

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 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	
AEC_300_2-AEC_300-TESLA-SCHULTE 115KV	VIERRA-TESLA 115KV [0] and SCHULTE-TESLA 115KV [0]	P6	N-1-1	< 100	< 100	< 100	116	< 100	< 100	< 100	< 100	< 100	Redispatch
	STANISLAUSPH 13.80KV GEN UNIT 1 and SCHULTE-TESLA 115KV [0]	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	100	< 100	< 100	< 100	Redispatch
	TESLA 115KV - MIDDLE BREAKER BAY 3	P2	Breaker	< 100	< 100	< 100	< 100	< 100	< 100	104	< 100	< 100	Sensitivity only.
ATLANTIC-PLEASANT GROVE #2 115KV	RIO OSO-LINCLN-SPILINCOLN 115KV [0] and ATLANTIC-PLEASANT GROVE #1 115KV [6190]	P6	N-1-1	109	118	144	< 100	< 100	< 100	< 100	< 100	122	under review.
BANTA-TRACY 115KV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	114	110	126	Diverge	< 100	< 100	Diverge	Diverge	113	Install redundant battery supply
	TESLA 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	104	103	116	Diverge	< 100	< 100	Diverge	Diverge	105	Install redundant relay
	TESLA-TRACY(115KV) 115KV [4020] (TESLA-ELLIS_JCT)	P2	Line Section w/o Fault	107	109	120	< 100	< 100	< 100	< 100	< 100	112	Potential line capacity increase.
	TESLA-LEPRINO_JCT 115KV	P1	N-1	106	108	119	< 100	< 100	< 100	< 100	< 100	111	Potential line capacity increase.
	TESLA-TRACY(115KV) 115KV [4020] (LEPRINO_JCT-TRACY JC)	P2	Line Section w/o Fault	106	108	119	< 100	< 100	< 100	< 100	< 100	111	Potential line capacity increase.
	TESLA 115KV - MIDDLE BREAKER BAY 5	P2	Breaker	106	108	119	< 100	< 100	< 100	< 100	< 100	111	Potential line capacity increase.
	TESLA-TRACY(115KV) 115KV [4020] (ELLIS_JCT-TRACY JC)	P2	Line Section w/o Fault	106	108	119	< 100	< 100	< 100	< 100	< 100	110	Potential line capacity increase.
	TESLA-TRACY(115KV) 115KV [4020] (LEPRINO_JCT-TRACY)	P2	Line Section w/o Fault	< 100	101	112	< 100	< 100	< 100	< 100	< 100	103	Potential line capacity increase.
	LEPRINO 115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	101	112	< 100	< 100	< 100	< 100	< 100	103	Install redundant battery supply
	DONNELLS 13.80KV GEN UNIT 1 and BELLOTA 230/115KV TB 2	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Sensitivity only.
BELLOTA 230/115KV TB 1	BELLOTA 230/115KV TB 2 and MANTECA-RIPON 115KV [0]	P6	N-1-1	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	Redispatch
	BELLOTA - 2D 115KV & BELLOTA-RIVERBANK-MELONESSWSTA-TULLOCHPH LINE	P2	Breaker	< 100	< 100	< 100	106	< 100	< 100	< 100	105	< 100	Redispatch
BELLOTA 230/115KV TB 2	TESLA 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant relay
	BELLOTA 230/115KV TB 1 and MANTECA-RIPON 115KV [0]	P6	N-1-1	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	Redispatch
	DONNELLS 13.80KV GEN UNIT 1 and BELLOTA 230/115KV TB 1	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Sensitivity only.
	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant battery supply
	TESLA 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant relay
BELLOTA-RIVERBANK 115KV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant battery supply
	TESLA 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	Diverge	101	< 100	Diverge	Diverge	< 100	Install redundant relay
BELLOTA-RIVERBANK-MELONESSWSTA-TULLOCHPH 115KV	MANTECA 115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	102	124	< 100	< 100	104	< 100	Install redundant battery supply
	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	140	Diverge	148	< 100	Diverge	Diverge	< 100	Install redundant battery supply
	TESLA 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	109	Diverge	178	< 100	Diverge	Diverge	< 100	Install redundant relay
	BELLOTA 230/115KV TB 1 and BELLOTA 230/115KV TB 2	P6	N-1-1	< 100	< 100	< 100	Diverge	104	< 100	Diverge	Diverge	< 100	Redispatch
	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	< 100	NA	< 100	Diverge	NA	138	Diverge	Diverge	NA	Redispatch
	BELLOTA 230KV - SECTION 2E & 1E	P2	Breaker	NA	< 100	NA	NA	104	NA	NA	NA	< 100	Redispatch
	STCKNBIOMASS 13.80KV GEN UNIT 1 and WEBER-TESLA 230KV [5880]	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	GOLD HILL 230 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	Diverge	Diverge	Diverge	107	< 100	< 100	Diverge	Diverge	Install redundant relay
BELL-PLACER 115KV	GOLDHILL 230KV - SECTION 2D & 1D	P2	Breaker	Diverge	NA	NA	Diverge	NA	NA	< 100	Diverge	NA	project: Gold Hill 230/115 kV Transformer Addition Project
	GOLDHILL 230/115KV TB 1 and GOLDHILL 230/115KV TB 2	P6	N-1-1	Diverge	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	project: Gold Hill 230/115 kV Transformer Addition Project
	GOLDHILL 115KV - SECTION 1F & 2F	P2	Breaker	167	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Gold Hill 230/115 kV Transformer Addition Project
	Placer-Gold Hill No. 1 115 KV Line and Placer-Gold Hill No. 2 115 KV Line	P7	DCTL	< 100	< 100	118	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	GOLD HILL 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	118	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
	STUCK BREAKER & NO BF RELAY GOLD HILL 115KV CB 172 OR 392	P5	Non-Redundant Battery/Relay	< 100	< 100	119	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant relay
	GOLD HILL 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	119	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant relay
	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	102	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
BIRDS LANDING SW STA-CONTRA COSTA PP 230KV	VACA-LAMBIE SW STA 230KV [5845] and BIRDS LANDING SW STA-CONTRA COSTA SUB 230KV [6161]	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	BIRDS LANDING SW STA-CONTRA COSTA SUB 230KV [6161]	P1	N-1	< 100	< 100	< 100	< 100	< 100	< 100	100	< 100	< 100	Sensitivity only.
BIRDS LANDING SW STA-CONTRA COSTA SUB 230KV	VACA-PARKWAY 230KV [5850] and BIRDS LANDING SW STA-CONTRA COSTA PP 230KV [5830]	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
BRIGHTN-W.SCRMNO 115KV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	133	134	129	< 100	< 100	< 100	< 100	< 100	136	Install redundant battery supply
BRIGHTON-BELLOTA 230KV	RIO OSO 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	128	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant relay
	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	170	175	NA	< 100	< 100	NA	< 100	< 100	176	Install redundant battery supply
BRIGHTON-DAVIS 115KV	WOODLAND-DAVIS 115KV [4210] and BRIGHTN-W.SCRMNO 115KV [0]	P6	N-1-1	145	140	< 100	< 100	< 100	< 100	< 100	< 100	145	under review.
	BRIGHTN-W.SCRMNO 115KV [0] and WOODLAND-DAVIS 115KV [4210]	P6	N-1-1	118	117	154	< 100	< 100	< 100	< 100	< 100	120	under review.
	Rio Oso-West Sacramento 115 KV Line & West Sacramento-Brighton 115 KV Line	P7	DCTL	123	124	162	< 100	< 100	< 100	< 100	< 100	130	under review.
	Rio Oso-Woodland #1 115 KV Line & Rio Oso-Woodland #2 115 KV Line	P7	DCTL	104	104	132	< 100	< 100	< 100	< 100	< 100	109	under review.
	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	172	172	166	< 100	< 100	< 100	< 100	< 100	175	Install redundant battery supply
	RIO OSO 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	122	126	175	< 100	< 100	< 100	< 100	< 100	131	Install redundant relay
	W.SCRMNO - DE 115KV & BRIGHTN-W.SCRMNO LINE	P2	Breaker	106	105	130	< 100	< 100	< 100	< 100	< 100	111	under review.
	BRIGHTN-W.SCRMNO 115KV [0]	P1	N-1	< 100	< 100	108	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	STATION DC BATTERY SUPPLY ZAMORA 115KV BATT	P5	Non-Redundant Battery/Relay	104	104	132	< 100	< 100	< 100	< 100	< 100	109	Install redundant battery supply
	WEST SACRAMENTO-BRIGHTON 115KV [4110] (DPWT_TP2-BRIGHTN)	P2	Line Section w/o Fault	< 100	< 100	108	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
BRIGHTON-LOCKEFORD 230KV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	NA	NA	163	NA	NA	< 100	NA	NA	NA	Install redundant battery supply
CLAY-MARTEL 60KV	VLLY SP5 230KV - RING R1 & R4	P2	Breaker	< 100	< 100	103	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
CORTINA-EGLE RCK-HOMSTKTP 115KV	VACA-DIXON 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	103	Install redundant relay
	STATION DC BATTERY SUPPLY VACA-DIXON 230KV BATT	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	103	Install redundant battery supply
COTTLE-MELONES 230KV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	103	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant battery supply
	WARNERVILLE 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	101	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant relay
DIXON-VACA #2 60KV	Q1461BESS 0.69KV GEN UNIT 1 and VACA-DXN-DIXON-J1-TRAVIS 60KV	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	VACA-DXN-DIXON-J1-TRAVIS 60KV	P1	N-1	< 100	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	GOLD HILL 230 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	Diverge	Diverge	Diverge	186	< 100	< 100	Diverge	Diverge	Install redundant relay

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				2028 Summer Peak	2031 Summer Peak	2036 Summer 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	
DRUM-HIGGINS 115KV	GOLDHILL 230KV - SECTION 2D & 1D	P2	Breaker	Diverge	NA	NA	Diverge	NA	NA	< 100	Diverge	NA	project: Gold Hill 230/115 kV Transformer Addition Project
	GOLDHILL 230/115KV TB 1 and GOLDHILL 230/115KV TB 2	P6	N-1-1	Diverge	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	project: Gold Hill 230/115 kV Transformer Addition Project
	GOLDHILL 115KV - SECTION 1F & 2F	P2	Breaker	249	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Gold Hill 230/115 kV Transformer Addition Project
	Placer-Gold Hill No. 1 115 KV Line and Placer-Gold Hill No. 2 115 KV Line	P7	DCTL	116	109	182	< 100	< 100	< 100	< 100	< 100	119	Project: Drum - Higgins 115 kV Line Reconductoring
	GOLD HILL 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	119	102	< 100	< 100	< 100	< 100	< 100	< 100	116	Install redundant battery supply
	STUCK BREAKER & NO BF RELAY GOLD HILL 115KV CB 172 OR 392	P5	Non-Redundant Battery/Relay	116	110	182	< 100	< 100	< 100	< 100	< 100	119	Install redundant relay
	GOLD HILL 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	116	110	182	< 100	< 100	< 100	< 100	< 100	119	Install redundant relay
	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	104	109	111	< 100	< 100	< 100	108	105	Install redundant battery supply
DRUMPH1 115/115KV TB 1	GOLD HILL 230 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	Diverge	Diverge	Diverge	108	< 100	< 100	Diverge	Diverge	Install redundant relay
	RIO OSO-BRNSWALT-DRUMPH1 115KV [0] and DRUM-HIGGINS 115KV	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	103	< 100	Sensitivity only.
	PLACER-GOLD HILL #1 115KV [3340] and DRUM-HIGGINS 115KV	P6	N-1-1	< 100	< 100	142	< 100	< 100	< 100	< 100	< 100	145	continue to monitor.
	GOLD HILL 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	< 100	107	< 100	< 100	< 100	< 100	Install redundant battery supply
E.MARYSVILLE-MARYSVILLE 60KV	PALERMO-NICOLAUS 115KV and RIO OSO-NICOLAUS 115KV	P6	N-1-1	< 100	118	187	< 100	< 100	< 100	< 100	< 100	124	under review.
	E.NICOLS 115KV - RING R1 & R5	P2	Breaker	NA	129	186	NA	< 100	< 100	NA	NA	133	under review.
	STELLING-MONTA VISTA 230KV [1000] and EIGHT MILE ROAD-TESLA 230KV [4660]	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
EIGHT MILE ROAD-STAGG 230KV	Q1109BESS 34.50KV GEN UNIT 1 and EIGHT MILE ROAD-TESLA 230KV [4660]	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
EIGHT MILE ROAD-TESLA 230KV	EIGHT MILE ROAD-STAGG 230KV [5002] and GOLDHILL-LAKE 230KV [1]	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
EL DORADO-MISSOURI FLAT #2 115KV	GOLDHILL 115KV - SECTION 1F & 1G	P2	Breaker	NA	193	NA	NA	< 100	NA	NA	NA	203	project: Gold Hill-El Dorado Reinforcement
	MISSOURI FLAT-GOLD HILL #2 115KV [2670] (GOLDHILL-SHPRING2)	P2	Line Section w/o Fault	200	193	< 100	108	< 100	< 100	< 100	107	202	project: Gold Hill-El Dorado Reinforcement
	GOLDHILL 115KV SECTION 1G	P2	Bus	NA	192	< 100	NA	< 100	< 100	NA	NA	202	project: Gold Hill-El Dorado Reinforcement
ELDORAD-MIZOU_T1 115KV	GOLDHILL 115KV - SECTION 2G & 1G	P2	Breaker	NA	192	NA	NA	< 100	NA	NA	NA	202	project: Gold Hill-El Dorado Reinforcement
	GOLDHILL 115KV - SECTION 1F & 1G	P2	Breaker	NA	177	NA	NA	< 100	NA	NA	NA	189	project: Gold Hill-El Dorado Reinforcement
	MISSOURI FLAT-GOLD HILL #2 115KV [2670] (GOLDHILL-SHPRING2)	P2	Line Section w/o Fault	181	176	< 100	< 100	< 100	< 100	< 100	< 100	188	project: Gold Hill-El Dorado Reinforcement
	GOLDHILL 115KV - SECTION 2G & 1G	P2	Breaker	NA	176	NA	NA	< 100	NA	NA	NA	188	project: Gold Hill-El Dorado Reinforcement
GRSS VLY-PALERMO 60KV	GOLDHILL 115KV SECTION 1G	P2	Bus	NA	176	< 100	NA	< 100	< 100	NA	NA	188	project: Gold Hill-El Dorado Reinforcement
	GOLDHILL 230/115KV TB 2 and DRUM-HIGGINS 115KV	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Gold Hill 230/115 kV Transformer Addition Project
	DRUM-HIGGINS 115KV and GOLDHILL 230/115KV TB 1	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Gold Hill 230/115 kV Transformer Addition Project
	PLACER-GOLD HILL #1 115KV [3340] and DRUM-HIGGINS 115KV	P6	N-1-1	< 100	< 100	125	< 100	< 100	< 100	< 100	< 100	103	continue to monitor.
	CRESTA-RIO OSO 230KV [4590] and COLGTE1 230/60KV TB 3	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	100	Sensitivity only.
	YCEC 13.80KV GEN UNIT 1 and COLGTE1 230/60KV TB 3	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	COLGATE SECTION 1D & COLGTE1 SECTION 1D 230KV	P2	Breaker	NA	< 100	102	NA	< 100	< 100	NA	NA	< 100	continue to monitor.
	COLGTE1 230KV SECTION 1D	P2	Bus	NA	< 100	102	NA	< 100	< 100	NA	NA	< 100	continue to monitor.
	COLGTE1 230/60KV TB 3	P1	N-1	NA	< 100	100	NA	< 100	< 100	NA	NA	< 100	continue to monitor.
	Palermo-Colgate 230 KV Line & Colgate-Rio Oso 230 KV Line	P7	DCTL	< 100	< 100	103	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
HAMMER-COUNTRY CLUB 60KV	LOCKFORD 230KV - RING R3 & R4	P2	Breaker	< 100	220	NA	< 100	< 100	NA	< 100	< 100	226	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R2	P2	Breaker	< 100	220	NA	< 100	< 100	NA	< 100	< 100	226	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV - SECTION 2E & 1E	P2	Breaker	NA	154	NA	NA	< 100	NA	NA	NA	182	project: Lockeford-Lodi Area 230 kV Development
	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	< 100	153	NA	< 100	< 100	NA	< 100	< 100	180	project: Lockeford-Lodi Area 230 kV Development
	STAGG-TESLA 230KV [5680] and EIGHT MILE ROAD-STAGG 230KV [5002]	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	242	< 100	< 100	< 100	Redispatch
	LOCKFORD 230/60KV TB 3 and LOCKFORD 230/60KV TB 2	P6	N-1-1	< 100	< 100	222	< 100	165	< 100	< 100	< 100	< 100	continue to monitor.
	Base Case	P0	Base Case	117	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	STAGG-D SECTION 1D & STAGG-E SECTION 1E 230KV	P2	Breaker	< 100	181	174	< 100	< 100	< 100	< 100	< 100	180	under review.
	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	181	173	< 100	< 100	< 100	< 100	< 100	180	Install redundant relay
	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	< 100	181	173	< 100	< 100	< 100	< 100	< 100	180	Install redundant relay
	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	< 100	179	169	< 100	< 100	243	< 100	< 100	176	under review.
	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	152	147	< 100	< 100	< 100	< 100	< 100	152	Install redundant battery supply
	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	152	129	< 100	< 100	< 100	< 100	< 100	181	Install redundant battery supply
	LOCKEFORD-BELLOTA 230KV #1 [4990] & LOCKEFORD-BELLOTA 230KV #2 [4990]	P7	DCTL	NA	NA	127	NA	< 100	NA	NA	NA	NA	continue to monitor.
	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	< 100	NA	126	< 100	NA	< 100	< 100	< 100	NA	continue to monitor.
	LOCKFORD 230/60KV TB 2 and LOCKFORD 230/60KV TB 3	P6	N-1-1	< 100	160	123	< 100	107	< 100	< 100	< 100	160	under review.
	LOCKEFORD #1 60KV [9461]	P1	N-1	< 100	102	122	< 100	< 100	< 100	< 100	< 100	105	under review.
	LOCKEFORD 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	102	121	< 100	< 100	< 100	< 100	< 100	105	Install redundant battery supply
	STAGG-HAMMER 60KV [8100]	P1	N-1	117	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	RIO OSO-LOCKEFORD 230KV [5620] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	< 100	349	< 100	< 100	216	< 100	< 100	< 100	350	project: Lockeford-Lodi Area 230 kV Development
	Brighton-Bellota 230 KV Line & Rio Oso-Lockeford 230 KV Line	P7	DCTL	< 100	348	< 100	< 100	216	< 100	< 100	< 100	350	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230/60KV TB 3	P1	N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	101	Sensitivity only.
	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	< 100	150	< 100	< 100	< 100	< 100	< 100	< 100	171	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	< 100	148	< 100	< 100	< 100	< 100	< 100	< 100	164	project: Lockeford-Lodi Area 230 kV Development
KASSON-LOUISE 60KV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	108	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
	STAGG-D 230KV SECTION 1D	P2	Bus	103	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	STAGG-F SECTION 1F & STAGG-D SECTION 1D 230KV	P2	Breaker	103	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	TESLA E 230KV - SECTION 2E & 1E	P2	Breaker	110	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	STAGG-E 230KV SECTION 1E	P2	Bus	103	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	STAGG-E - 1E 230KV & STAGG-TESLA LINE	P2	Breaker	103	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	EIGHT MILE ROAD-TESLA 230KV [4660] & STAGG-TESLA 230KV [5680]	P7	DCTL	107	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	KASSON 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	159	193	197	< 100	< 100	< 100	< 100	< 100	198	Install redundant relay
	KASSON 115/60KV TB 1	P1	N-1	159	194	197	< 100	< 100	< 100	< 100	< 100	199	Under review.
	LAMBIE SW STA-BIRDS LANDING SW STA 230KV	P2	Breaker	127	126	< 100	135	104	< 100	127	< 100	126	under review.

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 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	
LINCOLN-PLEASANT GROVE 115KV	ATLANTIC-GOLD HILL 230KV [4330] and RIO OSO-ATLANTIC 230KV [5590]	P6	N-1-1	117	117	< 100	< 100	< 100	< 100	< 100	< 100	121	project: Lincoln-Pleasant Grove 115 kV Reconductoring Project
	RIO OSO-ATLANTIC 230KV [5590] and ATLANTIC-GOLD HILL 230KV [4330]	P6	N-1-1	102	103	< 100	< 100	< 100	< 100	< 100	< 100	107	project: Lincoln-Pleasant Grove 115 kV Reconductoring Project
LOCKEFORD-BELLOTA #1 230KV	RIO OSO-WOODLAND #1 115KV [3460] and LOCKEFORD-BELLOTA 230KV [4990]	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
LOCKEFORD-BELLOTA #2 230KV	RIO OSO-WOODLAND #1 115KV [3460] and BELLOTA-LOCKFORD 230KV [0]	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
LOCKEFORD #1 60KV	STAGG-E 230/60KV TB 4 and STAGG-D 230/60KV TB 1	P6	N-1-1	< 100	199	204	< 100	< 100	< 100	< 100	< 100	197	under review.
	STAGG-D 230/60KV TB 1 and STAGG-E 230/60KV TB 4	P6	N-1-1	< 100	199	204	< 100	< 100	< 100	< 100	< 100	197	under review.
	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	NA	200	204	NA	< 100	< 100	NA	NA	200	Install redundant relay
	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	NA	200	204	NA	< 100	< 100	NA	NA	200	Install redundant relay
	STAGG-D SECTION 1D & STAGG-E SECTION 1E 230KV	P2	Breaker	< 100	200	203	< 100	< 100	< 100	< 100	< 100	200	under review.
	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	NA	197	198	NA	< 100	199	NA	NA	196	under review.
	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	NA	194	198	NA	< 100	< 100	NA	NA	194	Install redundant battery supply
	Brighton-Bellota 230 KV Line & Rio Oso-Lockeford 230 KV Line	P7	DCTL	< 100	140	< 100	< 100	136	< 100	< 100	< 100	140	project: Lockeford-Lodi Area 230 kV Development
	RIO OSO-LOCKEFORD 230KV [5620] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	< 100	140	< 100	< 100	136	< 100	< 100	< 100	141	project: Lockeford-Lodi Area 230 kV Development
	STAGG-D SECTION 1D & STAGG-E SECTION 1E 230KV	P2	Breaker	< 100	120	NA	< 100	< 100	NA	< 100	< 100	125	project: Lockeford-Lodi Area 230 kV Development
LOCKEFORD-BELLOTA 230KV	STAGG-D 230/60KV TB 1 and STAGG-E 230/60KV TB 4	P6	N-1-1	< 100	119	< 100	< 100	< 100	< 100	< 100	< 100	124	project: Lockeford-Lodi Area 230 kV Development
	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	< 100	120	NA	< 100	< 100	NA	< 100	< 100	125	Install redundant relay
	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	120	NA	< 100	< 100	NA	< 100	< 100	125	Install redundant relay
	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	118	NA	< 100	< 100	NA	< 100	< 100	123	Install redundant battery supply
	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	< 100	117	NA	< 100	< 100	NA	< 100	< 100	123	project: Lockeford-Lodi Area 230 kV Development
	Base Case	P0	Base Case	< 100	111	NA	< 100	< 100	NA	< 100	< 100	114	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFD-VICTOR-INDUSTRL 60KV [0]	P1	N-1	120	138	NA	< 100	< 100	NA	114	< 100	142	project: Lockeford-Lodi Area 230 kV Development
	LODI-INDUSTRIAL 60KV [6755]	P1	N-1	103	121	NA	< 100	< 100	NA	102	< 100	124	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-LODI #3 60KV [7450]	P1	N-1	103	119	NA	< 100	< 100	NA	< 100	< 100	123	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	130	116	NA	< 100	< 100	NA	< 100	< 100	127	project: Lockeford-Lodi Area 230 kV Development
LOCKEFORD-INDUSTRIAL 60KV	SUTTER HOME SW STA-LOCKEFORD-LODI 60KV [8068]	P1	N-1	< 100	103	NA	< 100	< 100	NA	< 100	< 100	107	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	127	119	NA	< 100	< 100	NA	< 100	< 100	138	Install redundant battery supply
	BELLOTA 230KV - SECTION 2E & 1E	P2	Breaker	NA	121	NA	NA	< 100	NA	NA	NA	139	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R4	P2	Breaker	119	149	NA	< 100	< 100	NA	123	< 100	150	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R2	P2	Breaker	119	148	NA	< 100	< 100	NA	123	< 100	150	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	130	117	NA	< 100	< 100	NA	< 100	< 100	131	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV SECTION 2E	P2	Bus	130	115	NA	< 100	< 100	NA	< 100	< 100	127	project: Lockeford-Lodi Area 230 kV Development
	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	< 100	111	NA	< 100	< 100	NA	< 100	< 100	115	Install redundant relay
	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	111	NA	< 100	< 100	NA	< 100	< 100	115	Install redundant relay
	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	110	NA	< 100	< 100	NA	< 100	< 100	113	Install redundant battery supply
	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	NA	< 100	< 100	NA	< 100	< 100	103	Install redundant battery supply
	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	128	NA	NA	< 100	NA	NA	Diverge	< 100	NA	project: Lockeford-Lodi Area 230 kV Development
	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	128	119	NA	< 100	< 100	NA	< 100	< 100	137	project: Lockeford-Lodi Area 230 kV Development
	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	< 100	110	NA	< 100	< 100	NA	< 100	< 100	114	project: Lockeford-Lodi Area 230 kV Development
	Base Case	P0	Base Case	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	103	project: Lockeford-Lodi Area 230 kV Development
LOCKEFORD-LODI #3 60KV	LOCKEFORD-INDUSTRIAL 60KV [7420]	P1	N-1	118	136	NA	< 100	< 100	NA	108	< 100	140	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFD-VICTOR-INDUSTRL 60KV [0]	P1	N-1	108	123	NA	< 100	< 100	NA	< 100	< 100	127	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	122	107	< 100	< 100	< 100	< 100	< 100	< 100	117	project: Lockeford-Lodi Area 230 kV Development
	SUTTER HOME SW STA-LOCKEFORD-LODI 60KV [8068]	P1	N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	101	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV - SECTION 2E & 1E	P2	Breaker	NA	111	NA	NA	< 100	NA	NA	NA	128	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R4	P2	Breaker	111	137	NA	< 100	< 100	NA	110	< 100	139	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R2	P2	Breaker	111	137	NA	< 100	< 100	NA	110	< 100	138	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	121	108	< 100	< 100	< 100	< 100	< 100	< 100	121	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV SECTION 2E	P2	Bus	122	106	< 100	< 100	< 100	< 100	< 100	< 100	117	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	119	110	< 100	< 100	< 100	< 100	< 100	< 100	127	Install redundant battery supply
	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	120	NA	< 100	< 100	NA	< 100	Diverge	< 100	NA	project: Lockeford-Lodi Area 230 kV Development
	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	120	110	NA	< 100	< 100	NA	< 100	< 100	126	project: Lockeford-Lodi Area 230 kV Development
	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	103	< 100	< 100	< 100	< 100	< 100	< 100	106	Install redundant relay
	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	< 100	103	< 100	< 100	< 100	< 100	< 100	< 100	106	Install redundant relay
	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	101	< 100	< 100	< 100	< 100	< 100	< 100	104	Install redundant battery supply
	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	< 100	102	< 100	< 100	< 100	< 100	< 100	< 100	105	project: Lockeford-Lodi Area 230 kV Development
	Base Case	P0	Base Case	< 100	107	< 100	< 100	< 100	< 100	< 100	< 100	111	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-INDUSTRIAL 60KV [7420]	P1	N-1	123	141	NA	< 100	< 100	NA	112	< 100	146	project: Lockeford-Lodi Area 230 kV Development
	LODI-INDUSTRIAL 60KV [6755]	P1	N-1	< 100	115	NA	< 100	< 100	NA	< 100	< 100	118	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-LODI #3 60KV [7450]	P1	N-1	< 100	< 100	NA	< 100	< 100	NA	< 100	< 100	100	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	104	< 100	NA	< 100	< 100	NA	< 100	< 100	103	project: Lockeford-Lodi Area 230 kV Development
LOCKEFD-VICTOR-INDUSTRL 60KV	SUTTER HOME SW STA-LOCKEFORD-LODI 60KV [8068]	P1	N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	102	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV - SECTION 2E & 1E	P2	Breaker	NA	117	NA	NA	< 100	NA	NA	NA	134	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R4	P2	Breaker	118	145	NA	< 100	< 100	NA	115	< 100	147	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R2	P2	Breaker	118	145	NA	< 100	< 100	NA	115	< 100	147	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	126	115	< 100	< 100	< 100	< 100	< 100	< 100	133	Install redundant battery supply
	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	104	< 100	NA	< 100	< 100	NA	< 100	< 100	106	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV SECTION 2E	P2	Bus	105	< 100	NA	< 100	< 100	NA	< 100	< 100	103	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	102	NA	NA	< 100	NA	NA	Diverge	< 100	NA	project: Lockeford-Lodi Area 230 kV Development

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 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	
	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	< 100	108	< 100	< 100	< 100	< 100	< 100	< 100	112	Install redundant relay
	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	108	< 100	< 100	< 100	< 100	< 100	< 100	112	Install redundant relay
	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	106	< 100	< 100	< 100	< 100	< 100	< 100	110	Install redundant battery supply
	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	100	Install redundant battery supply
	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DTCL	127	116	NA	< 100	< 100	NA	< 100	< 100	132	project: Lockeford-Lodi Area 230 kV Development
	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DTCL	< 100	107	< 100	< 100	< 100	< 100	< 100	< 100	111	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230/60KV TB 3	P1	N-1	113	130	< 100	< 100	< 100	< 100	101	< 100	134	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R1 & R2	P2	Breaker	113	125	NA	< 100	< 100	NA	101	< 100	130	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230/60KV TB 2	LOCKFORD 230KV - RING R3 & R2	P2	Breaker	108	113	NA	< 100	< 100	NA	115	< 100	113	project: Lockeford-Lodi Area 230 kV Development
	STAGG-D SECTION 1D & STAGG-E SECTION 1E 230KV	P2	Breaker	< 100	117	< 100	< 100	< 100	< 100	< 100	< 100	118	project: Lockeford-Lodi Area 230 kV Development
	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	< 100	117	< 100	< 100	< 100	< 100	< 100	< 100	119	Install redundant relay
	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	117	< 100	< 100	< 100	< 100	< 100	< 100	119	Install redundant relay
	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	116	< 100	< 100	< 100	< 100	< 100	< 100	118	Install redundant battery supply
	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DTCL	< 100	115	< 100	< 100	< 100	< 100	< 100	< 100	117	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230/60KV TB 2	P1	N-1	113	130	< 100	< 100	< 100	< 100	101	< 100	134	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R1 & R4	P2	Breaker	113	126	NA	< 100	< 100	NA	101	< 100	130	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230/60KV TB 3	LOCKFORD 230KV - RING R3 & R4	P2	Breaker	108	113	NA	< 100	< 100	NA	115	< 100	113	project: Lockeford-Lodi Area 230 kV Development
	STAGG-D SECTION 1D & STAGG-E SECTION 1E 230KV	P2	Breaker	< 100	118	< 100	< 100	< 100	< 100	< 100	< 100	120	project: Lockeford-Lodi Area 230 kV Development
	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	< 100	118	< 100	< 100	< 100	< 100	< 100	< 100	121	Install redundant relay
	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	118	< 100	< 100	< 100	< 100	< 100	< 100	121	Install redundant relay
	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	118	< 100	< 100	< 100	< 100	< 100	< 100	120	Install redundant battery supply
	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DTCL	< 100	117	< 100	< 100	< 100	< 100	< 100	< 100	119	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-INDUSTRIAL 60KV [7420]	P1	N-1	< 100	113	NA	< 100	< 100	NA	101	< 100	118	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-VICTOR-INDUSTRL 60KV [0]	P1	N-1	< 100	< 100	NA	< 100	< 100	NA	< 100	< 100	101	project: Lockeford-Lodi Area 230 kV Development
LOUISE-MANTECA 60KV	KASSON 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	105	107	< 100	< 100	< 100	< 100	< 100	108	Install redundant relay
	KASSON 115/60KV TB 1	P1	N-1	< 100	106	108	< 100	< 100	< 100	< 100	< 100	109	Under review.
MANTECA-RIPON 115KV	STANISLAUSPH 115/13.8KV TB 1	P1	N-1	< 100	< 100	< 100	166	< 100	< 100	133	162	< 100	Redispatch
	MI-WUK-CURTIS 115KV	P1	N-1	< 100	< 100	< 100	166	< 100	< 100	131	161	< 100	Redispatch
	BELLOTA 230/115KV TB 2 and BELLOTA 115/230KV TB 1	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	148	< 100	< 100	< 100	Redispatch
	BRIGHTON-BELLOTA 230KV [4420] & RIO OSO-LOCKEFORD 230KV [5620]	P7	DTCL	< 100	< 100	NA	147	< 100	NA	114	142	< 100	Redispatch
	BELLOTA-RIVERBANK-MELONES SW STA 115KV [1070] & BELLOTA-RIVERBANK 115KV [3480]	P7	DTCL	< 100	< 100	< 100	140	< 100	< 100	115	140	< 100	Redispatch
	Rio Oso-Brighton 230 KV Line & Rio Oso-Lockeford 230 KV Line	P7	DTCL	< 100	< 100	< 100	146	< 100	< 100	113	141	< 100	Redispatch
	Brighton-Bellota 230 KV Line & Rio Oso-Lockeford 230 KV Line	P7	DTCL	< 100	< 100	< 100	147	< 100	< 100	114	142	< 100	Redispatch
	BELLOTA-COTTLE 230KV [4360] & BELLOTA-WARNERVILLE 230KV [4380]	P7	DTCL	< 100	< 100	< 100	137	< 100	< 100	114	138	< 100	Redispatch
	COTTLE-MELONES 230KV [4530] & BELLOTA-WARNERVILLE 230KV [4380]	P7	DTCL	< 100	< 100	< 100	138	< 100	< 100	114	138	< 100	Redispatch
	RIVERBANK SW STA 115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	222	< 100	< 100	192	223	< 100	Install redundant battery supply
	MELONES SW STA 115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	221	< 100	< 100	192	221	< 100	Install redundant battery supply
	MELONES SW STA 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	221	< 100	< 100	192	221	< 100	Install redundant relay
	RIVERBANKJSS-RIPON 115KV	P1	N-1	< 100	< 100	< 100	211	< 100	< 100	190	211	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	RIPON-RIVERBANKJSS 115KV	P1	N-1	< 100	< 100	< 100	211	< 100	< 100	190	211	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	MELONESSWSTA-RIVERBANKJSS-STANISLAUSPH 115KV [0]	P1	N-1	< 100	< 100	< 100	222	< 100	< 100	192	223	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	STANISLAUSPH-MELONESSWSTA-RIVERBANKJSS 115KV [0]	P1	N-1	< 100	< 100	< 100	222	< 100	< 100	192	223	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	RIVERBANK JCT SW STA-RIPON 115KV [3841] (VALLEYHOMEJ1-RIPONJCT1)	P2	Line Section w/o Fault	< 100	< 100	< 100	211	< 100	< 100	190	211	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	RIVERBANK JCT SW STA-RIPON 115KV [3841] (MELONESJCT2-RIVERBANKJSS)	P2	Line Section w/o Fault	< 100	< 100	< 100	222	< 100	< 100	192	223	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	RIVERBANK JCT SW STA-RIPON 115KV [3841] (RIVERBANKJSS-VALLEYHOMEJ1)	P2	Line Section w/o Fault	< 100	< 100	< 100	222	< 100	< 100	192	223	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	STUCK BREAKER & NO BF RELAY STANISLAUS 115KV CB 112 122 OR 132	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	221	< 100	< 100	192	221	< 100	Install redundant relay
	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	140	< 100	122	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant battery supply
	SCHULTE SW STA 115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	104	< 100	< 100	136	< 100	< 100	< 100	133	< 100	Install redundant battery supply
	TESLA 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	125	< 100	107	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant relay
	MI-WUK 115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	166	< 100	< 100	131	161	< 100	Install redundant battery supply
	MELONESSWSTA - 1D 115KV & MELONESSWSTA-RIVERBANKJSS-STANISLAUSPH LINE	P2	Breaker	< 100	< 100	< 100	220	< 100	< 100	191	220	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	STANISLAUSPH - 1D 115KV & STANISLAUSPH-MELONESSWSTA-RIVERBANKJSS LINE	P2	Breaker	< 100	< 100	< 100	222	< 100	< 100	192	222	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	< 100	NA	< 100	Diverge	NA	114	Diverge	Diverge	NA	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	STANISLAUS-MANTECA #2 115KV [3820] & RIPON-RIVERBANKJSS 115KV [0]	P7	DTCL	< 100	< 100	< 100	212	< 100	< 100	190	212	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	STANISLAUS-MANTECA #2 115KV [3820] & STANISLAUS-MELONES SW STA-RIVERBANK JCT SW STA 115KV [3841]	P7	DTCL	< 100	< 100	< 100	222	< 100	< 100	192	222	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	DONNELLS 13.80KV GEN UNIT 1 and Q1557-RIPON #1 115KV [0]	P3	G-1/N-1	< 100	< 100	108	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	RIPON 115KV - RING R4 & R5	P2	Breaker	137	< 100	114	151	101	< 100	178	152	< 100	under review.
	Base Case	P0	Base Case	< 100	< 100	< 100	159	< 100	< 100	122	154	< 100	under review.
	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	104	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant battery supply
	STANISLAUS-MANTECA #2 115KV [3820] and STANISLAUSPH-MELONESSWSTA-RIVERBANKJSS 115KV [0]	P6	N-1-1	< 100	< 100	< 100	< 100	127	< 100	< 100	< 100	< 100	Redispatch
	GWFTRCY3 18.00KV & GWFTRCY1 13.80KV & GWFTRCY2 13.80KV GEN UNITS and STANISLAUSPH-MELONESSWSTA-RIVERBANKJSS 115KV [0]	P3	G-1/N-1	< 100	< 100	< 100	< 100	106	< 100	< 100	< 100	< 100	Redispatch
	STANISLAUSPH 13.80KV GEN UNIT 1 and STANISLAUSPH-MELONESSWSTA-RIVERBANKJSS 115KV [0]	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	100	< 100	< 100	Sensitivity only.

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 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	
MELONESSWSTA-MANTECA 115KV	STANISLAUS-MANTECA #2 115KV [3820] & RIPON-RIVERBANKJSS 115KV [0]	P7	DCTL	< 100	< 100	< 100	122	138	< 100	146	131	< 100	Redispatch
	STANISLAUS-MANTECA #2 115KV [3820] & STANISLAUS-MELONES SW STA-RIVERBANK JCT SW STA 115KV [3841]	P7	DCTL	< 100	< 100	< 100	< 100	140	< 100	119	104	< 100	Redispatch
	STANISLAUS-MANTECA #2 115KV [3820] & MANTECA-RIPON 115KV [0]	P7	DCTL	< 100	< 100	< 100	< 100	127	< 100	125	104	< 100	Redispatch
	STANISLAUSPH - 1D 115KV & STANISLAUSPH-MELONESSWSTA-RIVERBANKJSS LINE	P2	Breaker	< 100	< 100	< 100	< 100	< 100	< 100	105	101	< 100	Sensitivity only.
	RIVERBANK SW STA 115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	< 100	< 100	< 100	104	< 100	< 100	Install redundant battery supply
	RIPON-RIVERBANKJSS 115KV	P1	N-1	< 100	< 100	< 100	< 100	< 100	< 100	103	< 100	< 100	Sensitivity only.
	RIVERBANKJSS-RIPON 115KV	P1	N-1	< 100	< 100	< 100	< 100	< 100	< 100	103	< 100	< 100	Sensitivity only.
	MELONESSWSTA-RIVERBANKJSS-STANISLAUSPH 115KV [0]	P1	N-1	< 100	< 100	< 100	< 100	< 100	< 100	104	< 100	< 100	Sensitivity only.
	STANISLAUSPH-MELONESSWSTA-RIVERBANKJSS 115KV [0]	P1	N-1	< 100	< 100	< 100	< 100	< 100	< 100	104	< 100	< 100	Sensitivity only.
	RIVERBANK JCT SW STA-RIPON 115KV [3841] (RIVERBANKJSS-VALLEYHOMEJ1)	P2	Line Section w/o Fault	< 100	< 100	< 100	< 100	< 100	< 100	104	< 100	< 100	Sensitivity only.
	TESLA 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant relay
	RIVERBANK JCT SW STA-RIPON 115KV [3841] (MELONESJCT2-RIVERBANKJSS)	P2	Line Section w/o Fault	< 100	< 100	< 100	< 100	< 100	< 100	104	< 100	< 100	Sensitivity only.
	RIPONJCT1-RIPON 115KV [0] NO FAULT	P2	Line Section w/o Fault	< 100	< 100	< 100	< 100	< 100	< 100	103	< 100	< 100	Sensitivity only.
	RIVERBANK JCT SW STA-RIPON 115KV [3841] (VALLEYHOMEJ1-RIPONJCT1)	P2	Line Section w/o Fault	< 100	< 100	< 100	< 100	< 100	< 100	103	< 100	< 100	Sensitivity only.
	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	< 100	< 100	< 100	120	< 100	< 100	Diverge	123	< 100	Redispatch
	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	< 100	NA	< 100	Diverge	NA	< 100	Diverge	Diverge	NA	Redispatch
	STANISLAUSPH 13.80KV GEN UNIT 1 and MANTECA-RIPON 115KV [0]	P3	G-1/N-1	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	Redispatch
	STANISLAUSPH 115/13.8KV TB 1 and MANTECA-RIPON 115KV [0]	P6	N-1-1	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	Redispatch
	BELLOTA 230/115KV TB 1 and BELLOTA 230/115KV TB 2	P6	N-1-1	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	Redispatch
MELONESSWSTA-RIVERBANKJSS-STANISLAUSPH 115KV	Q1461BESS 0.69KV GEN UNIT 1 and MANTECA-RIPON 115KV [0]	P3	G-1/N-1	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	continue to monitor.
	Q1461-RALPH #1 230KV [0] and MANTECA-RIPON 115KV [0]	P6	N-1-1	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	continue to monitor.
	RIPON 115KV - RING R3 & R2	P2	Breaker	133	< 100	< 100	190	< 100	< 100	193	190	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	MANTECA-RIPON 115KV [0] and Q1557-RIPON #1 115KV [0]	P6	N-1-1	117	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	MANTECA 115KV - RING R6 & R5	P2	Breaker	< 100	< 100	< 100	Diverge	< 100	< 100	225	Diverge	< 100	Sensitivity only.
	MANTECA 115KV - RING R4 & R5	P2	Breaker	< 100	< 100	< 100	Diverge	< 100	< 100	225	Diverge	< 100	Sensitivity only.
	MANTECA-RIPON 115KV [0]	P1	N-1	< 100	< 100	< 100	Diverge	< 100	< 100	227	Diverge	< 100	Sensitivity only.
	RIPONJCT2-RIPON 115KV [0] NO FAULT	P2	Line Section w/o Fault	< 100	< 100	< 100	Diverge	< 100	< 100	227	Diverge	< 100	Sensitivity only.
	RIPON-MANTECA 115KV [1062] (RIPONJCT2-MANTECA)	P2	Line Section w/o Fault	< 100	< 100	< 100	Diverge	< 100	< 100	227	Diverge	< 100	Sensitivity only.
	MANTECA-MELONESSWSTA 115KV	P1	N-1	< 100	< 100	< 100	108	< 100	< 100	114	114	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	AVENA 115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	108	< 100	< 100	114	114	< 100	Install redundant battery supply
	FROGTOWN 115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	108	< 100	< 100	114	114	< 100	Install redundant battery supply
	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant battery supply
	TESLA 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant relay
	MELONESSWSTA-MANTECA 115KV	P1	N-1	< 100	< 100	< 100	108	< 100	< 100	114	114	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	STANISLAUS-MANTECA #2 115KV [3820]	P1	N-1	< 100	< 100	< 100	< 100	< 100	< 100	103	103	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	Base Case	P0	Base Case	< 100	< 100	< 100	< 100	< 100	< 100	100	101	< 100	ect: Manteca-Ripon-Riverbank-Melones Area 115 kV Line Reconductoring Pr
	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	< 100	< 100	< 100	117	< 100	< 100	Diverge	121	< 100	Redispatch
	E NICOLS 115KV - RING R1 & R5	P2	Breaker	< 100	< 100	114	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	PALERMO-NICOLAUS 115KV [3210]and RIO OSO-NICOLAUS 115KV [3440]	P6	N-1-1	< 100	< 100	117	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
NICOLAUS-MARYSVILLE 60KV	PEASE 115KV - MIDDLE BREAKER BAY 3	P2	Breaker	101	< 100	< 100	< 100	< 100	< 100	104	< 100	< 100	under review.
	PEASE-RIO OSO 115KV	P1	N-1	100	< 100	< 100	< 100	< 100	< 100	100	< 100	< 100	under review.
	PEASE-RIO OSO 115KV [3270] (PEASE-E.MRY J1)	P2	Line Section w/o Fault	100	< 100	< 100	< 100	< 100	< 100	100	< 100	< 100	under review.
	Colgate-Rio Oso 230 KV Line & Table Mountain-Rio Oso 230 KV Line	P7	DCTL	< 100	< 100	103	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	PALERMO-NICOLAUS 115KV [3210] (E.MRY J2-E.NICOLS)	P2	Line Section w/o Fault	< 100	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	PALERMO-NICOLAUS 115KV	P1	N-1	< 100	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	E.NICOLS 115KV - RING R5 & R4	P2	Breaker	< 100	101	103	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	E.MRYSV-MRYSVLLE #1 60KV [0]	P1	N-1	NA	101	130	NA	< 100	< 100	NA	NA	107	under review.
	Palermo-Pease 115 KV Line amd Pease-Rio Oso 115 KV Line	P7	DCTL	< 100	< 100	< 100	102	< 100	< 100	195	101	< 100	Redispatch
	RIO OSO 230 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	124	137	< 100	< 100	< 100	< 100	< 100	124	Install redundant relay
	E.NICOLS 115KV - RING R1 & R5	P2	Breaker	278	220	330	< 100	< 100	< 100	< 100	< 100	226	under review.
	PALERMO-NICOLAUS 115KVand RIO OSO-NICOLAUS 115KV	P6	N-1-1	< 100	225	< 100	< 100	< 100	< 100	< 100	< 100	231	under review.
	WOODLAND-DAVIS 115KV [4210] and PEASE-MARYSVILLE-HARTER 60KV [7770]	P6	N-1-1	< 100	< 100	< 100	102	< 100	< 100	< 100	< 100	< 100	Redispatch
	PEASE-MARYSVILLE-HARTER 60KV [7770]	P1	N-1	124	NA	NA	< 100	NA	NA	< 100	< 100	NA	under review.
	PEASE 115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	124	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
	PALERMO-NICOLAUS 115KV [3210] (E.MRYSV-E.MRY J2)	P2	Line Section w/o Fault	< 100	< 100	< 100	< 100	103	< 100	< 100	< 100	< 100	Redispatch
	E.MRYSV 115KV - MIDDLE BREAKER BAY 1	P2	Breaker	NA	< 100	< 100	NA	109	< 100	NA	NA	< 100	Redispatch
	Palermo-Pease 115 KV Line amd Pease-Rio Oso 115 KV Line	P7	DCTL	NA	< 100	< 100	NA	130	130	NA	NA	< 100	Redispatch
	PALERMO-NICOLAUS 115KV and RIO OSO-NICOLAUS 115KV	P6	N-1-1	180	129	174	< 100	< 100	< 100	< 100	< 100	135	under review.
PEASE-MARYSVILLE-HARTER 60KV	YCEC 13.80KV GEN UNIT 1 and YUBACTYCGN 13.80KV GEN UNIT 1	P3	G-1/N-1	102	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	RIO OSO-NICOLAUS 115KV and PALERMO-NICOLAUS 115KV	P6	N-1-1	149	< 100	134	< 100	131	< 100	< 100	< 100	< 100	under review.
	Palermo-Nicolaus 115 KV Line & Bogue-Rio Oso 115 KV Line	P7	DCTL	< 100	< 100	< 100	< 100	107	< 100	< 100	< 100	< 100	Redispatch
	E.NICOLS 115KV - RING R1 & R5	P2	Breaker	157	NA	NA	< 100	NA	NA	< 100	< 100	NA	under review.
	GOLDHILL-PLACER-FLINT 115KV [0] and DRUM-HIGGINS 115KV	P6	N-1-1	< 100	< 100	109	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	GOLD HILL 230 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	Diverge	Diverge	Diverge	< 100	< 100	< 100	Diverge	Diverge	Install redundant relay
PLACER-GOLD HILL #1 115KV	Placer-Gold Hill No. 1 115 KV Line and Placer-Gold Hill No. 2 115 KV Line	P7	DCTL	< 100	< 100	137	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	GOLDHILL 230KV - SECTION 2D & 1D	P2	Breaker	Diverge	NA	NA	Diverge	NA	NA	< 100	Diverge	NA	project: Gold Hill 230/115 kV Transformer Addition Project

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 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	
PLACER-HIGGINS 115 kV	GOLDHILL 230/115KV TB 1 and GOLDHILL 230/115KV TB 2	P6	N-1-1	Diverge	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	project: Gold Hill 230/115 kV Transformer Addition Project
	GOLDHILL 115KV - SECTION 1F & 2F	P2	Breaker	171	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Gold Hill 230/115 kV Transformer Addition Project
	GOLD HILL 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	137	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
	STUCK BREAKER & NO BF RELAY GOLD HILL 115KV CB 172 OR 392	P5	Non-Redundant Battery/Relay	< 100	< 100	138	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant relay
	GOLD HILL 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	138	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant relay
POE-RIO OSO 230KV	Base Case	P0	Base Case	< 100	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
Q1596 500/230KV TB 1	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	NA	100	100	NA	< 100	< 100	NA	NA	100	Install redundant battery supply
	STATION DC BATTERY SUPPLY BIRDS LANDING 230KV BATT	P5	Non-Redundant Battery/Relay	NA	100	100	NA	< 100	< 100	NA	NA	100	Install redundant battery supply
RIO OSO-ATLANTIC 230KV	GOLDHILL 230KV - SECTION 1D & 1E	P2	Breaker	NA	< 100	101	NA	< 100	< 100	NA	NA	< 100	project: Gold Hill 230/115 kV Transformer Addition Project
RIO OSO-BRIGHTON 230KV	RIO OSO 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	102	119	< 100	< 100	< 100	< 100	< 100	100	Install redundant relay
	GOLD HILL 230 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	Diverge	Diverge	Diverge	194	< 100	< 100	Diverge	Diverge	Install redundant relay
RIO OSO-BRNSWALT-DRUMPH1 115KV	GOLDHILL 230KV - SECTION 2D & 1D	P2	Breaker	Diverge	NA	NA	Diverge	NA	NA	< 100	Diverge	NA	project: Gold Hill 230/115 kV Transformer Addition Project
	GOLDHILL 230/115KV TB 1 and GOLDHILL 230/115KV TB 2	P6	N-1-1	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Gold Hill 230/115 kV Transformer Addition Project
	BRNSWALT 115KV - RING R4 & R3	P2	Breaker	< 100	< 100	< 100	119	< 100	< 100	< 100	118	< 100	project: Gold Hill 230/115 kV Transformer Addition Project
	GOLD HILL 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	< 100	130	< 100	< 100	< 100	< 100	Install redundant battery supply
	GOLD HILL 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	< 100	100	< 100	< 100	< 100	< 100	Install redundant relay
	STUCK BREAKER & NO BF RELAY GOLD HILL 115KV CB 172 OR 392	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	< 100	100	< 100	< 100	< 100	< 100	Install redundant relay
	GOLD HILL 230 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	Diverge	Diverge	Diverge	Diverge	189	< 100	< 100	Diverge	Diverge	Install redundant relay
	FREC 13.80KV GEN UNIT 1 and DRUM-HIGGINS 115KV	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
RIO OSO-DRUMPH1-BRUNSWCK 115KV	GOLDHILL 230KV - SECTION 2D & 1D	P2	Breaker	Diverge	NA	NA	< 100	NA	NA	< 100	< 100	NA	project: Gold Hill 230/115 kV Transformer Addition Project
	GOLDHILL 230/115KV TB 1 and GOLDHILL 230/115KV TB 2	P6	N-1-1	Diverge	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Gold Hill 230/115 kV Transformer Addition Project
	GOLD HILL 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	< 100	127	< 100	< 100	< 100	< 100	Install redundant battery supply
	RIO OSO-ATLANTIC 230KV [5590] and ATLANTIC-GOLD HILL 230KV [4330]	P6	N-1-1	140	< 100	118	< 100	< 100	< 100	< 100	< 100	< 100	oject: Recondutor Rio Oso-SPI Jct-Lincoln 115KV line (revision under review)
	ATLANTIC-GOLD HILL 230KV [4330] and RIO OSO-ATLANTIC 230KV [5590]	P6	N-1-1	133	< 100	114	< 100	< 100	< 100	< 100	< 100	< 100	oject: Recondutor Rio Oso-SPI Jct-Lincoln 115KV line (revision under review)
RIO OSO-LOCKEFORD 230KV	Rio Oso-Atlantic 230 KV Line & Rio Oso-Gold Hill 230 KV Line	P7	DTCL	102	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Recondutor Rio Oso-SPI Jct-Lincoln 115KV line
	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	130	103	< 100	< 100	< 100	< 100	< 100	< 100	110	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV - SECTION 2E & 1E	P2	Breaker	NA	106	NA	NA	< 100	NA	NA	NA	118	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R4	P2	Breaker	119	118	NA	< 100	< 100	NA	118	< 100	119	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R2	P2	Breaker	119	117	NA	< 100	< 100	NA	117	< 100	118	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	128	NA	< 100	Diverge	NA	< 100	Diverge	Diverge	NA	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	127	105	< 100	< 100	< 100	< 100	< 100	< 100	117	Install redundant battery supply
	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	129	104	< 100	< 100	< 100	< 100	< 100	< 100	113	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV SECTION 2E	P2	Bus	130	103	< 100	< 100	< 100	< 100	< 100	< 100	110	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230/60KV TB 3 and LOCKEFORD-BELLOTA 230KV [4990]	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	117	< 100	< 100	project: Lockeford-Lodi Area 230 kV Development
	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DTCL	128	105	NA	< 100	< 100	NA	< 100	< 100	117	project: Lockeford-Lodi Area 230 kV Development
	BRIGHTON-BELLOTA 230KV [4420] and RIO OSO-BRIGHTON 230KV [5600]	P6	N-1-1	123	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Rio Oso - W. Sacramento Reconductoring
RIO OSO-WEST SACRAMENTO 115KV	BRIGHTN - ME 115KV & BRIGHTON-DAVIS LINE	P2	Breaker	107	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Rio Oso - W. Sacramento Reconductoring
	BRIGHTN 115KV - SECTION ME & MD	P2	Breaker	107	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Rio Oso - W. Sacramento Reconductoring
	BRIGHTN 115KV SECTION ME	P2	Bus	107	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Rio Oso - W. Sacramento Reconductoring
	BRIGHTN - ME 115KV & BRIGHTON-GRAND ISLAND #1 LINE	P2	Breaker	107	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Rio Oso - W. Sacramento Reconductoring
	BRIGHTN - ME 115KV & BRIGHTON-GRAND ISLAND #2 LINE	P2	Breaker	107	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Rio Oso - W. Sacramento Reconductoring
	STATION DC BATTERY SUPPLY BRIGHTON 230KV BATT	P5	Non-Redundant Battery/Relay	125	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
	BRIGHTON 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	125	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant relay
	STATION DC BATTERY SUPPLY BRIGHTON 115KV BATT	P5	Non-Redundant Battery/Relay	106	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
	BRIGHTN - ME 115KV & BRIGHTN-W.SCRMNO LINE	P2	Breaker	< 100	< 100	106	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	STATION DC BATTERY SUPPLY BRIGHTON 230KV BATT	P5	Non-Redundant Battery/Relay	< 100	< 100	148	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
	BRIGHTON 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	148	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant relay
	BRIGHTN - ME 115KV & BRIGHTON-DAVIS LINE	P2	Breaker	< 100	< 100	106	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
RIO OSO-WOODLAND #1 115KV	BRIGHTN - ME 115KV & BRIGHTN-GRAND ISLAND #1 LINE	P2	Breaker	< 100	< 100	105	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	BRIGHTN - ME 115KV & BRIGHTON-GRAND ISLAND #2 LINE	P2	Breaker	< 100	< 100	105	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	BRIGHTN 115KV SECTION ME	P2	Bus	< 100	< 100	105	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	BRIGHTON 230/115KV TB 9 and BRIGHTON 230/115KV TB 10	P6	N-1-1	< 100	< 100	129	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	STATION DC BATTERY SUPPLY BRIGHTON 115KV BATT	P5	Non-Redundant Battery/Relay	< 100	< 100	106	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
	BRIGHTON 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	139	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant relay
	STATION DC BATTERY SUPPLY BRIGHTON 230KV BATT	P5	Non-Redundant Battery/Relay	< 100	< 100	139	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
	BRIGHTN - ME 115KV & BRIGHTN-W.SCRMNO LINE	P2	Breaker	< 100	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
RIO OSO-WOODLAND #2 115KV	BRIGHTN - ME 115KV & BRIGHTON-DAVIS LINE	P2	Breaker	< 100	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	BRIGHTON 230/115KV TB 9 and BRIGHTON 230/115KV TB 10	P6	N-1-1	< 100	< 100	121	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	STATION DC BATTERY SUPPLY BRIGHTON 115KV BATT	P5	Non-Redundant Battery/Relay	< 100	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
	DONNELLS 13.80KV GEN UNIT 1 and MANTECA-RIPON 115KV [0]	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	102	< 100	< 100	Sensitivity only.
	MANTECA-RIPON 115KV [0]	P1	N-1	< 100	< 100	< 100	Diverge	123	< 100	215	Diverge	< 100	Redispatch
RIVERBANKISS-RIPON 115KV	RIPONUCT2-RIPON 115KV [0] NO FAULT	P2	Line Section w/o Fault	< 100	< 100	< 100	Diverge	123	< 100	215	Diverge	< 100	Redispatch
	RIPON-MANTECA 115KV [1062] (RIPONUCT2-MANTECA)	P2	Line Section w/o Fault	< 100	< 100	< 100	Diverge	123	< 100	215	Diverge	< 100	Redispatch
	MANTECA 115KV - RING R6 & R5	P2	Breaker	< 100	< 100	< 100	Diverge	123	< 100	213	Diverge	< 100	Redispatch
	MANTECA 115KV - RING R4 & R5	P2	Breaker	< 100	< 100	< 100	Diverge	123	< 100	213	Diverge	< 100	Redispatch
	MELONESSWSTA-MANTECA 115KV [0]	P1	N-1	< 100	< 100	< 100	< 100	< 100	< 100	107	< 100	< 100	Sensitivity only.
	MANTECA-MELONESSWSTA 115KV [0]	P1	N-1	< 100	< 100	< 100	< 100	< 100	< 100	107	< 100	< 100	Sensitivity only.
	Q1461BESS 0.69KV GEN UNIT 1 and MANTECA-RIPON 115KV [0]	P3	G-1/N-1	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	Redispatch

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 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	
	SUISUN 115/9.11KV TB 1 and MANTECA-RIPON 115KV [0]	P6	N-1-1	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	Redispatch
	MANTECA-MELONESSWSTA 115KV and MANTECA-RIPON 115KV [0]	P6	N-1-1	< 100	< 100	< 100	Diverge	< 100	< 100	< 100	Diverge	< 100	Redispatch
	RIPON 115KV - RING R3 & R2	P2	Breaker	141	138	114	173	158	< 100	183	173	138	under review.
	AVENA 115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	< 100	< 100	< 100	107	< 100	< 100	Install redundant battery supply
	FROGTOWN 115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	< 100	< 100	< 100	107	< 100	< 100	Install redundant battery supply
	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant battery supply
	TESLA 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant relay
SCHULTE SW STA-KASSON-MANTECA 115KV	TESLA-LEPRINO_JCT 115KV and SCHULTE SW STA-LAMMERS 115KV [3993]	P6	N-1-1	108	< 100	117	< 100	< 100	< 100	< 100	< 100	< 100	under review.
SCHULTE-TESLA 115KV	VIERRA-TESLA 115KV [0] and AEC_300_2-AEC_300-TESLA-SCHULTE 115KV [0]	P6	N-1-1	< 100	< 100	< 100	116	< 100	< 100	< 100	< 100	< 100	Redispatch
	STANISLAUSPH 13.80KV GEN UNIT 1 and AEC_300_2-AEC_300-TESLA-SCHULTE 115KV [0]	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	101	< 100	< 100	< 100	Redispatch
	SCHULTE 115KV - MIDDLE BREAKER BAY 2	P2	Breaker	< 100	< 100	< 100	< 100	109	< 100	< 100	< 100	< 100	Redispatch
SMARTVILLE-MARYSVILLE 60KV	KOLABESS1 0.71KV GEN UNIT 1 and COLGATE-SMARTVILLE #1 60KV	P3	G-1/N-1	< 100	< 100	< 100	< 100	100	< 100	< 100	< 100	< 100	Redispatch
	E.MRYSVLE-MRYSVLE #1 60KV [0]	P1	N-1	NA	103	102	NA	< 100	< 100	NA	NA	102	under review.
	RIO OSO-NICOLAUS 115KV [3440] and PALERMO-NICOLAUS 115KV	P6	N-1-1	< 100	137	157	< 100	< 100	< 100	< 100	< 100	138	Sensitivity only.
	RIO OSO 230 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	138	127	< 100	< 100	< 100	< 100	< 100	137	Install redundant relay
	EAST NICOLAUS 115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	100	< 100	< 100	< 100	100	< 100	Install redundant battery supply
	BRNSWALT 115KV - RING R5 & R6	P2	Breaker	< 100	102	< 100	< 100	< 100	< 100	< 100	< 100	100	project: Gold Hill-EI Dorado Reinforcement
	BRNSWALT 115KV - RING R7 & R6	P2	Breaker	< 100	102	< 100	< 100	< 100	< 100	< 100	< 100	100	project: Gold Hill-EI Dorado Reinforcement
SPAULDING-SUMMIT 60KV	BELLOTA 230KV - SECTION 2E & 1E	P2	Breaker	NA	101	NA	NA	< 100	NA	NA	NA	112	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R4	P2	Breaker	< 100	125	NA	< 100	< 100	NA	< 100	< 100	129	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R2	P2	Breaker	< 100	125	NA	< 100	< 100	NA	< 100	< 100	129	project: Lockeford-Lodi Area 230 kV Development
STAGG-HAMMER 60KV	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DTCL	< 100	100	NA	< 100	< 100	NA	< 100	< 100	112	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230/60KV TB 2 and LOCKFORD 230/60KV TB 3	P6	N-1-1	< 100	175	170	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	112	Install redundant battery supply
	RIO OSO-LOCKEFORD 230KV [5620] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DTCL	< 100	175	< 100	< 100	< 100	< 100	< 100	< 100	176	project: Lockeford-Lodi Area 230 kV Development
	Brighton-Bellota 230 KV Line & Rio Oso-Lockeford 230 KV Line	P7	DTCL	< 100	175	< 100	< 100	< 100	< 100	< 100	< 100	176	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	108	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	106	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV SECTION 2E	P2	Bus	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	106	project: Lockeford-Lodi Area 230 kV Development
	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant battery supply
	TESLA 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	< 100	< 100	< 100	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant relay
STCKTN A-WEBER E-HARDING-D 60KV	STCKTNBIOMASS 13.80KV GEN UNIT 1 and STOCKTON A-WEBER #1 60KV [8120]	P3	G-1/N-1	< 100	< 100	110	< 100	< 100	< 100	< 100	< 100	100	continue to monitor.
STKTON A-BELLOTA-LOCKFORD 115KV	BELLOTA - 1D 115KV & BELLota-LOCKFORD-CAMANCHEPH LINE	P2	Breaker	< 100	< 100	106	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	BELLOTA 115KV SECTION 1D	P2	Bus	< 100	< 100	106	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	BELLOTA - 1D 115KV & BELLota-RIVERBANK LINE	P2	Breaker	< 100	< 100	106	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	Base Case	P0	Base Case	< 100	< 100	103	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
STOCKTON A-CHANNEL 60KV	STCKTNBIOMASS 13.80KV GEN UNIT 1 and WEBER-TESLA 230KV [5880]	P3	G-1/N-1	103	102	< 100	< 100	< 100	< 100	< 100	< 100	103	under review.
	STCKTNBIOMASS 13.80KV GEN UNIT 1	P1	N-1	111	109	117	< 100	< 100	< 100	104	< 100	110	under review.
	STANISLAUSPH 13.80KV GEN UNIT 1 and MANTECA-RIPON 115KV [0]	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Diverge	< 100	Sensitivity only.
	STANISLAUSPH 115/13.8KV TB 1 and MANTECA-RIPON 115KV [0]	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Diverge	< 100	Sensitivity only.
STOCKTON A-LOCKEFORD-BELLOTA #2 115KV	BELLOTA - 1D 115KV & BELLota-LOCKFORD-CAMANCHEPH LINE	P2	Breaker	122	120	148	< 100	< 100	< 100	< 100	< 100	124	under review.
	BELLOTA - 1D 115KV & BELLota-RIVERBANK LINE	P2	Breaker	116	120	148	< 100	< 100	< 100	< 100	< 100	124	under review.
	BELLOTA 115KV SECTION 1D	P2	Bus	116	120	148	< 100	< 100	< 100	< 100	< 100	124	under review.
STOCKTON A-WEBER #1 60KV	STCKTNBIOMASS 13.80KV GEN UNIT 1 and STCKTN A-WEBER E-HARDING-D 60KV [0]	P3	G-1/N-1	101	103	114	< 100	< 100	< 100	< 100	< 100	105	under review.
SUTTER HOME SW STA-LOCKEFORD-LODI 60KV	LOCKEFORD-INDUSTRIAL 60KV [7420]	P1	N-1	101	116	NA	< 100	< 100	NA	< 100	< 100	120	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-VICTOR-INDUSTRL 60KV [0]	P1	N-1	< 100	106	NA	< 100	< 100	NA	< 100	< 100	110	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-LODI #3 60KV [7450]	P1	N-1	< 100	102	< 100	< 100	< 100	< 100	< 100	< 100	105	project: Lockeford-Lodi Area 230 kV Development
	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	110	< 100	< 100	< 100	< 100	< 100	< 100	< 100	105	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV - SECTION 2E & 1E	P2	Breaker	NA	< 100	NA	NA	< 100	NA	NA	NA	115	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R4	P2	Breaker	101	124	NA	< 100	< 100	NA	< 100	< 100	125	project: Lockeford-Lodi Area 230 kV Development
	LOCKFORD 230KV - RING R3 & R2	P2	Breaker	101	124	NA	< 100	< 100	NA	< 100	< 100	125	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	110	< 100	< 100	< 100	< 100	< 100	< 100	< 100	108	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV SECTION 2E	P2	Bus	110	< 100	< 100	< 100	< 100	< 100	< 100	< 100	105	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	108	NA	< 100	< 100	NA	< 100	Diverge	< 100	NA	project: Lockeford-Lodi Area 230 kV Development
	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	108	< 100	< 100	< 100	< 100	< 100	< 100	< 100	114	Install redundant battery supply
	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DTCL	108	< 100	NA	< 100	< 100	NA	< 100	< 100	113	project: Lockeford-Lodi Area 230 kV Development
	TESLA D 230/115KV TB 3 and TESLA D 230/115KV TB 1	P6	N-1-1	< 100	< 100	< 100	< 100	161	< 100	< 100	< 100	< 100	Redispatch
	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	< 100	< 100	< 100	318	162	< 100	Diverge	314	< 100	Redispatch
TESLA-LAWRENCE LAB 115KV	TESLA D 230/115KV TB 1 and TESLA D 230/115KV TB 3	P6	N-1-1	< 100	< 100	< 100	< 100	113	< 100	< 100	< 100	< 100	Redispatch
	TULLOCPH 6.90KV GEN UNIT 5 and TESLA D 230/115KV TB 1	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
TESLA-LEPRINO_JCT 115KV	SCHULTE SW STA 115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	102	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
TESLA-NEWARK #2 230KV	TESLA E 230KV - SECTION 2E & 1E	P2	Breaker	104	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Tesla - Newark 230 kV Line No. 2 Reconductoring
	TESLA E 230KV SECTION 2E	P2	Bus	103	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Tesla - Newark 230 kV Line No. 2 Reconductoring
	TESLA E - 2E 230KV & STAGG-TESLA LINE	P2	Breaker	103	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Tesla - Newark 230 kV Line No. 2 Reconductoring
	TESLA-NEWARK #1 230KV [5720] & TESLA-RAVENSWOOD 230KV [5730]	P7	DTCL	103	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Tesla - Newark 230 kV Line No. 2 Reconductoring
	TESLA E SECTION 2E & TESLA D SECTION 2D 230KV	P2	Breaker	103	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	project: Tesla - Newark 230 kV Line No. 2 Reconductoring

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 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	
TIGER CREEK-ELECTRA 230KV	VALLEY SPRINGS-BELLOTA 230KV [5860] and VLLY SPS 230/60KV TB 2	P6	N-1-1	< 100	105	< 100	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	Q1835BESS 0.66KV GEN UNIT 2 and VALLEY SPRINGS-BELLOTA 230KV [5860]	P3	G-1/N-1	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	VLLY SPS 230KV - RING R1 & R4	P2	Breaker	< 100	108	140	< 100	< 100	< 100	< 100	< 100	109	under review.
	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	< 100	102	102	< 100	< 100	< 100	< 100	< 100	103	under review.
	BELLOTA - 2D 230KV & RANCHO SECO-BELLOTA #2 LINE	P2	Breaker	< 100	102	102	< 100	< 100	< 100	< 100	< 100	102	under review.
	BELLOTA 230KV SECTION 2D	P2	Bus	< 100	102	102	< 100	< 100	< 100	< 100	< 100	102	under review.
	VLLY SPS 230KV - RING R4 & R3	P2	Breaker	< 100	100	102	< 100	< 100	< 100	< 100	< 100	101	under review.
	VALLEY SPRINGS-BELLOTA 230KV [5860]	P1	N-1	< 100	< 100	100	< 100	< 100	< 100	< 100	< 100	100	continue to monitor.
TRACY-LEPRINO 115KV	SCHULTE SW STA 115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	102	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
VACA-BAHIA 230KV	TESLA 500KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	102	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	Install redundant battery supply
	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	< 100	< 100	112	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant battery supply
VACA-DIXON E 230/115KV TB 2	VACA-DIXON E 230/115KV TB 3 and VACA-DIXON F 230/115KV TB 4	P6	N-1-1	< 100	< 100	101	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
VACA-DXN-DIXON-J1-TRAVIS 60KV	DIXON-VACA #2 60KV [6740]	P1	N-1	< 100	< 100	112	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
VACA-LAMBIE SW STA 230KV	BDLSWSTA 230KV - MIDDLE BREAKER BAY 2	P2	Breaker	145	144	< 100	153	122	< 100	145	< 100	144	under review.
VACA-PARKWAY 230KV	TESLA 500KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	113	< 100	110	< 100	< 100	< 100	102	< 100	< 100	Install redundant battery supply
	VACA-LAKEVILLE #1 230KV [5840] and VACA-BAHIA 230KV [5810]	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	106	< 100	129	Diverge	< 100	< 100	Diverge	Diverge	< 100	Install redundant battery supply
	BDLSWSTA 230KV - MIDDLE BREAKER BAY 2	P2	Breaker	111	< 100	105	105	< 100	< 100	101	< 100	< 100	under review.
	Birds Landing-CC Sub 230KV Line & Birds Landing-Contra Costa PP 230KV Line	P7	DTCL	102	< 100	103	< 100	< 100	< 100	< 100	< 100	< 100	under review.
	Tulucay-Vaca 230 KV Line & Vaca-Lakeville #1 230 KV Line	P7	DTCL	< 100	< 100	106	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	VACA-VACAVILLE-JAMESON-NORTH TOWER 115KV and VACA-SUISUN 115KV	P6	N-1-1	< 100	< 100	113	< 100	< 100	< 100	< 100	< 100	101	continue to monitor.
	PRDEWS 60/7.2KV TB 1	P1	N-1	109	100	100	< 100	< 100	< 100	< 100	< 100	100	under review.
VALLEY SPRINGS-CLAY 60KV	PRDE 1-3 7.20KV GEN UNIT 1	P1	N-1	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	100	under review.
	VLLY SPS 230KV - RING R1 & R4	P2	Breaker	< 100	< 100	114	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	SCHULTE SW STA-KASSON-MANTECA 115KV [7472] and SCHULTE SW STA-LAMMERS 115KV [3993]	P6	N-1-1	< 100	< 100	103	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
VIERRA-BANTA #1 115KV	BELLOTA-LOCKFORD 230KV [0] and VLLY SPS 230/60KV TB 2	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	PRDE 1-3 7.20KV GEN UNIT 1 and VLLY SPS 230/60KV TB 2	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	VLLY SPS 230KV - RING R1 & R4	P2	Breaker	< 100	< 100	113	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	BRIGHTN-W.SCRMNO 115KV [0] and RIO OSO-WEST SACRAMENTO 115KV [3450]	P6	N-1-1	< 100	< 100	115	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
W.SCRMNO-DAVIS 115KV	WOODLAND-DAVIS 115KV and BRIGHTON-DAVIS 115KV	P6	N-1-1	< 100	< 100	103	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	Rio Oso-West Sacramento 115 KV Line & West Sacramento-Brighton 115 KV Line	P7	DTCL	< 100	< 100	112	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	STCKNBIOMASS 13.80KV GEN UNIT 1 and WEBER 230/60KV TB 1	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
WEBER 230/60KV TB 2	STCKNBIOMASS 13.80KV GEN UNIT 1 and STCKTN A-WEBER E-HARDING-D 60KV [0]	P3	G-1/N-1	116	120	< 100	< 100	< 100	< 100	< 100	< 100	122	under review.
	STCKNBIOMASS 13.80KV GEN UNIT 1	P1	N-1	< 100	< 100	100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
	STCKNBIOMASS 13.80KV GEN UNIT 1 and WEBER-FRENCH CAMP #2 60KV [8321]	P3	G-1/N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
WEBER-FRENCH CAMP #1 60KV	WEBER-FRENCH CAMP #2 60KV [8321]	P1	N-1	< 100	118	129	< 100	< 100	< 100	< 100	< 100	121	project: French Camp Reinforcement
	WEBER-FRENCH CAMP #1 60KV [8320]	P1	N-1	151	184	204	< 100	< 100	114	117	< 100	188	project: French Camp Reinforcement
WEBER-FRENCH CAMP #2 60KV	VLLY SPS 230KV - RING R1 & R4	P2	Breaker	< 100	< 100	108	< 100	< 100	< 100	< 100	< 100	< 100	continue to monitor.
WEST POINT-VALLEY SPRINGS 60KV	BRIGHTON 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	104	100	170	< 100	< 100	< 100	< 100	< 100	102	Install redundant relay
	STATION DC BATTERY SUPPLY BRIGHTON 115KV BATT	P5	Non-Redundant Battery/Relay	NA	NA	112	NA	NA	< 100	NA	NA	NA	Install redundant battery supply
	STATION DC BATTERY SUPPLY BRIGHTON 230KV BATT	P5	Non-Redundant Battery/Relay	104	100	170	< 100	< 100	< 100	< 100	< 100	102	Install redundant battery supply
	BRIGHTON 230/115KV TB 9 and BRIGHTON 230/115KV TB 10	P6	N-1-1	100	< 100	144	< 100	< 100	< 100	< 100	< 100	102	under review.
	BRIGHTON-BELLOTA 230KV [4420] and RIO OSO-BRIGHTON 230KV [5600]	P6	N-1-1	101	< 100	< 100	< 100	< 100	< 100	< 100	< 100	102	under review.
	BRIGHTN - ME 115KV & BRIGHTN-W.SCRMNO LINE	P2	Breaker	NA	NA	112	NA	NA	< 100	NA	NA	NA	continue to monitor.
	BRIGHTN - ME 115KV & BRIGHTON-DAVIS LINE	P2	Breaker	NA	NA	112	NA	NA	< 100	NA	NA	NA	continue to monitor.
	BRIGHTN 115KV SECTION ME	P2	Bus	NA	NA	111	NA	NA	< 100	NA	NA	NA	continue to monitor.
	BRIGHTN - ME 115KV & BRIGHTON-GRAND ISLAND #1 LINE	P2	Breaker	NA	NA	111	NA	NA	< 100	NA	NA	NA	continue to monitor.
	BRIGHTN - ME 115KV & BRIGHTON-GRAND ISLAND #2 LINE	P2	Breaker	NA	NA	111	NA	NA	< 100	NA	NA	NA	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 Spring Off-Peak	2036 Summer-Off Peak	2036 Winter Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
BELL PGE 115.0 kV	GOLDHILL 115KV - SECTION 1F & 2F	P2	Breaker	0.55	0.99	0.95	0.94	1.03	1.04	0.96	0.95	0.98	project: Gold Hill 230/115 kV Transformer Addition Project
ATLANTC 230.0 kV	RIO OSO-ATLANTIC 230KV [5590] and ATLANTIC-GOLD HILL 230KV [4330]	P6	N-1-1	0.88	> 0.9	0.82	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	under review.
ATLANTC 230.0 kV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.93	0.97	0.90	Diverge	1.01	1.05	Diverge	Diverge	0.97	Install redundant battery/relay supply
ATLANTC 230.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.91	0.94	0.84	0.97	0.97	1.03	0.97	0.97	0.93	Install redundant battery/relay supply
ATLANTC 230.0 kV	BRIGHTON 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.94	0.97	0.90	1.00	1.02	1.05	1.00	1.00	0.96	Install redundant battery/relay supply
ATLANTC 230.0 kV	STATION DC BATTERY SUPPLY BRIGHTON 230KV BATT	P5	Non-Redundant Battery/Relay	0.94	0.97	0.90	1.00	1.02	1.05	1.00	1.00	0.96	Install redundant battery/relay supply
ATLANTI 60.0 kV	ATLANTIC-GOLD HILL 230KV [4330] and RIO OSO-ATLANTIC 230KV [5590]	P6	N-1-1	0.88	> 0.9	0.89	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	under review.
ATLANTIC 115.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.92	0.96	0.85	0.99	0.99	1.05	0.99	0.99	0.95	Install redundant battery/relay supply
ATLANTIC 115.0 kV	RIO OSO-ATLANTIC 230KV [5590] and ATLANTIC-GOLD HILL 230KV [4330]	P6	N-1-1	> 0.9	> 0.9	0.84	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
DRUMPH1 115.0 kV	GOLDHILL 115KV - SECTION 1F & 2F	P2	Breaker	0.90	1.04	1.03	1.03	1.05	1.05	1.04	1.04	1.04	project: Gold Hill 230/115 kV Transformer Addition Project
HALSEY 60.0 kV	GOLDHILL 115KV - SECTION 1F & 2F	P2	Breaker	0.55	1.02	0.99	1.00	1.02	1.02	1.01	1.00	1.01	project: Gold Hill 230/115 kV Transformer Addition Project
BELL PGE 115.0 kV	GOLD HILL 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.86	0.92	0.55	0.96	1.01	1.02	0.97	0.97	0.91	Install redundant battery/relay supply
BELL PGE 115.0 kV	STUCK BREAKER & NO BF RELAY GOLD HILL 115KV CB 172 OR 392	P5	Non-Redundant Battery/Relay	0.87	0.93	0.55	0.96	1.02	1.02	0.97	0.97	0.91	Install redundant battery/relay supply
BELL PGE 115.0 kV	GOLD HILL 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.87	0.93	0.55	0.96	1.02	1.02	0.97	0.97	0.91	Install redundant battery/relay supply
HIGGINS 115.0 kV	GOLDHILL 115KV - SECTION 1F & 2F	P2	Breaker	0.61	1.00	0.96	0.96	1.03	1.04	0.97	0.96	0.99	project: Gold Hill 230/115 kV Transformer Addition Project
DEL MAR 60.0 kV	Base Case	P0	Base Case	0.95	1.03	1.02	1.02	1.03	1.04	1.00	1.02	1.02	under review.
BELLOTA 230.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.93	0.90	0.88	1.00	1.00	1.00	0.97	1.00	0.90	Install redundant battery/relay supply
BRIGHTN 115.0 kV	BRIGHTON 230/115KV TB 9 and BRIGHTON 230/115KV TB 10	P6	N-1-1	0.87	0.90	0.70	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	0.93	under review.
BRIGHTN 115.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.69	0.65	0.59	1.05	1.04	1.04	1.05	1.05	0.65	Install redundant battery/relay supply
BRIGHTN 115.0 kV	BRIGHTON 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.85	0.90	0.58	0.99	1.02	1.05	1.00	1.00	0.90	Install redundant battery/relay supply
BRIGHTN 115.0 kV	STATION DC BATTERY SUPPLY BRIGHTON 230KV BATT	P5	Non-Redundant Battery/Relay	0.85	0.90	0.58	0.99	1.02	1.05	1.00	1.00	0.90	Install redundant battery/relay supply
BRIGHTON 230.0 kV	LOCKEFORD-BELLOTA 230KV #1 [4990] & LOCKEFORD-BELLOTA 230KV #2 [4990]	P7	DCTL	NA	NA	0.85	NA	NA	1.04	NA	NA	NA	continue to monitor.
BRIGHTON 230.0 kV	RIO OSO 230KV - MIDDLE BREAKER BAY 1	P2	Breaker	0.92	0.92	0.89	0.98	1.00	1.00	0.96	0.99	0.92	continue to monitor.
BRIGHTON 230.0 kV	RIO OSO-BRIGHTON 230KV [5600] and BRIGHTON-LOCKFORD 230KV [0]	P6	N-1-1	> 0.9	> 0.9	0.64	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
BRIGHTON 230.0 kV	Rio Oso-Woodland #1 115 KV Line & Rio Oso-Woodland #2 115 KV Line	P7	DCTL	0.93	0.94	0.90	1.00	1.02	1.03	0.98	1.00	0.94	continue to monitor.
BRIGHTON 230.0 kV	Rio Oso-Woodland No. 1 115 KV Line & Rio Oso-Woodland No. 2 115 KV Line	P7	DCTL	0.93	0.94	0.90	1.00	1.02	1.03	0.98	1.00	0.94	continue to monitor.
BRIGHTON 230.0 kV	TESLA E 230KV - SECTION 2E & 1E	P2	Breaker	0.93	0.95	0.90	0.99	1.01	1.04	0.98	1.00	0.95	continue to monitor.
BRIGHTON 230.0 kV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.93	0.94	0.89	Diverge	1.01	1.04	Diverge	Diverge	0.94	Install redundant battery/relay supply
BRIGHTON 230.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.65	0.62	0.56	0.96	0.98	0.98	0.93	0.97	0.62	Install redundant battery/relay supply
BRIGHTON 230.0 kV	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.87	0.92	0.85	0.99	1.02	1.03	0.98	0.99	0.91	Install redundant battery/relay supply
BRIGHTON 230.0 kV	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	0.87	NA	0.85	Diverge	NA	1.04	Diverge	Diverge	NA	under review.
BRIGHTON 230.0 kV	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	0.87	0.92	NA	0.99	1.02	NA	0.99	0.99	0.91	project: Lockeford-Lodi Area 230 kV Development
BRIGHTON 230.0 kV	RIO OSO 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.93	0.93	0.86	1.00	1.02	1.02	0.99	1.00	0.93	Install redundant battery/relay supply
BRIGHTON 230.0 kV	RIO OSO 230 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.92	0.91	0.86	0.98	1.00	1.03	0.96	0.99	0.91	Install redundant battery/relay supply
BRIGHTON 230.0 kV	STATION DC BATTERY SUPPLY ZAMORA 115KV BATT	P5	Non-Redundant Battery/Relay	0.93	0.94	0.90	1.00	1.02	1.03	0.98	1.00	0.94	Install redundant battery/relay supply
CARBONA 60.0 kV	KASSON 115KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.94	0.88	0.92	1.02	1.03	1.03	0.97	1.02	0.87	Install redundant battery/relay supply
CARBONA 60.0 kV	KASSON 115/60KV TB 1	P1	N-1	0.93	0.87	0.91	NA	1.03	1.03	NA	NA	0.87	under review.
CLAY 60.0 kV	RIO OSO-WEST SACRAMENTO 115KV [3450] and VALLEY SPRINGS-BELLOTA 230KV [5860]	P6	N-1-1	0.80	> 0.9	0.86	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	0.88	under review.
CLAY 60.0 kV	VLLY SPS 230KV - RING R1 & R4	P2	Breaker	0.93	0.90	0.62	1.02	1.02	1.03	1.02	1.03	0.91	under review.
CLAY 60.0 kV	PRDE 1-3 7.20KV GEN UNIT 1 and VALLEY SPRINGS-BELLOTA 230KV [5860]	P3	G-1/N-1	> 0.9	> 0.9	0.88	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
CLAY 60.0 kV	VLLY SPS 230KV - RING R4 & R3	P2	Breaker	0.94	0.94	0.88	1.02	1.03	1.04	1.02	1.03	0.95	continue to monitor.
CLAY 60.0 kV	BELLOTA - 2D 230KV & RANCHO SECO-BELLOTA #2 LINE	P2	Breaker	0.95	0.93	0.89	1.02	1.03	1.03	1.02	1.03	0.94	continue to monitor.
CLAY 60.0 kV	BELLOTA 230KV SECTION 2D	P2	Bus	0.95	0.93	0.89	1.02	1.03	1.03	1.02	1.03	0.94	continue to monitor.
CLAY 60.0 kV	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	0.94	0.93	0.89	1.02	1.03	1.03	1.02	1.03	0.94	continue to monitor.
KASSON 115.0 kV	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	1.00	1.01	1.00	0.85	1.02	1.03	Diverge	0.85	1.01	under review.
SALADO 115.0 kV	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	1.00	1.01	1.00	0.85	1.01	1.03	Diverge	0.85	1.01	under review.

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 Spring Off-Peak	2036 Summer-Off Peak	2036 Winter Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
CNTRY CB 60.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	NA	0.36	0.30	NA	1.02	0.56	NA	NA	0.35	under review.
CNTRY CB 60.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] and STAGG-TESLA 230KV [5680]	P6	N-1-1	> 0.9	0.35	0.30	> 0.9	> 0.9	0.53	> 0.9	> 0.9	0.36	under review.
CNTRY CB 60.0 kV	STAGG-D SECTION 1D & STAGG-E SECTION 1E 230KV	P2	Breaker	NA	0.38	0.32	NA	0.87	0.91	NA	NA	0.37	under review.
CNTRY CB 60.0 kV	STUCK BREAKER & NO BF RELAY STAGG 230 kV CB252	P5	Non-Redundant Battery/Relay	NA	0.38	0.32	NA	0.87	0.91	NA	NA	0.37	Install redundant battery/relay supply
CNTRY CB 60.0 kV	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	NA	0.38	0.32	NA	0.87	0.91	NA	NA	0.37	Install redundant battery/relay supply
CNTRY CB 60.0 kV	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	NA	0.47	0.39	NA	0.94	0.99	NA	NA	0.46	Install redundant battery/relay supply
COLGATE 230.0 kV	Palermo-Colgate 230 KV Line & Colgate-Rio Oso 230 KV Line	P7	DCTL	NA	0.92	0.87	NA	0.98	0.96	NA	NA	0.92	continue to monitor.
BRIGHTON 230.0 kV	Base Case	P0	Base Case	0.96	0.96	0.94	1.00	1.02	1.04	0.99	1.00	0.96	continue to monitor.
DAVIS 115.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.53	0.51	0.43	1.01	1.01	1.04	1.01	1.02	0.50	Install redundant battery/relay supply
DAVIS 115.0 kV	BRIGHTON 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.85	0.91	0.60	0.99	1.02	1.04	1.00	1.00	0.91	Install redundant battery/relay supply
DAVIS 115.0 kV	STATION DC BATTERY SUPPLY BRIGHTON 230KV BATT	P5	Non-Redundant Battery/Relay	0.85	0.91	0.60	0.99	1.02	1.04	1.00	1.00	0.91	Install redundant battery/relay supply
DAVIS 115.0 kV	BRIGHTN - ME 115KV & BRIGHTN-W-SCRMNO LINE	P2	Breaker	0.90	0.95	0.82	0.99	1.02	1.04	1.00	1.00	0.94	continue to monitor.
DAVIS 115.0 kV	BRIGHTN - ME 115KV & BRIGHTON-DAVIS LINE	P2	Breaker	0.90	0.94	0.82	0.99	1.02	1.04	1.00	1.00	0.94	continue to monitor.
DAVIS 115.0 kV	BRIGHTN - ME 115KV & BRIGHTON-GRAND ISLAND #1 LINE	P2	Breaker	0.90	0.95	0.82	0.99	1.02	1.04	1.00	1.00	0.94	continue to monitor.
DAVIS 115.0 kV	BRIGHTN - ME 115KV & BRIGHTON-GRAND ISLAND #2 LINE	P2	Breaker	0.90	0.95	0.82	0.99	1.02	1.04	1.00	1.00	0.94	continue to monitor.
DAVIS 115.0 kV	BRIGHTN 115KV - SECTION ME & MO	P2	Breaker	0.90	0.95	0.82	0.99	1.02	1.04	1.00	1.00	0.94	continue to monitor.
DAVIS 115.0 kV	BRIGHTN 115KV SECTION ME	P2	Bus	0.90	0.95	0.82	0.99	1.02	1.04	1.00	1.00	0.94	continue to monitor.
DAVIS 115.0 kV	BRIGHTON 230/115KV TB 9 and BRIGHTON 230/115KV TB 10	P6	N-1-1	0.87	> 0.9	0.71	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	under review.
DAVIS 115.0 kV	Rio Oso-West Sacramento 115 KV Line & West Sacramento-Brighton 115 KV Line	P7	DCTL	0.94	0.96	0.87	1.01	1.03	1.04	1.01	1.02	0.95	continue to monitor.
DAVIS 115.0 kV	Rio Oso-Woodland #1 115 KV Line & Rio Oso-Woodland #2 115 KV Line	P7	DCTL	0.96	0.98	0.88	1.00	1.03	1.03	1.00	1.01	0.97	continue to monitor.
DAVIS 115.0 kV	Rio Oso-Woodland No. 1 115 KV Line & Rio Oso-Woodland No. 2 115 KV Line	P7	DCTL	0.96	0.98	0.88	1.00	1.03	1.03	1.00	1.01	0.97	continue to monitor.
DAVIS 115.0 kV	STATION DC BATTERY SUPPLY BRIGHTON 115KV BATT	P5	Non-Redundant Battery/Relay	0.90	0.94	0.82	0.99	1.02	1.04	1.00	1.00	0.94	Install redundant battery/relay supply
DAVIS 115.0 kV	RIO OSO 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.95	0.97	0.79	1.01	1.02	1.03	1.01	1.02	0.96	Install redundant battery/relay supply
DAVIS 115.0 kV	STATION DC BATTERY SUPPLY ZAMORA 115KV BATT	P5	Non-Redundant Battery/Relay	0.96	0.98	0.88	1.00	1.03	1.03	1.00	1.01	0.97	Install redundant battery/relay supply
DEL MAR 60.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.89	1.03	0.88	0.98	1.02	1.04	0.97	0.98	1.02	Install redundant battery/relay supply
DEL MAR 60.0 kV	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.88	1.03	0.96	1.01	1.03	1.04	0.99	1.01	1.02	Install redundant battery/relay supply
DEL MAR 60.0 kV	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	0.89	NA	0.97	Diverge	NA	1.04	Diverge	Diverge	NA	under review.
DEL MAR 60.0 kV	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	0.90	1.03	1.01	1.02	1.03	1.04	0.99	1.02	1.02	under review.
DEL MAR 60.0 kV	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	0.89	1.03	NA	1.01	1.03	NA	0.99	1.01	1.02	under review.
DEL MAR 60.0 kV	ATLANTIC-GOLD HILL 230KV [4330] and RIO OSO-ATLANTIC 230KV [5590]	P6	N-1-1	0.85	> 0.9	0.86	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	under review.
DEL MAR 60.0 kV	YCEC 13.80KV GEN UNIT 1 and LOCKEFORD-BELLOTA 230KV [4990]	P3	G-1/N-1	0.90	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	project: Lockeford-Lodi Area 230 kV Development
PLACER 115.0 kV	GOLDHILL 115KV - SECTION 1F & 2F	P2	Breaker	0.54	0.99	0.94	0.94	1.03	1.04	0.95	0.94	0.98	project: Gold Hill 230/115 kV Transformer Addition Project
E.MRYSVE 115.0 kV	PALERMO-NICOLAUS 115KV and RIO OSO-NICOLAUS 115KV [3440]	P6	N-1-1	0.46	0.88	0.77	> 0.9	> 0.9	> 0.9	0.76	> 0.9	0.91	under review.
E.MRYSVE 115.0 kV	PALERMO-NICOLAUS 115KV [3210] [E.MRYSVE-E.MRY J2]	P2	Line Section w/o Fault	NA	1.06	0.88	NA	1.12	1.06	NA	NA	1.06	continue to monitor.
E.NICOLS 115.0 kV	PALERMO-NICOLAUS 115KV and RIO OSO-NICOLAUS 115KV [3440]	P6	N-1-1	0.47	0.88	0.74	> 0.9	> 0.9	> 0.9	0.77	> 0.9	0.91	under review.
E.NICOLS 115.0 kV	E.NICOLS 115KV - RING R1 & R5	P2	Breaker	0.55	0.79	0.60	0.96	1.01	1.06	0.78	0.96	0.79	under review.
E.NICOLS 60.0 kV	PALERMO-NICOLAUS 115KV and RIO OSO-NICOLAUS 115KV [3440]	P6	N-1-1	0.54	> 0.9	0.84	> 0.9	> 0.9	> 0.9	0.88	> 0.9	> 0.9	under review.
E.NICOLS 60.0 kV	E.NICOLS 115KV - RING R1 & R5	P2	Breaker	0.63	0.91	0.69	0.96	1.00	1.05	0.90	0.96	0.90	under review.
EIGHT MI 230.0 kV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.92	0.99	0.89	Diverge	1.00	1.05	Diverge	Diverge	0.98	Install redundant battery/relay supply
PLACER 60.0 kV	GOLDHILL 115KV - SECTION 1F & 2F	P2	Breaker	0.55	1.02	0.99	1.00	1.02	1.02	1.01	1.00	1.02	project: Gold Hill 230/115 kV Transformer Addition Project
WEIMAR 60.0 kV	GOLDHILL 115KV - SECTION 1F & 2F	P2	Breaker	0.86	0.97	0.96	0.98	0.99	0.99	0.98	0.98	0.97	project: Gold Hill 230/115 kV Transformer Addition Project
HORSESHE 115.0 kV	GOLDHILL 115KV - SECTION 1F & 2F	P2	Breaker	0.52	0.98	0.92	0.93	1.03	1.04	0.94	0.93	0.97	project: Gold Hill 230/115 kV Transformer Addition Project
APPLE HL 115.0 kV	MISSOURI FLAT-GOLD HILL #2 115KV [2670] [GOLDHILL-SHPRING2]	P2	Line Section w/o Fault	0.88	0.91	0.99	0.98	1.03	1.05	1.00	0.99	0.90	project: Gold Hill-El Dorado Reinforcement
ELECTRA 230.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.95	0.90	0.88	1.01	1.01	1.01	0.98	1.01	0.90	Install redundant battery/relay supply
ELECTRA 230.0 kV	VLLY SPS 230KV - RING R1 & R4	P2	Breaker	0.98	0.92	0.86	1.01	1.01	1.01	0.99	1.01	0.92	continue to monitor.
ELECTRA 230.0 kV	RIO OSO-BRIGHTON 230KV [5600] and VALLEY SPRINGS-BELLOTA 230KV [5860]	P6	N-1-1	> 0.9	> 0.9	0.89	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
FRNCH CP 60.0 kV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.97	0.96	0.90	Diverge	1.02	1.02	Diverge	Diverge	0.97	Install redundant battery/relay supply
GOLDHILL 230.0 kV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.93	0.97	0.89	Diverge	1.01	1.05	Diverge	Diverge	0.97	Install redundant battery/relay supply
GOLDHILL 230.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.92	0.95	0.86	0.98	0.98	1.03	0.98	0.98	0.94	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 Spring Off-Peak	2036 Summer-Off Peak	2036 Winter Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
GRAND IS 115.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.68	0.63	0.58	1.05	1.04	1.04	1.04	1.05	0.63	Install redundant battery/relay supply
GRAND IS 115.0 kV	BRIGHTON 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.84	0.88	0.57	0.99	1.02	1.05	1.00	1.00	0.88	Install redundant battery/relay supply
GRAND IS 115.0 kV	STATION DC BATTERY SUPPLY BRIGHTON 230KV BATT	P5	Non-Redundant Battery/Relay	0.84	0.88	0.57	0.99	1.02	1.05	1.00	1.00	0.88	Install redundant battery/relay supply
GRAND IS 115.0 kV	BRIGHTON 230/115KV TB 9 and BRIGHTON 230/115KV TB 10	P6	N-1-1	0.86	0.88	0.69	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	0.92	under review.
ELDORAD 115.0 kV	GOLDHILL 115KV - SECTION 1F & 1G	P2	Breaker	0.89	NA	NA	1.03	NA	NA	NA	NA	0.88	project: Gold Hill-El Dorado Reinforcement
ELDORAD 115.0 kV	GOLDHILL 115KV - SECTION 2G & 1G	P2	Breaker	NA	0.90	NA	NA	1.02	NA	NA	NA	0.88	project: Gold Hill-El Dorado Reinforcement
HALSEY 60.0 kV	GOLD HILL 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.90	0.99	0.54	1.01	1.02	1.02	1.01	1.02	0.98	Install redundant battery/relay supply
HALSEY 60.0 kV	STUCK BREAKER & NO BF RELAY GOLD HILL 115KV CB 172 OR 392	P5	Non-Redundant Battery/Relay	0.91	0.99	0.54	1.01	1.02	1.02	1.01	1.02	0.98	Install redundant battery/relay supply
HALSEY 60.0 kV	GOLD HILL 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.91	0.99	0.54	1.01	1.02	1.02	1.01	1.02	0.98	Install redundant battery/relay supply
ELDORAD 115.0 kV	GOLDHILL 115KV SECTION 1G	P2	Bus	NA	0.90	0.99	NA	1.02	1.05	NA	NA	0.88	project: Gold Hill-El Dorado Reinforcement
HAMMER 60.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	NA	0.36	0.31	NA	1.02	0.56	NA	NA	0.35	under review.
HAMMER 60.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] and STAGG-TESLA 230KV [5680]	P6	N-1-1	> 0.9	0.35	0.31	> 0.9	> 0.9	0.53	> 0.9	> 0.9	0.36	under review.
HAMMER 60.0 kV	STAGG-D SECTION 1D & STAGG-E SECTION 1E 230KV	P2	Breaker	NA	0.38	0.33	NA	0.88	0.92	NA	NA	0.37	under review.
HAMMER 60.0 kV	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	NA	0.38	0.33	NA	0.88	0.92	NA	NA	0.37	Install redundant battery/relay supply
HAMMER 60.0 kV	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	NA	0.38	0.33	NA	0.88	0.92	NA	NA	0.37	Install redundant battery/relay supply
HAMMER 60.0 kV	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	NA	0.47	0.40	NA	0.94	0.99	NA	NA	0.46	Install redundant battery/relay supply
BELL PGE 115.0 kV	PLACER-GOLD HILL #1 115KV [3340] and GOLDHILL-PLACER-FLINT 115KV [0]	P6	N-1-1	0.88	> 0.9	0.55	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	under review.
HALSEY 60.0 kV	PLACER-GOLD HILL #1 115KV [3340] and GOLDHILL-PLACER-FLINT 115KV [0]	P6	N-1-1	> 0.9	> 0.9	0.54	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
HIGGINS 115.0 kV	GOLD HILL 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.89	0.94	0.60	0.98	1.02	1.02	0.98	0.98	0.93	Install redundant battery/relay supply
HIGGINS 115.0 kV	STUCK BREAKER & NO BF RELAY GOLD HILL 115KV CB 172 OR 392	P5	Non-Redundant Battery/Relay	0.89	0.94	0.60	0.98	1.02	1.02	0.99	0.98	0.93	Install redundant battery/relay supply
HIGGINS 115.0 kV	GOLD HILL 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.89	0.94	0.60	0.98	1.02	1.02	0.99	0.98	0.93	Install redundant battery/relay supply
HIGGINS 115.0 kV	PLACER-GOLD HILL #1 115KV [3340] and GOLDHILL-PLACER-FLINT 115KV [0]	P6	N-1-1	> 0.9	> 0.9	0.60	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
ELDORAD 115.0 kV	MISSOURI FLAT-GOLD HILL #2 115KV [2670] (GOLDHILL-SHPRING2)	P2	Line Section w/o Fault	0.86	0.89	0.99	0.97	1.03	1.05	0.99	0.98	0.88	project: Gold Hill-El Dorado Reinforcement
LINCLN 115.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.90	0.94	0.81	0.98	0.99	1.05	0.97	0.98	0.93	Install redundant battery/relay supply
LINCLN 115.0 kV	RIO OSO-LINCLN-SPINLINCOLN 115KV [0] and RIO OSO-ATLANTIC 230KV [5590]	P6	N-1-1	> 0.9	> 0.9	0.87	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
LOCKEFRD 60.0 kV	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	1.04	0.90	0.96	1.04	1.04	1.04	1.04	1.04	0.89	Install redundant battery/relay supply
LOCKEFRD 60.0 kV	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	1.04	0.90	0.96	1.04	1.04	1.04	1.04	1.04	0.89	Install redundant battery/relay supply
LOCKEFRD 60.0 kV	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.63	0.85	0.92	1.04	1.03	1.04	0.98	1.04	0.77	Install redundant battery/relay supply
LOCKEFRD 60.0 kV	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	0.63	NA	0.93	Diverge	NA	1.04	Diverge	Diverge	NA	project: Mosher Transmission Project
LOCKEFRD 60.0 kV	BELLOTA 230KV - SECTION 2E & 1E	P2	Breaker	NA	0.84	NA	NA	1.03	NA	NA	NA	0.76	project: Lockeford-Lodi Area 230 kV Development
LOCKEFRD 60.0 kV	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	0.64	0.86	1.04	1.04	1.03	1.04	0.98	1.03	0.80	project: Lockeford-Lodi Area 230 kV Development
LOCKEFRD 60.0 kV	BELLOTA 230KV SECTION 2E	P2	Bus	0.64	0.87	1.03	1.04	1.03	1.04	0.98	1.03	0.82	project: Lockeford-Lodi Area 230 kV Development
ATLANTC 230.0 kV	Base Case	P0	Base Case	0.96	0.98	0.95	1.00	1.02	1.05	1.00	1.00	0.98	continue to monitor.
LOCKEFRD 60.0 kV	Brighton-Bellota 230 KV Line & Rio OsO-Lockeford 230 KV Line	P7	DCTL	1.03	0.26	1.04	1.04	0.46	1.04	1.03	1.04	0.25	project: Lockeford-Lodi Area 230 kV Development
LOCKEFRD 60.0 kV	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	0.63	0.84	NA	1.04	1.03	NA	0.98	1.04	0.77	project: Lockeford-Lodi Area 230 kV Development
LOCKEFRD 60.0 kV	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	0.65	0.86	1.03	1.04	1.03	1.04	0.98	1.03	0.82	project: Lockeford-Lodi Area 230 kV Development
LOCKEFRD 60.0 kV	LOCKEFORD-BELLOTA 230KV [4990] and RIO OSO-LOCKEFORD 230KV [5620]	P6	N-1-1	> 0.9	0.26	> 0.9	> 0.9	0.46	> 0.9	> 0.9	> 0.9	0.26	project: Lockeford-Lodi Area 230 kV Development
LOCKEFRD 60.0 kV	LOCKFORD 230KV - RING R3 & R2	P2	Breaker	0.59	0.65	NA	1.04	1.03	NA	0.64	1.04	0.64	project: Lockeford-Lodi Area 230 kV Development
LOCKEFRD 60.0 kV	LOCKFORD 230KV - RING R3 & R4	P2	Breaker	0.59	0.65	NA	1.04	1.03	NA	0.64	1.04	0.64	project: Lockeford-Lodi Area 230 kV Development
LOCKEFRD 60.0 kV	RIO OSO-LOCKEFORD 230KV [5620] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	NA	0.26	1.03	NA	0.46	1.04	NA	NA	0.25	project: Lockeford-Lodi Area 230 kV Development
LOCKEFRD 60.0 kV	STAGG-D SECTION 1D & STAGG-E SECTION 1E 230KV	P2	Breaker	1.04	0.90	0.96	1.04	1.04	1.04	1.04	1.04	0.89	project: Lockeford-Lodi Area 230 kV Development
LOCKEFRD 60.0 kV	YCEC 13.80KV GEN UNIT 1 and LOCKEFORD-BELLOTA 230KV [4990]	P3	G-1/N-1	0.64	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	project: Mosher Transmission Project
LOCKFORD 230.0 kV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.93	0.92	0.89	Diverge	0.99	1.00	Diverge	Diverge	0.92	Install redundant battery/relay supply
LOCKFORD 230.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.90	0.88	0.82	0.99	0.99	0.99	0.95	0.99	0.87	Install redundant battery/relay supply
LOCKFORD 230.0 kV	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	0.61	NA	0.81	Diverge	NA	1.00	Diverge	Diverge	NA	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	0.95	0.88	0.90	1.00	0.99	1.00	0.97	1.00	0.88	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 Spring Off-Peak	2036 Summer-Off Peak	2036 Winter Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
LOCKFORD 230.0 kV	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.95	0.88	0.90	1.00	0.99	1.00	0.97	1.00	0.88	Install redundant battery/relay supply
LOCKFORD 230.0 kV	BELLOTA 230KV - SECTION 2E & 1E	P2	Breaker	NA	0.76	NA	NA	0.97	NA	NA	NA	0.70	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.95	0.88	0.91	1.00	1.00	1.00	0.97	1.00	0.88	Install redundant battery/relay supply
LOCKFORD 230.0 kV	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	0.61	0.77	0.92	0.95	0.96	1.00	0.87	0.96	0.73	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.60	0.76	0.80	0.95	0.97	1.00	0.87	0.96	0.70	Install redundant battery/relay supply
LOCKFORD 230.0 kV	BELLOTA 230KV SECTION 2E	P2	Bus	0.61	0.78	0.93	0.95	0.96	1.00	0.87	0.96	0.75	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	Brighton-Bellota 230 KV Line & Rio Oso-Lockeford 230 KV Line	P7	DCTL	0.95	0.23	0.94	1.00	0.44	0.99	0.95	1.00	0.22	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	0.61	0.76	NA	0.95	0.97	NA	0.87	0.96	0.71	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	0.95	0.88	0.90	1.00	1.00	0.98	0.97	1.00	0.88	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	0.62	0.78	0.93	0.96	0.96	1.00	0.87	0.96	0.75	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	LOCKEFORD-BELLOTA 230KV [4990] and RIO OSO-LOCKEFORD 230KV [5620]	P6	N-1-1	> 0.9	0.22	> 0.9	> 0.9	0.42	> 0.9	> 0.9	> 0.9	0.23	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	LOCKFORD 230KV - RING R3 & R2	P2	Breaker	0.63	0.66	NA	0.95	0.96	NA	0.68	0.96	0.66	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	LOCKFORD 230KV - RING R3 & R4	P2	Breaker	0.63	0.66	NA	0.95	0.96	NA	0.67	0.95	0.66	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	RIO OSO-LOCKEFORD 230KV [5620] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	NA	0.23	0.92	NA	0.44	0.99	NA	NA	0.22	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	STAGG-D SECTION 1D & STAGG-E SECTION 1E 230KV	P2	Breaker	0.95	0.88	0.90	1.00	0.99	1.00	0.97	1.00	0.88	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	YCEC 13.80KV GEN UNIT 1 and LOCKEFORD-BELLOTA 230KV [4990]	P3	G-1/N-1	0.61	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	LOCKEFORD-BELLOTA 230KV #1 [4990] & LOCKEFORD-BELLOTA 230KV #2 [4990]	P7	DCTL	NA	NA	0.81	NA	NA	1.00	NA	NA	NA	continue to monitor.
LODI 60.0 kV	LOCKFORD 230/60KV TB 3 and LOCKFORD 230/60KV TB 2	P6	N-1-1	> 0.9	0.23	0.51	> 0.9	0.43	> 0.9	> 0.9	> 0.9	0.23	under review.
LODI 60.0 kV	BELLOTA 230KV - SECTION 1E & 2E	P2	Breaker	0.57	NA	0.91	Diverge	NA	1.03	Diverge	Diverge	NA	project: Mosher Transmission Project
LODI 60.0 kV	BELLOTA 230KV - SECTION 2E & 1E	P2	Breaker	NA	0.78	NA	NA	1.01	NA	NA	NA	0.70	project: Lockeford-Lodi Area 230 kV Development
LODI 60.0 kV	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	0.57	0.81	1.03	1.02	1.01	1.04	0.94	1.02	0.74	project: Lockeford-Lodi Area 230 kV Development
LODI 60.0 kV	BELLOTA 230KV SECTION 2E	P2	Bus	0.58	0.82	1.02	1.02	1.01	1.03	0.95	1.01	0.77	project: Lockeford-Lodi Area 230 kV Development
LODI 60.0 kV	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	1.00	0.85	0.94	1.02	1.01	1.03	1.00	1.02	0.84	Install redundant battery/relay supply
LODI 60.0 kV	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	1.00	0.85	0.94	1.02	1.01	1.03	1.00	1.02	0.84	Install redundant battery/relay supply
LODI 60.0 kV	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	1.00	0.86	0.95	1.02	1.01	1.03	1.00	1.02	0.86	Install redundant battery/relay supply
LODI 60.0 kV	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.56	0.79	0.91	1.02	1.01	1.03	0.94	1.02	0.70	Install redundant battery/relay supply
LODI 60.0 kV	Brighton-Bellota 230 KV Line & Rio Oso-Lockeford 230 KV Line	P7	DCTL	0.99	0.23	1.02	1.02	0.43	1.04	1.00	1.02	0.22	project: Lockeford-Lodi Area 230 kV Development
LODI 60.0 kV	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	0.57	0.79	NA	1.02	1.01	NA	0.95	1.02	0.71	project: Lockeford-Lodi Area 230 kV Development
LODI 60.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	1.00	0.85	0.95	1.02	1.02	1.03	1.00	1.02	0.85	project: Lockeford-Lodi Area 230 kV Development
LODI 60.0 kV	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	0.58	0.81	1.02	1.02	1.01	1.03	0.95	1.01	0.77	project: Lockeford-Lodi Area 230 kV Development
LODI 60.0 kV	LOCKFORD 230KV - RING R3 & R2	P2	Breaker	0.52	0.57	NA	1.02	1.01	NA	0.58	1.02	0.56	project: Lockeford-Lodi Area 230 kV Development
LODI 60.0 kV	LOCKFORD 230KV - RING R3 & R4	P2	Breaker	0.52	0.58	NA	1.02	1.01	NA	0.58	1.02	0.56	project: Lockeford-Lodi Area 230 kV Development
LODI 60.0 kV	RIO OSO-LOCKEFORD 230KV [5620] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	NA	0.23	1.02	NA	0.43	1.03	NA	NA	0.22	project: Lockeford-Lodi Area 230 kV Development
LODI 60.0 kV	STAGG-D SECTION 1D & STAGG-E SECTION 1E 230KV	P2	Breaker	1.00	0.85	0.95	1.02	1.01	1.03	1.00	1.02	0.84	project: Lockeford-Lodi Area 230 kV Development
LODI 60.0 kV	YCEC 13.80KV GEN UNIT 1 and LOCKEFORD-BELLOTA 230KV [4990]	P3	G-1/N-1	0.57	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	project: Mosher Transmission Project
MRYSVLLE 60.0 kV	E.NICOLS 115KV - RING R1 & R5	P2	Breaker	0.85	1.00	0.96	0.99	1.01	1.03	0.97	0.99	1.00	under review.
MRYSVLLE 60.0 kV	RIO OSO-NICOLAUS 115KV [3440] & PALERMO-NICOLAUS 115KV [3210]	P6	N-1-1	0.80	> 0.9	0.87	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	under review.
MSHR 60V 60.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	NA	0.45	0.46	NA	1.02	0.64	NA	NA	0.44	under review.
MSHR 60V 60.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] and STAGG-TESLA 230KV [5680]	P6	N-1-1	> 0.9	0.44	0.46	> 0.9	> 0.9	0.63	> 0.9	> 0.9	0.45	under review.
MSHR 60V 60.0 kV	STAGG-D SECTION 1D & STAGG-E SECTION 1E 230KV	P2	Breaker	NA	0.45	0.45	NA	0.93	0.93	NA	NA	0.44	under review.
MSHR 60V 60.0 kV	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	NA	0.45	0.45	NA	0.93	0.93	NA	NA	0.44	Install redundant battery/relay supply
MSHR 60V 60.0 kV	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	NA	0.45	0.45	NA	0.93	0.93	NA	NA	0.44	Install redundant battery/relay supply
MSHR 60V 60.0 kV	STAGG 230-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	NA	0.51	0.50	NA	0.97	0.99	NA	NA	0.50	Install redundant battery/relay supply
MSHR 60V 60.0 kV	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.97	0.92	0.93	1.00	1.03	1.04	0.99	1.00	0.88	Install redundant battery/relay supply
MSHR 60V 60.0 kV	Brighton-Bellota 230 KV Line & Rio Oso-Lockeford 230 KV Line	P7	DCTL	0.97	0.59	0.99	1.00	0.76	1.05	0.99	1.00	0.58	project: Lockeford-Lodi Area 230 kV Development
MSHR 60V 60.0 kV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.90	1.00	0.92	Diverge	1.03	1.04	Diverge	Diverge	1.00	Install redundant battery/relay supply
MSHR 60V 60.0 kV	HAMMER-COUNTRY CLUB 60KV	P1	N-1	NA	0.93	0.89	NA	1.01	1.02	NA	NA	0.92	continue to monitor.
MSHR 60V 60.0 kV	LOCKFORD 230KV - RING R3 & R2	P2	Breaker	0.97	0.82	NA	1.00	1.03	NA	0.98	1.00	0.82	project: Lockeford-Lodi Area 230 kV Development
MSHR 60V 60.0 kV	LOCKFORD 230KV - RING R3 & R4	P2	Breaker	0.97	0.82	NA	1.00	1.03	NA	0.98	1.00	0.82	project: Lockeford-Lodi Area 230 kV Development
LOCKFRD 60.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	1.04	0.90	0.96	1.04	1.04	1.04	1.04	1.04	0.90	Sensitivity only.

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 Spring Off-Peak	2036 Summer-Off Peak	2036 Winter Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
MSHR 60V 60.0 kV	RIO OSO-LOCKEFORD 230KV [5620] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	0.97	0.59	0.99	1.00	0.76	1.04	0.99	1.00	0.58	project: Lockeford-Lodi Area 230 kV Development
MSHR 60V 60.0 kV	TESLA E 230KV - SECTION 2E & 1E	P2	Breaker	0.88	1.01	0.93	0.99	1.03	1.04	0.98	1.00	1.00	project: Mosher Transmission Project
PLACER 115.0 kV	GOLD HILL 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.86	0.92	0.54	0.96	1.01	1.02	0.97	0.96	0.90	Install redundant battery/relay supply
PLACER 115.0 kV	STUCK BREAKER & NO BF RELAY GOLD HILL 115KV CB 172 OR 392	P5	Non-Redundant Battery/Relay	0.86	0.92	0.54	0.96	1.01	1.01	0.97	0.96	0.91	Install redundant battery/relay supply
PLACER 115.0 kV	GOLD HILL 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.86	0.92	0.54	0.96	1.01	1.01	0.97	0.96	0.91	Install redundant battery/relay supply
PLACER 115.0 kV	PLACER-GOLD HILL #1 115KV [3340] and GOLDHILL-PLACER-FLINT 115KV [0]	P6	N-1-1	0.87	> 0.9	0.54	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	under review.
PLACER 60.0 kV	PLACER-GOLD HILL #1 115KV [3340] and GOLDHILL-PLACER-FLINT 115KV [0]	P6	N-1-1	> 0.9	> 0.9	0.54	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
WEIMAR 60.0 kV	RIO OSO-BRIGHTON 230KV [5600] and DRUMPH1 115/115KV TB 1	P6	N-1-1	> 0.9	> 0.9	0.85	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
PLACER 60.0 kV	GOLD HILL 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.91	0.99	0.54	1.02	1.02	1.02	1.02	1.02	0.98	Install redundant battery/relay supply
PLACER 60.0 kV	STUCK BREAKER & NO BF RELAY GOLD HILL 115KV CB 172 OR 392	P5	Non-Redundant Battery/Relay	0.91	0.99	0.55	1.02	1.02	1.02	1.02	1.02	0.98	Install redundant battery/relay supply
PLACER 60.0 kV	GOLD HILL 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.91	0.99	0.55	1.02	1.02	1.02	1.02	1.02	0.98	Install redundant battery/relay supply
BELL PGE 115.0 kV	Placer-Gold Hill No. 1 115 KV Line and Placer-Gold Hill No. 2 115 KV Line	P7	DCTL	0.86	0.93	0.55	0.96	1.02	1.02	0.97	0.97	0.91	under review.
HALSEY 60.0 kV	Placer-Gold Hill No. 1 115 KV Line and Placer-Gold Hill No. 2 115 KV Line	P7	DCTL	0.91	0.99	0.54	1.01	1.02	1.02	1.01	1.02	0.98	continue to monitor.
HIGGINS 115.0 kV	Placer-Gold Hill No. 1 115 KV Line and Placer-Gold Hill No. 2 115 KV Line	P7	DCTL	0.89	0.94	0.60	0.98	1.02	1.02	0.98	0.98	0.93	under review.
GOLDHILL 230.0 kV	Base Case	P0	Base Case	0.96	0.98	0.94	1.00	1.02	1.05	1.00	1.00	0.98	continue to monitor.
PLSNT GR 115.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.91	0.95	0.83	0.98	0.99	1.05	0.98	0.99	0.94	Install redundant battery/relay supply
PLSNT GR 115.0 kV	RIO OSO-ATLANTIC 230KV [5590] and ATLANTIC-GOLD HILL 230KV [4330]	P6	N-1-1	> 0.9	> 0.9	0.85	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
LOCKFORD 230.0 kV	Base Case	P0	Base Case	0.95	0.95	0.94	1.00	1.00	1.00	0.97	1.00	0.95	under review.
RIO OSO 230.0 kV	BELLOTA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.90	0.95	0.91	1.00	1.03	1.05	0.99	1.00	0.93	Install redundant battery/relay supply
RIO OSO 230.0 kV	LOCKEFORD-BELLOTA 230KV [4990] and BRIGHTON-BELLOTA 230KV [4420]	P6	N-1-1	0.90	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	under review.
RIO OSO 230.0 kV	RIO OSO 230 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.94	0.94	0.88	1.03	1.03	1.29	1.06	1.06	0.94	Install redundant battery/relay supply
SHWSS 60.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	NA	0.33	0.27	NA	1.00	0.52	NA	NA	0.32	under review.
SHWSS 60.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] and STAGG-TESLA 230KV [5680]	P6	N-1-1	> 0.9	0.32	0.27	> 0.9	> 0.9	0.50	> 0.9	> 0.9	0.33	under review.
SHWSS 60.0 kV	STAGG-D SECTION 1D & STAGG-E SECTION 1E 230KV	P2	Breaker	NA	0.35	0.29	NA	0.84	0.89	NA	NA	0.34	under review.
SHWSS 60.0 kV	STUCK BREAKER & NO BF RELAY STAGG 230 KV CB252	P5	Non-Redundant Battery/Relay	NA	0.35	0.29	NA	0.84	0.89	NA	NA	0.34	Install redundant battery/relay supply
SHWSS 60.0 kV	STAGG 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	NA	0.35	0.29	NA	0.84	0.89	NA	NA	0.34	Install redundant battery/relay supply
SMRTSVLE 60.0 kV	COLGATE-SMARTVILLE #2 60KV and PEASE-MARYSVILLE-HARTER 60KV [7770]	P6	N-1-1	0.82	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	under review.
SMRTSVLE 60.0 kV	YCEC 13.80KV GEN UNIT 1 and NARROWSPH2 13.80KV GEN UNIT 1	P3	G-1/N-1	0.87	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	under review.
SMRTSVLE 60.0 kV	NARRWS 2 60/13.8KV TB 1	P1	N-1	0.88	1.04	1.01	0.99	1.02	1.04	1.00	1.00	1.04	under review.
SMRTSVLE 60.0 kV	NARROWSPH2 13.80KV GEN UNIT 1	P1	N-1	0.88	1.04	1.01	0.99	1.02	1.04	1.00	1.00	1.04	under review.
STAGG-D 230.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] & STAGG-TESLA 230KV [5680]	P7	DCTL	NA	0.32	0.26	NA	0.97	0.51	NA	NA	0.31	under review.
STAGG-D 230.0 kV	EIGHT MILE ROAD-STAGG 230KV [5002] and STAGG-TESLA 230KV [5680]	P6	N-1-1	> 0.9	0.31	0.26	> 0.9	> 0.9	0.48	> 0.9	> 0.9	0.32	under review.
STAGG-D 230.0 kV	EIGHT MILE ROAD-TESLA 230KV [4660] & STAGG-TESLA 230KV [5680]	P7	DCTL	0.91	0.99	0.90	0.98	1.00	1.05	0.98	0.98	0.98	continue to monitor.
STAGG-D 230.0 kV	TESLA E 230KV - SECTION 2E & 1E	P2	Breaker	0.89	0.98	0.89	0.98	1.00	1.05	0.98	0.98	0.98	under review.
STAGG-D 230.0 kV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.90	0.98	0.87	Diverge	1.00	1.05	Diverge	Diverge	0.98	Install redundant battery/relay supply
STKTON A 115.0 kV	BELLOTA - 1D 115KV & BELLOTA-LOCKFORD-CAMANECHEP LINE	P2	Breaker	0.90	0.95	0.85	0.96	1.01	1.00	0.94	0.96	0.94	under review.
STKTON A 115.0 kV	BELLOTA - 1D 115KV & BELLOTA-RIVERBANK LINE	P2	Breaker	0.90	0.95	0.85	0.97	1.01	1.00	0.94	0.97	0.95	under review.
STKTON A 115.0 kV	BELLOTA 115KV SECTION 1D	P2	Bus	0.89	0.95	0.85	0.97	1.01	1.00	0.94	0.97	0.95	under review.
TIGERCREEK 230.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.94	0.89	0.88	1.00	1.01	1.01	0.98	1.01	0.89	Install redundant battery/relay supply
TIGERCREEK 230.0 kV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.97	0.93	0.90	Diverge	1.00	1.01	Diverge	Diverge	0.93	Install redundant battery/relay supply
TIGERCREEK 230.0 kV	VLLY SPS 230KV - RING R1 & R4	P2	Breaker	0.97	0.89	0.83	1.00	1.01	1.01	0.98	1.00	0.89	under review.
TIGERCREEK 230.0 kV	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	0.96	0.90	0.89	1.00	1.00	1.01	0.98	1.00	0.90	under review.
TIGERCREEK 230.0 kV	VLLY SPS 230KV - RING R4 & R3	P2	Breaker	0.97	0.91	0.90	1.00	1.01	1.01	0.98	1.01	0.91	continue to monitor.
MSHR 60V 60.0 kV	BELLOTA 230KV - SECTION 2E & 1E	P2	Breaker	NA	0.91	NA	NA	1.03	NA	NA	NA	0.88	Sensitivity only.
MSHR 60V 60.0 kV	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	0.96	0.92	0.99	1.00	1.03	1.04	0.99	1.00	0.89	Sensitivity only.
TIGERCREEK 230.0 kV	BELLOTA - 2D 230KV & RANCHO SECO-BELLOTA #2 LINE	P2	Breaker	0.97	0.90	0.89	1.00	1.00	1.01	0.98	1.00	0.90	continue to monitor.
TIGERCREEK 230.0 kV	BELLOTA 230KV SECTION 2D	P2	Bus	0.97	0.90	0.89	1.00	1.00	1.01	0.98	1.00	0.90	continue to monitor.
TIGERCREEK 230.0 kV	SALT SPS 11.00KV GEN UNIT 2 and VALLEY SPRINGS-BELLOTA 230KV [5860]	P3	G-1/N-1	> 0.9	> 0.9	0.89	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	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 Spring Off-Peak	2036 Summer-Off Peak	2036 Winter Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
TIGERCREEK 230.0 kV	RIO OSO-BRIGHTON 230KV [5600] and VALLEY SPRINGS-BELLOTA 230KV [5860]	P6	N-1-1	> 0.9	> 0.9	0.87	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
MSHR 60V 60.0 kV	BRIGHTON-BELLOTA 230KV [4420] & LOCKEFORD-BELLOTA 230KV [4990]	P7	DCTL	0.96	0.92	NA	1.00	1.03	NA	0.99	1.00	0.88	Sensitivity only.
VLLY SPS 230.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.92	0.89	0.87	1.00	1.00	1.01	0.97	1.00	0.89	Install redundant battery/relay supply
VLLY SPS 230.0 kV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.95	0.93	0.89	Diverge	0.99	1.01	Diverge	Diverge	0.93	Install redundant battery/relay supply
VLLY SPS 230.0 kV	VALLEY SPRINGS-BELLOTA 230KV [5860]	P1	N-1	0.95	0.89	0.87	0.99	1.00	1.01	0.97	0.99	0.89	under review.
VLLY SPS 230.0 kV	VLLY SPS 230KV - RING R1 & R4	P2	Breaker	0.94	0.86	0.76	0.99	1.00	1.01	0.97	0.99	0.86	under review.
VLLY SPS 230.0 kV	BELLOTA - 2D 230KV & RANCHO SECO-BELLOTA #2 LINE	P2	Breaker	0.94	0.88	0.85	0.99	1.00	1.01	0.96	0.99	0.88	under review.
VLLY SPS 230.0 kV	BELLOTA 230KV SECTION 2D	P2	Bus	0.94	0.88	0.85	0.99	1.00	1.01	0.96	0.99	0.88	under review.
VLLY SPS 230.0 kV	BELLOTA 230KV - SECTION 2E & 2D	P2	Breaker	0.94	0.88	0.85	0.99	0.99	1.01	0.96	0.99	0.88	under review.
VLLY SPS 230.0 kV	VLLY SPS 230KV - RING R4 & R3	P2	Breaker	0.95	0.89	0.86	0.99	1.00	1.01	0.97	0.99	0.89	under review.
VLLY SPS 230.0 kV	RIO OSO-BRIGHTON 230KV [5600] and VALLEY SPRINGS-BELLOTA 230KV [5860]	P6	N-1-1	> 0.9	0.89	0.83	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	0.92	under review.
VLLY SPS 230.0 kV	SALT SPS 11.00KV GEN UNIT 2 and VALLEY SPRINGS-BELLOTA 230KV [5860]	P3	G-1/N-1	> 0.9	> 0.9	0.86	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
VLLY SPS 60.0 kV	VLLY SPS 230KV - RING R1 & R4	P2	Breaker	1.01	0.94	0.72	1.04	1.04	1.04	1.04	1.04	0.94	continue to monitor.
W.SCRMNO 115.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.59	0.56	0.48	1.04	1.03	1.05	1.04	1.05	0.56	Install redundant battery/relay supply
W.SCRMNO 115.0 kV	BRIGHTON 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.85	0.91	0.59	0.99	1.03	1.05	1.01	1.01	0.91	Install redundant battery/relay supply
W.SCRMNO 115.0 kV	STATION DC BATTERY SUPPLY BRIGHTON 230KV BATT	P5	Non-Redundant Battery/Relay	0.85	0.91	0.59	0.99	1.03	1.05	1.01	1.01	0.91	Install redundant battery/relay supply
W.SCRMNO 115.0 kV	STATION DC BATTERY SUPPLY BRIGHTON 115KV BATT	P5	Non-Redundant Battery/Relay	0.91	0.95	0.82	1.00	1.02	1.04	1.01	1.01	0.95	Install redundant battery/relay supply
W.SCRMNO 115.0 kV	RIO OSO 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.99	1.01	0.85	1.04	1.03	1.04	1.03	1.04	1.00	Install redundant battery/relay supply
W.SCRMNO 115.0 kV	BRIGHTN - ME 115KV & BRIGHTN-W.SCRMNO LINE	P2	Breaker	0.91	0.95	0.82	1.00	1.03	1.04	1.01	1.01	0.95	continue to monitor.
W.SCRMNO 115.0 kV	BRIGHTN - ME 115KV & BRIGHTON-DAVIS LINE	P2	Breaker	0.91	0.95	0.82	1.00	1.02	1.04	1.01	1.01	0.95	continue to monitor.
W.SCRMNO 115.0 kV	BRIGHTN - ME 115KV & BRIGHTON-GRAND ISLAND #1 LINE	P2	Breaker	0.91	0.95	0.82	1.00	1.03	1.04	1.01	1.01	0.95	continue to monitor.
W.SCRMNO 115.0 kV	BRIGHTN - ME 115KV & BRIGHTON-GRAND ISLAND #2 LINE	P2	Breaker	0.91	0.95	0.82	1.00	1.03	1.04	1.01	1.01	0.95	continue to monitor.
W.SCRMNO 115.0 kV	BRIGHTN 115KV - SECTION ME & MD	P2	Breaker	0.91	0.95	0.82	1.00	1.03	1.04	1.01	1.01	0.95	continue to monitor.
RIPON 115.0 kV	DONNELLS 13.80KV GEN UNIT 1 and MANTECA-RIPON 115KV [0]	P3	G-1/N-1	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	0.87	> 0.9	> 0.9	under review.
VALLEYHOME 115.0 kV	DONNELLS 13.80KV GEN UNIT 1 and MANTECA-RIPON 115KV [0]	P3	G-1/N-1	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	0.89	> 0.9	> 0.9	under review.
RIPON 115.0 kV	MANTECA 115KV - RING R4 & R5	P2	Breaker	1.01	1.01	1.01	Diverge	1.01	1.01	0.87	Diverge	1.01	under review.
VALLEYHOME 115.0 kV	MANTECA 115KV - RING R4 & R5	P2	Breaker	1.01	1.01	1.01	Diverge	1.02	1.02	0.89	Diverge	1.01	under review.
RIPON 115.0 kV	MANTECA 115KV - RING R6 & R5	P2	Breaker	1.01	1.01	1.01	Diverge	1.01	1.01	0.87	Diverge	1.01	under review.
VALLEYHOME 115.0 kV	MANTECA 115KV - RING R6 & R5	P2	Breaker	1.01	1.01	1.01	Diverge	1.02	1.02	0.88	Diverge	1.01	under review.
RIPON 115.0 kV	MANTECA-RIPON 115KV [0]	P1	N-1	1.01	1.01	1.01	Diverge	1.01	1.01	0.86	Diverge	1.01	under review.
VALLEYHOME 115.0 kV	MANTECA-RIPON 115KV [0]	P1	N-1	1.01	1.01	1.01	Diverge	1.02	1.02	0.88	Diverge	1.01	under review.
RIPON 115.0 kV	MI-WUK-CURTIS 115KV and MANTECA-RIPON 115KV [0]	P6	N-1-1	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	0.86	> 0.9	> 0.9	Sensitivity only.
VALLEYHOME 115.0 kV	MI-WUK-CURTIS 115KV and MANTECA-RIPON 115KV [0]	P6	N-1-1	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	0.88	> 0.9	> 0.9	Sensitivity only.
RIPON 115.0 kV	RIPONICT2-RIPON 115KV [0] NO FAULT	P2	Line Section w/o Fault	1.01	1.01	1.01	Diverge	1.01	1.01	0.86	Diverge	1.01	under review.
VALLEYHOME 115.0 kV	RIPONICT2-RIPON 115KV [0] NO FAULT	P2	Line Section w/o Fault	1.01	1.01	1.01	Diverge	1.02	1.02	0.88	Diverge	1.01	under review.
RIPON 115.0 kV	RIPON-MANTECA 115KV [1062] (RIPONICT2-MANTECA)	P2	Line Section w/o Fault	1.01	1.01	1.01	Diverge	1.01	1.01	0.86	Diverge	1.01	under review.
VALLEYHOME 115.0 kV	RIPON-MANTECA 115KV [1062] (RIPONICT2-MANTECA)	P2	Line Section w/o Fault	1.01	1.01	1.01	Diverge	1.02	1.02	0.88	Diverge	1.01	under review.
MANTECA 115.0 kV	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	0.99	1.02	1.00	0.85	1.01	1.02	Diverge	0.85	1.01	under review.
RIPON 115.0 kV	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	1.01	1.01	1.01	0.85	1.01	1.01	Diverge	0.85	1.01	under review.
SCHULTE 115.0 kV	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	1.01	1.03	1.01	0.85	1.03	1.04	Diverge	0.85	1.03	under review.
TESLA 115.0 kV	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	1.01	1.03	1.01	0.86	1.02	1.03	Diverge	0.86	1.03	under review.
TRACY 115.0 kV	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	0.99	1.01	0.99	0.84	1.01	1.03	Diverge	0.84	1.01	under review.
VALLEYHOME 115.0 kV	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	1.01	1.01	1.01	0.87	1.02	1.02	Diverge	0.87	1.01	under review.
VIERRA 115.0 kV	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	0.99	1.02	1.00	0.84	1.01	1.03	Diverge	0.84	1.02	under review.
LEPRINO 115.0 kV	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	0.99	1.01	0.99	0.84	1.01	1.03	Diverge	0.84	1.01	under review.
LAMMERS 115.0 kV	TESLA D 230KV - SECTION 1D & 2D	P2	Breaker	1.01	1.02	1.01	0.85	1.02	1.03	Diverge	0.85	1.02	under review.
W.SCRMNO 115.0 kV	BRIGHTN 115KV SECTION ME	P2	Bus	0.91	0.95	0.82	1.00	1.03	1.04	1.01	1.01	0.95	continue to monitor.
W.SCRMNO 115.0 kV	BRIGHTON 230/115KV TB 9 and BRIGHTON 230/115KV TB 10	P6	N-1-1	0.87	> 0.9	0.71	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	under review.
W.SCRMNO 115.0 kV	Rio Oso-West Sacramento 115 KV Line & West Sacramento-Brighton 115 KV Line	P7	DCTL	0.93	0.96	0.85	1.03	1.03	1.04	1.02	1.03	0.95	continue to monitor.
WEBER 230.0 kV	TESLA 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.92	0.92	0.87	Diverge	0.97	0.99	Diverge	Diverge	0.92	Install redundant battery/relay supply
WEBER 230.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.93	0.92	0.89	0.99	0.99	1.00	0.96	0.99	0.92	Install redundant battery/relay supply
WEBER 230.0 kV	RIO OSO-BRIGHTON 230KV [5600] and WEBER-TESLA 230KV [5880]	P6	N-1-1	> 0.9	> 0.9	0.88	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
WEBER 230.0 kV	STCKNBIOMASS 13.80KV GEN UNIT 1 and WEBER-TESLA 230KV [5880]	P3	G-1/N-1	> 0.9	> 0.9	0.88	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
WEBER 230.0 kV	TESLA E 230KV - SECTION 2E & 1E	P2	Breaker	0.92	0.92	0.88	0.98	0.98	0.99	0.94	0.98	0.92	continue to monitor.
VLLY SPS 230.0 kV	Base Case	P0	Base Case	0.97	0.95	0.94	1.00	1.01	1.01	0.98	1.00	0.95	continue to monitor.
WEBER 230.0 kV	WEBER-TESLA 230KV [5880] & French CAMP-TESLA #2 230KV [4370]	P7	DCTL	NA	0.92	0.89	NA	0.98	0.99	NA	NA	0.92	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 Spring Off-Peak	2036 Summer-Off Peak	2036 Winter Off Peak	2028 SP Heavy Renewable & Min Gas Gen	2028 OP Sensitivity	2031 SP High CEC Forecast	
WEIMAR 60.0 kV	GOLD HILL 230-115-60KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.96	0.97	0.87	0.98	0.99	0.99	0.98	0.98	0.97	Install redundant battery/relay supply
WEIMAR 60.0 kV	STUCK BREAKER & NO BF RELAY GOLD HILL 115KV CB 172 OR 392	P5	Non-Redundant Battery/Relay	0.96	0.97	0.88	0.98	0.99	0.99	0.98	0.98	0.97	Install redundant battery/relay supply
WEIMAR 60.0 kV	GOLD HILL 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.96	0.97	0.88	0.98	0.99	0.99	0.98	0.98	0.97	Install redundant battery/relay supply
PLACER 115.0 kV	Placer-Gold Hill No. 1 115 KV Line and Placer-Gold Hill No. 2 115 KV Line	P7	DCTL	0.86	0.92	0.54	0.96	1.01	1.01	0.97	0.96	0.91	under review.
PLACER 60.0 kV	Placer-Gold Hill No. 1 115 KV Line and Placer-Gold Hill No. 2 115 KV Line	P7	DCTL	0.91	0.99	0.54	1.02	1.02	1.02	1.02	1.02	0.98	continue to monitor.
WEIMAR 60.0 kV	Placer-Gold Hill No. 1 115 KV Line and Placer-Gold Hill No. 2 115 KV Line	P7	DCTL	0.96	0.97	0.87	0.98	0.99	0.99	0.98	0.98	0.97	continue to monitor.
WOODLAND 115.0 kV	RIO OSO 230-115KV BATT(FAILURE OF NON-REDUNDANT BATT)	P5	Non-Redundant Battery/Relay	0.49	0.48	0.39	1.00	1.01	1.04	1.00	1.01	0.47	Install redundant battery/relay supply
WOODLAND 115.0 kV	BRIGHTON 230KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.90	0.94	0.70	0.99	1.03	1.04	1.01	1.00	0.94	Install redundant battery/relay supply
WEBER 230.0 kV	Base Case	P0	Base Case	0.96	0.96	0.94	1.00	0.99	1.00	0.96	1.00	0.96	continue to monitor.
WOODLAND 115.0 kV	STATION DC BATTERY SUPPLY BRIGHTON 230KV BATT	P5	Non-Redundant Battery/Relay	0.90	0.94	0.70	0.99	1.03	1.04	1.01	1.00	0.94	Install redundant battery/relay supply
WOODLAND 115.0 kV	STATION DC BATTERY SUPPLY BRIGHTON 115KV BATT	P5	Non-Redundant Battery/Relay	0.94	0.96	0.87	1.00	1.03	1.04	1.01	1.01	0.96	Install redundant battery/relay supply
WOODLAND 115.0 kV	RIO OSO 115 KV BUS (FAILURE OF NON-REDUNDANT RELAY)	P5	Non-Redundant Battery/Relay	0.92	0.94	0.75	1.00	1.01	1.03	0.99	1.00	0.93	Install redundant battery/relay supply
WOODLAND 115.0 kV	STATION DC BATTERY SUPPLY ZAMORA 115KV BATT	P5	Non-Redundant Battery/Relay	0.93	0.95	0.85	0.99	1.02	1.03	0.98	1.00	0.94	Install redundant battery/relay supply
WOODLAND 115.0 kV	BRIGHTN - ME 115KV & BRIGHTN-W.SCRMNO LINE	P2	Breaker	0.94	0.96	0.87	1.00	1.03	1.04	1.01	1.01	0.96	continue to monitor.
WOODLAND 115.0 kV	BRIGHTN - ME 115KV & BRIGHTON-DAVIS LINE	P2	Breaker	0.94	0.96	0.87	1.00	1.03	1.04	1.01	1.01	0.96	continue to monitor.
WOODLAND 115.0 kV	BRIGHTN - ME 115KV & BRIGHTON-GRAND ISLAND #1 LINE	P2	Breaker	0.94	0.96	0.87	1.00	1.03	1.04	1.01	1.01	0.96	continue to monitor.
WOODLAND 115.0 kV	BRIGHTN - ME 115KV & BRIGHTON-GRAND ISLAND #2 LINE	P2	Breaker	0.94	0.96	0.87	1.00	1.03	1.04	1.01	1.01	0.96	continue to monitor.
WOODLAND 115.0 kV	BRIGHTN 115KV - SECTION ME & MD	P2	Breaker	0.94	0.96	0.87	1.00	1.03	1.04	1.01	1.01	0.96	continue to monitor.
WOODLAND 115.0 kV	BRIGHTN 115KV SECTION ME	P2	Bus	0.94	0.96	0.87	1.00	1.03	1.04	1.01	1.01	0.96	continue to monitor.
WOODLAND 115.0 kV	RIO OSO-BRIGHTON 230KV [5600] and LOCKFORD-BRIGHTON 230KV [0]	P6	N-1-1	> 0.9	> 0.9	0.78	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	> 0.9	continue to monitor.
WOODLAND 115.0 kV	Rio Oso-Woodland #1 115 KV Line & Rio Oso-Woodland #2 115 KV Line	P7	DCTL	0.93	0.95	0.85	0.99	1.02	1.03	0.98	1.00	0.94	continue to monitor.
WOODLAND 115.0 kV	Rio Oso-Woodland No. 1 115 KV Line & Rio Oso-Woodland No. 2 115 KV Line	P7	DCTL	0.93	0.95	0.85	0.99	1.02	1.03	0.98	1.00	0.94	continue to monitor.



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 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	
RIPON 115.0 kV	MANTECA-RIPON 115KV [0]	P1	N-1	< 8	< 8	< 8	Diverge	< 8	< 8	13	Diverge	< 8	Under review.
VALLEYHOME 115.0 kV	MANTECA-RIPON 115KV [0]	P1	N-1	< 8	< 8	< 8	Diverge	< 8	< 8	12	Diverge	< 8	Under review.
MSHR 60V 60.0 kV	HAMMER-COUNTRY CLUB 60KV	P1	N-1	NA	< 8	9	NA	< 8	< 8	NA	NA	8	Continue to monitor
SMRTSVLE 60.0 kV	NARRWS 2 60/13.8KV TB 1	P1	N-1	12	NA	< 8	< 8	< 8	< 8	< 8	< 8	NA	Project:East Marysville project
SMRTSVLE 60.0 kV	NARROWSPH2 13.80KV GEN UNIT 1	P1	N-1	12	NA	< 8	< 8	< 8	< 8	< 8	< 8	NA	Project:East Marysville project
CARBONA 60.0 kV	KASSON 115/60KV TB 1	P1	N-1	< 8	10	8	Diverge	< 8	< 8	Diverge	Diverge	11	Under review.
LODI 60.0 kV	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	42	18	< 8	< 8	< 8	< 8	< 8	< 8	22	project: Lockeford-Lodi Area 230 kV Development
LOCKEFRD 60.0 kV	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	39	17	< 8	< 8	< 8	< 8	< 8	< 8	21	project: Lockeford-Lodi Area 230 kV Development
LOCKFORD 230.0 kV	LOCKEFORD-BELLOTA 230KV [4990]	P1	N-1	34	17	< 8	< 8	< 8	< 8	9	< 8	20	project: Lockeford-Lodi Area 230 kV Development

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	
P1-2_8MI-LODI-230-1	P1	N-1	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	No Issues	Under review
P1-2_CTL-MEL-230-1	P1	N-1	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	No Issues	Under review
P1-2_TBM-RIO-230-1	P1	N-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	No Issues	No Issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P1-3_TES_500-230-2	P1	N-1	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	Under review
P1-3_TES_500-230-6	P1	N-1	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	Under review
P1-4_BEL-230-r	P1	N-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	No Issues	No Issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P2-2_BEL-230-1E	P2	Bus/Breaker	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	No Issues	No Issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P2-4_BEL-230-CB-400	P2	Bus/Breaker	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	Under review
P2-4_TES-230-CB-202	P2	Bus/Breaker	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	Under review
P2-4_BEL-230-CB-400	P2	Bus/Breaker	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	No Issues	Under review
P3-4 - Gen GWFFTRACY (3 units) and RIO OSO 230 kV SVC id v	P3	N-1/G-1	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	Under review
P3-3 - Gen HIGHWINDS 0.69 kV unit 1 and Tran TESLA 500/230 kV bk 2	P3	N-1/G-1	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	Under review
P3-4_GWFT_1-3_RIO_v	P3	N-1/G-1	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	Under review
P4-4 - Stuck Breaker 492 protecting SVD VACA-DIX 230 kV id v	P4	Stuck Breaker	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	Under review
P5-4 - Failure of non-redundant relay protecting RIO OSO 230 kV SVC id v	P5	Non-Redundant Battery/Relay	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	No Issues	Install redundant relay
P5-4 - Failure of non-redundant relay protecting RIO OSO 230 kV SVC id v	P5	Non-Redundant Battery/Relay	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	No Issues	Install redundant relay
P5-4d_DC_GHL-115-v_GHL-115-CB-392f	P5	Non-Redundant Battery/Relay	Potential WECC/NERC criteria violation	No Issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	No Issues	Install redundant battery
P5-3d_DC_RIO_230-115-1_RIO-230-CB-272f	P5	Non-Redundant Battery/Relay	No Issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	No Issues	Potential WECC/NERC criteria violation	Install redundant battery
P5-5a_RLY_TES-230	P5	Non-Redundant Battery/Relay	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	No Issues	No Issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Install redundant relay
P5-5c_DC_BEL-230	P5	Non-Redundant Battery/Relay	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	No Issues	Install redundant battery
P5-5_DC_RIO-230	P5	Non-Redundant Battery/Relay	No Issues	No Issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	No Issues	No Issues	continue to monitor
P6-1_LKF-BEL-230-1_RIO-LKF-230-1	P6	N-1/N-1	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	Under review
P6-2_BEL-230-115-2_BEL-230-115-1	P6	N-1/N-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	No Issues	No Issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6-2_BEL-230-115-2_BEL-230-115-1_wRAS	P6	N-1/N-1	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	Under review
P6-3_RIO_v_LKF-BEL-230-1	P6	N-1/N-1	No Issues	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	Under review
P7-1_HSR-F_RIO-BRI-230-1_RIO-LKF-230-1	P7	DCTL	Potential WECC/NERC criteria violation	No Issues	No Issues	No Issues	Potential WECC/NERC criteria violation	No Issues	Under review

Single Contingency Load Drop

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	2036 Winter Off-Peak	2041 Greater Bay area Summer 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	2036 Winter Off-Peak	2041 Greater Bay area Summer 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