



Thermal Overloads

ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2014 Summer Peak	2017 Summer Peak	2022 Summer Peak	

No thermal overloads identified.

2012/2013 ISO Reliability Assessment - Final Study Results

Study Area: **SCE North of Lugo - Summer Peak without Renewables**



**Voltage Deviations**

ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %			Potential Mitigation Solutions
					2014 Summer Peak	2017 Summer Peak	2022 Summer Peak	
NOL-DV-1	TORTILLA 115kV	line COLWATER-SEG2-TORTILLA 115 ck 1	B	L-1	<5%	<5%	5.33%	Install shunt cap at Tortilla 115kV substation.

2012/2013 ISO Reliability Assessment - Final Study Results

Study Area: **SCE North of Lugo - Summer Peak without Renewables**



**High/Low Voltage**

ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)			Potential Mitigation Solutions
					2014 Summer Peak	2017 Summer Peak	2022 Summer Peak	
NOL-V-1	N/A	Tran CONTROL 115.00 to CONTROL 55.00 ck 1, Tran CONTROL 115.00 to CONTROL 55.00 ck 3	C	T-1/T-1	N/A	DIVERGE	DIVERGE	SPS to shed load at Control 55kV substation.



Transient Stability

ID	Contingency	Category	Category Description	Transient Stability Performance			Potential Mitigation Solutions
				2014 Summer Peak	2017 Summer Peak	2022 Summer Peak	

No transient stability issues identified.

Post-Transient Thermal Overloads

ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2014 Summer Peak	2017 Summer Peak	2022 Summer Peak	

No post-transient thermal overloads identified.

Post-Transient Voltage Deviations

ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %			Potential Mitigation Solutions
					2014 Summer Peak	2017 Summer Peak	2022 Summer Peak	

No post-transient voltage deviations identified.

Study Area: **SCE North of Lugo - without Renewables**



Single Contingency Load Drop

ID	Worst Contingency	Category	Category Description	Amount of Load Drop (MW)			Potential Mitigation Solutions
				2014	2017	2022	

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

## 2012/2013 ISO Reliability Assessment - Final Study Results

Study Area: **SCE North of Lugo - without Renewables**

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



ID	Substation	Load Served (MW)			Potential Mitigation Solutions
		2014	2017	2022	

No single source substation with more than 100 MW Load