

**2016 Risk Assessment Mitigation Phase
Investigation 16-10-015
Workpapers to
Public Safety Events - Electric
(Chapter SDG&E-15-WP)**

January 2017



2016 Risk Assessment Mitigation Phase
SDGE-15-WP
Risk: Public Safety Events - Electric (O&M)

Line No.	Mitigation	Project/Program	Project/Program Description	Status	Recorded (Directs, 2015 \$000)					Forecast Range (Directs, 2015 \$000)						Forecast Methodology
					2011	2012	2013	2014	2015	2017 Low	2017 High	2018 Low	2018 High	2019 Low	2019 High	
1	Physical Security	Physical Security Systems	Physical security measures put in place for the security/safety of employees and infrastructure	B/P	\$ 1,110	\$ 2,205	\$ 1,050	\$ 1,515	\$ 2,640	\$ 2,187	\$ 2,673	\$ 1,958	\$ 2,393	\$ 1,620	\$ 1,980	Zero-Based
2		Contract Security	Security guard staffing	B/P	2,508	2,612	2,485	2,960	3,925	5,288	5,922	5,817	6,515	6,398	7,166	5-Year Average
3		Critical Asset Security Team (CAST)	CAST was developed to identify and mitigate vulnerabilities in security	B	-	-	-	30	31	26	36	26	36	26	36	Base Year
4	Physical Security Subtotal				3,618	4,817	3,535	4,506	6,596	7,501	8,631	7,800	8,943	8,044	9,182	
5	Communications and Outreach	Emergency Management First Responder Outreach Program	Provide safety and basic operational information about electricity and SDG&E's facilities as they relate to First Responder operations and activities	B	6	7	11	18	24	24	29	24	29	24	29	Base Year
6		Emergency Preparedness Communications	A general communications effort mainly concentrated in the High risk fire area but reaching beyond with information about preparing for emergencies	B	655	564	427	195	167	167	200	167	200	167	200	Base Year
7		Customer Communications - Safety	One time 'don't touch downed power lines' campaign	B	-	-	-	-	100	-	-	-	-	-	-	
8		Summer/Winter Prep Campaign	Bill inserts, print, radio, web, social media. Messages include Carbon Monoxide Safety, Fumigations, furnace	B	625	1,550	650	520	365	365	438	365	438	365	438	Base Year
9		Fire Preparedness & Outreach	Ensure public is aware of SDG&E's operation activities during high fire risk situations. Various SDG&E departments work together to plan, organize, and participate in community outreach events ensuring that key external stakeholders and channels are utilized efficiently.	B	20		73	70	75	75	90	75	90	75	90	Base Year
10	Communications and Outreach Subtotal				1,306	2,121	1,161	803	731	631	757	631	757	631	757	
11	Design, Operations and Maintenance	Design, Operations and Maintenance	SDG&E designs, constructs, maintains, and operates its system in a manner that aims to minimize safety risks to employees, contractors and the public in accordance with the General Orders		Mitigation activities associated with General Orders and other mandates are accounted for in other RAMP risks					Mitigation activities associated with General Orders and other mandates are accounted for in other RAMP risks						
12	Design, Operations and Maintenance Subtotal				-	-	-	-	-	-	-	-	-	-	-	
13	TOTAL				\$ 4,924	\$ 6,938	\$ 4,696	\$ 5,309	\$ 7,327	\$ 8,132	\$ 9,388	\$ 8,431	\$ 9,700	\$ 8,675	\$ 9,939	

Notes:

- Baseline (B) and Proposed (P).
- Numbers in risk chapter tables may differ due to rounding.
- The purpose of Risk Assessment Mitigation Phase (RAMP) is not to request funding. Any funding requests will be made in the General Rate Case (GRC). The forecasts for mitigations are not for funding purposes, but are rather to provide a range for the future GRC filing. This range will be refined with supporting testimony in the GRC.

2016 Risk Assessment Mitigation Phase
SDGE-15-WP
Risk: Public Safety Events - Electric (Capital)

Line No.	Mitigation	Project/Program	Project/Program Description	Status	Recorded (Directs, 2015 \$000)					Forecast Range (Directs, 2015 \$000)								
					2011	2012	2013	2014	2015	2017 Low	2017 High	2018 Low	2018 High	2019 Low	2019 High	2017-2019 Low (Sum)	2017-2019 High (Sum)	Forecast Methodology
1	Physical Security	Physical Security Systems	Physical security measures put in place for the security/safety of employees and infrastructure	B/P	\$ 7,400	\$ 14,700	\$ 7,000	\$ 10,100	\$ 17,600	\$ 14,580	\$ 17,820	\$ 13,050	\$ 15,950	\$ 10,800	\$ 13,200	\$ 38,430	\$ 46,970	Zero-Based
2		Contract Security	Security guard staffing	B/P	620	748	864	580	844	804	892	885	981	973	1,080	2,663	2,953	5-Year Average
3		Critical Asset Security Team (CAST)	CAST was developed to identify and mitigate vulnerabilities in security	B	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	Physical Security Subtotal				8,020	15,448	7,864	10,680	18,444	15,384	18,712	13,935	16,931	11,773	14,280	41,093	49,923	
5	Communications and Outreach	Emergency Management First Responder Outreach Program	Provide safety and basic operational information about electricity and SDG&E's facilities as they relate to First Responder operations and activities	B	-	-	-	-	-	-	-	-	-	-	-	-	-	
6		Emergency Preparedness Communications	A general communications effort mainly concentrated in the High risk fire area but reaching beyond with information about preparing for emergencies	B	-	-	-	-	-	-	-	-	-	-	-	-	-	
7		Customer Communications - Safety	One time 'don't touch downed power lines' campaign	B	-	-	-	-	-	-	-	-	-	-	-	-	-	
8		Summer/Winter Prep Campaign	Bill inserts, print, radio, web, social media. Messages include Carbon Monoxide Safety, Fumigations, furnace	B	-	-	-	-	-	-	-	-	-	-	-	-	-	
9		Fire Preparedness & Outreach	Ensure public is aware of SDG&E's operation activities during high fire risk situations. Various SDG&E departments work together to plan, organize, and participate in community outreach events ensuring that key external stakeholders and channels are utilized efficiently.	B	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	Communications and Outreach Subtotal				-	-	-	-	-	-	-	-	-	-	-	-	-	
11	Design, Operations and Maintenance	Design, Operations and Maintenance	SDG&E designs, constructs, maintains, and operates its system in a manner that aims to minimize safety risks to employees, contractors and the public in accordance with the General Orders		Mitigation activities associated with General Orders and other mandates are accounted for in other RAMP risks					Mitigation activities associated with General Orders and other mandates are accounted for in other RAMP risks								
12	Design, Operations and Maintenance Subtotal				-	-	-	-	-	-	-	-	-	-	-	-	-	
13	TOTAL				\$ 8,020	\$ 15,448	\$ 7,864	\$ 10,680	\$ 18,444	\$ 15,384	\$ 18,712	\$ 13,935	\$ 16,931	\$ 11,773	\$ 14,280	\$ 41,093	\$ 49,923	

Notes:

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2016 Risk Assessment Mitigation Phase
SDGE-15-WP
Risk: Public Safety Events - Electric (GRC Total - O&M)

Line No.	Mitigation	Project/Program	Project/Program Description	Recorded (Directs, 2015 \$000)								Forecast Range (Directs, 2015 \$000)									
				Status	GRC 2011	GRC 2012	GRC 2013	GRC 2014	GRC 2015	Non-GRC 2015	O&M Total 2015	GRC 2017 Low	GRC 2017 High	GRC 2018 Low	GRC 2018 High	GRC 2019 Low	GRC 2019 High	Non-GRC 2019 Low	Non-GRC 2019 High	O&M Total 2019 Low	O&M Total 2019 High
1	Physical Security	Physical Security Systems	Physical security measures put in place for the security/safety of employees and infrastructure	B/P	\$ 111	\$ 221	\$ 105	\$ 152	\$ 264	\$ 2,376	\$ 2,640	\$ 219	\$ 267	\$ 196	\$ 239	\$ 162	\$ 198	\$ 1,458	\$ 1,782	\$ 1,620	\$ 1,980
2		Contract Security	Security guard staffing	B/P	2,508	2,612	2,485	2,960	3,925	-	3,925	3,578	3,832	4,107	4,425	4,688	5,076	1,710	2,090	6,398	7,166
3		Critical Asset Security Team (CAST)	CAST was developed to identify and mitigate vulnerabilities in security	B	-	-	-	30	31	-	31	26	36	26	36	26	36	-	-	26	36
4	Physical Security Subtotal				2,619	2,833	2,590	3,142	4,220	2,376	6,596	3,822	4,135	4,328	4,700	4,876	5,310	3,168	3,872	8,044	9,182
5	Communications and Outreach	Emergency Management First Responder Outreach Program	Provide safety and basic operational information about electricity and SDG&E's facilities as they relate to First Responder operations and activities	B	6	7	11	18	24	-	24	24	29	24	29	24	29	-	-	24	29
6		Emergency Preparedness Communications	A general communications effort mainly concentrated in the High risk fire area but reaching beyond with information about preparing for emergencies	B	655	564	427	195	167	-	167	167	200	167	200	167	200	-	-	167	200
7		Customer Communications - Safety	One time 'don't touch downed power lines' campaign	B	-	-	-	-	100	-	100	-	-	-	-	-	-	-	-	-	-
8		Summer/Winter Prep Campaign	Bill inserts, print, radio, web, social media. Messages include Carbon Monoxide Safety, Fumigations, furnace	B	625	1,550	650	520	365	-	365	365	438	365	438	365	438	-	-	365	438
9		Fire Preparedness & Outreach	Ensure public is aware of SDG&E's operation activities during high fire risk situations. Various SDG&E departments work together to plan, organize, and participate in community outreach events ensuring that key external stakeholders and channels are utilized efficiently.	B	20	-	73	70	75	-	75	75	90	75	90	75	90	-	-	75	90
10	Communications and Outreach Subtotal				1,306	2,121	1,161	803	731	-	731	631	757	631	757	631	757	-	-	631	757
11	Design, Operations and Maintenance	Design, Operations and Maintenance	SDG&E designs, constructs, maintains, and operates its system in a manner that aims to minimize safety risks to employees, contractors and the public in accordance with the General Orders	Mitigation activities associated with General Orders and other mandates are accounted for in other RAMP risks								Mitigation activities associated with General Orders and other mandates are accounted for in other RAMP risks									
12	Design, Operations and Maintenance Subtotal				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	TOTAL				\$ 3,925	\$ 4,954	\$ 3,751	\$ 3,945	\$ 4,951	\$ 2,376	\$ 7,327	\$ 4,453	\$ 4,893	\$ 4,959	\$ 5,457	\$ 5,507	\$ 6,067	\$ 3,168	\$ 3,872	\$ 8,675	\$ 9,939

Notes:

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2016 Risk Assessment Mitigation Phase
SDGE-15-WP
Risk: Public Safety Events - Electric (GRC Total - Capital)

Line No.	Mitigation	Project/Program	Project/Program Description	Status	Recorded (Directs, 2015 \$000)							Non-GRC 2015	Capital Total 2015	Forecast Range (Directs, 2015 \$000)						GRC 2017-2019 Low (Sum)	GRC 2017-2019 High (Sum)	Non-GRC 2017-2019 Low	Non-GRC 2017-2019 High	Capital Total 2017-2019 Low	Capital Total 2017-2019 High
					GRC 2011	GRC 2012	GRC 2013	GRC 2014	GRC 2015	GRC 2017 Low	GRC 2017 High			GRC 2018 Low	GRC 2018 High	GRC 2019 Low	GRC 2019 High								
1	Physical Security	Physical Security Systems	Physical security measures put in place for the security/safety of employees and infrastructure	B/P	\$ 740	\$ 1,470	\$ 700	\$ 1,010	\$ 1,760	\$ 15,840	\$ 17,600	\$ 1,458	\$ 1,782	\$ 1,305	\$ 1,595	\$ 1,080	\$ 1,320	\$ 3,843	\$ 4,697	\$ 34,587	\$ 42,273	\$ 38,430	46,970		
2		Contract Security	Security guard staffing	B/P	620	748	864	580	844	-	844	804	892	885	981	973	1,080	2,663	2,953	-	-	2,663	2,953		
3		Critical Asset Security Team (CAST)	CAST was developed to identify and mitigate vulnerabilities in security	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4	Physical Security Subtotal				1,360	2,218	1,564	1,590	2,604	15,840	18,444	2,262	2,674	2,190	2,576	2,053	2,400	6,506	7,650	34,587	42,273	41,093	49,923		
5	Communications and Outreach	Emergency Management First Responder Outreach Program	Provide safety and basic operational information about electricity and SDG&E's facilities as they relate to First Responder operations and activities	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
6		Emergency Preparedness Communications	A general communications effort mainly concentrated in the High risk fire area but reaching beyond with information about preparing for emergencies	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
7		Customer Communications - Safety	One time 'don't touch downed power lines' campaign	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
8		Summer/Winter Prep Campaign	Bill inserts, print, radio, web, social media. Messages include Carbon Monoxide Safety, Fumigations, furnace	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
9		Fire Preparedness & Outreach	Ensure public is aware of SDG&E's operation activities during high fire risk situations. Various SDG&E departments work together to plan, organize, and participate in community outreach events ensuring that key external stakeholders and channels are utilized efficiently.	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
10	Communications and Outreach Subtotal				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11	Design, Operations and Maintenance	Design, Operations and Maintenance	SDG&E designs, constructs, maintains, and operates its system in a manner that aims to minimize safety risks to employees, contractors and the public in accordance with the General Orders		Mitigation activities associated with General Orders and other mandates are accounted for in other RAMP risks							Mitigation activities associated with General Orders and other mandates are accounted for in other RAMP risks													
12	Design, Operations and Maintenance Subtotal				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
13	TOTAL				\$ 1,360	\$ 2,218	\$ 1,564	\$ 1,590	\$ 2,604	\$ 15,840	\$ 18,444	\$ 2,262	\$ 2,674	\$ 2,190	\$ 2,576	\$ 2,053	\$ 2,400	\$ 6,506	\$ 7,650	\$ 34,587	\$ 42,273	\$ 41,093	\$ 49,923		

Notes:

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