



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	
Bob SS-Mead 230kV Line	Eldorado 500/230kV Transformer No.5	P1	Single outage	<100	<100	<100	184.9	<100	<100	<100	182.87	Bob-Mead upgrade. Interium solution utilizes Ivanpah RAS
Eldorado-Merchant 230kV No.2 Line	Eldorado-Merchant 230kV No.1 Line	P1	Single outage	<100	<100	<100	<100	<100	<100	102.46	<100	Reduce generation output at Merchant
System Diverge	Eldorado-Mohave & Lugo-Mohave 500kV	P6	Two overlapping singles	Nconv	Nconv	Nconv	Nconv	Nconv	Nconv	Nconv	Nconv	NVEnergy protection scheme to radialize Laughlin 69kV system

Study Area: SCE East of Lugo

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												

Study Area: SCE East of Lugo

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												

Study Area: SCE East of Lugo

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	
EIDorado_5AA_RAS	P1	Normal clearing	Stable	NA	Stable	NA	Stable	NA	Stable	Stable	
EIDorado_5AA_noRAS	P1	Normal clearing	Stable	NA	Stable	NA	Stable	NA	Stable	Stable	
Eldorado-Mohave & Lugo-Mohave 500kV	P6	Normal clearing	Stable	NA	Stable	NA	Stable	NA	Stable	Stable	
Eldorado-Lugo & Eldorado-Mohave 500kV	P6	Normal clearing	Stable	NA	Stable	NA	Stable	NA	Stable	Stable	

Study Area: SCE East of Lugo



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..	

Study Area: SCE East of Lugo

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..	