

Study Area: **SCE East of Lugo - Summer Peak**

Thermal Overloads



ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2016 Summer Peak	2019 Summer Peak	2024 Summer Peak	

No thermal overload concerns identified.

# 2014-2015 ISO Reliability Assessment - Preliminary Study Results

Study Area: **SCE East of Lugo - Summer Off-Peak & Summer Light Load**

## Thermal Overloads



ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2016 Summer Off-Peak	2019 Summer Light Load	N/A	
EOL-NP-T-1	24647 IVANPAH 230 24648 IVANPAH 115 1	line_119_Line IVANPAH 115.0 to MTN PASS 115.0 Circuit + tran_132_Tran IVANPAH 230.00 to IVANPAH 115.00 Circui	C	N-1-1	106%	<100%		Operational action plan (curtail generation after the first N-1)
EOL-NP-T-2	24647 IVANPAH 230 24648 IVANPAH 115 2	line_119_Line IVANPAH 115.0 to MTN PASS 115.0 Circuit + tran_131_Tran IVANPAH 230.00 to IVANPAH 115.00 Circui	C	N-1-1	106%	<100%		Operational action plan (curtail generation after the first N-1)



ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %			Potential Mitigation Solutions
					2016 Summer Peak	2019 Summer Peak	2024 Summer Peak	

No voltage deviation concerns identified.



Voltage Deviations

ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %			Potential Mitigation Solutions
					2016 Summer Off-Peak	2019 Summer Light Load	N/A	

No voltage deviation concerns identified.



ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)			Potential Mitigation Solutions
					2016 Summer Peak	2019 Summer Peak	2024 Summer Peak	

No high/low voltage concerns identified.



ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)			Potential Mitigation Solutions
					2016 Summer Off-Peak	2019 Summer Light Load	N/A	

No high/low voltage concerns identified.



ID	Contingency	Category	Category Description	Transient Stability Performance			Potential Mitigation Solutions
				2016 Summer Peak	2019 Summer Peak	2024 Summer Peak	

No transient stability concerns identified.



*Transient Stability*

ID	Contingency	Category	Category Description	Transient Stability Performance			Potential Mitigation Solutions
				2016 Summer Off-Peak	2019 Summer Light Load	N/A	

No transient stability concerns identified.



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**Post-Transient Thermal Overloads**



ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2016 Summer Peak	2019 Summer Peak	2024 Summer Peak	
EOL-SP-PTT-1	Lugo - Victorville 500kV line	Palo Verde - Col River 500kV line + IV - North Gila 500kV line	C	N-1-1	111%	<100%	<100%	Please refer to SCE Bulk system results
EOL-SP-PTT-2	Lugo - Victorville 500kV line	Lugo - Eldorado 500kV line + Lugo - Mohave 500kV line	C	N-1-1	<100%	<100%	125%	Please refer to SCE Bulk system results



ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2016 Summer Off-Peak	2019 Summer Light Load	N/A	

No post-transient thermal overload concerns identified.



Post-Transient Voltage Deviations

ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %			Potential Mitigation Solutions
					2016 Summer Peak	2019 Summer Peak	2024 Summer Peak	

No post-transient voltage overload concerns identified.



Post-Transient Voltage Deviations

ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %			Potential Mitigation Solutions
					2016 Summer Off-Peak	2019 Summer Light Load	N/A	

No post-transient voltage deviation concerns identified.

Study Area: **SCE East of Lugo - Summer Peak**



Single Contingency Load Drop

ID	Worst Contingency	Category	Category Description	Amount of Load Drop (MW)			Potential Mitigation Solutions
				2016 Summer Peak	2019 Summer Peak	2024 Summer Peak	

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

**Single Contingency Load Drop**

ID	Worst Contingency	Category	Category Description	Amount of Load Drop (MW)			Potential Mitigation Solutions
				2016 Summer Off-Peak	2019 Summer Light Load	N/A	

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

Study Area: **SCE East of Lugo - Summer Peak**

*Single Source Substation with more than 100 MW Load*



ID	Substation	Load Served (MW)			Potential Mitigation Solutions
		2016 Summer Peak	2019 Summer Peak	2024 Summer Peak	

No single source substation with more than 100 MW Load

## 2014-2015 ISO Reliability Assessment - Preliminary Study Results

Study Area: **SCE East of Lugo - Summer Off-Peak & Summer Light Load**

**Single Source Substation with more than 100 MW Load**



ID	Substation	Load Served (MW)			Potential Mitigation Solutions
		2016 Summer Off-Peak	2019 Summer Light Load	N/A	

No single source substation with more than 100 MW Load