031 Spring Off-Peak	2036 Summer-Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
PUEBLO 115.0 kV	FULTON-PUEBLO 115KV	P1	N-1	< 8	15	< 8	< 8	< 8	< 8	< 8	< 8	< 8	< 8	< 8	16	Project: Lakeville 60 kV area reinforcement
PUEBLO 115.0 kV	SONOMA-PUEBLO 115KV	P1	N-1	< 8	33	< 8	< 8	< 8	NA	< 8	NA	NA	< 8	NA	33	Project: Lakeville 60 kV area reinforcement
CARQUINZ 115.0 kV	JAMESON CANYON PUMPING PLANT TAP 115KV MOAS OPENED ON SKGGS J1 HGHWY J1	P1	N-1	< 8	< 8	< 8	< 8	< 8	9	< 8	< 8	< 8	< 8	< 8	< 8	Continue to monitor
UKIAH 115.0 kV	MENDOCINO-UKIAH 115KV MOAS OPENED ON MENDOCNO CALPELLA	P1	N-1	11	< 8	9	< 8	9	< 8	< 8	< 8	< 8	< 8	< 8	10	Project under development
CLOVRDLE 115.0 kV	GEYSERS #3-CLOVERDALE 115KV MOAS OPENED ON AIDLINJCT_AIDLINGYSR	P1	N-1	11	< 8	< 8	< 8	< 8	< 8	< 8	< 8	< 8	< 8	< 8	8	Project: Geyser #3-Cloverdale 115 kV Line (Aidlin Sw Sta-Cloverdale)
LYTNVLLE 60.0 kV	LAYTONVILLE-WILLITS 60KV	P1	N-1	20	Diverge	Diverge	< 8	Diverge	Diverge	< 8	Diverge	Diverge	< 8	< 8	Diverge	Project under development
HARTLEY 60.0 kV	KONOCTI-EAGLE ROCK 60KV	P1	N-1	< 8	17	22	< 8	11	15	< 8	< 8	< 8	< 8	< 8	18	Project under development
HARTLEY 60.0 kV	EGLE RCK 115/60KV TB 1	P1	N-1	< 8	17	22	< 8	11	15	< 8	< 8	< 8	< 8	< 8	18	Project under development
KONOCTI6 60.0 kV	KONOCTI-EAGLE ROCK 60KV	P1	N-1	18	31	40	12	21	26	9	< 8	< 8	10	9	34	Project under development
KONOCTI6 60.0 kV	EGLE RCK 115/60KV TB 1	P1	N-1	18	31	40	12	20	26	9	< 8	< 8	10	9	33	Project under development
EGLE RCK 60.0 kV	EGLE RCK 115/60KV TB 1	P1	N-1	22	32	42	14	21	26	11	< 8	< 8	12	11	35	Project under development
WINDSOR 60.0 kV	FULTON-WINDSOR 60KV	P1	N-1	< 8	< 8	9	< 8	< 8	11	< 8	< 8	< 8	< 8	< 8	< 8	Continue to monitor

Contingency	Category	Category Description	Transient Stability Performance						Potential Mitigation Solutions
			Baseline Scenarios				Sensitivity Scenarios		
			2028 Spring Off-Peak	2031 Summer Peak	2036 Summer Peak	2036 Summer-Off Peak	2028 Spring OP Sensitivity	2031 SP High CEC Forecast	
In accordance with TPL-001-5- Requirement R2.6, this area relies on the past studies from the 2024-25 Transmission Planning Process for transient stability studies:									
https://stakeholdercenter.caiso.com/InitiativeDocuments/BoardApproved-AppendixC-2024-2025-TransmissionPlan.pdf									

Worst Contingency	Category	Category Description	Amount of Load Drop (MW)													Potential Mitigation Solutions
			2028 Summer Peak	2031 Summer Peak	2036 Summer Peak	2041 Summer Peak	2028 Winter Peak	2031 Winter Peak	2041 Winter Peak	2028 Spring Off-Peak	2036 Summer-Off Peak	2031 Spring Off-Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 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	2028 Summer Peak	2031 Summer Peak	2036 Summer Peak	2041 Summer Peak	2028 Winter Peak	2031 Winter Peak	2041 Winter Peak	2028 Spring Off-Peak	2036 Summer-Off Peak	2031 Spring Off-Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	

No single source substation with more than 100 MW