

Study Area: **SCE Eastern area - 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	

See post transient thermal loading results.

Study Area: **SCE Eastern area - 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	

No thermal overload concerns identified.

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 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.

2014-2015 ISO Reliability Assessment - Preliminary Study Results

Study Area: **SCE Eastern area - Summer Off-Peak & Summer Light Load**

High/Low Voltage



ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)			Potential Mitigation Solutions
					2016 Summer Off-Peak	2019 Summer Light Load	N/A	
EOD-NP-V-1	Buck Boulevard	Julian Hinds-Mirage 230 kV line & Julian Hinds 230 kV reactor	C	L-1/N-1	< 1.1 p.u.	1.1 p.u.	N/A	System adjustment after initial or second contingency.

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Transient Stability



ID	Contingency	Category	Category Description	Transient Stability Performance			Potential Mitigation Solutions
				2016 Summer Peak	2019 Summer Peak	2024 Summer Peak	
EOD-SP-TS-1	Julian Hinds–Mirage & Eagle Mountain–Iron Mountain 230 kV lines	C	C3	Diverged	Diverged	Diverged	System adjustments after initial contingency per SCE OP 128 and ISO OP 7720F.
EOD-SP-TS-2	Julian Hinds–Mirage & Iron Mountain–Camino–Mead–Gene 230 kV lines	C	C3	Did not meet voltage dip requirements	Diverged	Diverged	

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Transient Stability

ID	Contingency	Category	Category Description	Transient Stability Performance			Potential Mitigation Solutions
				2016 Summer Off-Peak	2019 Summer Light Load	N/A	
EOD-NP-TS-1	Julian Hinds–Mirage & Eagle Mountain–Iron Mountain 230 kV lines	C	C3	Unstable	Met requirements	N/A	System adjustments after initial contingency per ISO OP 7720F.
EOD-NP-TS-2	Julian Hinds–Mirage & Iron Mountain–Camino–Mead–Gene 230 kV lines	C	C3	Unstable	Met requirements	N/A	

2014-2015 ISO Reliability Assessment - Preliminary Study Results

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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	
EOD-SP-PTT-1	Julian Hinds 161 kV Bus Section	Julian Hinds–Mirage & Eagle Mountain–Iron Mountain 230 kV lines	C	C3	<100%	Diverged	100%	System adjustments after initial contingency per SCE OP 128 and ISO OP 7720F.
EOD-SP-PTT-2	Julian Hinds 161 kV Bus Section	Julian Hinds–Mirage & Iron Mountain–Camino–Mead–Gene 230 kV lines	C	C3	<100%	Diverged	101%	

2014-2015 ISO Reliability Assessment - Preliminary Study Results

Study Area: **SCE Eastern area - Summer Off-Peak & Summer Light Load**

Post-Transient Thermal Overloads



ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2016 Summer Off-Peak	2019 Summer Light Load	N/A	
EOD-NP-PTT-1	N/A	Julian Hinds–Mirage & Eagle Mountain–Iron Mountain 230 kV lines	C	C3	Diverged	<100%		System adjustments after initial contingency per ISO OP 7720F.
EOD-NP-PTT-2	N/A	Julian Hinds–Mirage & Iron Mountain–Camino–Mead–Gene 230 kV lines	C	C3	Diverged	<100%		



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 deviation 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 Eastern area - 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.

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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 Eastern area - 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