



Overloaded Facility	Contingency (All and Worst P6)	Contingency Category	Category Description	Loading % (Baseline Scenarios)							Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2024 Summer Peak	2027 Summer Peak	2032 Summer Peak	2024 Spring Off-Peak	2027 Spring Off-Peak	2032 Spring Off-Peak	2032 Winter Off-Peak	2024 Spring Off-Peak COI	2024 SP Heavy Renewable & Min Gas Gen	2027 SP High CEC Forecast	
AMES BS1 115.0 - WHISMAN 115.0 - 1	TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	<95%	<95%	102%	<95%	<95%	115%	<95%	<95%	<95%	<95%	Redispatch San Jose generation after first contingency
AMES BS2 115.0 - MT VIEW 115.0 - 1	TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	<95%	<95%	107%	<95%	<95%	113%	<95%	<95%	<95%	<95%	Redispatch San Jose generation after first contingency
ARCO 230.0 - MIDWAY-E 230.0 - 1	GATES-DIABLOCNYNSS #1 500KV LINE & GATES-MIDWAY #1 500	P6	L-1/L-1	<95%	<95%	<95%	120%	<95%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
ATLANTC 230.0 - GOLDHILL 230.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/T-1	<95%	<95%	<95%	<95%	98%	114%	<95%	<95%	<95%	<95%	Open line to prevent loop on 230kV circuit
BELLOTA 230.0 - COTTLE 230.0 - 1	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	126%	<95%	<95%	<95%	<95%	Generation redispatch
BELLOTA 230.0 - WEBER 230.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/T-1	<95%	<95%	<95%	<95%	105%	<95%	<95%	<95%	<95%	<95%	Open line to prevent loop on 230kV circuit
BELRDG J 115.0 - MIDWAY 115.0 - 1	GATES-MIDWAY #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	108%	<95%	Sensitivity only
BELRDG J 115.0 - MIDWAY 115.0 - 1	GATESBK11JCT #11 500/230KV TRANSFORMER	P1	L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	108%	<95%	Sensitivity only
BELRDG J 115.0 - MIDWAY 115.0 - 1	GATES F #12 500/230KV TRANSFORMER	P1	L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	108%	<95%	Sensitivity only
BELRDG J 115.0 - MIDWAY 115.0 - 1	LOSBANOS-GATES #1 500KV LINE & GATES-MIDWAY #1 500KV LIN	P2	BRK	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	110%	<95%	Sensitivity only
BELRDG J 115.0 - MIDWAY 115.0 - 1	DIABLOCNYNSS GENERATOR & GATES-MIDWAY #1 500KV LINE	P3	G-1/L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	108%	<95%	Sensitivity only
BELRDG J 115.0 - MIDWAY 115.0 - 1	DIABLOCNYNSS GENERATOR & GATESBK11JCT #11 500/230KV TRAN	P3	G-1/L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	108%	<95%	Sensitivity only
BELRDG J 115.0 - MIDWAY 115.0 - 1	DIABLOCNYNSS GENERATOR & GATES F #12 500/230KV TRANSFORM	P3	G-1/L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	108%	<95%	Sensitivity only
BELRDG J 115.0 - MIDWAY 115.0 - 1	GATES 500/230KV & MIDWAY 11 500/230KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	104%	<95%	Sensitivity only
BRIGHTON 230.0 - BELLOTA 230.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/T-1	<95%	<95%	<95%	<95%	109%	<95%	<95%	<95%	<95%	<95%	Open line to prevent loop on 230kV circuit
BRIGHTON 230.0 - LOCKJ1 230.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	130%	<95%	<95%	<95%	<95%	Generation redispatch
CALFLATSSS 230.0 - GATES D 230.0 - 1	GATES-MIDWAY #1 500KV LINE & MIDWAY-VINCENT #1 500KV L	P6	L-1/L-1	<95%	<95%	<95%	<95%	103%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
CARRIZO 115.0 - SN LS OB 115.0 - 1	GATES-DIABLOCNYNSS #1 500KV LINE & GATES-MIDWAY #1 500	P6	L-1/L-1	<95%	<95%	<95%	103%	<95%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
CASTROVL 230.0 - NEWARK E 230.0 - 1	TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	<95%	<95%	100%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	Redispatch San Jose generation after first contingency
CAYETANO 230.0 - NDUBLIN 230.0 - 1	TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	97%	96%	105%	<95%	<95%	<95%	<95%	<95%	<95%	99%	Mitigation in local area
CAYETANO 230.0 - USWP-JRW 230.0 - 1	TESLA-METCALF #1 500KV LINE & METCALF-MOSSLAND #1 500K	P6	L-1/L-1	104%	102%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	104%	Mitigation in local area
CHCGO PK 115.0 - HIGGINS 115.0 - 1	TABLE MTN-VACA-DIX #1 500KV LINE & TABLE MTN-RM_DRS #1	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	100%	Sensitivity only
COBURN 230.0 - LASAGUILASS 230.0 - 1	TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	106%	<95%	<95%	<95%	<95%	Generation redispatch
COPCO 115.0 - HART SS 115.0 - 1	OLINDA-CAPTJACK #1 500KV LINE	P1	L-1	98%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	100%	<95%	Sensitivity only
COPCO 115.0 - HART SS 115.0 - 1	DIABLOCNYNSS GENERATOR & OLINDA-CAPTJACK #1 500KV LINE	P3	G-1/L-1	98%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	100%	<95%	Sensitivity only
COPCO 115.0 - HART SS 115.0 - 1	OLINDA-CAPTJACK #1 500KV LINE & OLINDA 500KV SHUNT	P6	L-1/L-1	98%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	100%	<95%	Sensitivity only
DELEVAN 230.0 - CORTINA 230.0 - 1	OLINDA-TRACY #1 500KV LINE	P1	L-1	108%	96%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	109%	Project: Delevan-Cortina reconductor
DELEVAN 230.0 - CORTINA 230.0 - 1	TABLE MTN-VACA-DIX #1 500KV LINE	P1	L-1	97%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	109%	Project: Delevan-Cortina reconductor
DELEVAN 230.0 - CORTINA 230.0 - 1	DIABLOCNYNSS GENERATOR & OLINDA-TRACY #1 500KV LINE	P3	G-1/L-1	108%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	Project: Delevan-Cortina reconductor
DELEVAN 230.0 - CORTINA 230.0 - 1	OLINDA-TRACY #1 500KV LINE & TRACY 500KV SHUNT	P6	L-1/L-1	109%	97%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	110%	Project: Delevan-Cortina reconductor
EIGHT MI 230.0 - TESLA E 230.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/L-1	<95%	<95%	<95%	<95%	110%	141%	<95%	<95%	<95%	<95%	Generation redispatch
GATES 500.0 - GT_MW_11 500.0 - 1	LOSBANOS-MIDWAY #1 500KV LINE	P1	L-1	<95%	<95%	<95%	101%	106%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
GATES 500.0 - GT_MW_11 500.0 - 1	LOSBANOS-MIDWAY #1 500KV LINE & LOSBANOS #1 500/230KV BA	P2	L-1/T-1	<95%	<95%	<95%	101%	106%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
GATES 500.0 - GT_MW_11 500.0 - 1	LOSBANOS-MIDWAY #1 500KV LINE & MIDWAY-VINCENT #1 500KV	P2	L-1/L-1	<95%	<95%	<95%	101%	106%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
GATES 500.0 - GT_MW_11 500.0 - 1	DIABLOCNYNSS GENERATOR & LOSBANOS-MIDWAY #1 500KV LINE	P3	G-1/L-1	<95%	<95%	<95%	101%	<95%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
GATES 500.0 - GT_MW_11 500.0 - 1	MOSSLAND-LOSBANOS #1 500KV LINE & LOSBANOS-MIDWAY #1 5	P6	L-1/L-1	<95%	<95%	<95%	100%	<95%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
GATES 500.0 - LB_GT_11 500.0 - 1	LOSBANOS-GATES #3 500KV LINE & LOSBANOS-MIDWAY #1 500K	P6	L-1/L-1	<95%	<95%	<95%	110%	<95%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
GATES F 230.0 - ARCO 230.0 - 1	LOSBANOS-MIDWAY #1 500KV LINE & DIABLOCNYNSS-MIDWAY #3	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	115%	<95%	<95%	<95%	<95%	Generation redispatch
GATES F 230.0 - MIDWAY-F 230.0 - 1	LOSBANOS-MIDWAY #1 500KV LINE & DIABLOCNYNSS-MIDWAY #3	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	126%	<95%	<95%	<95%	<95%	Generation redispatch
GOLDHILL 230.0 - EIGHT MI 230.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/T-1	<95%	<95%	<95%	<95%	110%	116%	<95%	<95%	<95%	<95%	Generation redispatch
GOLDHILL 230.0 - LAKE 230.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	120%	<95%	<95%	<95%	<95%	Generation redispatch



Overloaded Facility	Contingency (All and Worst P6)	Contingency Category	Category Description	Loading % (Baseline Scenarios)							Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2024 Summer Peak	2027 Summer Peak	2032 Summer Peak	2024 Spring Off-Peak	2027 Spring Off-Peak	2032 Spring Off-Peak	2032 Winter Off-Peak	2024 Spring Off-Peak COI	2024 SP Heavy Renewable & Min Gas Gen	2027 SP High CEC Forecast	
GOLDHILL 230.0 - LODI 230.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/T-1	<95%	<95%	<95%	<95%	110%	117%	<95%	<95%	<95%	<95%	Generation redispatch
LB_MW_11 500.0 - LB_MW_12 500.0 - 1	GATES-DIABLOCNYNSS #1 500KV LINE & GATES-MIDWAY #1 500	P6	L-1/L-1	<95%	<95%	<95%	109%	<95%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
LB_MW_11 500.0 - LB_MW_12 500.0 - 2	LOSBANOS-GATES #3 500KV LINE & GATES-MIDWAY #1 500KV L	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	103%	<95%	<95%	<95%	<95%	Generation redispatch
LB_MW_12 500.0 - LB_MW_13 500.0 - 1	GATES-DIABLOCNYNSS #1 500KV LINE & GATES-MIDWAY #1 500	P6	L-1/L-1	<95%	<95%	<95%	109%	<95%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
LB_MW_12 500.0 - LB_MW_13 500.0 - 2	LOSBANOS-GATES #3 500KV LINE & GATES-MIDWAY #1 500KV L	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	103%	<95%	<95%	<95%	<95%	Generation redispatch
LOCKJ1 230.0 - LOCKFORD 230.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	113%	<95%	<95%	<95%	<95%	Generation redispatch
LONETREE 230.0 - USWP-JRW 230.0 - 1	TESLA-METCALF #1 500KV LINE & METCALF-MOSSLAND #1 500K	P6	L-1/L-1	102%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	Operating solution
LOSBANOS 230.0 - DS AMIGO 230.0 - 1	LOSBANOS-GATES #3 500KV LINE & GATES-DIABLOCNYNSS #1 5	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	143%	<95%	<95%	<95%	<95%	Generation redispatch
LOSBANOS 230.0 - PANOCH 230.0 - 2	LOSBANOS-GATES #3 500KV LINE & GATES-DIABLOCNYNSS #1 5	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	159%	<95%	<95%	<95%	<95%	Generation redispatch
LOSBANOS 500.0 - LB_GT_11 500.0 - 1	LOSBANOS-GATES #3 500KV LINE & LOSBANOS-MIDWAY #1 500K	P6	L-1/L-1	<95%	<95%	<95%	110%	<95%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
LOSBANOS 500.0 - LB_MN_11 500.0 - 1	GATES-DIABLOCNYNSS #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	117%	<95%	<95%	<95%	<95%	Generation redispatch
LOSBANOS 500.0 - LB_MN_11 500.0 - 1	LOSBANOS-GATES #3 500KV LINE & LOSBANOS-GATES #1 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	152%	<95%	<95%	<95%	<95%	Generation redispatch
LOSBANOS 500.0 - LB_MN_21 500.0 - 2	LOSBANOS-MIDWAY #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	117%	<95%	<95%	<95%	<95%	Generation redispatch
LOSBANOS 500.0 - LB_MN_21 500.0 - 2	LOSBANOS-GATES #1 500KV LINE & LOSBANOS-MIDWAY #1 500K	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	152%	<95%	<95%	<95%	<95%	Generation redispatch
LOSBANOS 500.0 - LB_MW_11 500.0 - 1	LOSBANOS-GATES #1 500KV LINE & GATES-MIDWAY #1 500KV LIN	P2	BRK	<95%	<95%	<95%	<95%	102%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
LOSBANOS 500.0 - LB_MW_11 500.0 - 1	LOSBANOS-GATES #3 500KV LINE & LOSBANOS-GATES #1 500KV	P6	L-1/L-1	<95%	<95%	<95%	103%	<95%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
LS PSTAS 230.0 - NEWARK D 230.0 - 1	TESLA-METCALF #1 500KV LINE & METCALF-MOSSLAND #1 500K	P6	L-1/L-1	106%	98%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	98%	Operating solution
MANNING 500.0 - LB_MN_11 500.0 - 1	GATES-DIABLOCNYNSS #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	104%	<95%	<95%	<95%	<95%	Generation redispatch
MANNING 500.0 - LB_MN_11 500.0 - 1	LOSBANOS-GATES #3 500KV LINE & LOSBANOS-GATES #1 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	135%	<95%	<95%	<95%	<95%	Generation redispatch
MANNING 500.0 - LB_MN_21 500.0 - 1	LOSBANOS-MIDWAY #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	104%	<95%	<95%	<95%	<95%	Generation redispatch
MANNING 500.0 - LB_MN_21 500.0 - 1	LOSBANOS-GATES #1 500KV LINE & LOSBANOS-MIDWAY #1 500K	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	135%	<95%	<95%	<95%	<95%	Generation redispatch
MANNING 500.0 - LB_MW_11 500.0 - 2	LOSBANOS-GATES #3 500KV LINE & GATES-MIDWAY #1 500KV L	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	116%	<95%	<95%	<95%	<95%	Generation redispatch
MANTECA 115.0 - VIERRA 115.0 - 1	TESLA-LOSBANOS #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	102%	<95%	<95%	<95%	<95%	Mitigation in local area
MANTECA 115.0 - VIERRA 115.0 - 1	TRACY-LOSBANOS #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	101%	<95%	<95%	<95%	<95%	Mitigation in local area
MANTECA 115.0 - VIERRA 115.0 - 1	LOSBANOS-GATES #3 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	100%	<95%	<95%	<95%	<95%	Mitigation in local area
MANTECA 115.0 - VIERRA 115.0 - 1	TESLA E #2 500/230KV TRANSFORMER	P1	L-1	<95%	<95%	<95%	<95%	<95%	100%	<95%	<95%	<95%	<95%	Mitigation in local area
MANTECA 115.0 - VIERRA 115.0 - 1	TABLE MTN D #5 500/230KV TRANSFORMER	P1	L-1	<95%	<95%	<95%	<95%	<95%	100%	<95%	<95%	<95%	<95%	Mitigation in local area
MANTECA 115.0 - VIERRA 115.0 - 1	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #1 500KV L	P2	BRK	<95%	<95%	<95%	<95%	<95%	102%	<95%	<95%	<95%	<95%	Mitigation in local area
MANTECA 115.0 - VIERRA 115.0 - 1	VACA-DIX-TESLA #1 500KV LINE & TESLA-LOSBANOS #1 500KV L	P2	BRK	<95%	<95%	<95%	<95%	<95%	101%	<95%	<95%	<95%	<95%	Mitigation in local area
MANTECA 115.0 - VIERRA 115.0 - 1	MOSSLAND-LOSBANOS #1 500KV LINE & MOSSLAND #9 500/230KV	P2	BRK	<95%	<95%	<95%	<95%	<95%	101%	<95%	<95%	<95%	<95%	Mitigation in local area
MANTECA 115.0 - VIERRA 115.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	116%	<95%	<95%	<95%	<95%	Mitigation in local area
MELONES 230.0 - COTTLE 230.0 - 1	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	122%	<95%	<95%	<95%	<95%	Mitigation in local area
MENDOTA 115.0 - PANOCHET 115.0 - 1	LOSBANOS-MIDWAY #1 500KV LINE & DIABLOCNYNSS-MIDWAY #3	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	111%	<95%	<95%	<95%	<95%	Mitigation in local area
METCALF 500.0 - METCALF 230.0 - 13	METCALF #11 & #12 500/230KV BANK	P6	L-1/T-1	125%	<95%	<95%	119%	<95%	<95%	<95%	112%	135%	<95%	Generation redispatch
MIDWAY 500.0 - GT_MW_11 500.0 - 1	GATES-MIDWAY #1 500KV LINE & MIDWAY-WIRLWIND #3 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	103%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
MIDWAY 500.0 - LB_MW_13 500.0 - 1	LOSBANOS-GATES #1 500KV LINE & GATES-MIDWAY #1 500KV LIN	P2	BRK	<95%	<95%	<95%	<95%	103%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
MIDWAY 500.0 - LB_MW_13 500.0 - 1	LOSBANOS-GATES #3 500KV LINE & LOSBANOS-GATES #1 500KV	P6	L-1/L-1	<95%	<95%	<95%	104%	<95%	<95%	<95%	<95%	<95%	<95%	Generation redispatch



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				2024 Summer Peak	2027 Summer Peak	2032 Summer Peak	2024 Spring Off-Peak	2027 Spring Off-Peak	2032 Spring Off-Peak	2032 Winter Off-Peak	2024 Spring Off-Peak COI	2024 SP Heavy Renewable & Min Gas Gen	2027 SP High CEC Forecast	
MIDWAY 500.0 - LB_MW_13 500.0 - 2	LOSBANOS-GATES #3 500KV LINE & GATES-MIDWAY #1 500KV L	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	118%	<95%	<95%	<95%	<95%	Generation redispatch
MN_RM_11 500.0 - MN_RM_12 500.0 - 1	ROUND MT-MALIN #2 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	107%	<95%	<95%	Sensitivity only
MN_RM_11 500.0 - MN_RM_12 500.0 - 1	ROUND MT-MALIN #2 500KV LINE & ROUND MT #1 500/230KV BAN	P2	BRK	<95%	<95%	<95%	<95%	<95%	<95%	<95%	113%	<95%	<95%	Sensitivity only
MN_RM_11 500.0 - MN_RM_12 500.0 - 1	DIABLOCNYNSS GENERATOR & ROUND MT-MALIN #2 500KV LINE	P3	G-1/L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	107%	<95%	<95%	Sensitivity only
MN_RM_11 500.0 - MN_RM_12 500.0 - 1	ROUND MT-MALIN #2 500KV LINE & ROUND MT #1 500/230KV B	P6	L-1/T-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	113%	<95%	<95%	Sensitivity only
MORAGA 230.0 - CASTROVL 230.0 - 1	TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	<95%	<95%	109%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	Mitigation in local area
MOSSLAND 500.0 - LOSBANOS 500.0 - 1	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	119%	<95%	<95%	<95%	<95%	Generation redispatch
MOSSLNSW 230.0 - LASAGLSRCTR 230.0 - 1	MOSSLAND-LOSBANOS #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	107%	<95%	<95%	<95%	<95%	<95%	Mitigation in local area
MOSSLNSW 230.0 - LASAGLSRCTR 230.0 - 1	LOSBANOS-GATES #3 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	122%	<95%	<95%	<95%	<95%	Mitigation in local area
MOSSLNSW 230.0 - LASAGLSRCTR 230.0 - 1	MOSSLAND-LOSBANOS #1 500KV LINE & MOSSLAND #9 500/230KV	P2	L-1/T-1	<95%	<95%	<95%	<95%	106%	112%	<95%	<95%	<95%	<95%	Mitigation in local area
MOSSLNSW 230.0 - LASAGLSRCTR 230.0 - 1	TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	<95%	<95%	103%	<95%	<95%	176%	<95%	<95%	<95%	<95%	Mitigation in local area
MOSSLNSW 230.0 - LASAGUILASS 230.0 - 2	TESLA-LOSBANOS #1 500KV LINE & MOSSLAND-LOSBANOS #1 50	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	101%	<95%	Sensitivity only
MTCALF E 115.0 - PIERCY 115.0 - 1	OLINDA-CAPTJACK #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	123%	Mitigation in local area
MTCALF E 115.0 - PIERCY 115.0 - 1	ROUND MT-MALIN #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	123%	Mitigation in local area
MTCALF E 115.0 - PIERCY 115.0 - 1	TESLA D #4 500/230KV TRANSFORMER	P1	L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	123%	Mitigation in local area
MTCALF E 115.0 - PIERCY 115.0 - 1	OLINDA 500KV SHUNT	P1	L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	123%	Mitigation in local area
MTCALF E 115.0 - PIERCY 115.0 - 1	METCALF #13 500/230KV TRANSFORMER	P1	L-1	<95%	112%	<95%	<95%	96%	<95%	<95%	<95%	<95%	130%	Mitigation in local area
MTCALF E 115.0 - PIERCY 115.0 - 1	METCALF #11 500/230KV TRANSFORMER	P1	L-1	<95%	109%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	125%	Mitigation in local area
MTCALF E 115.0 - PIERCY 115.0 - 1	METCALF #12 500/230KV TRANSFORMER	P1	L-1	<95%	107%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	123%	Mitigation in local area
MTCALF E 115.0 - PIERCY 115.0 - 1	MIDWAY-VINCENT #1 500KV LINE	P1	L-1	<95%	107%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	Mitigation in local area
MTCALF E 115.0 - PIERCY 115.0 - 1	TESLA C #6 500/230KV TRANSFORMER	P1	L-1	101%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	123%	Mitigation in local area
MTCALF E 115.0 - PIERCY 115.0 - 1	TABLE MTN-VACA-DIX #1 500KV LINE	P1	L-1	97%	108%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	125%	Mitigation in local area
MTCALF E 115.0 - PIERCY 115.0 - 1	DIABLOCNYNSS GENERATOR & TESLA C #6 500/230KV TRANSFORME	P3	G-1/L-1	101%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	Mitigation in local area
MTCALF E 115.0 - PIERCY 115.0 - 1	TESLA 500/230KV & TRACY 500/230KV	P6	L-1/L-1	99%	110%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	126%	Mitigation in local area
MW_WRLWND_32 500.0 - WIRLWIND 500.0 - 3	MIDWAY-VINCENT #2 500KV LINE & MIDWAY-WIRLWIND #3 500K	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	104%	<95%	<95%	<95%	<95%	Refer to SCE bulk results
NEWARK E 230.0 - NWK DIST 230.0 - 1	TESLA-METCALF #1 500KV LINE & METCALF-MOSSLAND #1 500K	P6	L-1/L-1	113%	101%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	105%	Operating solution. Project: San Jose area HVDC
NEWARK E 230.0 - PPASSJCT 230.0 - 2	TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	<95%	<95%	109%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	Continue to monitor
NRS 400 115.0 - NRS 230.0 - 1	TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	<95%	<95%	98%	<95%	<95%	107%	<95%	<95%	<95%	<95%	Mitigation in local area
NWK DIST 230.0 - LS ESTRS 230.0 - 1	TESLA-METCALF #1 500KV LINE & METCALF-MOSSLAND #1 500K	P6	L-1/L-1	111%	97%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	100%	Operating solution. Project: San Jose area HVDC
PANOCH 230.0 - GATES E 230.0 - 1	MANNING-GATES #1 500KV LINE & MANNING-MIDWAY #2 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	173%	<95%	<95%	<95%	<95%	Generation redispatch
PANOCH 230.0 - GATES E 230.0 - 2	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #1 500KV L	P2	BRK	<95%	<95%	<95%	<95%	105%	<95%	<95%	<95%	<95%	<95%	Generation redispatch
PANOCH 230.0 - GATES E 230.0 - 2	MANNING-GATES #1 500KV LINE & MANNING-MIDWAY #2 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	184%	<95%	<95%	<95%	<95%	Generation redispatch
PANOCH 230.0 - LASAGUILASS 230.0 - 1	TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	113%	<95%	<95%	<95%	<95%	Generation redispatch
PANOCH 230.0 - LASAGUILASS 230.0 - 2	TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	113%	<95%	<95%	<95%	<95%	Generation redispatch
PANOCH1 115.0 - PANOCHET 115.0 - 1	LOSBANOS-MIDWAY #1 500KV LINE & DIABLOCNYNSS-MIDWAY #3	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	111%	<95%	<95%	<95%	<95%	Generation redispatch
PITSBG E 230.0 - SANMATEO 230.0 - 1	TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	<95%	<95%	103%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	Continue to monitor
QUINTO_SS 230.0 - LOSBANOS 230.0 - 1	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	146%	<95%	<95%	<95%	<95%	Generation redispatch
QUINTO_SS 230.0 - Q1244SS 230.0 - 1	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	155%	<95%	<95%	<95%	<95%	Generation redispatch
RD MT 1M 500.0 - ROUND MT 230.0 - 1	TABLE MTN-RM_DRS #1 500KV LINE & TABLE MTN-RM_DRS #2 5	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	112%	<95%	<95%	<95%	<95%	Reduce area generation
RIO OSO 115.0 - BRNSWKCP 115.0 - 2	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	113%	<95%	<95%	<95%	<95%	Generation redispatch
RIO OSO 115.0 - BRNSWKTP 115.0 - 1	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	114%	<95%	<95%	<95%	<95%	Generation redispatch



Overloaded Facility	Contingency (All and Worst P6)	Contingency Category	Category Description	Loading % (Baseline Scenarios)							Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2024 Summer Peak	2027 Summer Peak	2032 Summer Peak	2024 Spring Off-Peak	2027 Spring Off-Peak	2032 Spring Off-Peak	2032 Winter Off-Peak	2024 Spring Off-Peak COI	2024 SP Heavy Renewable & Min Gas Gen	2027 SP High CEC Forecast	
RIO OSO 230.0 - LOCKFORD 230.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/T-1	<95%	<95%	<95%	<95%	100%	122%	<95%	<95%	<95%	<95%	Open line to prevent loop on 230kV circuit
RM_TM_11 500.0 - RM_DRS 500.0 - 1	ROUND MT-RM_DRS #2 500KV LINE	P1	L-1	116%	109%	116%	<95%	<95%	<95%	<95%	140%	111%	117%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_11 500.0 - RM_DRS 500.0 - 1	DIABLOCNYNSS GENERATOR & ROUND MT-RM_DRS #2 500KV LINE	P3	G-1/L-1	116%	<95%	<95%	<95%	<95%	<95%	<95%	140%	111%	<95%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_11 500.0 - RM_DRS 500.0 - 1	ROUND MT-RM_DRS #2 500KV LINE & RM_DRS #1 500/230KV BA	P6	L-1/T-1	117%	109%	<95%	<95%	<95%	<95%	<95%	141%	111%	117%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_12 500.0 - RM_DRS 500.0 - 1	MIDWAY-VINCENT #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	129%	<95%	<95%	Sensitivity only
RM_TM_12 500.0 - RM_DRS 500.0 - 1	TABLE MTN-RM_DRS #2 500KV LINE	P1	N/A	<95%	<95%	107%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_12 500.0 - RM_DRS 500.0 - 1	ROUND MT-MALIN #1 500KV LINE	P1	L-1	<95%	101%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_12 500.0 - RM_DRS 500.0 - 1	TABLE MTN-RM_DRS #2 500KV LINE	P1	L-1	106%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	102%	108%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_12 500.0 - RM_DRS 500.0 - 1	DIABLOCNYNSS GENERATOR & MIDWAY-VINCENT #1 500KV LINE	P3	G-1/L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	129%	<95%	<95%	Sensitivity only
RM_TM_12 500.0 - RM_DRS 500.0 - 1	DIABLOCNYNSS GENERATOR & TABLE MTN-RM_DRS #2 500KV LINE	P3	G-1/L-1	106%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	102%	<95%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_12 500.0 - RM_DRS 500.0 - 1	TABLE MTN-RM_DRS #2 500KV LINE & TABLE MTN #5 500/230K	P6	L-1/T-1	109%	101%	107%	<95%	<95%	<95%	<95%	135%	106%	108%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_21 500.0 - RM_DRS 500.0 - 2	ROUND MT-RM_DRS #1 500KV LINE	P1	L-1	116%	109%	116%	<95%	<95%	<95%	<95%	140%	111%	117%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_21 500.0 - RM_DRS 500.0 - 2	DIABLOCNYNSS GENERATOR & ROUND MT-RM_DRS #1 500KV LINE	P3	G-1/L-1	116%	<95%	<95%	<95%	<95%	<95%	<95%	140%	111%	<95%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_21 500.0 - RM_DRS 500.0 - 2	ROUND MT-RM_DRS #1 500KV LINE & RM_DRS #1 500/230KV BA	P6	L-1/T-1	117%	109%	<95%	<95%	<95%	<95%	<95%	141%	111%	117%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_22 500.0 - RM_DRS 500.0 - 2	DALLASES-MOSSLAND #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	129%	<95%	<95%	Sensitivity only
RM_TM_22 500.0 - RM_DRS 500.0 - 2	TABLE MTN-RM_DRS #1 500KV LINE	P1	L-1	<95%	<95%	107%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_22 500.0 - RM_DRS 500.0 - 2	MIDWAY-WIRLWIND #3 500KV LINE	P1	L-1	<95%	101%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_22 500.0 - RM_DRS 500.0 - 2	TABLE MTN-RM_DRS #1 500KV LINE	P1	L-1	106%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	102%	108%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_22 500.0 - RM_DRS 500.0 - 2	DIABLOCNYNSS GENERATOR & DALLASES-MOSSLAND #1 500KV LINE	P3	G-1/L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	129%	<95%	<95%	Sensitivity only
RM_TM_22 500.0 - RM_DRS 500.0 - 2	DIABLOCNYNSS GENERATOR & TABLE MTN-RM_DRS #1 500KV LINE	P3	G-1/L-1	106%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	102%	<95%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
RM_TM_22 500.0 - RM_DRS 500.0 - 2	TABLE MTN-RM_DRS #1 500KV LINE & TABLE MTN #5 500/230K	P6	L-1/T-1	109%	101%	107%	<95%	<95%	<95%	<95%	135%	106%	108%	SPS to bypass series cap on remaining Rount Mtn-Table Mtn 500kV line on overload.
ROUND MT 500.0 - RD MT 1M 500.0 - 1	TABLE MTN-RM_DRS #1 500KV LINE & TABLE MTN-RM_DRS #2 5	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	116%	<95%	<95%	<95%	<95%	Generation redispatch
ROUND MT 500.0 - RM_TM_11 500.0 - 1	ROUND MT-RM_DRS #2 500KV LINE	P1	L-1	95%	<95%	95%	<95%	<95%	<95%	<95%	115%	<95%	96%	Sensitivity only
ROUND MT 500.0 - RM_TM_11 500.0 - 1	DIABLOCNYNSS GENERATOR & ROUND MT-RM_DRS #2 500KV LINE	P3	G-1/L-1	95%	<95%	<95%	<95%	<95%	<95%	<95%	115%	<95%	<95%	Sensitivity only
ROUND MT 500.0 - RM_TM_11 500.0 - 1	ROUND MT-RM_DRS #2 500KV LINE & RM_DRS #1 500/230KV BA	P6	L-1/T-1	96%	<95%	<95%	<95%	<95%	<95%	<95%	116%	<95%	96%	Sensitivity only
ROUND MT 500.0 - RM_TM_21 500.0 - 2	ROUND MT-RM_DRS #1 500KV LINE	P1	L-1	95%	<95%	95%	<95%	<95%	<95%	<95%	115%	<95%	96%	Sensitivity only
ROUND MT 500.0 - RM_TM_21 500.0 - 2	DIABLOCNYNSS GENERATOR & ROUND MT-RM_DRS #1 500KV LINE	P3	G-1/L-1	95%	<95%	<95%	<95%	<95%	<95%	<95%	115%	<95%	<95%	Sensitivity only
ROUND MT 500.0 - RM_TM_21 500.0 - 2	ROUND MT-RM_DRS #1 500KV LINE & RM_DRS #1 500/230KV BA	P6	L-1/T-1	96%	<95%	<95%	<95%	<95%	<95%	<95%	116%	<95%	96%	Sensitivity only
RPN JNCN 115.0 - RPNJ2 115.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	114%	<95%	<95%	<95%	<95%	Generation redispatch
RPN JNCN 115.0 - VLYHMTTP1 115.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	109%	<95%	<95%	<95%	<95%	Generation redispatch
SANDHLWJCT 230.0 - DELTAPMP 230.0 - 1	VACA-DIX #11 & #12 500/230KV BANK	P6	L-1/L-1	<95%	<95%	<95%	116%	<95%	<95%	<95%	103%	100%	<95%	Generation redispatch
SANDHLWJCT 230.0 - TESLA D 230.0 - 1	VACA-DIX #11 & #12 500/230KV BANK	P6	L-1/L-1	<95%	<95%	<95%	116%	<95%	<95%	<95%	101%	<95%	<95%	Generation redispatch
STA. E 115.0 - STA. G 115.0 - 1	OLINDA-TRACY #1 500KV LINE	P1	L-1	<95%	99%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	107%	Sensitivity only
STA. E 115.0 - STA. G 115.0 - 1	TABLE MTN-VACA-DIX #1 500KV LINE	P1	L-1	<95%	99%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	106%	Sensitivity only
STA. E 115.0 - STA. G 115.0 - 1	OLINDA-TRACY #1 500KV LINE & TRACY 500KV SHUNT	P6	L-1/L-1	<95%	100%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	107%	Sensitivity only
STA. E 115.0 - STA. G 115.0 - 2	OLINDA-TRACY #1 500KV LINE	P1	L-1	<95%	99%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	107%	Sensitivity only
STA. E 115.0 - STA. G 115.0 - 2	TABLE MTN-VACA-DIX #1 500KV LINE	P1	L-1	<95%	99%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	106%	Sensitivity only
STA. E 115.0 - STA. G 115.0 - 2	OLINDA-TRACY #1 500KV LINE & TRACY 500KV SHUNT	P6	L-1/L-1	<95%	100%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	107%	Sensitivity only

Overloaded Facility	Contingency (All and Worst P6)	Contingency Category	Category Description	Loading % (Baseline Scenarios)							Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2024 Summer Peak	2027 Summer Peak	2032 Summer Peak	2024 Spring Off-Peak	2027 Spring Off-Peak	2032 Spring Off-Peak	2032 Winter Off-Peak	2024 Spring Off-Peak COI	2024 SP Heavy Renewable & Min Gas Gen	2027 SP High CEC Forecast	
STAGG-J1 230.0 - EIGHT MI 230.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/L-1	<95%	<95%	<95%	<95%	113%	99%	<95%	<95%	<95%	<95%	Generation redispatch
STAGG-J2 230.0 - TESLA E 230.0 - 1	TESLA #2 & #4 500/230KV BANK	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	104%	<95%	<95%	<95%	<95%	Generation redispatch
TABLE MTN 500.0 - RM_TM_12 500.0 - 1	MIDWAY-VINCENT #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	104%	<95%	<95%	Sensitivity only
TABLE MTN 500.0 - RM_TM_12 500.0 - 1	DIABLOCNYNSS GENERATOR & MIDWAY-VINCENT #1 500KV LINE	P3	G-1/L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	104%	<95%	<95%	Sensitivity only
TABLE MTN 500.0 - RM_TM_12 500.0 - 1	TABLE MTN-RM_DRS #2 500KV LINE & TABLE MTN #5 500/230K	P6	L-1/T-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	109%	<95%	<95%	Sensitivity only
TABLE MTN 500.0 - RM_TM_22 500.0 - 2	DALLASES-MOSSLAND #1 500KV LINE	P1	L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	104%	<95%	<95%	Sensitivity only
TABLE MTN 500.0 - RM_TM_22 500.0 - 2	DIABLOCNYNSS GENERATOR & DALLASES-MOSSLAND #1 500KV LINE	P3	G-1/L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	104%	<95%	<95%	Sensitivity only
TABLE MTN 500.0 - RM_TM_22 500.0 - 2	TABLE MTN-RM_DRS #1 500KV LINE & TABLE MTN #5 500/230K	P6	L-1/T-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	109%	<95%	<95%	Sensitivity only
TABLE MTN 500.0 - TABLE MTN5M 500.0 - 5	TESLA E #2 500/230KV TRANSFORMER	P1	L-1	<95%	<95%	<95%	<95%	117%	123%	<95%	<95%	<95%	<95%	Generation redispatch
TABLE MTN 500.0 - TABLE MTN6M 500.0 - 6	TABLE MTN D #5 500/230KV TRANSFORMER	P1	L-1	<95%	<95%	<95%	<95%	115%	121%	<95%	<95%	<95%	<95%	Generation redispatch
TABLE MTN 500.0 - TABLE MTN6M 500.0 - 6	TABLE MTN-TESLA #1 500KV LINE & TABLE MTN #5 500/230KV	P6	L-1/T-1	<95%	<95%	<95%	<95%	<95%	124%	<95%	<95%	<95%	<95%	Generation redispatch
TABLE MTN5M 500.0 - TABLE MTN D 230.0 - 5	TESLA E #2 500/230KV TRANSFORMER	P1	L-1	<95%	<95%	<95%	<95%	111%	121%	<95%	<95%	<95%	<95%	Generation redispatch
TABLE MTN6M 500.0 - TABLE MTN E 230.0 - 6	TABLE MTN D #5 500/230KV TRANSFORMER	P1	L-1	<95%	<95%	<95%	<95%	112%	120%	<95%	<95%	<95%	<95%	Generation redispatch
TABLE MTN6M 500.0 - TABLE MTN E 230.0 - 6	TABLE MTN-TESLA #1 500KV LINE & TABLE MTN #5 500/230KV	P6	L-1/T-1	<95%	<95%	<95%	<95%	<95%	123%	<95%	<95%	<95%	<95%	Generation redispatch
TESLA 500.0 - LOSBANOS 500.0 - 1	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #1 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	134%	<95%	<95%	<95%	<95%	Generation redispatch
TESLA E 230.0 - WESTLEY 230.0 - 1	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	112%	<95%	<95%	<95%	<95%	Generation redispatch
TRACY 500.0 - LOSBANOS 500.0 - 1	TESLA-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #1 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	127%	<95%	<95%	<95%	<95%	Generation redispatch
VACA-DIX 500.0 - VD_TS_11 500.0 - 1	TABLE MTN-TESLA #1 500KV LINE & TRACY-TESLA #1 500KV L	P6	L-1/L-1	102%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	<95%	Operating solution
WARNERVL 230.0 - WILSONRCTR 230.0 - 1	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	130%	<95%	<95%	<95%	<95%	Mitigation in local area
WESTLEY 230.0 - Q1244SS 230.0 - 1	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	96%	159%	<95%	<95%	<95%	<95%	Generation redispatch
WILSONRCTR 230.0 - WILSON 230.0 - BP	TRACY-LOSBANOS #1 500KV LINE & TESLA-LOSBANOS #1 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	<95%	<95%	116%	<95%	<95%	Sensitivity only
WILSONRCTR 230.0 - WILSONPGAE 230.0 - 2	TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	<95%	<95%	<95%	<95%	<95%	129%	<95%	<95%	<95%	<95%	Mitigation in local area

Study Area: PG&E Bulk



High/Low Voltages

Substation	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)							Voltage PU (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2024 Summer Peak	2027 Summer Peak	2032 Summer Peak	2024 Spring Off-Peak	2027 Spring Off-Peak	2032 Spring Off-Peak	2032 Winter Off-Peak	2024 SP Heavy Renewable & Min Gas Gen	2024 Spring Off-Peak COI	2027 SP High CEC Forecast	
DIABLO 500 kV	Normal Conditions	P0	normal	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	No Issue
	Two Statcoms on Gates	P6	S-1/S-1	N/A	1.10	within limits	within limits	within limits	within limits	within limits	N/A	N/A	1.10	System adjustments after the first contingency
	Two Statcoms on Round Mountain	P6	S-1/S-1	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	No Issue
GATES 500 kV	Normal Conditions	P6	S-1/S-1	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	No Issue
GATES 500 kV	Two Statcoms on Gates	P6	S-1/S-1	N/A	within limits	within limits	within limits	within limits	within limits	within limits	N/A	N/A	within limits	No Issue
GATES 500 kV	Two Statcoms on Round Mountain	P6	S-1/S-1	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	No Issue
MIDWAY 500 kV	Normal Conditions	P6	S-1/S-1	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	No Issue
MIDWAY 500 kV	Two Statcoms on Gates	P6	S-1/S-1	N/A	within limits	within limits	within limits	within limits	within limits	within limits	N/A	N/A	within limits	No Issue
MIDWAY 500 kV	Two Statcoms on Round Mountain	P6	S-1/S-1	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	No Issue
Round Mountain 500 kV	Normal Conditions	P6	S-1/S-1	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	No Issue
Round Mountain 500 kV	Two Statcoms on Gates	P6	S-1/S-1	N/A	within limits	within limits	within limits	within limits	within limits	within limits	N/A	N/A	within limits	No Issue
Round Mountain 500 kV	Two Statcoms on Round Mountain	P6	S-1/S-1	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	within limits	No Issue
Low voltages in the Las Aguilas-Moss Landing area	Mosslanding-Los Banos 500 kV & Tesla-Metcalf 500 kV	P6	L-1/L-1	insufficient reactive margin	within limits	within limits	within limits	within limits	within limits	within limits	insufficient reactive margin	within limits	within limits	Under review

Study Area: PG&E Bulk



Voltage Deviation

Substation	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)							Voltage PU (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2024 Summer Peak	2027 Summer Peak	2032 Summer Peak	2024 Spring Off-Peak	2027 Spring Off-Peak	2032 Spring Off-Peak	2032 Winter Off-Peak	2024 SP Heavy Renewable & Min Gas Gen	2024 Spring Off-Peak COI	2027 SP High CEC Forecast	
NONE over 8%														

Contingency	Category	Category Description	2024 Spring Off-Peak	2027 Summer Peak	2032 Summer Peak	2032 Spring Off-Peak	2027 SP High CEC Forecast	2024 Spring Off-Peak COI	Potential Mitigation Solutions/Comments
P1_2-0. ROUND MT-RM_DRS #1 500KV LINE	P1	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Re-evaluate with increased pre-contingency var support at Monta Vista 230kV in 2032 scenarios
P1_2-1. ROUND MT-RM_DRS #2 500KV LINE	P1	L-1	no issues	no issues	Potential WECC/NERC criteria violation	no issues	no issues	no issues	Re-evaluate with increased pre-contingency var support at Monta Vista 230kV in 2032 scenarios
P1_2-2. TABLE MTN-VACA-DIX #1 500KV LINE	P1	L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Re-evaluate with increased pre-contingency var support at Monta Vista 230kV in 2032 scenarios
P1_2-3. TABLE MTN-TESLA #1 500KV LINE	P1	L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Significant # voltage dips in 2032-SOP case. Lesser # for 2032-HS. Area modeling to be investigated
P1_2-4. OLINDA-TRACY #1 500KV LINE	P1	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Dip in Tesla 500kV voltage in 2032-SOP warrants investigation
P1_2-5. VACA-DIX-TESLA #1 500KV LINE	P1	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Voltage dips at Olinda, Tesla, Collinsville & Tracy 500kV suggests wider area concerns in 2032 SOP. Re-evaluation of var equipment settings and re-run required.
P1_2-6. TRACY-TESLA #1 500KV LINE	P1	L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Potential WECC/NERC criteria violation	no issues	Re-evaluate with increased pre-contingency var support at Montavis 230kV
P1_2-7. TRACY-LOSBANOS #1 500KV LINE	P1	L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Excessive # of voltage dips >30 cycles seen for 2023SOP. Modeling and pre-contingency var settings to be re-evaluated
P1_2-8. TESLA-METCALF #1 500KV LINE	P1	L-1	no issues	Potential WECC/NERC criteria violation	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Significant # of voltage dips for 230kV and lower buses seen for 2032SOP.
P1_2-9. TESLA-LOSBANOS #1 500KV LINE	P1	L-1	no issues	Potential WECC/NERC criteria violation	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Excessive # of voltage dips >30 cycles seen for 2023SOP. Modeling and pre-contingency var settings to be re-evaluated
P1_2-10. METCALF-MOSSLAND #1 500KV LINE	P1	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Voltage dips seen primarily at 60kV and lower buses for 2032SOP and 2032HS cases
P1_2-12. LOSBANOS-GATES #3 500KV LINE	P1	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Re-evaluate with increased pre-contingency var support at Montavis 230kV
P1_2-13. LOSBANOS-GATES #1 500KV LINE	P1	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Voltage dips at Tesla 500kV and Collinsville, Pittsburgh and adjacent 230kV buses seen in 2032SOP. Possible var support required in Bay Area.
P1_2-14. LOSBANOS-MIDWAY #1 500KV LINE	P1	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Voltage dips at Tesla 500kV and Collinsville, Pittsburgh and adjacent 230kV buses seen in 2032SOP. Possible var support required in Bay Area.
P1_2-15. GATES-DIABLOCNYNSS #1 500KV LINE	P1	L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Voltage dips at Tesla 500kV and Collinsville, Pittsburgh and adjacent 230kV buses seen in 2032SOP. Possible var support required in Bay Area.
P1_2-16. GATES-MIDWAY #1 500KV LINE	P1	L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Voltage dips at Tesla 500kV and Collinsville, Pittsburgh and adjacent 230kV buses seen in 2032SOP. Possible var support required in Bay Area.
P1_2-17. DIABLOCNYNSS-MIDWAY #2 500KV LINE	P1	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Voltage dip at Tesla 500kV may be acceptable for 2032SP and 2032HS.
P1_2-18. DIABLOCNYNSS-MIDWAY #3 500KV LINE	P1	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Voltage dips of concern seen only at 230kV buses and below for 2032SP and 2032HS scenarios
P1_2-19. MIDWAY-VINCENT #1 500KV LINE	P1	L-1	Potential WECC/NERC criteria violation	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Potential WECC/NERC criteria violation	Re-evaluate with increased pre-contingency var support at Monta Visa, Saratoga, etc at 230kV
P1_2-20. MIDWAY-VINCENT #2 500KV LINE	P1	L-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	no issues	Potential WECC/NERC criteria violation	Variance with P1_2-19 requires investigation

Contingency	Category	Category Description	2024 Spring Off-Peak	2027 Summer Peak	2032 Summer Peak	2032 Spring Off-Peak	2027 SP High CEC Forecast	2024 Spring Off-Peak COI	Potential Mitigation Solutions/Comments
P1_2-21. MIDWAY-WIRLWIND #3 500KV LINE	P1	L-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	no issues	Potential WECC/NERC criteria violation	Comparable results as P1_2-20
P1_3-5. VACA-DIX #11 500/230KV TRANSFORMER	P1	T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Voltage dips at Vaca Dixon, Collinsville, Tracy, Tesla 500kV noted for 2032SOP
P1_3-6. VACA-DIX #12 500/230KV TRANSFORMER	P1	T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Comparable results as P1_3-5
P1_3-8. TESLA D #4 500/230KV TRANSFORMER	P1	T-1	no issues	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Voltage dips at Vaca Dixon, Collinsville, Tracy, Tesla 500kV noted for 2032SOP
P1_3-9. TESLA C #6 500/230KV TRANSFORMER	P1	T-1	no issues	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Comparable results as P1_3-8
P1_3-10. METCALF #11 500/230KV TRANSFORMER	P1	T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Voltage dips seen on Table Mtn, Vaca-Dixon, Collinsville, Tracey 500kV for 2032SOP.
P1_3-12. METCALF #13 500/230KV TRANSFORMER	P1	T-1	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Comparable results as P1_3-10
P1_3-14. LOSBANOS #1 500/230KV TRANSFORMER	P1	T-1	no issues	no issues	N/A	Potential WECC/NERC criteria violation	no issues	no issues	Voltage dips seen on Table Mtn, Vaca-Dixon, Collinsville, Tracey 500kV for 2032SOP
P2_3-1. VACA-DIX-TESLA #1 500KV LINE & TESLA-LOSBANOS #1 500KV L	P2	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Voltage dip issues on Collinsville, Tracy, Tesla 500kV for 2032SP
P2_3-2. TESLA-METCALF #1 500KV LINE & TESLA #2 500/230KV BANK	P2	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P2_3-3. TESLA-METCALF #1 500KV LINE & METCALF #11 500/230KV BANK	P2	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P2_3-4. METCALF-MOSSLAND #1 500KV LINE & METCALF #11 500/230KV B	P2	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P2_3-5. MOSSLAND-LOSBANOS #1 500KV LINE & MOSSLAND #9 500/230KV	P2	L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P2_3-10. LOSBANOS-MIDWAY #1 500KV LINE & MIDWAY-VINCENT #1 500KV	P2	L-1	no issues	no issues	N/A	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P2_3-11. MIDWAY-VINCENT #1 500KV LINE & MIDWAY #11 500/230KV BANK	P2	L-1	no issues	no issues	N/A	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P2_3-12. MIDWAY-WIRLWIND #3 500KV LINE & MIDWAY #11 500/230KV BAN	P2	L-1	no issues	no issues	N/A	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P3_2-2. DIABLOCNYNSS GENERATOR & TABLE MTN-VACA-DIX #1 500KV LIN	P3	L-1	no issues	N/A	N/A	N/A	N/A	Potential WECC/NERC criteria violation	Under review
P3_2-3. DIABLOCNYNSS GENERATOR & TABLE MTN-TESLA #1 500KV LINE	P3	L-1	no issues	N/A	N/A	N/A	N/A	Potential WECC/NERC criteria violation	Under review
P3_2-15. DIABLOCNYNSS GENERATOR & GATES-DIABLOCNYNSS #1 500KV LIN	P3	L-1	no issues	N/A	N/A	N/A	N/A	Potential WECC/NERC criteria violation	Under review
P3_2-16. DIABLOCNYNSS GENERATOR & GATES-MIDWAY #1 500KV LINE	P3	L-1	no issues	N/A	N/A	N/A	N/A	Potential WECC/NERC criteria violation	Under review
P3_2-19. DIABLOCNYNSS GENERATOR & MIDWAY-VINCENT #1 500KV LINE	P3	L-1	Potential WECC/NERC criteria violation	N/A	N/A	N/A	N/A	Potential WECC/NERC criteria violation	Under review
P3_2-20. DIABLOCNYNSS GENERATOR & MIDWAY-VINCENT #2 500KV LINE	P3	L-1	Potential WECC/NERC criteria violation	N/A	N/A	N/A	N/A	Potential WECC/NERC criteria violation	Under review
P3_2-21. DIABLOCNYNSS GENERATOR & MIDWAY-WIRLWIND #3 500KV LINE	P3	L-1	Potential WECC/NERC criteria violation	N/A	N/A	N/A	N/A	Potential WECC/NERC criteria violation	Under review
P3_3-17. DIABLOCNYNSS GENERATOR & MIDWAY-R11 #11 500/230KV TRANSF	P3	L-1	Potential WECC/NERC criteria violation	N/A	N/A	N/A	N/A	Potential WECC/NERC criteria violation	Under review
P3_3-18. DIABLOCNYNSS GENERATOR & MIDWAY-R12 #12 500/230KV TRANSF	P3	L-1	Potential WECC/NERC criteria violation	N/A	N/A	N/A	N/A	Potential WECC/NERC criteria violation	Under review
P3_3-19. DIABLOCNYNSS GENERATOR & MIDWAY-R13 #13 500/230KV TRANSF	P3	L-1	Potential WECC/NERC criteria violation	N/A	N/A	N/A	N/A	Potential WECC/NERC criteria violation	Under review
P6_1_1-0. ROUND MT-RM_DRS #1 500KV LINE & ROUND MT-RM_DRS #2 500	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-1. ROUND MT-RM_DRS #1 500KV LINE & ROUND MT-MALIN #1 500K	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-2. ROUND MT-RM_DRS #1 500KV LINE & ROUND MT-MALIN #2 500K	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review

Transient Stability

Contingency	Category	Category Description	2024 Spring Off-Peak	2027 Summer Peak	2032 Summer Peak	2032 Spring Off-Peak	2027 SP High CEC Forecast	2024 Spring Off-Peak COI	Potential Mitigation Solutions/Comments
P6_1_1-3. ROUND MT-RM_DRS #2 500KV LINE & ROUND MT-MALIN #1 500K	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-4. ROUND MT-RM_DRS #2 500KV LINE & ROUND MT-MALIN #2 500K	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	Potential WECC/NERC criteria violation	Under review
P6_1_1-5. ROUND MT-MALIN #1 500KV LINE & ROUND MT-MALIN #2 500KV	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	Potential WECC/NERC criteria violation	Under review
P6_1_1-6. TABLE MTN-VACA-DIX #1 500KV LINE & TABLE MTN-TESLA #1	P6	L-1/L-1	no issues	no issues	no issues	no issues	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_1-7. TABLE MTN-VACA-DIX #1 500KV LINE & TABLE MTN-RM_DRS #1	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-9. TABLE MTN-TESLA #1 500KV LINE & TABLE MTN-RM_DRS #1 50	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-10. TABLE MTN-TESLA #1 500KV LINE & TABLE MTN-RM_DRS #2 50	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-11. TABLE MTN-RM_DRS #1 500KV LINE & TABLE MTN-RM_DRS #2 5	P6	L-1/L-1	no issues	no issues	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-12. TABLE MTN-TESLA #1 500KV LINE & VACA-DIX-TESLA #1 500K	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-13. TABLE MTN-TESLA #1 500KV LINE & TRACY-TESLA #1 500KV L	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	May need additional dynamic reactive support in the Bay Area
P6_1_1-14. TABLE MTN-TESLA #1 500KV LINE & TESLA-METCALF #1 500KV	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	May need additional dynamic reactive support in the Bay Area
P6_1_1-15. TABLE MTN-TESLA #1 500KV LINE & TESLA-LOSBANOS #1 500K	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	May need additional dynamic reactive support in the Bay Area
P6_1_1-16. VACA-DIX-TESLA #1 500KV LINE & TRACY-TESLA #1 500KV LI	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_1-17. VACA-DIX-TESLA #1 500KV LINE & TESLA-METCALF #1 500KV	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_1-18. VACA-DIX-TESLA #1 500KV LINE & TESLA-LOSBANOS #1 500KV	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_1-19. TRACY-TESLA #1 500KV LINE & TESLA-METCALF #1 500KV LIN	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	N/A	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_1-20. TRACY-TESLA #1 500KV LINE & TESLA-LOSBANOS #1 500KV LI	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	N/A	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_1-21. TESLA-METCALF #1 500KV LINE & TESLA-LOSBANOS #1 500KV	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_1-22. TABLE MTN-VACA-DIX #1 500KV LINE & VACA-DIX-TESLA #1 5	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-23. TESLA-METCALF #1 500KV LINE & METCALF-MOSSLAND #1 500K	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_1-26. MOSSLAND-LOSBANOS #1 500KV LINE & DALLASES-MOSSLAND #1	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_1-29. TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_1-30. TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #1 500KV	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_1-31. TRACY-LOSBANOS #1 500KV LINE & LOSBANOS-MIDWAY #1 500K	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_1-32. TESLA-LOSBANOS #1 500KV LINE & MOSSLAND-LOSBANOS #1 50	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_1-33. TESLA-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 500KV	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_1-34. TESLA-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #1 500KV	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_1-35. TESLA-LOSBANOS #1 500KV LINE & LOSBANOS-MIDWAY #1 500K	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_1-36. MOSSLAND-LOSBANOS #1 500KV LINE & LOSBANOS-GATES #3 50	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review

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Contingency	Category	Category Description	2024 Spring Off-Peak	2027 Summer Peak	2032 Summer Peak	2032 Spring Off-Peak	2027 SP High CEC Forecast	2024 Spring Off-Peak COI	Potential Mitigation Solutions/Comments
P6_1_1-66. MIDWAY-VINCENT #1 500KV LINE & MIDWAY-VINCENT #2 500KV	P6	L-1/L-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-67. MIDWAY-VINCENT #1 500KV LINE & MIDWAY-WIRLWIND #3 500K	P6	L-1/L-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-68. MIDWAY-VINCENT #2 500KV LINE & MIDWAY-WIRLWIND #3 500K	P6	L-1/L-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-69. GATES-DIABLOCNYNSS #1 500KV LINE & DIABLOCNYNSS-MIDWAY	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_1-70. GATES-DIABLOCNYNSS #1 500KV LINE & DIABLOCNYNSS-MIDWAY	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_1-74. OLINDA-TRACY #1 500KV LINE & TRACY-LOSBANOS #1 500KV L	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_1-75. TRACY-TESLA #1 500KV LINE & TRACY-LOSBANOS #1 500KV LI	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_1-76. ROUND MT-RM_DRS #1 500KV LINE & ROUND MT-RM_DRS #2 500	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-77. ROUND MT-RM_DRS #1 500KV LINE & TABLE MTN-RM_DRS #1 50	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_1_1-78. ROUND MT-RM_DRS #1 500KV LINE & TABLE MTN-RM_DRS #2 50	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_1_1-79. ROUND MT-RM_DRS #2 500KV LINE & TABLE MTN-RM_DRS #1 50	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_1_1-8. TABLE MTN-VACA-DIX #1 500KV LINE & TABLE MTN-RM_DRS #2	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_1-80. ROUND MT-RM_DRS #2 500KV LINE & TABLE MTN-RM_DRS #2 50	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_1_1-81. TABLE MTN-RM_DRS #1 500KV LINE & TABLE MTN-RM_DRS #2 5	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Potential WECC/NERC criteria violation	Under review
P6_1_1-100. TESLA-METCALF & MOSSLAND-LOSBANOS #1 500KV LINES	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_2-0. ROUND MT-RM_DRS #1 500KV LINE & ROUND MT #1 500/230KV	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_2-1. ROUND MT-RM_DRS #2 500KV LINE & ROUND MT #1 500/230KV	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_1_2-2. ROUND MT-MALIN #1 500KV LINE & ROUND MT #1 500/230KV B	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-3. ROUND MT-MALIN #2 500KV LINE & ROUND MT #1 500/230KV B	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_1_2-4. TABLE MTN-VACA-DIX #1 500KV LINE & TABLE MTN #5 500/23	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-5. TABLE MTN-TESLA #1 500KV LINE & TABLE MTN #5 500/230KV	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-6. TABLE MTN-RM_DRS #1 500KV LINE & TABLE MTN #5 500/230K	P6	L-1/T-1	no issues	no issues	no issues	no issues	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_2-7. TABLE MTN-RM_DRS #2 500KV LINE & TABLE MTN #5 500/230K	P6	L-1/T-1	no issues	no issues	no issues	no issues	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_2-8. TABLE MTN-TESLA #1 500KV LINE & TESLA #2 500/230KV BAN	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	May need additional dynamic reactive support in the Bay Area
P6_1_2-9. VACA-DIX-TESLA #1 500KV LINE & TESLA #2 500/230KV BANK	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	N/A	N/A	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_2-11. TESLA-METCALF #1 500KV LINE & TESLA #2 500/230KV BANK	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_2-12. TESLA-LOSBANOS #1 500KV LINE & TESLA #2 500/230KV BANK	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_2-13. TABLE MTN-VACA-DIX #1 500KV LINE & VACA-DIX #11 500/23	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-14. VACA-DIX-TESLA #1 500KV LINE & VACA-DIX #11 500/230KV	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review

Contingency	Category	Category Description	2024 Spring Off-Peak	2027 Summer Peak	2032 Summer Peak	2032 Spring Off-Peak	2027 SP High CEC Forecast	2024 Spring Off-Peak COI	Potential Mitigation Solutions/Comments
P6_1_2-15. TESLA-METCALF #1 500KV LINE & METCALF #11 500/230KV BA	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_2-16. METCALF-MOSSLAND #1 500KV LINE & METCALF #11 500/230KV	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_2-17. METCALF-MOSSLAND #1 500KV LINE & MOSSLAND #9 500/230KV	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_2-18. MOSSLAND-LOSBANOS #1 500KV LINE & MOSSLAND #9 500/230K	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_2-19. DALLASES-MOSSLAND #1 500KV LINE & MOSSLAND #9 500/230K	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_2-21. TESLA-LOSBANOS #1 500KV LINE & LOSBANOS #1 500/230KV B	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_2-22. MOSSLAND-LOSBANOS #1 500KV LINE & LOSBANOS #1 500/230K	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_2-23. LOSBANOS-GATES #3 500KV LINE & LOSBANOS #1 500/230KV B	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_2-24. LOSBANOS-GATES #1 500KV LINE & LOSBANOS #1 500/230KV B	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_2-25. LOSBANOS-MIDWAY #1 500KV LINE & LOSBANOS #1 500/230KV	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_2-26. LOSBANOS-GATES #3 500KV LINE & GATES #11 500/230KV BAN	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-27. LOSBANOS-GATES #1 500KV LINE & GATES #11 500/230KV BAN	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-28. GATES-DIABLOCNYNSS #1 500KV LINE & GATES #11 500/230KV	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-29. GATES-MIDWAY #1 500KV LINE & GATES #11 500/230KV BANK	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-30. LOSBANOS-MIDWAY #1 500KV LINE & MIDWAY #11 500/230KV B	P6	L-1/T-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-31. GATES-MIDWAY #1 500KV LINE & MIDWAY #11 500/230KV BANK	P6	L-1/T-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-32. DIABLOCNYNSS-MIDWAY #2 500KV LINE & MIDWAY #11 500/230	P6	L-1/T-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-33. DIABLOCNYNSS-MIDWAY #3 500KV LINE & MIDWAY #11 500/230	P6	L-1/T-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-34. MIDWAY-VINCENT #1 500KV LINE & MIDWAY #11 500/230KV BA	P6	L-1/T-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-35. MIDWAY-VINCENT #2 500KV LINE & MIDWAY #11 500/230KV BA	P6	L-1/T-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-36. MIDWAY-WIRLWIND #3 500KV LINE & MIDWAY #11 500/230KV B	P6	L-1/T-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_1_2-37. OLINDA-TRACY #1 500KV LINE & OLINDA #1 500/230KV BANK	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_2-38. OLINDA-CAPTJACK #1 500KV LINE & OLINDA #1 500/230KV BA	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_2-39. OLINDA-TRACY #1 500KV LINE & TRACY #1 500/230KV BANK	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_2-40. TRACY-TESLA #1 500KV LINE & TRACY #1 500/230KV BANK	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_2-41. TRACY-LOSBANOS #1 500KV LINE & TRACY #1 500/230KV BANK	P6	L-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_1_2-42. ROUND MT-RM_DRS #1 500KV LINE & RM_DRS #1 500/230KV BA	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_1_2-43. ROUND MT-RM_DRS #2 500KV LINE & RM_DRS #1 500/230KV BA	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_1_2-44. TABLE MTN-RM_DRS #1 500KV LINE & RM_DRS #1 500/230KV B	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review

Contingency	Category	Category Description	2024 Spring Off-Peak	2027 Summer Peak	2032 Summer Peak	2032 Spring Off-Peak	2027 SP High CEC Forecast	2024 Spring Off-Peak COI	Potential Mitigation Solutions/Comments
P6_1_2-45. TABLE MTN-RM_DRS #2 500KV LINE & RM_DRS #1 500/230KV B	P6	L-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_1_3-2. TABLE MTN-RM_DRS #1 500KV LINE & TABLE MTN 500KV SHUNT	P6	L-1/L-1	no issues	no issues	no issues	no issues	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_3-3. TABLE MTN-RM_DRS #2 500KV LINE & TABLE MTN 500KV SHUNT	P6	L-1/L-1	no issues	no issues	no issues	no issues	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_3-4. TESLA-METCALF #1 500KV LINE & METCALF 500KV SHUNT	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_3-5. METCALF-MOSSLAND #1 500KV LINE & METCALF 500KV SHUNT	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_3-6. OLINDA-TRACY #1 500KV LINE & OLINDA 500KV SHUNT	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	no issues	Under review
P6_1_3-7. OLINDA-CAPTJACK #1 500KV LINE & OLINDA 500KV SHUNT	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_3-8. OLINDA-TRACY #1 500KV LINE & TRACY 500KV SHUNT	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_3-9. TRACY-TESLA #1 500KV LINE & TRACY 500KV SHUNT	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_1_3-10. TRACY-LOSBANOS #1 500KV LINE & TRACY 500KV SHUNT	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_2-0. TESLA #2 & #4 500/230KV BANK	P6	T-1/T-1	no issues	no issues	no issues	N/A	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_2_2-2. METCALF #11 & #12 500/230KV BANK	P6	T-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_2-3. GATES #11 & #12 500/230KV BANK	P6	T-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_2_2-4. MIDWAY #11 & #12 500/230KV BANK	P6	T-1/T-1	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_2_2-5. TRACY #1 & #2 500/230KV BANK	P6	T-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	May need additional dynamic reactive support in the Bay Area
P6_2_2-6. RM_DRS #1 & #2 500/230KV BANK	P6	T-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_2-10. ROUND MOUNTAIN 500/230KV & TABLE MOUNTAIN 500/230KV	P6	T-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_2_2-11. TABLE MOUNTAIN 500/230KV & VACA DIXON 500/230KV	P6	T-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_2-12. TABLE MOUNTAIN 500/230KV & TESLA 500/230KV	P6	T-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_2-13. VACA DIXON 500/230KV & TESLA 500/230KV	P6	T-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_2-14. TRACY 500/230KV & OLINDA 500/230KV	P6	T-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_2-15. TRACY 500/230KV & LOS BANOS 500/230KV	P6	T-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_2-16. TESLA 500/230KV & METCALF 500/230KV	P6	T-1/T-1	no issues	Potential WECC/NERC criteria violation	N/A	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_2-17. TESLA 500/230KV & LOS BANOS 500/230KV	P6	T-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_2-18. TESLA 500/230KV & TRACY 500/230KV	P6	T-1/T-1	no issues	Potential WECC/NERC criteria violation	N/A	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_2-19. METCALF 500/230KV & MOSS LANDING 500/230KV	P6	T-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_2_2-20. MOSS LANDING 500/230KV & LOS BANOS 500/230KV	P6	T-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_2_2-21. LOS BANOS 500/230KV & GATES 500/230KV	P6	T-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_2_2-22. LOS BANOS 500/230KV & MIDWAY 11 500/230KV	P6	T-1/T-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review

Transient Stability

Contingency	Category	Category Description	2024 Spring Off-Peak	2027 Summer Peak	2032 Summer Peak	2032 Spring Off-Peak	2027 SP High CEC Forecast	2024 Spring Off-Peak COI	Potential Mitigation Solutions/Comments
P6_2_2-24. GATES 500/230KV & MIDWAY 11 500/230KV	P6	T-1/T-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	Under review
P6_2_3-0. TABLE MTN #5 500/230KV BANK & TABLE MTN 500KV SHUNT	P6	L-1/L-1	no issues	no issues	no issues	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_3-1. METCALF #11 500/230KV BANK & METCALF 500KV SHUNT	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P6_2_3-2. OLINDA #1 500/230KV BANK & OLINDA 500KV SHUNT	P6	L-1/L-1	no issues	no issues	Potential WECC/NERC criteria violation	N/A	no issues	no issues	Under review
P6_2_3-3. TRACY #1 500/230KV BANK & TRACY 500KV SHUNT	P6	L-1/L-1	no issues	Potential WECC/NERC criteria violation	Potential WECC/NERC criteria violation	N/A	Potential WECC/NERC criteria violation	no issues	Under review
P7_2-0. PACIFIC DC INTERTIE (N2S)	P7	L-2	no issues	no issues	no issues	N/A	Potential WECC/NERC criteria violation	no issues	Under review

Study Area: PG&E Bulk



Single Contingency Load Drop

Worst Contingency	Category	Category Description	Amount of Load Drop (MW)													Potential Mitigation Solutions
			2024 Summer Peak	2027 Summer Peak	2032 Summer Peak	2024 Winter Peak	2027 Winter Peak	2032 Winter Peak	2024 Spring Off-Peak	2027 Spring Off-Peak	2032 Spring Off-Peak	2027 SP High CEC Forecast	2024 SP Heavy Renewable & Min Gas Gen	2024 OP Sensitivity	2032 SP with Additional Transportation Electrification	

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

Study Area: PG&E Bulk



Single Source Substation with more than 100 MW Load

Substation	Load Served (MW)													Potential Mitigation Solutions
	2024 Summer Peak	2027 Summer Peak	2032 Summer Peak	2024 Winter Peak	2027 Winter Peak	2032 Winter Peak	2024 Spring Off-Peak	2027 Spring Off-Peak	2032 Spring Off-Peak	2027 SP High CEC Forecast	2024 SP Heavy Renewable & Min Gas Gen	2024 OP Sensitivity	2032 SP with Additional Transportation Electrification	

No single source substation with more than 100 MW