



Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)					Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2020 Summer Peak	2023 Summer Peak	2028 Summer Peak	2020 Spring Off-Peak	2023 Spring Off-Peak	2023 SP High CEC Forecast	2023 SpOP Hi Renew & Min Gas Gen	2020 SP Heavy Renewable & Min Gas Gen	
22020 AVOCADO 69.0 22508 MNSRATTP 69.0 1 1	TL0691_TL0691B C D: AVCDTP-AVCAD-PND-MNSRT ck 1	P1	N-1	<90	<90	<90	94.49	132.51	<90	133.89	<90	Reduce battery charging, potential RAS to trip battery charging
22016 AVCADOTP 69.0 22020 AVOCADO 69.0 1 1	TL0698_TL0698 MONSRATE-AVOCADO-PALA ck 1	P1	N-1	<90	<90	<90	94.16	131.35	<90	132.31	<90	Reduce battery charging, potential RAS to trip battery charging
22884 WARNERS 69.0 22688 RINCON 69.0 1 1	TL0637_SANTYSBL - CREELMAN ck 1	P1	N-1	96.74	99.21	97.56	<90	<90	117.07	<90	<90	Sensitivity Only
22016 AVCADOTP 69.0 22020 AVOCADO 69.0 1 1	TL0698A_TL0698A AVOCADO-MNSRATTP ck 1	P2.1	Line Section w/o Fault	<90	<90	<90	94.21	129.87	<90	131.24	<90	Reduce battery charging, potential RAS to trip battery charging
22020 AVOCADO 69.0 22508 MNSRATTP 69.0 1 1	TL0691D_TL0691D AVOCADO-AVCADOTP ck 1	P2.1	Line Section w/o Fault	<90	<90	<90	94.08	129.31	<90	130.58	<90	Reduce battery charging, potential RAS to trip battery charging
22688 RINCON 69.0 22404 LILAC 69.0 1 1	TL0681B_TL0681B ASH TP-VALCNTR ck 1	P2.1	Line Section w/o Fault	<90	97.62	99.79	<90	<90	104.39	<90	<90	Sensitivity Only
22016 AVCADOTP 69.0 22020 AVOCADO 69.0 1 1	TL0698B_TL0698B MONSRATE-MNSRATTP ck 1	P2.1	Line Section w/o Fault	<90	<90	<90	<90	100.96	<90	97.5	<90	Reduce battery charging, potential RAS to trip battery charging
22440 MELROSE 69.0 22442 MELRSETP 69.0 1 1	ME69-N_Melrose 69kV N Bus	P2	Bus	95.26	98.68	103.82	<90	113.21	106.98	111.33	113.88	Prefered resources, operation procedure
22604 OTAY 69.0 22616 OTAYLKTP 69.0 1 1	ML69-S_Miguel 69kV S Bus	P2	Bus	91.94	<90	<90	<90	98.55	<90	97.55	116.28	30-min rating, Generation Re-dispatch
22884 WARNERS 69.0 22688 RINCON 69.0 1 1	CRE69-E_Creelman 69kV E Bus	P2	Bus	96.72	99.22	97.57	<90	<90	117.07	<90	<90	Sensitivity Only
22208 EL CAJON 69.0 22408 LOSCOCHS 69.0 1 1	MY69-N_Murray 69kV N Bus	P2	Bus	<90	<90	<90	<90	111.36	<90	110.75	116.48	30-min rating, operation procedure
22604 OTAY 69.0 22616 OTAYLKTP 69.0 1 1	Bus_SLT69E_SALT CREEK E 69 kV BUS	P2	Bus	<90	112.81	110.64	<90	<90	107.05	<90	<90	30-min rating, Generation Re-dispatch
22160 DEL MAR 69.0 22644 PENSQTOS 69.0 2 1	Bus_PQ69NW_Penasquitos 69kV NW Bus	P2	Bus	<90	101.93	110.15	<90	91.07	109.46	96.87	<90	Operation Procedure to radialize North City and Encinitas after 1st contingency
22306 GARFIELD 69.0 22208 EL CAJON 69.0 1 1	MY69-N_Murray 69kV N Bus	P2	Bus	94.48	100.39	103.43	<90	<90	107.76	<90	94.88	Prefered resources, operation procedure
22200 DUNHILTP 69.0 22188 DOUBLTTP 69.0 1 1	Bus_PQ69SE_Penasquitos 69kV SE Bus	P2	Bus	<90	100.26	99.82	<90	<90	107.41	<90	<90	30-min rating, operation procedure
22188 DOUBLTTP 69.0 22164 DELMARTP 69.0 1 1	Bus_PQ69SE_Penasquitos 69kV SE Bus	P2	Bus	<90	100.26	99.82	<90	<90	107.41	<90	<90	Prefered resources, operation procedure
22644 PENSQTOS 69.0 22164 DELMARTP 69.0 1 1	Bus_PQ69SE_Penasquitos 69kV SE Bus	P2	Bus	<90	100.23	99.8	<90	<90	107.37	<90	<90	30-min rating, operation procedure
22841 LAGNA NL TAP 138 22396 LAGNA NL 138 1 1	PI138-E_Pico 138kV E Bus	P2	Bus	113.2	<90	<90	<90	<90	<90	<90	114.44	SOCRE project as previously approved in transmission plan, Operation Procedure in the interim
22208 EL CAJON 69.0 22408 LOSCOCHS 69.0 1 1	EC69-S_El Cajon 69kV S Bus	P2	Bus	<90	<90	<90	<90	95.91	<90	104.1	93.06	30-min rating, Generation Re-dispatch
22604 OTAY 69.0 22616 OTAYLKTP 69.0 1 1	SYO69-S_San Ysidro 69kV S Bus	P2	Bus	<90	102.12	101.11	<90	<90	100.02	<90	<90	30-min rating, Generation Re-dispatch
22640 PENDLETN 69.0 22708 SANLUSRY 69.0 1 1	ME69-S_Melrose 69kV S Bus	P2	Bus	<90	<90	<90	<90	102.06	<90	99.86	<90	Prefered resources, operation procedure
22664 POMERADO 69.0 22828 SYCAMORE 69.0 2 1	TL06915_TL06915 POMERADO -SYCAMORE ck 1 AND PEN_ALL_PEN_ALL 3 UNITS	P3	G-1/N-1	<90	<90	<90	<90	<90	<90	<90	101.89	Artesen 230/69 kV Transformer to mitigate for long term, re-dispatch generation in the interim
22664 POMERADO 69.0 22828 SYCAMORE 69.0 1 1	TL06915_TL06915 POMERADO -SYCAMORE ck 2 AND PEN_ALL_PEN_ALL 3 UNITS	P3	G-1/N-1	<90	<90	<90	<90	<90	<90	<90	101.89	Artesen 230/69 kV Transformer to mitigate for long term, re-dispatch generation in the interim

Study Area: San Diego Sub-Transmission
Thermal Overloads



Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)					Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2020 Summer Peak	2023 Summer Peak	2028 Summer Peak	2020 Spring Off-Peak	2023 Spring Off-Peak	2023 SP High CEC Forecast	2023 SpOP Hi Renew & Min Gas Gen	2020 SP Heavy Renewable & Min Gas Gen	
22420 SILVERGT 69.0 22868 URBAN 69.0 1 1	TL604_OLD TOWN to VINE SUB 69 ck 1 AND GEN NI_QF	P3	G-1/N-1	101.58	<90	<90	<90	<90	<90	<90	<90	Upgrade Silvergate-Urban 69 kV, as previously approved, in 2021, Generation Re-dispatch, preferred resources and use 30-min rating of 100 MVA in the interim
22841 LAGNA NL TAP 138 22396 LAGNA NL 138 1 1	PI-TCB_PICO TCB 138 kV 13836/46/16/48	P4	Breaker	111.01	<90	<90	<90	<90	<90	<90	112.3	SOCRE project as previously approved in transmission plan, Operation Procedure in the interim
22256 ESCNDIDO 69.0 22260 ESCNDIDO 230 2 1	ES2-2N_ESCNDIDO 230KV 2N CB	P4	Breaker	<90	<90	<90	<90	96.56	<90	<90	104.41	Monitor load growth, generation re-dispatch
N/A	TL0635_CREELMAN - LOSCOCHS ck 1 AND TL06917_TL06917 CREELMAN-SYCAMORE ck 1	P6	N-1-1	Diverge	Diverge	Diverge	<90	Diverge	Diverge	<90	Diverge	Operation Procedure to radialize Creelman after 1st contingency, TL 682 RAS will shed Creelman
22884 WARNERS 69.0 22736 SANTYSBL 69.0 1 1	TL0681_ASH-FELICITA-VALCNTR ck 1 AND TL0683_RINCON-LILAC ck 1	P6	N-1-1	153.32	Diverge	Diverge	<90	122.93	Diverge	<90	<90	Operation Procedure to radialize Valley Center after 1st contingency
N/A	TL0694_TL0694 MONSRATE-MHTAP-MOROHILL-MELROSE ck 1 AND TL06912_TL06912 PENDLETN-SANLUSRY ck 1	P6	N-1-1	<90	<90	<90	<90	Diverge	<90	Diverge	<90	Operation Procedure, Generation Re-dispatch
22668 POWAY 69.0 22676 R.CARMEL 69.0 1 1	TL0689_ESCONDIDO-FELICITA-BERNARDO ck 1 AND TL06920_TL06920 ARTESN-SYCAMORE ck 1	P6	N-1-1	160.07	<90	<90	<90	<90	<90	<90	183.01	Artesen 230/69 kV Transformer to mitigate for long term, Operation Procedure in the interim to radialize Artesan or R. Carmel substation
22604 OTAY 69.0 22616 OTAYLKTP 69.0 1 1	TL0623_IMPEAL BEACH-OTAY-SAN YSIDRO ck 1 AND TL6964_MIGUEL to SALT CREEK 69 ck 1	P6	N-1-1	108.8	104.19	99.61	<90	152.95	92.71	151.35	176.78	Operation Procedure, re-dispatch generation after 1st contingency
22808 STUARTTP 69.0 22400 LASPULGS 69.0 1 1	TL23007_TALEGA - S.ONOFRE ck 1 AND TL23052_TALEGA - S.ONOFRE ck 2	P6	N-1-1	168.4	<90	<90	<90	<90	<90	<90	149.93	Upgrade Las Pulgas - Stuart Tap 69 kV, as previously approved, in 2022, SPS to trip TL 695 in the interim
22768 BAY BLVD 69.0 22352 IMPRLBCH 69.0 1 1	TL0645_BAY BLVD-OTAY ck 1 AND TL0646_BAY BLVD-OTAY ck 2	P6	N-1-1	<90	<90	<90	<90	145.81	<90	141.75	161.79	Operation Procedure to dispatch local generation after 1 st contingency, no overload for 30-minute rating
22524 MORHILTP 69.0 22440 MELROSE 69.0 1 1	TL06912_TL06912 PENDLETN-SANLUSRY ck 1 AND TL06932_TL06932 LILAC -PALA ck 1	P6	N-1-1	<90	<90	<90	<90	147.89	<90	148.4	115.76	Operation Procedure, Generation Re-dispatch
22368 JAP MESA 69.0 22400 LASPULGS 69.0 1 1	TL23007_TALEGA - S.ONOFRE ck 1 AND TL23052_TALEGA - S.ONOFRE ck 2	P6	N-1-1	144.17	<90	<90	<90	<90	<90	<90	125.81	Upgrade Las Pulgas - Jap Mesa 69 kV, as previously approved, in 2020, SPS to trip TL 695 in the interim
22020 AVOCADO 69.0 22508 MNSRATTP 69.0 1 1	TL0691_TL0691B C D: AVCDTP-AVOCADO-PENDLETON-MONSRATE ck 1 AND TL06932_TL06932 LILAC -PALA ck 1	P6	N-1-1	<90	<90	<90	97.66	142.82	<90	144.11	<90	Congestion Management, Generation Re-dispatch
22208 EL CAJON 69.0 22408 LOSCOCHS 69.0 1 1	TLNEWA_TLNEWA GRANITE-LOS COCHES ck 1 AND TLNEWB_TLNEWB GRANITE-LOS COCHES ck 2	P6	N-1-1	<90	<90	<90	<90	134.15	<90	139.53	133.21	Operation Procedure to radialize Granite in the interim, re-configure of load in 2022 and 2027 cases
22856 TOREYPNS 69.0 22864 UCM 69.0 1 1	TL06905_TL06905 GENESEE -PENSQTOS ck 2 AND TL06959_TL06959 MIRASNT0-PENSQTOS ck 1	P6	N-1-1	122.32	129.13	127.35	<90	109.3	138.43	108.62	122.21	Operation Procedure, radialize Genesee substation after 1st contingency
22016 AVCADOTP 69.0 22020 AVOCADO 69.0 1 1	TL0698_TL0698 MONSRATE-AVOCADO-PALA ck 1 AND TL06912_TL06912 PENDLETN-SANLUSRY ck 1	P6	N-1-1	<90	<90	<90	<90	134.86	<90	136.37	<90	Operation Procedure, re-disptach Pala generators
22640 PENDLETN 69.0 22708 SANLUSRY 69.0 1 1	TL0694_TL0694 MONSRATE-MHTAP-MOROHILL-MELROSE ck 1 AND TL06932_TL06932 LILAC -PALA ck 1	P6	N-1-1	<90	<90	<90	<90	134.78	<90	132.22	102.79	Operation Procedure, re-disptach Pala generators
22316 GENESEE 69.0 22644 PENSQTOS 69.0 2 1	TL06943_TL069 TOREYPNS to UCM ck 1 AND TL06959_TL06959 MIRASNT0-PENSQTOS ck 1	P6	N-1-1	116.85	123.84	122.08	<90	104.63	132.89	103.98	116.76	Operation Procedure, radialize Genesee substation after 1st contingency
22331 MIRASNT0 69.0 22644 PENSQTOS 69.0 1 1	TL06905_TL06905 GENESEE -PENSQTOS ck 2 AND TL06943_TL069 TOREYPNS to UCM ck 1	P6	N-1-1	116.22	122.85	121.13	<90	103.95	131.72	103.3	116.11	Operation Procedure, radialize Genesee substation after 1st contingency
22056 BERNARDO 69.0 22284 FELCTATP 69.0 1 1	TL0648_POWAY-R.CARMEL ck 1 AND TL06920_TL06920 ARTESN-SYCAMORE ck 1	P6	N-1-1	112.93	<90	<90	<90	<90	<90	<90	125.57	Artesen 230/69 kV Transformer to mitigate for long term, Operation Procedure in the interim to radialize Artesan or R. Carmel substation



Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)					Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2020 Summer Peak	2023 Summer Peak	2028 Summer Peak	2020 Spring Off-Peak	2023 Spring Off-Peak	2023 SP High CEC Forecast	2023 SpOP Hi Renew & Min Gas Gen	2020 SP Heavy Renewable & Min Gas Gen	
22708 SANLUSRY 69.0 22582 OCEAN RANCH 69.0 1 1	TL0680_SANLUSRY-MELROSE-SAN MARCOS ck 1 AND TL0693_TL0693 MELROSE - SANLUSRY ck 1	P6	N-1-1	104.19	102.33	107.14	<90	119.17	111.56	117.81	122.72	Operation Procedure, preferred resources after 1st contingency, no overload on 30- min rating
22440 MELROSE 69.0 22708 SANLUSRY 69.0 1 1	TL0680_SANLUSRY-MELROSE-SAN MARCOS ck 1 AND TL6966_OCEAN RANCH to SANLUSRY 69 ck 1	P6	N-1-1	102.42	101.13	106.11	<90	118.68	110.38	117.32	121.25	Operation Procedure, preferred resources and to re-configure systems after 1st contingency
22112 CAPSTRNO 138 22860 TRABUCO 138 1 1	TL13831_TALEGA-R.MSNVJO ck 1 AND TL13833_CAPSTRNO-TRABUCO ck 1	P6	N-1-1	120.21	<90	<90	<90	<90	<90	<90	119.23	SOCRE project as previously approved in transmission plan, Operation Procedure in the interim
22420 SILVERGT 69.0 22868 URBAN 69.0 1 1	OT_BK70_OLD TOWN 69 to OLD TOWN 230 ck 1 AND OT_BK71_OLD TOWN 69 to OLD TOWN 230 ck 2	P6	N-1-1	105.22	<90	<90	<90	<90	<90	<90	116.11	Upgrade Silvergate-Urban 69 kV, as previously approved, in 2021, Generation Re-dispatch, preferred resources and use 30-min rating of 100 MVA in the interim
22160 DEL MAR 69.0 22644 PENSQTOS 69.0 2 1	TL0610_DEL MAR-PENSQTOS ck 1 AND TL06952_TL06952 NORTHCTY-PENSQTOS 69 ck 1	P6	N-1-1	109.72	101.63	109.85	<90	90.65	109.13	96.4	115.02	Operation Procedure to radialize North City and Encinitas after 1st contingency
22640 PENDLETN 69.0 22016 AVCADOTP 69.0 1 1	TL0694_TL0694 MONSRATE-MHTAP-MOROHILL-MELROSE ck 1 AND TL06932_TL06932 LILAC -PALA ck 1	P6	N-1-1	<90	<90	<90	<90	114.94	<90	112.83	<90	Operation Procedure, re-disptach Pala generators
22664 POMERADO 69.0 22828 SYCAMORE 69.0 2 1	TL06908_TL06908 ESCNDIDO-ESCO ck 1 AND TL06915_TL06915 POMERADO -SYCAMORE ck 1	P6	N-1-1	92.01	<90	<90	<90	<90	<90	<90	114.69	Operation Procedure to radialize Pomerado after the 1st contingency
22664 POMERADO 69.0 22828 SYCAMORE 69.0 1 1	TL06908_TL06908 ESCNDIDO-ESCO ck 1 AND TL06924_TL06924 POMERADO -SYCAMORE ck 2	P6	N-1-1	92.01	<90	<90	<90	<90	<90	<90	114.69	Operation Procedure to radialize Pomerado after the 1st contingency
22841 LAGNA NL TAP 138 22396 LAGNA NL 138 1 1	TL13836_TALEGA-PICO ck 1 AND TL13846_TA TAP33 TALEGA-SM-PICO ck 1	P6	N-1-1	113.02	<90	<90	<90	<90	<90	<90	114.26	SOCRE project as previously approved in transmission plan, Operation Procedure in the interim
22440 MELROSE 69.0 22442 MELRSETP 69.0 1 1	TL0693_TL0693 MELROSE - SANLUSRY ck 1 AND TL6966_OCEAN RANCH to SANLUSRY 69 ck 1	P6	N-1-1	95.26	98.68	103.82	<90	113.22	106.98	111.34	113.88	Operation Procedure, preferred resources and to re-configure systems after 1st contingency
22160 DEL MAR 69.0 22644 PENSQTOS 69.0 1 1	TL0667_DEL MAR-PENSQTOS ck 2 AND TL06952_TL06952 NORTHCTY-PENSQTOS 69 ck 1	P6	N-1-1	107.14	99.22	107.29	<90	<90	106.6	94	112.36	Operation Procedure to radialize North City and Encinitas after 1st contingency
22644 PENSQTOS 69.0 22856 TOREYPNS 69.0 1 1	TL06959_TL06959 MIRASNT0-PENSQTOS ck 1 AND TL0666_TL0666 A-G PENSQTOS-DOUBTTP-DUNHILTP-TOREYPNS ck 1	P6	N-1-1	99.57	104.19	103.9	<90	<90	111.65	<90	99.47	Operation Procedure, preferred resources and to re-configure systems after 1st contingency, monitor load growth
22200 DUNHILTP 69.0 22188 DOUBLTTP 69.0 1 1	TL06905_TL06905 GENESEE -PENSQTOS ck 2 AND TL06959_TL06959 MIRASNT0-PENSQTOS ck 1	P6	N-1-1	96	100.58	99.97	<90	<90	107.8	<90	95.91	Operation procedure to radialize TOREYPNS and MIRASNT0 after 1st contingency
22188 DOUBLTTP 69.0 22164 DELMARTP 69.0 1 1	TL06905_TL06905 GENESEE -PENSQTOS ck 2 AND TL06959_TL06959 MIRASNT0-PENSQTOS ck 1	P6	N-1-1	96	100.58	99.97	<90	<90	107.8	<90	95.91	Operation procedure to radialize TOREYPNS and MIRASNT0 after 1st contingency
22644 PENSQTOS 69.0 22164 DELMARTP 69.0 1 1	TL06905_TL06905 GENESEE -PENSQTOS ck 2 AND TL06959_TL06959 MIRASNT0-PENSQTOS ck 1	P6	N-1-1	95.99	100.55	99.94	<90	<90	107.77	<90	95.9	Operation procedure to radialize TOREYPNS and MIRASNT0 after 1st contingency
22306 GARFIELD 69.0 22208 EL CAJON 69.0 1 1	TL0618_MISSION-MURRAY ck 1 AND TL0619_MISSION-MURRAY ck 2	P6	N-1-1	94.48	100.39	103.43	<90	<90	107.76	<90	94.88	Prefered resources, operation procedure
22331 MIRASNT0 69.0 22316 GENESEE 69.0 1 1	TL06905_TL06905 GENESEE -PENSQTOS ck 2 AND TL06943_TL069 TOREYPNS to UCM ck 1	P6	N-1-1	94.08	100.23	98.62	<90	<90	107.49	<90	93.99	Operation Procedure, radialize Genesee and UCM substation after 1st contingency
22372 KEARNY 69.0 22140 CLARMTTP 69.0 1 1	TL0663_KEARNY -MISSION ck 1 AND TL0676_MESAHGTS-MISSION ck 1	P6	N-1-1	103	<90	<90	<90	<90	<90	<90	107.37	Mesa Heights 69 kV loop-in project, as previously approved, in 2021, Operation Procedure in the interim



Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)					Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2020 Summer Peak	2023 Summer Peak	2028 Summer Peak	2020 Spring Off-Peak	2023 Spring Off-Peak	2023 SP High CEC Forecast	2023 SpOP Hi Renew & Min Gas Gen	2020 SP Heavy Renewable & Min Gas Gen	
22256 ESCNDIDO 69.0 22272 ESCO 69.0 1 1	TL06915_TL06915 POMERADO -SYCAMORE ck 1 AND TL06924_TL06924 POMERADO -SYCAMORE ck 2	P6	N-1-1	<90	<90	<90	<90	<90	<90	<90	106.11	Sensitivity Only
22192 DOUBLTTP 138 22300 FRIARS 138 1 1	TL23013_PENSQTOS - OT ck 1 AND TL23071_New SX to PENSQTOS 230 ck 1	P6	N-1-1	<90	<90	<90	<90	<90	<90	102.19	90.13	Sensitivity Only
22808 STUARTTP 69.0 22400 LASPULGS 69.0 1 1	TL23007+52_TALEGA-S.ONOFRE 230KV Ckt 1 & 2	P7	N-2	168.4	<90	<90	<90	<90	<90	<90	149.93	Upgrade Las Pulgas - Stuart Tap 69 kV, as previously approved, in 2022, SPS to trip TL 695 in the interim
22368 JAP MESA 69.0 22400 LASPULGS 69.0 1 1	TL23007+52_TALEGA-S.ONOFRE 230KV Ckt 1 & 2	P7	N-2	144.17	<90	<90	<90	<90	<90	<90	125.81	Upgrade Las Pulgas - Jap Mesa 69 kV, as previously approved, in 2020, SPS to trip TL 695 in the interim
22841 LAGNA NL TAP 138 22396 LAGNA NL 138 1 1	TL13846+13836_PICO-SANMATEO-TALEGA 138KV + PICO-TALEGA 69KV	P7	N-2	113.02	<90	<90	<90	<90	<90	<90	114.26	SOCRE project as previously approved in transmission plan, Operation Procedure in the interim
22256 ESCNDIDO 69.0 22272 ESCO 69.0 1 1	TL6924+6915_POMERADO-SYCAMORE 69KV Ckt 1 & 2	P7	N-2	<90	<90	<90	<90	<90	<90	<90	106.11	Artesen 230/69 kV Transformer to mitigate for long term, pre-contingency re-dispatch generation in the interim
22208 EL CAJON 69.0 22408 LOSCOCHS 69.0 1 1	TL630+624_EL CAJON-JAMACHA + EL CAJON-GRANITE 69kV	P7	N-2	<90	<90	<90	<90	95.86	<90	104.06	93.04	30-min rating, Sensitivity Only
22200 DUNHILTP 69.0 22188 DOUBLTTP 69.0 1 1	TL662+6905_PENSQTOS-TOREYPNS + GENESEE-PENSQTOS 69KV	P7	N-2	<90	93.39	93.01	<90	<90	100.03	<90	<90	30-min rating, Sensitivity Only
22188 DOUBLTTP 69.0 22164 DELMARTP 69.0 1 1	TL662+6905_PENSQTOS-TOREYPNS + GENESEE-PENSQTOS 69KV	P7	N-2	<90	93.39	93.01	<90	<90	100.03	<90	<90	Sensitivity Only
22644 PENSQTOS 69.0 22164 DELMARTP 69.0 1 1	TL662+6905_PENSQTOS-TOREYPNS + GENESEE-PENSQTOS 69KV	P7	N-2	<90	93.36	92.98	<90	<90	100	<90	<90	30-min rating, Sensitivity Only

Study Area: San Diego Sub-Transmission

High/Low Voltages



Substation	Contingency (All and Worst P6)	Category	Category Description	Post Cont. Voltage Deviation % (Baseline Scenarios)					Post Cont. Voltage Deviation % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2020 Summer Peak	2023 Summer Peak	2028 Summer Peak	2020 Spring Off-Peak	2023 Spring Off-Peak	2023 SP High CEC Forecast	2023 SpOP Hi Renew & Min Gas Gen	2020 SP Heavy Renewable & Min Gas Gen	
None	None											

Study Area: San Diego Sub-Transmission

Voltage Deviation



Substation	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)					Voltage PU (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				2020 Summer Peak	2023 Summer Peak	2028 Summer Peak	2020 Spring Off-Peak	2023 Spring Off-Peak	2023 SP High CEC Forecast	2023 SpOP Hi Renew & Min Gas Gen	2020 SP Heavy Renewable & Min Gas Gen	
None	None											

Study Area: San Diego Sub-Transmission

Transient Stability



Contingency	Category	Category Description	Transient Stability Performance (Number of voltage and frequency violations)								Potential Mitigation Solutions
			2020 Summer Peak	2023 Summer Peak	2028 Summer Peak	2020 Spring Off-Peak	2023 Spring Off-Peak	2023 SP High CEC Forecast	2023 SpOP Hi Renew & Min Gas Gen	2020 SP Heavy Renewable & Min Gas Gen	
N/A	N/A	N/A									

Study Area: San Diego Sub-Transmission



Single Contingency Load Drop

Worst Contingency	Category	Category Description	Amount of Load Drop (MW)								Potential Mitigation Solutions
			Select..	Select..	Select..	Select..	Select..	Select..	Select..	Select..	

None

Study Area: San Diego Sub-Transmission



Single Source Substation with more than 100 MW Load

Substation	Load Served (MW)								Potential Mitigation Solutions
	Select..	Select..	Select..	Select..	Select..	Select..	Select..	Select..	

None