



Risk Assessment and Mitigation Phase

(Chapter SCG/SDG&E-Risk-6-WP)

Cybersecurity

Workpapers

May 17, 2021

2021 RAMP
 SCG/SDG&E-Risk-6-WP
 Risks Recorded and Forecast Costs Incurred Allocations Workpaper
 Tab: Incurred\$
 (2020 Direct \$000)

RAMP Chapter ID	RAMP Chapter Name	Control / Mitigation ID	Control / Mitigation Name	RECORDED DOLLARS										FORECAST DOLLARS										Shared Allocations (Yes/No)			
				O&M					Capital					O&M					Capital								
				2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	2022		2023		2024		2022		2023			2024		
										\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High						
SCG/SDG&E-Risk-6	Cybersecurity	C1	Perimeter Defenses	\$ 64	\$ 158	\$ 155	\$ 126	\$ 191	\$ 603	\$ 573	\$ 5,125	\$ 4,679	\$ 12,600	\$ 399	\$ 509	\$ 399	\$ 509	\$ 399	\$ 509	\$ 6,143	\$ 7,849	\$ 5,198	\$ 6,641	\$ 8,100	\$ 10,350	Yes	
SCG/SDG&E-Risk-6	Cybersecurity	C2	Internal Defenses	\$ 153	\$ 240	\$ 124	\$ 101	\$ 153	\$ 1,301	\$ 908	\$ 13,463	\$ 5,182	\$ 7,790	\$ 369	\$ 472	\$ 369	\$ 472	\$ 369	\$ 472	\$ 4,401	\$ 5,739	\$ 7,702	\$ 9,842	\$ 7,938	\$ 10,143	Yes	
SCG/SDG&E-Risk-6	Cybersecurity	C3	Sensitive Data Protection	\$ 128	\$ 176	\$ 62	\$ 50	\$ 76	\$ 1,936	\$ 105	\$ -	\$ -	\$ -	\$ 210	\$ 268	\$ 210	\$ 268	\$ 210	\$ 268	\$ 3,994	\$ 5,103	\$ 4,095	\$ 5,233	\$ 5,040	\$ 6,440	Yes	
SCG/SDG&E-Risk-6	Cybersecurity	C4	Operational Technology (OT) Cybersecurity	\$ 91	\$ 126	\$ 124	\$ 101	\$ 153	\$ -	\$ 38	\$ 0	\$ 1,573	\$ 13	\$ 319	\$ 407	\$ 319	\$ 407	\$ 319	\$ 407	\$ 4,867	\$ 6,219	\$ 5,513	\$ 7,044	\$ 4,410	\$ 5,635	No	
SCG/SDG&E-Risk-6	Cybersecurity	C5	Obsolete Information Technology (IT) Infrastructure and Application Replacement	\$ 64	\$ 158	\$ 155	\$ 126	\$ 191	\$ 2,982	\$ 3,326	\$ 73	\$ 2,375	\$ 362	\$ 399	\$ 509	\$ 399	\$ 509	\$ 399	\$ 509	\$ 5,040	\$ 6,440	\$ 5,276	\$ 6,742	\$ 6,300	\$ 8,050	Yes	
NOTES:																											
[1] The figures provided are direct charges and do not include company loaders, with the exception of vacation and sick. The costs are also in 2020 dollars and have not been escalated to 2021 amounts.																											
[2] Costs are provided, where available, for all activities regardless of whether a RSE analysis was performed.																											

2021 RAMP
 SCG/SDG&E Risk-6-WP
 Risks Shared Allocations Workpaper
 Tab: Shared Allocations
 (\$200 Direct \$000)

RAMP Chapter ID	RAMP Chapter Name	Control / Mitigation ID	Control / Mitigation Name	O&M Shared Allocations 2016 - 2024			Capital Shared Allocations 2016			Capital Shared Allocations 2017			Capital Shared Allocations 2018			Capital Shared Allocations 2019			Capital Shared Allocations 2020			Capital Shared Allocations 2021			Capital Shared Allocations 2022			Capital Shared Allocations 2023			Capital Shared Allocations 2024				
				Retained	SDG&E	Sempra Energy	Other	Retained	SDG&E	Sempra Energy	Other	Retained	SDG&E	Sempra Energy	Other	Retained	SDG&E	Sempra Energy	Other	Retained	SDG&E	Sempra Energy	Other	Retained	SDG&E	Sempra Energy	Other	Retained	SDG&E	Sempra Energy	Other				
SCG/SDG&E Risk-4	Cybersecurity	C1	Perimeter Defenses	53,300	42,300	4,000	0%	58%	38%	4%	0%	58%	38%	4%	0%	57%	39%	4%	0%	57%	39%	4%	0%	55%	40%	3%	0%	54%	42%	4%	0%	54%	42%	4%	0%
SCG/SDG&E Risk-4	Cybersecurity	C2	Internal Defenses	53,300	42,300	4,000	0%	55%	42%	4%	0%	57%	39%	4%	0%	58%	38%	4%	0%	59%	37%	4%	0%	59%	37%	4%	0%	58%	42%	4%	0%	54%	42%	4%	0%
SCG/SDG&E Risk-4	Cybersecurity	C3	Sensitive Data Protection	53,300	42,300	4,000	0%	57%	39%	4%	0%	57%	39%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	42%	4%	0%	54%	42%	4%	0%	
SCG/SDG&E Risk-4	Cybersecurity	C4	Operational Technology (OT) Cybersecurity	53,300	42,300	4,000	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%
SCG/SDG&E Risk-4	Cybersecurity	C5	Obsolete Information Technology (IT) Infrastructure and Application	53,300	42,300	4,000	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%

NOTES: CSS (Corporate Shared Service) shares costs with SDGE, SCG, and Sempra Corporate. All mitigations have cost centers that use the CSS sharing percentages.

2021 RAMP
 SCG/SDG&E-Risk-6-WP
 Risks Recorded and Forecast Costs After Allocations Workpaper
 Tab: After Allocations\$
 (2020 Direct \$000)

RAMP Chapter ID	RAMP Chapter Name	Control / Mitigation ID	Control / Mitigation Name	RECORDED DOLLARS										FORECAST DOLLARS											
				O&M					Capital					O&M					Capital						
				2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	2022		2023		2024		2022		2023		2024	
														\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High	\$ Low	\$ High
SCG/SDG&E-Risk-	Cybersecurity	C1	Perimeter Defenses	\$ 576	\$ 710	\$ 834	\$ 783	\$ 1,032	\$ 347	\$ 330	\$ 2,944	\$ 2,693	\$ 8,037	\$ 1,251	\$ 1,599	\$ 1,251	\$ 1,599	\$ 1,251	\$ 1,599	\$ 3,300	\$ 4,217	\$ 2,793	\$ 3,568	\$ 4,352	\$ 5,561
SCG/SDG&E-Risk-	Cybersecurity	C2	Internal Defenses	\$ 1,309	\$ 2,069	\$ 3,247	\$ 2,498	\$ 3,124	\$ 704	\$ 517	\$ 8,034	\$ 2,952	\$ 4,658	\$ 3,158	\$ 4,035	\$ 3,158	\$ 4,035	\$ 3,158	\$ 4,035	\$ 2,413	\$ 3,083	\$ 4,138	\$ 5,288	\$ 4,265	\$ 5,450
SCG/SDG&E-Risk-	Cybersecurity	C3	Sensitive Data Protection	\$ 840	\$ 1,553	\$ 2,649	\$ 1,938	\$ 2,377	\$ 1,102	\$ 60	\$ -	\$ -	\$ -	\$ 2,351	\$ 3,004	\$ 2,351	\$ 3,004	\$ 2,351	\$ 3,004	\$ 2,146	\$ 2,742	\$ 2,200	\$ 2,811	\$ 2,708	\$ 3,460
SCG/SDG&E-Risk-	Cybersecurity	C4	Operational Technology (OT) Cybersecurity	\$ 482	\$ 639	\$ 767	\$ 719	\$ 896	\$ -	\$ 38	\$ 0	\$ 1,573	\$ 127	\$ 1,066	\$ 1,362	\$ 1,066	\$ 1,362	\$ 1,066	\$ 1,362	\$ 4,867	\$ 6,219	\$ 5,513	\$ 7,044	\$ 4,410	\$ 5,635
SCG/SDG&E-Risk-6	Cybersecurity	C5	Obsolete Information Technology (IT) Infrastructure and Application Replacement	\$ 651	\$ 773	\$ 890	\$ 830	\$ 1,083	\$ 1,846	\$ 1,996	\$ 44	\$ 1,352	\$ 206	\$ 1,297	\$ 1,657	\$ 1,297	\$ 1,657	\$ 1,297	\$ 1,657	\$ 2,708	\$ 3,460	\$ 2,835	\$ 3,622	\$ 3,385	\$ 4,325

NOTES: The after allocation O&M costs are a combination of costs that were retained at SCG and costs that were sent to SCG from SDGE & Sempra Corporate. For the cyber chapter in particular, a large portion of costs are received from Sempra Corporate

[2] The figures provided are direct charges and do not include company loaders, with the exception of vacation and sick. The costs are also in 2020 dollars and have not been escalated to 2021 amounts.

[3] Costs are provided, where available, for all activities regardless of whether a RSE analysis was performed.

