Monitored 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 OP Heavy Renewable & Min Gas Gen	2029 SP High CEC Forecast	
Bridgeville - Garberville 60 kV Line (BRDGVLLE-FRUTLDJT)	P1-2:A1:24:_GARBERVILLE-LAYTONVILLE 60KV [8365]	P1	N-1	96	104	50	50	64	28	49	37	89	48	105	Project: Garberville reinforcement project
	P1-2:A1:24:_GARBERVILLE-LAYTONVILLE 60KV [8365] & P1-1:A1:9:_HMBOBAYPPA 13.80KV GEN UNIT 1	P3	G-1/N-1	95	105	<100	<100	<100	<100	<100	<100	<100	<100	105	Project: Garberville reinforcement project
	P1-2:A1:3:_BRIDGEVILLE-COTTONWOOD 115KV [1110] & P1-2:A1:2:_HUMBOLDT-TRINITY 115KV [1820] MOAS OPENED ON TRINITY_JESSTAP	P6	N-1-1	<100	<100	<100	<100	<100	<100	100	96	98	100	<100	Generation re-dispatch
Bridgeville-Cottonwood 115 kV Line	P1-3:A1:4:_HMBOBAYPPB 115/13.8KV TB 1 & P1-2:A1:26:_HUMB115-HUMBOLDT #1 115KV [0]	P6	N-1-1	<100	<100	<100	<100	<100	102	<100	<100	<100	<100	<100	Continue to monitor
Garberville-Laytonville 60kV line	P1-2:A1:23:_BRIDGEVILLE-GARBERVILLE 60KV [6220] MOAS OPENED ON BRDGVLLE_FRUTLDJT	P1	N-1	106	109	NA	50	68	NA	37	25	105	40	109	Project: Garberville reinforcement project
	P1-2:A1:23:_BRIDGEVILLE-GARBERVILLE 60KV [6220] MOAS OPENED ON BRDGVLLE_FRUTLDJT & P1-1:A1:9:_HMBOBAYPPA 13.80KV GEN UNIT 1	P3	G-1/N-1	106	109	<100	<100	<100	<100	<100	<100	<100	<100	109	Project: Garberville reinforcement project
	P5-5C:A1:2:_BRIDGEVILLE 115-60KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundent battery/relay	106	109	NA	52	68	NA	39	25	105	NA	109	Add redundant battery
	P1-4:A1:4:_ORICK SVD=V & P1-2:A1:23:_BRIDGEVILLE-GARBERVILLE 60KV [6220] MOAS OPENED ON BRDGVLLE_FRUTLDJT	P6	N-1-1	<100	<100	<100	<100	<100	<100	<100	<100	102	<100	<100	Project: Garberville reinforcement project
Humboldt - Bridgeville 115 kV Line	P1-2:A1:2:_HUMBOLDT-TRINITY 115KV [1820] MOAS OPENED ON TRINITY_JESSTAP & P1-2:A1:22:_RIO DELL JCT-BRIDGEVILLE 60KV [7850] MOAS OPENED ON CARLOTTA_SWNS FLT (2)	P6	N-1-1	<100	<100	<100	100	<100	<100	100	100	<100	100	<100	Generation re-dispatch
Humboldt - Maple Creek 60 kV Line	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	66	71	84	48	39	NConv	73	77	13	61	68	Continue to monitor
	P2-3:A1:1:_HUMBOLDT - MA 115KV & HUMBOLDT-TRINITY LINE	P2	Bus/Breaker	59	NConv	82	42	35	NConv	61	60	10	51	NConv	Project: Garberville reinforcement project
	P2-3:A1:23:_HUMBOLDT - MA 115KV & HUMB115-HUMBOLDT #1 LINE	P2	Bus/Breaker	NA	NA	84	NA	NA	NConv	NA	NA	NA	NA	NA	Continue to monitor
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	66	71	84	48	39	NConv	73	77	13	61	68	Continue to monitor
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery/relay	66	72	46	48	39	NConv	73	77	14	NA	68	Add redundant relay
Humboldt Bay - Humboldt No.1 60 kV Line (HUMBOLDT-HMBLT JT)	P7-1:A1:2:_HUMBOLDT BAY & HUMBOLDT BAY LINES	P7	DCTL	27	41	80	80	72	54	104	92	5	87	40	Generation re-dispatch
Humboldt Bay - Rio Dell Jct 60 kV Line	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	19	32	66	71	64	NConv	101	64	29	80	30	Continue to monitor
	P2-3:A1:18:_BRDGVLLE 115KV - RING R3 & R2	P2	Bus/Breaker	93	91	66	55	69	32	65	5	103	64	91	Sensitivity Only
	P2-3:A1:19:_BRDGVLLE 115KV - RING R1 & R2	P2	Bus/Breaker	93	91	66	55	69	32	65	5	103	64	91	Sensitivity Only
	P2-3:A1:1:_HUMBOLDT - MA 115KV & HUMBOLDT-TRINITY LINE	P2	Bus/Breaker	33	NConv	66	75	67	NConv	109	75	26	86	NConv	Project: Garberville reinforcement project
	P2-3:A1:20:_BRDGVLLE 115KV - RING R1 & R3	P2	Bus/Breaker	93	91	66	55	69	32	65	5	103	64	91	Sensitivity Only
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	19	32	66	71	64	NConv	101	64	29	80	30	Continue to monitor
	P2-3:A1:1:_HUMBOLDT - MA 115KV & HUMBOLDT-TRINITY LINE	P2	Bus/Breaker	45	NConv	41	63	52	NConv	102	72	17	79	NConv	Project: Garberville reinforcement project
	P1-3:A1:3:_BRDGVLLE 115/60KV TB 1 & P1-1:A1:4:_HRCGENSAB 13.80KV GEN UNIT 2	P3	G-1/N-1	98	109	<100	<100	<100	<100	<100	<100	99	<100	110	Project: Garberville reinforcement project
	P5-5C:A1:1:_HUMBOLDT 115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundent battery/relay	45	NConv	NConv	63	52	NConv	102	72	17	NA	NConv	Add redundant battery
	P1-2:A1:2:_HUMBOLDT-TRINITY 115KV [1820] MOAS OPENED ON TRINITY_JESSTAP & P1-2:A1:1:_HUMBOLDT-BRIDGEVILLE 115KV [1810]	P6	N-1-1	<100	<100	<100	100	95	<100	<100	<100	<100	<100	<100	Project: Garberville reinforcement project
Humboldt-Trinity 115 kV Line	P1-2:A1:3:_BRIDGEVILLE-COTTONWOOD 115KV [1110] & P1-1:A1:8:_HMBOBAYPPB 13.80KV GEN UNIT 4	P3	G-1/N-1	<100	101	<100	<100	<100	<100	<100	94	<100	<100	101	Project: Garberville reinforcement project
	P5-5C:A1:2:_BRIDGEVILLE 115-60KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundent battery/relay	26	40	54	75	69	25	98	116	66	NA	40	Add redundant battery
	P1-2:A1:3:_BRIDGEVILLE-COTTONWOOD 115KV [1110] & P1-2:A1:25:_BRIDGEVILLE-GARBERVILLE 60KV [6220] MOAS OPENED ON FTSWRDJT_GRBRVLLE	P6	N-1-1	<100	<100	<100	<100	<100	<100	93	113	<100	100	<100	Generation re-dispatch
	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	89	125	NA	63	48	NA	110	83	12	82	122	Project: Garberville reinforcement project
	P2-3:A1:1:_HUMBOLDT - MA 115KV & HUMBOLDT-TRINITY LINE	P2	Bus/Breaker	110	NConv	NA	69	51	NA	120	99	16	90	NConv	Project: Garberville reinforcement project

Newburg-Rio Dell Tap 60 kV Line	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	89	125	NA	63	48	NA	110	83	12	82	122	Project: Garberville reinforcement project
	P1-2:A1:1:_HUMBOLDT-BRIDGEVILLE 115KV [1810] & P1-1:A1:3:_HRCGENSAB 13.80KV GEN UNIT 1	P3	G-1/N-1	<100	<100	<100	<100	<100	<100	100	<100	<100	96	<100	Generation re-dispatch
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery/relay	89	126	NA	63	48	NA	110	83	12	NA	122	Add redundant relay
	P5-5C:A1:1:_HUMBOLDT 115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundent battery/relay	110	NConv	NA	69	51	NA	120	99	16	NA	NConv	Add redundant battery
	P1-2:A1:2:_HUMBOLDT-TRINITY 115KV [1820] MOAS OPENED ON TRINITY_JESSTAP & P1-2:A1:1:_HUMBOLDT-BRIDGEVILLE 115KV [1810]	P6	N-1-1	<100	<100	<100	100	<100	<100	<100	<100	<100	<100	<100	Project: Garberville reinforcement project
Rio Dell Jct - Bridgeville 60 kV Line (CARLOTTA-PCLUMBER)	P1-2:A1:1:_HUMBOLDT-BRIDGEVILLE 115KV [1810]	P1	N-1	8	10	17	71	60	48	100	99	54	100	9	Sensitivity Only
	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	105	148	25	75	55	51	110	135	29	98	141	Project: Garberville reinforcement project
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	105	148	25	75	55	51	110	135	29	98	141	Project: Garberville reinforcement project
	P2-3:A1:1:_HUMBOLDT - MA 115KV & HUMBOLDT-TRINITY LINE	P2	Bus/Breaker	133	NConv	25	80	57	51	120	150	34	106	NConv	Project: Garberville reinforcement project
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery/relay	105	150	25	75	54	51	109	135	30	NA	143	Add redundant relay
	P5-5C:A1:1:_HUMBOLDT 115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundent battery/relay	133	NConv	25	80	57	51	119	150	34	106	NConv	Add redundant battery
	P1-2:A1:2:_HUMBOLDT-TRINITY 115KV [1820] MOAS OPENED ON TRINITY_JESSTAP & P1-2:A1:1:_HUMBOLDT-BRIDGEVILLE 115KV [1810]	P6	N-1-1	<100	<100	<100	101	95	<100	<100	<100	<100	<100	<100	Project: Garberville reinforcement project
Rio Dell Tap 60 kV Line(SCOTIATP-RIODLLTP)	P1-1:A1:4:_HRCGENSAB 13.80KV GEN UNIT 2 & P1-1:A1:3:_HRCGENSAB 13.80KV GEN UNIT 1	P3	G-1/N-1	<100	<100	109	<100	<100	<100	<100	<100	<100	<100	<100	Continue to monitor
Trinity-Maple Creek 60 kV Line	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	82	107	53	35	19	NConv	60	71	31	47	104	Project: Garberville reinforcement project
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	82	107	53	35	19	NConv	60	71	31	47	104	Project: Garberville reinforcement project
	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	82	107	53	35	19	NConv	60	71	31	47	104	Project: Garberville reinforcement project
	P2-3:A1:1:_HUMBOLDT - MA 115KV & HUMBOLDT-TRINITY LINE	P2	Bus/Breaker	72	NConv	52	28	15	NConv	48	55	27	37	NConv	Project: Garberville reinforcement project
	P2-3:A1:23:_HUMBOLDT - MA 115KV & HUMB115-HUMBOLDT #1 LINE	P2	Bus/Breaker	NA	NA	53	NA	NA	NConv	NA	NA	NA	NA	NA	Project: Garberville reinforcement project
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery/relay	83	108	82	35	19	NConv	60	71	31	NA	105	Add redundant relay
	P5-5C:A1:1:_HUMBOLDT 115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundent battery/relay	72	NConv	NConv	28	15	NConv	48	55	27	NA	NConv	Add redundant battery

2024-2025 ISO Reliability Assessment - Study Results
Study Area: PG&E Humboldt
Low Voltages

California ISO

Monitored Facility	Contingency (All and Worst P6)	Category	Category Description	Post Cont. Voltage P.U (Baseline Scenarios)								Post Cont. Voltage P.U (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 OP Heavy Renewable & Min Gas Gen	2029 SP High CEC Forecast	
BRDGVLLE 115 kV	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	0.96	0.89	0.98	1.03	1.03	NConv	1.04	1.00	1.03	1.04	0.91	Project: Garberville reinforcement project
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	0.96	0.89	0.98	1.03	1.03	NConv	1.04	1.00	1.03	1.04	0.91	Project: Garberville reinforcement project
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery supply/relay	0.96	0.89	0.98	1.03	1.03	NConv	1.04	1.00	1.03	1.04	0.90	Add Redundant relay
BRDGVLLE 60 kV	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	0.97	0.90	0.98	1.01	1.02	NConv	1.01	0.98	1.03	1.03	0.91	Project: Garberville reinforcement project
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	0.97	0.90	0.98	1.01	1.02	NConv	1.01	0.98	1.03	1.03	0.91	Project: Garberville reinforcement project
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery supply/relay	0.97	0.89	0.98	1.01	1.02	NConv	1.01	0.98	1.03	1.03	0.91	Add Redundant relay
EUREKA 60 kV	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	0.98	0.80	1.00	NA	1.03	NConv	1.04	1.04	1.02	1.04	0.82	Project: Garberville reinforcement project
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	0.98	0.80	1.00	NA	1.03	NConv	1.04	1.04	1.02	1.04	0.82	Project: Garberville reinforcement project
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery supply/relay	0.98	0.79	0.97	1.03	1.03	NConv	1.04	1.04	1.02	1.04	0.82	Add Redundant relay
EUREKA A 60 kV	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	0.98	0.80	1.00	1.03	1.03	NConv	1.04	1.04	1.02	1.04	0.82	Project: Garberville reinforcement project
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	0.98	0.80	1.00	1.03	1.03	NConv	1.04	1.04	1.02	1.04	0.82	Project: Garberville reinforcement project
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery supply/relay	0.98	0.79	0.97	1.03	1.03	NConv	1.04	1.04	1.02	1.04	0.82	Add Redundant relay
GRBRVLLE 60 kV	Base Case	P0	Base Case	0.95	0.98	1.03	1.03	1.03	1.03	1.03	1.03	0.97	1.03	0.98	Project: Garberville reinforcement project
	P1-2:A1:23:_BRIDGEVILLE-GARBERVILLE 60KV [6220] MOAS OPENED ON BRDGVLLE FRUTLDJT	P1	N-1	0.49	0.47	NA	1.03	0.88	NA	1.03	1.03	0.53	1.03	0.47	Project: Garberville reinforcement project
	P1-2:A1:24:_GARBERVILLE-LAYTONVILLE 60KV [8365]	P1	N-1	0.90	0.94	1.03	1.03	1.03	1.03	1.03	1.03	0.93	1.03	0.94	Project: Garberville reinforcement project
	P1-2:A1:25:_BRIDGEVILLE-GARBERVILLE 60KV [6220] MOAS OPENED ON FTSWRDJT GRBRVLLE	P1	N-1	0.69	0.58	NA	1.03	1.03	NA	1.03	1.03	0.89	1.03	0.58	Project: Garberville reinforcement project
	P1-4:A1:6:_GRBRVLLE 60.00KV ID=8H & GRBRVLLE 60.00KV ID=7H & GRBRVLLE 60.00KV ID=5H & GRBRVLLE 60.00KV ID=V SHUNT DEVICES	P1	N-1	0.85	0.85	0.94	0.94	0.91	0.90	0.94	0.99	0.87	0.93	0.85	Project: Garberville reinforcement project
	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	0.95	0.89	1.03	1.03	1.03	NConv	1.03	1.03	1.01	1.03	0.90	Project: Garberville reinforcement project
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	0.95	0.89	1.03	1.03	1.03	NConv	1.03	1.03	1.01	1.03	0.90	Project: Garberville reinforcement project
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery supply/relay	0.95	0.89	1.03	1.03	1.03	NConv	1.03	1.03	1.01	1.03	0.90	Add Redundant relay
	P5-5C:A1:2:_BRIDGEVILLE 115-60KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundent battery supply/relay	0.49	0.47	NA	1.03	0.88	NA	1.03	1.03	0.53	1.03	0.47	Add Redundant battery
HARRIS 60 kV	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	0.98	0.80	1.01	1.03	1.03	NConv	1.04	1.03	1.02	1.04	0.82	Project: Garberville reinforcement project
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	0.98	0.80	1.01	1.03	1.03	NConv	1.04	1.03	1.02	1.04	0.82	Project: Garberville reinforcement project
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery supply/relay	0.98	0.79	0.96	1.03	1.03	NConv	1.04	NA	1.02	1.04	0.82	Add Redundant relay
HMBLT BY 60 kV	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	0.98	0.81	1.01	1.04	1.04	NConv	1.04	1.04	1.02	1.04	0.83	Project: Garberville reinforcement project
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	0.98	0.81	1.01	1.04	1.04	NConv	1.04	1.04	1.02	1.04	0.83	Project: Garberville reinforcement project
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery supply/relay	0.98	0.80	0.98	1.04	1.04	NConv	1.04	1.04	1.02	1.04	0.83	Add Redundant relay
HMBLT JT 60 kV	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	0.98	0.80	1.01	1.04	1.04	NConv	1.04	1.04	1.02	1.04	0.83	Project: Garberville reinforcement project
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	0.98	0.80	1.01	1.04	1.04	NConv	1.04	1.04	1.02	1.04	0.83	Project: Garberville reinforcement project
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery supply/relay	0.98	0.80	0.97	1.04	1.04	NConv	1.04	1.04	1.02	1.04	0.82	Add Redundant relay
HUMBOLDT 60 kV	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	0.98	0.80	1.01	1.03	1.03	NConv	1.04	1.03	1.02	1.04	0.82	Project: Garberville reinforcement project
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	0.98	0.80	1.01	1.03	1.03	NConv	1.04	1.03	1.02	1.04	0.82	Project: Garberville reinforcement project
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery supply/relay	0.98	0.79	0.96	1.03	1.03	NConv	1.04	1.03	1.02	1.04	0.82	Add Redundant relay
MPLE CRK 60 kV	P1-2:A1:13:_HUMBOLDT-MAPLE CREEK 60KV [7130] MOAS OPENED ON HUMBOLDT MPLE CRK	P1	N-1	0.89	1.04	1.03	0.98	1.03	0.93	1.01	1.03	0.94	1.01	1.04	Project:Maple Creek reactive support
	P2-2:A1:1:_HUMBOLDT 115KV SECTION MA	P2	Bus/Breaker	0.94	0.77	1.00	1.02	1.03	NConv	1.02	1.02	1.01	1.03	0.80	Project:Maple Creek reactive support
	P2-3:A1:1:_HUMBOLDT - MA 115KV & HUMBOLDT-TRINITY LINE	P2	Bus/Breaker	0.90	NConv	0.99	1.03	1.03	NConv	1.02	1.02	1.01	1.03	NConv	Project:Maple Creek reactive support
	P2-3:A1:2:_HUMBOLDT - MA 115KV & HUMBOLDT BAY-HUMBOLDT #1 LINE	P2	Bus/Breaker	0.94	0.77	1.00	1.02	1.03	NConv	1.02	1.02	1.01	1.03	0.80	Project:Maple Creek reactive support
	P5-5A:A1:1:_HUMBOLDT 115 KV BUS (FAILURE OF NON-REDUNDENT RELAY)	P5	Non-Redundent battery supply/relay	0.94	0.76	0.95	1.02	1.03	NConv	1.02	1.02	1.01	1.03	0.79	Add Redundant relay
	P5-5C:A1:1:_HUMBOLDT 115KV BATT(FAILURE OF NON-REDUNDENT BATT)	P5	Non-Redundent battery supply/relay	0.90	NConv	NConv	1.03	1.03	NConv	1.02	1.02	1.01	1.03	NConv	Add Redundant battery
	P1-2:A1:26:_HUMB115-HUMBOLDT #1 115KV [0] & P1-3:A1:4:_HMBOBAYPPB 115/13.8KV TB 1	P6	N-1-1	NA	NA	NA	NA	NA	0.56	NA	NA	NA	NA	NA	Project:Maple Creek reactive support
	P1-4:A1:9:_FRT SWRD SVD=V1 & P1-4:A1:6:_GRBRVLLE 60.00KV ID=8H & GRBRVLLE 60.00KV ID=7H & GRBRVLLE 60.00KV ID=5H & GRBRVLLE 60.00KV ID=V SHUNT DEVICES	P6	N-1-1	NA	NA	0.79	NA	NA	NA	NA	NA	NA	NA	NA	Continue to monitor

2024-2025 ISO Reliability Assessment - Study Results
Study Area: PG&E Humboldt
Voltage Deviation

Overloaded Facility	Contingency (All and Worst P6)	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 OP Heavy Renewable & Min Gas Gen	2029 SP High CEC Forecast	
GRBRVLLE 60 kV	P1-2:A1:23:_BRIDGEVILLE-GARBERVILLE 60KV [6220] MOAS OPENED ON BRDGVLLE_FRUTLDJT	P1	N-1	46	51	<8	<8	15	14	<8	<8	44	<8	51	Project: Garberville reinforcement project
MPLE CRK 60 kV	P1-2:A1:13:_HUMBOLDT-MAPLE CREEK 60KV [7130] MOAS OPENED ON HUMBOLDT_MPLE CRK	P1	N-1	13	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	Project:Maple Creek reactive support

2024-2025 ISO Reliability Assessment - Study Results
Study Area: **PG&E Humboldt**
Transient Stability

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	
In accordance with TPL-001-5- Requirement R2.6, this area relies on the past studies from the 2020-21 Transmission Planning Process.								
http://www.caiso.com/Documents/BoardApproved2020-2021TransmissionPlan.pdf								

2024-2025 ISO Reliability Assessment - Study Results
Study Area: **PG&E Humboldt**
Single Contingency Load Drop

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 OP Heavy Renewable & Min Gas Gen	2029 SP High CEC Forecast	
None														

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

2024-2025 ISO Reliability Assessment - Study Results
Study Area: **PG&E Humboldt**
Single Source Substation with more than 100 MW Load

Substation	Load Served (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 OP Heavy Renewable & Min Gas Gen	2029 SP High CEC Forecast	
None												

No single source substation with more than 100 MW