

# 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Summer Peak**



## Thermal Overloads

ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2015 Summer Peak	2018 Summer Peak	2023 Summer Peak	
CC-SP-T-001	GRN VLY1-MOSLND D 115 kV # 1 Line	Moss Landing-Green Valley #2 115 kV Line	B	L-1	109	<100	<100	Action Plan
CC-SP-T-002	GRN VLY2-MOSLND D 115 kV # 1 Line	Moss Landing-Green Valley #1 115 kV Line	B	L-1	109	<100	<100	Action Plan
CC-SP-T-003	MOSLND D-MOSSLND1 115/230 kV #1 Bank	BUS FAULT AT MOSSLND2 230 kV (Bus Section 2D)	C1	BUS	109	<100	<100	Action Plan/drop load
CC-SP-T-004	MOSLND D-MOSSLND2 115/230 kV #2 Bank	BUS FAULT AT MOSSLND1 230 kV (Bus Section 1D)	C1	BUS	109	<100	<100	Action Plan/drop load
CC-SP-T-005	MOSLND E-MOSSLND1 115/230 kV #8 Bank	BUS FAULT AT MOSSLND2 230 kV (Bus Section 2D)	C1	BUS	108	<100	<100	Action Plan/drop load
CC-SP-T-006	MOSLND E-MOSSLND2 115/230 kV #10 Bank	BUS FAULT AT MOSSLND1 230 kV (Bus Section 1D)	C1	BUS	109	<100	<100	Action Plan/drop load
CC-SP-T-007	GRN VLY2-MOSLND D 115 kV # 1 Line	BUS FAULT AT MOSSLND1 230 kV (Bus Section 1D)	C1	BUS	109	<100	<100	Action Plan/drop load
CC-SP-T-008	MOSLND D-MOSSLND1 115/230 kV #1 Bank	CB FAULT AT MOSS LANDING SUB 115 kV CB120	C2	CB	113	<100	<100	Action Plan/drop load
CC-SP-T-009	MOSLND D-MOSSLND2 115/230 kV #2 Bank	CB FAULT AT MOSS LANDING SUB 115 kV CB110	C2	CB	114	<100	<100	Action Plan/drop load
CC-SP-T-010	MOSLND E-MOSSLND1 115/230 kV #8 Bank	CB FAULT AT MOSS LANDING SUB 115 kV CB120	C2	CB	113	<100	<100	Action Plan/drop load
CC-SP-T-011	MOSLND E-MOSSLND2 115/230 kV #10 Bank	CB FAULT AT MOSS LANDING SUB 115 kV CB110	C2	CB	114	<100	<100	Action Plan/drop load
CC-SP-T-012	GRN VLY2-MOSLND D 115 kV # 1 Line	CB FAULT AT MOSS LANDING SUB 115 kV CB110	C2	CB	112	<100	<100	Action Plan/drop load
CC-SP-T-013	GRN VLY1-MOSLND D 115 kV # 1 Line	Moss Landing-Green Valley #2 & Green Valley-Paul Sweet 115 kV Lines	C3	L-1-1	103	<100	<100	Action Plan/drop load
CC-SP-T-014	GRN VLY1-MOSLND D 115 kV # 1 Line	Moss Landing-Green Valley #2 115 kV and Crazy Horse-Watsonville 115 kV Lines	C3	L-1-1	<100	110	117	Reconductor

# 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Summer Peak**

## Thermal Overloads



ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2015 Summer Peak	2018 Summer Peak	2023 Summer Peak	
CC-SP-T-015	GRN VLY2-MOSLND D 115 kV # 1 Line	Moss Landing-Green Valley #1 & Green Valley-Paul Sweet 115 kV Lines	C3	L-1-1	103	<100	<100	Action Plan/drop load
CC-SP-T-016	GRN VLY2-MOSLND D 115 kV # 1 Line	Moss Landing-Green Valley #1 115 kV and Crazy Horse-Watsonville 115 kV Lines	C3	L-1-1	<100	110	117	Reconductor
CC-SP-T-017	CRZY_HRS-NTVD SW2 115 kV #1 Line	Moss Landing-Salinas #1 & 2 115 kV Lines	C3	L-1-1	138	139	136	Reconductor
CC-SP-T-018	CRZY_HRS-NTVD SW1 115 kV #1 Line	Moss Landing-Salinas #1 & 2 115 kV Lines	C3	L-1-1	138	139	136	Reconductor
CC-SP-T-019	NTVD SW2-SALINAS 115 kV #1 Line	Moss Landing-Salinas #1 & 2 115 kV Lines	C3	L-1-1	107	108	112	Reconductor
CC-SP-T-020	NTVD SW1-SALINAS 115 kV #1 Line	Moss Landing-Salinas #1 & 2 115 kV Lines	C3	L-1-1	107	108	112	Reconductor
CC-SP-T-021	MOSLND D-MOSSLND1 115/230 kV #1 Bank	Moss Landing 230/115 kV Bank #8 & 10	C3	T-1-1	199	<100	<100	Action Plan/drop load
CC-SP-T-022	MOSLND D-MOSSLND2 115/230 kV #2 Bank	Moss Landing 230/115 kV Bank #8 & 10	C3	T-1-1	199	<100	<100	Action Plan/drop load
CC-SP-T-023	MOSLND E-MOSSLND1 115/230 kV #8 Bank	Moss Landing 230/115 kV Bank #1 & 10	C3	T-1-1	108	<100	<100	Action Plan/drop load
CC-SP-T-024	MOSLND E-MOSSLND2 115/230 kV #10 Bank	Moss Landing 230/115 kV Bank #1 & 8	C3	T-1-1	109	<100	<100	Action Plan/drop load
CC-SP-T-025	GRN VLY1-ERTA JCT 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	N/A	148	161	Resize conductors for the Watsonville 115 kV Voltage Conversion Project (Refer to the C5 DCTL mitigation)
CC-SP-T-026	CIC JCT-ERTA JCT 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	N/A	149	162	Resize conductors for the Watsonville 115 kV Voltage Conversion Project (Refer to the C5 DCTL mitigation)

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Study Area: **PG&E Central Coast - Summer Peak**

## Thermal Overloads



ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2015 Summer Peak	2018 Summer Peak	2023 Summer Peak	
CC-SP-T-027	CIC JCT-AGRILINK 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	N/A	149	162	Resize conductors for the Watsonville 115 kV Voltage Conversion Project (Refer to the C5 DCTL mitigation)
CC-SP-T-028	WTSNVLE-AGRILINK 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	N/A	149	162	Resize conductors for the Watsonville 115 kV Voltage Conversion Project (Refer to the C5 DCTL mitigation)
CC-SP-T-029	WTSNVLE-GRANT JT 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	N/A	161	175	Resize conductors for the Watsonville 115 kV Voltage Conversion Project (Refer to the C5 DCTL mitigation)
CC-SP-T-030	BRIGTANO-GRANT JT 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	N/A	161	176	Resize conductors for the Watsonville 115 kV Voltage Conversion Project (Refer to the C5 DCTL mitigation)
CC-SP-T-031	CRZY_HRS-BRIGTANO 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	N/A	163	177	Resize conductors for the Watsonville 115 kV Voltage Conversion Project (Refer to the C5 DCTL mitigation)
CC-SP-T-032	GRN VLY1-ERTA JCT 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	149	154	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to address low voltage concerns

**Thermal Overloads**

ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2015 Summer Peak	2018 Summer Peak	2023 Summer Peak	
CC-SP-T-033	CIC JCT-ERTA JCT 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	151	155	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to address low voltage concerns
CC-SP-T-034	CIC JCT-AGRILINK 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	151	155	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to address low voltage concerns
CC-SP-T-035	WTSNVLE-AGRILINK 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	151	155	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to address low voltage concerns
CC-SP-T-036	WTSNVLE-GRANT JT 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	163	167	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to address low voltage concerns
CC-SP-T-037	BRIGTANO-GRANT JT 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	163	168	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to address low voltage concerns

## 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Summer Peak**



### Thermal Overloads

ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2015 Summer Peak	2018 Summer Peak	2023 Summer Peak	
CC-SP-T-038	CRZY_HRS-BRIGTANO 115 kV #1 Line	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	165	169	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to address low voltage concerns

San Onofre Nuclear Generation Station was retired on June 7, 2013 and therefore was removed from the base cases used for the 2013/14 ISO transmission planning process.

# 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Summer Peak**

**High/Low Voltage**



ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)			Potential Mitigation Solutions
					2015 Summer Peak	2018 Summer Peak	2023 Summer Peak	
CC-SP-V-001	GREN VLY 60 kV	Normal	A	-	1.05	N/A	N/A	Action Plan/monitor area load decline
CC-SP-V-002	ERTA 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C3	L-1-1	N/A	0.90	0.86	Add Reactive Support (Refer to mitigation for C5 DCTL related low voltage concerns)
CC-SP-V-003	AGRILINK 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C3	L-1-1	N/A	0.90	0.86	Add Reactive Support (Refer to mitigation for C5 DCTL related low voltage concerns)
CC-SP-V-004	WTSNVLE 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C3	L-1-1	N/A	0.90	0.86	Add Reactive Support (Refer to mitigation for C5 DCTL related low voltage concerns)
CC-SP-V-005	CMP EVRS 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C3	L-1-1	-	0.91	0.85	Activate Paul Sweet StatCom
CC-SP-V-006	PAUL SWT 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C3	L-1-1	-	0.91	0.86	Activate Paul Sweet StatCom
CC-SP-V-007	ROB ROY 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C3	L-1-1	-	0.90	0.85	Activate Paul Sweet StatCom
CC-SP-V-008	GRN VLY1 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C3	L-1-1	-	0.90	0.85	Activate Paul Sweet StatCom
CC-SP-V-009	GRN VLY2 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C3	L-1-1	-	0.90	0.85	Activate Paul Sweet StatCom
CC-SP-V-010	TEXACO 60 kV	Coburn-Oil Fields #1 60 kV Line and Coburn 230/60 kV #2 Bank	C3	L-1/T-1	0.74	-	-	Existing Action Plan/drop load
CC-SP-V-011	OILFLDS 60 kV	Coburn-Oil Fields #1 60 kV Line and Coburn 230/60 kV #2 Bank	C3	L-1/T-1	0.74	0.83	-	Existing Action Plan/drop load
CC-SP-V-012	SAN ARDO 60 kV	Coburn-Oil Fields #2 60 kV Line and Coburn 230/60 kV #2 Bank	C3	L-1/T-1	0.88	0.88	-	Existing Action Plan/drop load
CC-SP-V-013	CMP EVRS 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C5	L-2	-	0.89	0.85	Activate Paul Sweet StatCom
CC-SP-V-014	PAUL SWT 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C5	L-2	-	0.89	0.86	Activate Paul Sweet StatCom

2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Summer Peak**

**High/Low Voltage**



ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)			Potential Mitigation Solutions
					2015 Summer Peak	2018 Summer Peak	2023 Summer Peak	
CC-SP-V-015	ROB ROY 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C5	L-2	-	0.88	0.85	Activate Paul Sweet StatCom
CC-SP-V-016	GRN VLY1 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C5	L-2	-	0.88	0.85	Activate Paul Sweet StatCom
CC-SP-V-017	GRN VLY2 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C5	L-2	-	0.88	0.85	Activate Paul Sweet StatCom
CC-SP-V-018	ERTA 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C5	L-2	N/A	0.88	0.86	Add Reactive Support (Refer to mitigation for C5 DCTL related low voltage concerns)
CC-SP-V-019	AGRILINK 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C5	L-2	N/A	0.89	0.86	Add Reactive Support (Refer to mitigation for C5 DCTL related low voltage concerns)
CC-SP-V-020	WTSNVLE 115 kV	Moss Landing-Green Valley #1 & 2 115 kV Lines	C5	L-2	N/A	0.89	0.86	Add Reactive Support (Refer to mitigation for C5 DCTL related low voltage concerns)

**Voltage Deviations**

ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %			Potential Mitigation Solutions
					2015 Summer Peak	2018 Summer Peak	2023 Summer Peak	
CC-SP-VD-001	ERTA 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	N/A	-12	-15	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-002	AGRILINK 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	N/A	-12	-14	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-003	WTSNVLL 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	N/A	-12	-14	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-004	GRANT RK 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	N/A	-	-11	Monitor area voltage
CC-SP-VD-005	BRIGTANO 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	N/A	-	-11	Monitor area voltage
CC-SP-VD-006	CMP EVRS 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	-	-12	-15	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-007	PAUL SWT 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	-	-12	-14	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-008	ROB ROY 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	-	-12	-15	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-009	GRN VLY1 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	-	-12	-15	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-010	GRN VLY2 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C3	L-1-1	-	-12	-15	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-011	OILFLDS 60 kV	Coburn 230/60 kV #2 Bank and Coburn-Oil Fields 60 kV #1 Line	C3	L-1/T-1	-24	-15	-	Existing Action Plan
CC-SP-VD-012	TEXACO 60 kV	Coburn 230/60 kV #2 Bank and Coburn-Oil Fields 60 kV #1 Line	C3	L-1/T-1	-23	-	-	Existing Action Plan
CC-SP-VD-013	SAN ARDO 60 kV	Coburn 230/60 kV #2 Bank and Coburn-Oil Fields 60 kV #2 Line	C3	L-1/T-1	-	-10	-	Existing Action Plan/Monitor area voltage rise
CC-SP-VD-014	ERTA 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-14	-15	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-015	AGRILINK 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-14	-14	Implement area-wide action plan to mitigate high voltage deviations

**Voltage Deviations**

ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %			Potential Mitigation Solutions
					2015 Summer Peak	2018 Summer Peak	2023 Summer Peak	
CC-SP-VD-016	WTSNVILLE 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-14	-14	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-017	GRANT RK 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-10	-11	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-018	BRIGTANO 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-10	-11	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-019	CMP EVRS 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	-	-14	-15	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-020	PAUL SWT 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	-	-13	-14	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-021	ROB ROY 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	-	-14	-15	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-022	GRN VLY1 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	-	-14	-15	Implement area-wide action plan to mitigate high voltage deviations
CC-SP-VD-023	GRN VLY2 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	-	-14	-15	Implement area-wide action plan to mitigate high voltage deviations

**Thermal Overloads**

ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2015 Summer Off-Peak	2018 Summer Light Load	2023 Summer Off-Peak	
CC-NP-T-001	MOSLND D-MOSSLND2 115/230 kV #2 Bank	Moss Landing 230/115 kV Bank #8 & 10	C3	T-1-1	106	<100	<100	Action Plan/drop load
CC-NP-T-002	MOSLND D-MOSSLND1 115/230 kV #1 Bank	Moss Landing 230/115 kV Bank #8 & 10	C3	T-1-1	106	<100	<100	Action Plan/drop load

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Study Area: **PG&E Central Coast - Summer Off-Peak & Summer Light Load**

**High/Low Voltage**



ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)			Potential Mitigation Solutions
					2015 Summer Off-Peak	2018 Summer Light Load	2023 Summer Off-Peak	
CC-NP-V-001	ERTA 60 kV	-	A	Normal	1.07	N/A	N/A	Review for exemption
CC-NP-V-002	AGRILINK 60 kV	-	A	Normal	1.07	N/A	N/A	Review for exemption
CC-NP-V-003	WTSNVLL 60 kV	-	A	Normal	1.07	N/A	N/A	Review for exemption
CC-NP-V-004	GRANT RK 60 kV	-	A	Normal	1.06	N/A	N/A	Review for exemption
CC-NP-V-005	BRIGTANO 60 kV	-	A	Normal	1.06	N/A	-	Review for exemption
CC-NP-V-006	ERTA 115 kV	-	A	Normal	N/A	1.08	-	Review for exemption
CC-NP-V-007	AGRILINK 115 kV	-	A	Normal	N/A	1.08	-	Review for exemption
CC-NP-V-008	WTSNVLL 115 kV	-	A	Normal	N/A	1.08	-	Review for exemption
CC-NP-V-009	GRANT RK 115 kV	-	A	Normal	N/A	1.08	-	Review for exemption
CC-NP-V-010	BRIGTANO 115 kV	-	A	Normal	N/A	1.08	-	Review for exemption
CC-NP-V-011	LONE STR 60 kV	-	A	Normal	1.05	-	1.05	Review for exemption
CC-NP-V-012	BIG BASN 60 kV	-	A	Normal	1.06	1.09	1.05	Review for exemption
CC-NP-V-013	CRUSHER 60 kV	-	A	Normal	1.05	1.09	1.05	Review for exemption
CC-NP-V-014	PT MRTTI 60 kV	-	A	Normal	1.05	1.09	1.05	Review for exemption
CC-NP-V-015	CMP EVRS 115 kV	-	A	Normal	-	1.07	-	Review for exemption

# 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Summer Off-Peak & Summer Light Load**

**High/Low Voltage**



ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)			Potential Mitigation Solutions
					2015 Summer Off-Peak	2018 Summer Light Load	2023 Summer Off-Peak	
CC-NP-V-016	PAUL SWT 115 kV	-	A	Normal	-	1.07	-	Review for exemption
CC-NP-V-017	ROB ROY 115 kV	-	A	Normal	-	1.08	-	Review for exemption
CC-NP-V-018	GRN VLY1 115 kV	-	A	Normal	-	1.08	-	Review for exemption
CC-NP-V-019	GRN VLY2 115 kV	-	A	Normal	-	1.08	-	Review for exemption
CC-NP-V-020	HOLLISTR 115 kV	-	A	Normal	-	1.09	-	Review for exemption
CC-NP-V-021	HOLLISTR 115 kV	-	A	Normal	1.05	1.09	-	Review for exemption
CC-NP-V-022	HOLST D 115 kV	-	A	Normal	1.05	1.09	-	Review for exemption
CC-NP-V-023	SNBENITO 115 kV	-	A	Normal	-	1.08	-	Review for exemption
CC-NP-V-024	SALINAS 115 kV	-	A	Normal	-	1.08	-	Review for exemption
CC-NP-V-025	SOLEDAD 115 kV	-	A	Normal	-	1.08	-	Review for exemption
CC-NP-V-026	CSTRVLE 115 kV	-	A	Normal	1.06	1.09	1.06	Review for exemption
CC-NP-V-027	DEL MNTE 115 kV	-	A	Normal	-	1.07	-	Review for exemption
CC-NP-V-028	DOLAN RD 115 kV	-	A	Normal	1.06	1.09	1.06	Review for exemption
CC-NP-V-029	PRUNEDLE 115 kV	-	A	Normal	1.05	1.08	1.05	Review for exemption
CC-NP-V-030	TEXACO 60 kV	Coburn 230/60 kV Bank #2 and Coburn-Oil Fields 60 kV #1 Line	C3	L-1-1	0.82	-	-	Action Plan/drop load

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Study Area: **PG&E Central Coast - Summer Off-Peak & Summer Light Load**

**High/Low Voltage**



ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)			Potential Mitigation Solutions
					2015 Summer Off-Peak	2018 Summer Light Load	2023 Summer Off-Peak	
CC-NP-V-031	OILFLDS 60 kV	Coburn 230/60 kV Bank #2 and Coburn-Oil Fields 60 kV #1 or #2 Line	C3	L-1-1	0.82	-	0.88	Action Plan/drop load

**Voltage Deviations**

ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %			Potential Mitigation Solutions
					2015 Summer Off-Peak	2018 Summer Light Load	2023 Summer Off-Peak	
CC-NP-VD-001	VIEJO 60 kV	Del Monte 115/60 kV #4 Bank	B	T-1	-	7	-	Action Plan for summer light load conditions
CC-NP-VD-002	HATTON 60 kV	Del Monte 115/60 kV #4 Bank	B	T-1	-	7	-	Action Plan for summer light load conditions
CC-NP-VD-003	DEL MNTE 60 kV	Del Monte 115/60 kV #4 Bank	B	T-1	-	7	-	Action Plan for summer light load conditions
CC-NP-VD-004	FORT ORD 60 kV	Del Monte 115/60 kV #4 Bank	B	T-1	-	7	-	Action Plan for summer light load conditions
CC-NP-VD-005	MANZANTA 60 kV	Del Monte 115/60 kV #4 Bank	B	T-1	-	7	-	Action Plan for summer light load conditions
CC-NP-VD-006	MONTEREY 60 kV	Del Monte 115/60 kV #4 Bank	B	T-1	-	7	-	Action Plan for summer light load conditions
CC-NP-VD-007	NAVY LAB 60 kV	Del Monte 115/60 kV #4 Bank	B	T-1	-	7	-	Action Plan for summer light load conditions
CC-NP-VD-008	NAVY SCHL 60 kV	Del Monte 115/60 kV #4 Bank	B	T-1	-	7	-	Action Plan for summer light load conditions
CC-NP-VD-009	PAUL SWT 115 kV	PSWTSTCM #1 Unit	B	T-1	-	-	5	Action Plan/monitor voltage deviation
CC-NP-VD-010	TEXACO 60 kV	Coburn-Oil Fields #1 60 kV Line and Coburn 230/60 kV #2 Bank	C3	L-1/T-1	-17	-	-	Existing Action Plan
CC-NP-VD-011	OILFLDS 60 kV	Coburn-Oil Fields #1 or #2 60 kV Line and Coburn 230/60 kV #2 Bank	C3	L-1/T-1	-17	-	-10	Existing Action Plan
CC-NP-VD-012	SALN RVR 60 kV	Coburn-Oil Fields #1 60 kV Line and Coburn 230/60 kV #2 Bank	C3	L-1/T-1	-15	-	-	Existing Action Plan
CC-NP-VD-013	SARG CYN 60 kV	Coburn-Oil Fields #1 or #2 60 kV Line and Coburn 230/60 kV #2 Bank	C3	L-1/T-1	-19	-	-12	Existing Action Plan

## 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Summer Peak**



### Single Contingency Load Drop

ID	Worst Contingency	Category	Category Description	Amount of Load Drop (MW)			Potential Mitigation Solutions
				Select..	Select..	Select..	

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

Study Area: **PG&E Central Coast - Winter Peak**



**Single Contingency Load Drop**

ID	Worst Contingency	Category	Category Description	Amount of Load Drop (MW)			Potential Mitigation Solutions
				Select..	Select..	Select..	

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

Study Area: **PG&E Central Coast - Summer Off-Peak & Summer Light Load**



**Single Contingency Load Drop**

ID	Worst Contingency	Category	Category Description	Amount of Load Drop (MW)			Potential Mitigation Solutions
				Select..	Select..	Select..	

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

## 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Summer Peak**

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



ID	Substation	Load Served (MW)			Potential Mitigation Solutions
		Select..	Select..	Select..	

No single source substation with more than 100 MW Load

## 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Winter Peak**

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



ID	Substation	Load Served (MW)			Potential Mitigation Solutions
		Select..	Select..	Select..	

No single source substation with more than 100 MW Load

## 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Summer Off-Peak & Summer Light Load**



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

ID	Substation	Load Served (MW)			Potential Mitigation Solutions
		Select..	Select..	Select..	
X-NP-SS-1					

No single source substation with more than 100 MW Load

## 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Winter Peak**



### Thermal Overloads

ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2015 Winter Peak	2018 Winter Peak	2023 Winter Peak	
CC-WP-T-001	GRN VLY2-MOSLND D 115 kV #1 Line	Moss Landing 115 kV Bus Section 1D	C1	BUS	100	<100	<100	Action Plan
CC-WP-T-002	GRN VLY2-MOSLND D 115 kV #1 Line	CB FAULT AT MOSS LANDING SUB 115 CB110	C2	CB	103	<100	<100	Action Plan
CC-WP-T-003	GRN VLY1-MOSLND D 115 kV # 1 Line	Moss Landing-Green Valley #2 115 kV Line and Paul Sweet Statcom #1 Unit	C3	L-1-1	107	<100	<100	Action Plan/drop load
CC-WP-T-004	GRN VLY1-MOSLND D 115 kV # 1 Line	Moss Landing-Green Valley #2 and Crazy Horse-Watsonville 115 kV Lines	C3	L-1-1	N/A	101	106	Monitor/rerate/reconductor
CC-WP-T-005	GRN VLY2-MOSLND D 115 kV # 1 Line	Moss Landing-Green Valley #1 115 kV Line and Paul Sweet Statcom #1 Unit	C3	L-1-1	107	<100	<100	Action Plan/drop load
CC-WP-T-006	GRN VLY2-MOSLND D 115 kV # 1 Line	Moss Landing-Green Valley #1 and Crazy Horse-Watsonville 115 kV Lines	C3	L-1-1	N/A	101	106	Monitor/rerate/reconductor
CC-WP-T-007	MOSLND D-MOSSLND2 115/230 kV #2 Bank	Moss Landing 230/115 kV #8 & 10 Banks	C3	T-1-1	169	171	<100	Action Plan/drop load
CC-WP-T-008	MOSLND D-MOSSLND1 115/230 kV #1 Bank	Moss Landing 230/115 kV #8 & 10 Banks	C3	L-1-1	169	172	<100	Action Plan/drop load
CC-WP-T-009	CRZY_HRS-BRIGTANO 115 kV #1 Line	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	135	137	Monitor/rerate/reconductor
CC-WP-T-010	GRN VLY1-ERTA JCT 115 kV #1 Line	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	124	126	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern (See Mitigation for summer peak C5 conditions)

**Thermal Overloads**

ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2015 Winter Peak	2018 Winter Peak	2023 Winter Peak	
CC-WP-T-011	CIC JCT-ERTA JCT 115 kV #1 Line	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	124	126	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern (See Mitigation for summer peak C5 conditions)
CC-WP-T-012	CIC JCT-AGRILINK 115 kV #1 Line	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	124	126	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern (See Mitigation for summer peak C5 conditions)
CC-WP-T-013	WTSNVLE-GRANT JT 115 kV #1 Line	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	134	136	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern (See Mitigation for summer peak C5 conditions)
CC-WP-T-014	WTSNVLE-AGRILINK 115 kV #1 Line	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	124	126	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern (See Mitigation for summer peak C5 conditions)

**Thermal Overloads**

ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2015 Winter Peak	2018 Winter Peak	2023 Winter Peak	
CC-WP-T-015	BRIGTANO-GRANT JT 115 kV #1 Line	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	134	137	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern (See Mitigation for summer peak C5 conditions)
CC-WP-T-016	CRZY_HRS-BRIGTANO 115 kV #1 Line	Moss Landing - Green Valley 115 kV #1 and #2 Lines	C5 DCTL	L-2	N/A	135	137	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern
CC-WP-T-017	GRN VLY1-ERTA JCT 115 kV #1 Line	Moss Landing - Green Valley 115 kV #1 and #2 Lines	C5 DCTL	L-2	N/A	124	126	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern
CC-WP-T-018	CIC JCT-ERTA JCT 115 kV #1 Line	Moss Landing - Green Valley 115 kV #1 and #2 Lines	C5 DCTL	L-2	N/A	124	126	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern
CC-WP-T-019	CIC JCT-AGRILINK 115 kV #1 Line	Moss Landing - Green Valley 115 kV #1 and #2 Lines	C5 DCTL	L-2	N/A	124	126	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern

## 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Winter Peak**



### Thermal Overloads

ID	Overloaded Facility	Worst Contingency	Category	Category Description	Loading (%)			Potential Mitigation Solutions
					2015 Winter Peak	2018 Winter Peak	2023 Winter Peak	
CC-WP-T-020	WTSNVLE-AGRILINK 115 kV #1 Line	Moss Landing - Green Valley 115 kV #1 and #2 Lines	C5 DCTL	L-2	N/A	124	126	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern
CC-WP-T-021	WTSNVLE-GRANT JT 115 kV #1 Line	Moss Landing - Green Valley 115 kV #1 and #2 Lines	C5 DCTL	L-2	N/A	134	136	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern
CC-WP-T-022	BRIGTANO-GRANT JT 115 kV #1 Line	Moss Landing - Green Valley 115 kV #1 and #2 Lines	C5 DCTL	L-2	N/A	134	137	Resize conductors for the Watsonville 115 kV Voltage Conversion Project and add reactive support to mitigate low voltage concern

San Onofre Nuclear Generation Station was retired on June 7, 2013 and therefore was removed from the base cases used for the 2013/14 ISO transmission planning

# 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Winter Peak**



## High/Low Voltage

ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)			Potential Mitigation Solutions
					2015 Winter Peak	2018 Winter Peak	2023 Winter Peak	
CC-WP-V_001	MOSLND E 115 kV	-	A	Normal	1.05	1.05	1.05	Review for exemption
CC-WP-V_002	MOSLND D 115 kV	-	A	Normal	1.05	1.05	1.05	Review for exemption
CC-WP-V_003	DOLAN RD 115 kV	-	A	Normal	1.05	1.05	1.05	Review for exemption
CC-WP-V_004	GREN VLY 60 kV	-	A	Normal	1.06	N/A	N/A	Review for exemption
CC-WP-V_005	CRYHSE60 60kV	-	A	Normal	1.06	N/A	N/A	Review for exemption
CC-WP-V_006	CMP EVRS 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	1.02	0.88	0.92	Monitor voltage
CC-WP-V_007	PAUL SWT 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	1.02	0.88	0.93	Action Plan
CC-WP-V_008	ROB ROY 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	1.02	0.88	0.92	Action Plan
CC-WP-V_009	GRN VLY1 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	1.01	0.88	0.91	Action Plan
CC-WP-V_010	GRN VLY2 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	1.01	0.88	0.91	Action Plan
CC-WP-V_011	ERTA 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	0.88	0.91	Add Reactive Support (Refer to mitigation for C5 DCTL related thermal and low voltage concerns)
CC-WP-V_012	AGRILINK 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	0.88	0.92	Add Reactive Support (Refer to mitigation for C5 DCTL related thermal and low voltage concerns)
CC-WP-V_013	WTSNVLE 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	0.88	0.92	Add Reactive Support (Refer to mitigation for C5 DCTL related thermal and low voltage concerns)
CC-WP-V_014	GRN VLY1 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	0.88	0.91	Action Plan

# 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Winter Peak**



## High/Low Voltage

ID	Substation	Worst Contingency	Category	Category Description	Voltage (PU)			Potential Mitigation Solutions
					2015 Winter Peak	2018 Winter Peak	2023 Winter Peak	
CC-WP-V_015	GRN VLY2 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	0.88	0.91	Action Plan
CC-WP-V_016	CMP EVRS 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	0.88	0.93	Action Plan
CC-WP-V_017	PAUL SWT 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	0.88	0.93	Action Plan
CC-WP-V_018	ROB ROY 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	0.88	0.92	Action Plan
CC-WP-V_019	ERTA 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	0.88	0.91	Action Plan
CC-WP-V_020	WTSNVLE 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	0.88	0.92	Action Plan
CC-WP-V_021	AGRILINK 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5 DCTL	L-2	N/A	0.88	0.92	Action Plan

**Voltage Deviations**

ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %			Potential Mitigation Solutions
					2015 Winter Peak	2018 Winter Peak	2023 Winter Peak	
CC-WP-VD-001	GRN VLY1 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	-1.0	-15.3	-10.5	Action plan/Monitor voltage deviation
CC-WP-VD-002	GRN VLY2 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	-1.1	-15.3	-10.5	Action plan/Monitor voltage deviation
CC-WP-VD-003	CMP EVRS 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	0.1	-14.3	-7.7	Action plan/Monitor voltage deviation
CC-WP-VD-004	CMP EVRS 115 kV	Moss Landing-Green Valley 115 kV Line and Paul Sweet Statcom	C3	L-1/N-1	-10.1	-4.7	-0.3	Action plan/Monitor voltage deviation
CC-WP-VD-005	PAUL SWT 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	0.0	-14.1	-7.3	Action plan/Monitor voltage deviation
CC-WP-VD-006	PAUL SWT 115 kV	Moss Landing-Green Valley 115 kV Line and Paul Sweet Statcom	C3	L-1/N-1	-10.7	-5.1	-0.6	Action plan/Monitor voltage deviation
CC-WP-VD-007	ROB ROY 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	0.2	-15.0	-9.6	Action plan/Monitor voltage deviation
CC-WP-VD-008	ERTA 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	-15.1	-10.5	Action plan/Monitor voltage deviation
CC-WP-VD-009	WTSNVLE 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	-14.6	-10.4	Action plan/Monitor voltage deviation
CC-WP-VD-010	GRANT RK 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	-11.1	-8.3	Action plan/Monitor voltage deviation
CC-WP-VD-011	AGRILINK 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	-14.7	-10.4	Action plan/Monitor voltage deviation
CC-WP-VD-012	BRIGTANO 115 kV	Moss Landing-Green Valley 115 kV #1 and 2 Lines	C3	L-1-1	N/A	-10.9	-8.2	Action plan
CC-WP-VD-013	GRN VLY1 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-15.3	-10.5	Action plan/Monitor voltage deviation
CC-WP-VD-014	GRN VLY2 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-15.3	-10.5	Action plan/Monitor voltage deviation
CC-WP-VD-015	CMP EVRS 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-14.3	-7.7	Action Plan

**Voltage Deviations**

ID	Substation	Worst Contingency	Category	Category Description	Post Cont. Voltage Deviation %			Potential Mitigation Solutions
					2015 Winter Peak	2018 Winter Peak	2023 Winter Peak	
CC-WP-VD-016	PAUL SWT 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-14.1	-7.3	Action Plan
CC-WP-VD-017	ROB ROY 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-15.0	-9.6	Action Plan
CC-WP-VD-018	ERTA 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-15.1	-10.5	Action plan/Monitor voltage deviation
CC-WP-VD-019	WTSNVLE 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-14.6	-10.4	Action plan/Monitor voltage deviation
CC-WP-VD-020	GRANT RK 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-11.1	-8.3	Action Plan
CC-WP-VD-021	AGRILINK 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-14.7	-10.4	Action plan/Monitor voltage deviation
CC-WP-VD-022	BRIGTANO 115 kV	Moss Landing - Green Valley #1 and #2 115 kV Lines	C5	L-2	N/A	-10.9	-8.2	Action Plan

## 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Summer Peak**



### Single Contingency Load Drop

ID	Worst Contingency	Category	Category Description	Amount of Load Drop (MW)			Potential Mitigation Solutions
				Select..	Select..	Select..	

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

## 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Winter Peak**



### Single Contingency Load Drop

ID	Worst Contingency	Category	Category Description	Amount of Load Drop (MW)			Potential Mitigation Solutions
				Select..	Select..	Select..	

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

Study Area: **PG&E Central Coast - Summer Off-Peak & Summer Light Load**



**Single Contingency Load Drop**

ID	Worst Contingency	Category	Category Description	Amount of Load Drop (MW)			Potential Mitigation Solutions
				Select..	Select..	Select..	

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

## 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Summer Peak**

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



ID	Substation	Load Served (MW)			Potential Mitigation Solutions
		Select..	Select..	Select..	

No single source substation with more than 100 MW Load

## 2013/2014 ISO Reliability Assessment - Preliminary Study Results

Study Area: **PG&E Central Coast - Winter Peak**

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



ID	Substation	Load Served (MW)			Potential Mitigation Solutions
		Select..	Select..	Select..	

No single source substation with more than 100 MW Load

Study Area: **PG&E Central Coast - Summer Off-Peak & Summer Light Load**



*Single Source Substation with more than 100 MW Load*

ID	Substation	Load Served (MW)			Potential Mitigation Solutions
		Select..	Select..	Select..	

No single source substation with more than 100 MW Load