



Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)					Loading % (Sensitivity Scenarios)			ISO Approved Projects & Potential Mitigation Solutions
				2021 Summer Peak	2024 Summer Peak	2029 Summer Peak	2021 Spring Off-Peak	2024 Spring Off-Peak	2024 SP High CEC Forecast	2024 SpOP Hi Renew & Min Gas Gen	2021 SP Heavy Renewable & Min Gas Gen	
22016 AVCADOTP 69.0 22020 AVOCADO 69.0 1 1	TL698_Line AVOCADO-MNSRATTP 69kV ck 1	P1	N-1	<90	<90	<90	151	187	<90	186	<90	Potential RAS to trip battery charging at Avocado
	TL0698A AVOCADO-MNSRATTP ck 1	P2.1	N-1	<90	<90	<90	150	186	<90	185	<90	
	TL0698B MONSRATE-MNSRATTP ck 1	P2.1	N-1	<90	<90	<90	99	141	<90	129	<90	
	TL0691B AVCADOTP-MONSRATE ck 1	P2.1	N-1	<90	<90	<90	<90	102	<90	95	<90	
22020 AVOCADO 69.0 22508 MNSRATTP 69.0 1 1	TL691_Line MONSRATE-AVCADOTP 69kV ck 1	P1	N-1	<90	<90	<90	151	191	<90	190	<90	Potential RAS to trip battery charging at Avocado
	TL6912_Line PANDLETN-SANLUSRY 69kV ck 1	P1	N-1	<90	<90	<90	91	111	<90	110	<90	
	TL0691D AVOCADO-AVCADOTP ck 1	P2.1	N-1	<90	<90	<90	149	184	<90	183	<90	
	TL0691C AVCADOTP-PENDLETN ck 1	P2.1	N-1	<90	<90	<90	<90	112	<90	111	<90	
22046 BASILONE 69.0 22368 JAP MESA 69.0 1 1	TL23007_Line TALEGA-S.ONOFRE 230kV ck 1 AND TL23052_Line TALEGA-S.ONOFRE 230kV ck 2	P7	N-2	126	<90	<90	<90	<90	<90	<90	144	Upgrade Basilone-Jap Mesa 69 kV, as previously approved, in 2022, existing SPS to trip TL 695 in the interim
22112 CAPSTRNO 138 22860 TRABUCO 138 1 1	TL13831_Line TALEGA-R.MSNVJO 138kV ck 1 AND TL13833_Line PICO-TRABUCO 138kV ck 1	P6	N-1-1	116	<90	<90	<90	<90	<90	<90	111	SOCRE project as previously approved in transmission plan, Operation Procedure in the interim
	TL13833_Line PICO-TRABUCO 138kV ck 1 AND TL13838_Line R.MSNVJO-MARGARTA 138kV ck 1	P6	N-1-1	105	<90	<90	<90	<90	<90	<90	100	
22192 DOUBLTTP 138 22300 FRIARS 138 1 1	TL23013_Line PENSQTOS-OLD TOWN 230kV ck 1 AND TL23071_Line SYCAMORE-PENSQTOS 230kV ck 1	P7	N-2	<90	<90	<90	<90	<90	<90	103	98	Generation Re-dispatch/Potential RAS to trip generation
22416 LOVELAND 69.0 22168 DESCANSO 69.0 1 1	TL6958_Line CAMERON-CRESTWD 69kV ck 1	P1	N-1	<90	<90	<90	115	104	<90	104	95	Existing Crestwood RAS to trip generation
	TL6923_Line BARRETT-CAMERON 69kV ck 1	P1	N-1	<90	<90	<90	111	95	<90	95	<90	
	TL6957_Line BARRETT-LOVELAND 69kV ck 1	P1	N-1	<90	<90	<90	108	<90	<90	<90	<90	
22524 MORHILTP 69.0 22440 MELROSE 69.0 1 1	TL6912_Line PENDLETN-SANLUSRY 69 kV ck 1	P1	N-1	<90	<90	<90	<90	102	<90	95	<90	Potential RAS to trip battery charging at Avocado
	TL6912_Line PENDLETN-SANLUSRY 69 kV ck 1 AND TL23051 SYCAMORE - ARTESN ck 1	P6	N-1-1	<90	<90	<90	<90	105	<90	99	<90	
22604 OTAY 69.0 22616 OTAYLKTP 69.0 1 1	TL6910_Line BORDER-SALT CREEK 69kV ck 1	P1	N-1	119	115	115	<90	<90	107	<90	117	30-min rating, Generation Re-dispatch
	TL0649D OTAYLKTP-SANYSDRO ck 1	P2.1	N-1	110	115	115	<90	<90	113	<90	115	
22640 PENDLETN 69.0 22708	TL694_Line MORHILTP-MELROSE 69 kV ck 1	P1	N-1	<90	<90	<90	<90	103	<90	96	<90	
	TL0694A MELROSE-MORHILTP ck 1	P2.1	N-1	<90	<90	<90	<90	107	<90	100	<90	



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				2021 Summer Peak	2024 Summer Peak	2029 Summer Peak	2021 Spring Off-Peak	2024 Spring Off-Peak	2024 SP High CEC Forecast	2024 SpOP Hi Renew & Min Gas Gen	2021 SP Heavy Renewable & Min Gas Gen	
22070 FENDELYN 69.0 22700 SANLUSRY 69.0 1 1	TL0694B MONSRATE-MORHILTP ck 1	P2.1	N-1	<90	<90	<90	<90	103	<90	96	<90	Potential RAS to trip battery charging at Avocado
	TL694_Line MORHILTP-MELROSE 69 kV ck 1 AND TL23051 SYCAMORE - ARTESN ck 1	P6	N-1-1	<90	<90	<90	<90	105	<90	100	<90	
22808 STUARTTP 69.0 22400 LASPULGS 69.0 1 1	TL23007_Line TALEGA-S.ONOFRE 230kV ck 1 AND TL23052_Line TALEGA-S.ONOFRE 230kV ck 2	P7	N-2	147	<90	<90	<90	<90	<90	<90	160	Upgrade Las Pulgas - Stuart Tap 69 kV, as previously approved, in 2022, existing SPS to trip TL 695 in the interim
22841 LAGNA NL TAP 138 22396 LAGNA NL 138 1 1	Bus PICO 138kV East	P2		115	<90	<90	<90	<90	<90	<90	114	SOCRE project as previously approved in transmission plan, Operation Procedure in the interim
	PICO TCB 138 kV 13836/46/16/48	P4		113	<90	<90	<90	<90	<90	<90	112	
	TL13816_Line CAPSTRNO-PICO 138 kV ck 1 AND TL13831_Line TALEGA-R.MSNVJO 138kV ck 1	P6	N-1-1	105	<90	<90	<90	<90	<90	<90	105	
	TL13816_Line CAPSTRNO-PICO 138 kV ck 1 AND TL13838_Line R.MSNVJO-MARGARTA 138kV ck 1	P6	N-1-1	100	<90	<90	<90	<90	<90	<90	100	
	TL13836_Line TALEGA-PICO 138kV ck 1 AND TL13846_Line PICO-TA TAP33 138kV ck 1	P7	N-2	115	<90	<90	<90	<90	<90	<90	114	
22306 GARFIELD 69.0 22208 EL CAJON 69.0 1 1	Murray 69kV North Bus	P2		110	114	112	<90	<90	125	<90	112	Prefered resources, Load Reduction, Reconductor the line
22208 EL CAJON 69.0 22408 LOSCOCHS 69.0 1 1	LOSCOCHS-GRANITE 69 kV ck 1 AND LOSCOCHS-GRANITE 69 kV ck 2	P6	N-2	93	102	95	<90	109	116	114	104	30-min rating, Generation Re-dispatch
	TL620_Line MURRAY-GARFIELD 69 kV ck 1 AND TL624_Line EL CAJON-JAMACHA 69 kV ck 1	P6	N-2	<90	<90	<90	<90	105	<90	105	<90	

Study Area: San Diego Sub-Transmission

High/Low Voltages



Substation	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)					Voltage PU (Sensitivity Scenarios)			ISO Approved Projects & Potential Mitigation Solutions
				2021 Summer Peak	2024 Summer Peak	2029 Summer Peak	2021 Spring Off-Peak	2024 Spring Off-Peak	2024 SP High CEC Forecast	2024 SpOP Hi Renew & Min Gas Gen	2021 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 Deviation % (Baseline Scenarios)					Voltage Deviation % (Sensitivity Scenarios)			ISO Approved Projects & Potential Mitigation Solutions
				2021 Summer Peak	2024 Summer Peak	2029 Summer Peak	2021 Spring Off-Peak	2024 Spring Off-Peak	2024 SP High CEC Forecast	2024 SpOP Hi Renew & Min Gas Gen	2021 SP Heavy Renewable & Min Gas Gen	
None	None											

Study Area: San Diego Sub-Transmission

Transient Stability



Contingency	Category	Category Description	Transient Stability Performance					Potential Mitigation Solutions
			Baseline Scenarios			Sensitivity Scenarios		
			2024 Summer Peak	2029 Summer Peak	2024 Spring Off-Peak	2024 SP High CEC Forecast	2024 SpOP Hi Renew & Min Gas Gen	
None	None							

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..	Select..	Select..	

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

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..	Select..	Select..	

No single source substation with of more than 100 MW.