

Company: San Diego Gas & Electric Company (U 902 M)

Proceeding: 2024 General Rate Case

Application: A.22-05-016

Exhibit No: SDG&E-03-WP-R

REVISED WORKPAPERS TO
PREPARED DIRECT TESTIMONY
OF R. SCOTT PEARSON
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

AUGUST 2022



Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-Risk-1: Wildfire Involve SDG&E Equipment - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC						
ID	Control / Mitigation Name	2024			Witness	Workpaper	Tranche	2021	2024	RSE	
		Low	High	RSE							
C04	Fire Science and Climate Adaptation Department	\$ 3,700	\$ 4,523	0	Ex. SDG&E-13	IWM002.000	N/A	\$ 2,994	\$ 3,777	0	
C07/M2-T1	OH Dist Fire Hardening – Covered Cond (HFTD Tier 3)	\$ 2,962	\$ 3,620	32	Ex. SDG&E-13	IWM003.000	Tier 3	\$ 445	\$ 1,309	80	
C07/M2-T2	OH Dist Fire Hardening – Covered Cond (HFTD Tier 2)	\$ 650	\$ 795	14	Ex. SDG&E-13	IWM003.000	Tier 2	\$ 73	\$ 287	54	
C10/M5-T2	Microgrids (HFTD Tier 2)	\$ 1,284	\$ 1,570	30	Ex. SDG&E-13	IWM003.000	Tier 2	\$ -	\$ 1,607	28	
C12/M7-T1	Hotline Clamps (HFTD Tier 3)	\$ 164	\$ 201	0	Ex. SDG&E-13	IWM003.000	Tier 3	\$ 383	\$ 182	264	
C12/M7-T2	Hotline Clamps (HFTD Tier 2)	\$ 164	\$ 201	0	Ex. SDG&E-13	IWM003.000	Tier 2	\$ 3,265	\$ 182	80	
C13/M8-T1	Resiliency Grant Programs (HFTD Tier 3)	\$ 2,370	\$ 2,897	76	Ex. SDG&E-13	IWM003.000	Generator Grant Program Tier 3	\$ 2,938	\$ 3,465	418	
C13/M8-T2	Resiliency Grant Programs (HFTD Tier 2)	\$ 4,740	\$ 5,793	38	Ex. SDG&E-13	IWM003.000	Generator Grant Program Tier 2	\$ 4,954	\$ 6,934	466	
C14/M9-T1	Standby Power Programs (HFTD Tier 3)	\$ 4,163	\$ 5,088	120	Ex. SDG&E-13	IWM003.000	Standby Power Program Tier 3	\$ 8,822	\$ 10,350	133	
C15/M10-T1	Resiliency Assistance Programs (HFTD Tier 3)	\$ 324	\$ 396	569	Ex. SDG&E-13	IWM003.000	Generator Assistance Program Tier 3	\$ 299	\$ 732	380	
C15/M10-T2	Resiliency Assistance Programs (HFTD Tier 2)	\$ 486	\$ 594	284	Ex. SDG&E-13	IWM003.000	Generator Assistance Program Tier 2	\$ 446	\$ 1,097	190	
C16/M11-T1	Strategic Undergrounding (HFTD Tier 3)	\$ 5,993	\$ 7,324	156	Ex. SDG&E-13	IWM003.000	Tier 3	\$ 57	\$ 2,592	173	
C16/M11-T2	Strategic Undergrounding (HFTD Tier 2)	\$ 3,596	\$ 4,395	54	Ex. SDG&E-13	IWM003.000	Tier 2	\$ 33	\$ 1,523	84	
C17/M12	OH Dist Fire Hardening Bare Conductor - Tier 3	GRC: Rescoped to include			Ex. SDG&E-13	IWM003.000	Tier 3	\$ 1,143	\$ 21	41	
C17/M12	OH Dist Fire Hardening Bare Conductor - Tier 2	GRC: Rescoped to include			Ex. SDG&E-13	IWM003.000	Tier 2	\$ 1,470	\$ 27	0	
C17/M12	OH Dist Fire Hardening Bare Conductor - Non-HFTD	GRC: Rescoped to include			Ex. SDG&E-13	IWM003.000	Non-HFTD	\$ 109	\$ 2		
C22-T1	Dist Syst Inspect–CMP –5 Yr Detail Inspect (HFTD Tier 3)	\$ 185	\$ 226	65	Ex. SDG&E-13	IWM004.000	Tier 3	\$ 84	\$ 197	170	
C22-T2	Dist Syst Inspect–CMP –5 Yr Detail Inspect (HFTD Tier 2)	\$ 109	\$ 133	33	Ex. SDG&E-13	IWM004.000	Tier 2	\$ 81	\$ 116	43	
C24-T2	Dist System Inspection – IR/Corona (HFTD Tier 2)	\$ 157	\$ 192	322	Ex. SDG&E-13	IWM004.000	Tier 2	\$ -	\$ 175	372	
C25-T1	Intrusive Poles - Tier 3	GRC: Rescoped to include			Ex. SDG&E-13	IWM004.000	Tier 3	\$ 531	\$ 83	534	
C25-T2	Intrusive Poles - Tier 2	GRC: Rescoped to include			Ex. SDG&E-13	IWM004.000	Tier 2	\$ 272	\$ 43	10	
C26	LiDAR Flights	\$ 1,620	\$ 1,980	0	Ex. SDG&E-13	IWM004.000	N/A	\$ 1,151	\$ 1,500	0	
C27-T1	Dist System Inspection – HFTD Tier 3 Inspections	\$ 282	\$ 344	111	Ex. SDG&E-13	IWM004.000	Tier 3	\$ 290	\$ 328	187	
C28-T1	Dist System Inspection – Drone Inspections (HFTD Tier 3)	\$ 2,025	\$ 2,475	194	Ex. SDG&E-13	IWM004.000	Tier 3	\$ 14,271	\$ 12,656	22	
C29-T1	Dist System Inspection – Circuit Ownership (HFTD Tier 3)	\$ 38	\$ 46	13	Ex. SDG&E-13	No funding request in the GRC: Rescoped					
C29-T2	Dist System Inspection – Circuit Ownership (HFTD Tier 2)	\$ 75	\$ 92	7	Ex. SDG&E-13	No funding request in the GRC: Rescoped					
C30-T1	Dist System Inspect – CMP – Annual Patrol (HFTD Tier 3)	\$ 10	\$ 13	684	Ex. SDG&E-13	IWM004.000	Tier 3	\$ 106	\$ 127	994	
C30-T2	Dist System Inspect – CMP – Annual Patrol (HFTD Tier 2)	\$ 12	\$ 15	373	Ex. SDG&E-13	IWM004.000	Tier 2	\$ 125	\$ 151	533	
C31-T1	Tree Trimming (HFTD Tier 3)	\$ 14,521	\$ 17,748	192	Ex. SDG&E-13	IWM005.001	Tier 3	\$ 11,314	\$ 12,346	222	
C31-T2	Tree Trimming (HFTD Tier 2)	\$ 17,508	\$ 21,398	104	Ex. SDG&E-13	IWM005.001	Tier 2	\$ 14,030	\$ 14,886	200	
C32/M15-T1	Fuels Management Program (HFTD Tier 3)	\$ 5,586	\$ 6,827	7	Ex. SDG&E-13	IWM005.000	Tier 3	\$ 3,434	\$ 5,082	19	
C32/M15-T2	Fuels Management Program (HFTD Tier 2)	GRC: Rescoped to include			Ex. SDG&E-13	IWM005.000	Tier 2	\$ 982	\$ 1,269	9	
C33/M16-T1	Enhanced Vegetation Management (HFTD Tier 3)	\$ 4,637	\$ 5,668	111	Ex. SDG&E-13	IWM005.001	Tier 3	\$ 3,248	\$ 4,410	230	
C33/M16-T2	Enhanced Vegetation Management (HFTD Tier 2)	\$ 5,489	\$ 6,708	61	Ex. SDG&E-13	IWM005.001	Tier 2	\$ 6,707	\$ 5,825	174	

Witness Area: Ex. SDG&E-13 Wildfire Mitigation and Vegetation Management

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-Risk-1: Wildfire Involve SDG&E Equipment - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC					
ID	Control / Mitigation Name	2024			Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High	RSE						
C34-T1	Pole Brushing (HFTD Tier 3)	\$ 2,450	\$ 2,995	261	Ex. SDG&E-13	1WM005.000	Tier 3	\$ 2,411	\$ 3,049	107
C34-T2	Pole Brushing (HFTD Tier 2)	\$ 2,773	\$ 3,390	152	Ex. SDG&E-13	1WM005.000	Tier 2	\$ 2,580	\$ 3,263	90
C34-T3	Pole Brushing (Non-HFTD)	GRC: Rescoped to include			Ex. SDG&E-13	1WM005.000	Non-HFTD	\$ 565	\$ 715	
C35-T1	Aviation Firefighting Program (HFTD Tier 3)	\$ 5,691	\$ 6,956	24	Ex. SDG&E-13	1WM006.000	Tier 3	\$ 4,197	\$ 7,070	218
C35-T2	Aviation Firefighting Program (HFTD Tier 2)	\$ 3,356	\$ 4,101	14	Ex. SDG&E-13	1WM006.000	Tier 2	\$ 2,475	\$ 4,169	453
C35-T3	Aviation Firefighting Program (Non-HFTD)	\$ 241	\$ 295	1	Ex. SDG&E-13	1WM006.000	Non-HFTD	\$ 307	\$ 300	
C36-T1	Wildfire Infrastructure Protection Teams (HFTD Tier 3)	\$ 1,855	\$ 2,267	63	Ex. SDG&E-13	1WM006.000	Tier 3	\$ 2,156	\$ 2,267	63
C36-T2	Wildfire Infrastructure Protection Teams (HFTD Tier 2)	\$ 787	\$ 963	56	Ex. SDG&E-13	1WM006.000	Tier 2	\$ 915	\$ 963	67
C39	Asset Management	\$ 349	\$ 426	0	Ex. SDG&E-13	No funding request in the GRC: Rescoped				
C40	Wildfire Mitigation Personnel	\$ 5,224	\$ 6,385	0	Ex. SDG&E-13	1WM007.000	N/A	\$ 3,823	\$ 7,748	0
C41	Emergency Management Operations	\$ 10,938	\$ 13,369	0	Ex. SDG&E-13	1WM001.000	N/A	\$ 13,315	\$ 16,236	0
C42	Communication Practices	\$ 5,996	\$ 7,328	0	Ex. SDG&E-13	1WM008.000	N/A	\$ 9,766	\$ 9,889	0
C43	Non-Conductive Balloon Alternatives	\$ 68	\$ 83	0	Ex. SDG&E-13	1WM008.000	N/A	\$ 37	\$ 86	0
New01	BLM Land Management	RAMP Post-Filing			Ex. SDG&E-13	1WM003.000	N/A	\$ -	\$ 4	0
New03	CNF Land Management	RAMP Post-Filing			Ex. SDG&E-13	1WM003.000	N/A	\$ -	\$ 134	0
New04	Risk Assessment & Mapping	RAMP Post-Filing			Ex. SDG&E-13	1WM005.000	N/A	\$ 393	\$ 1,000	0
New05	Data Governance	RAMP Post-Filing			Ex. SDG&E-13	1WM007.001	N/A	\$ 608	\$ 2,413	0
New06	WMP AFN Customer Support	RAMP Post-Filing			Ex. SDG&E-13	1WM007.002	N/A	\$ 1,082	\$ 1,650	0
New07	WMP Tribal Customer Support	RAMP Post-Filing			Ex. SDG&E-13	1WM008.000	N/A	\$ 1,127	\$ 1,390	0
New08	Tree Planting Initiative	RAMP Post-Filing			Ex. SDG&E-13	1WM008.000	N/A	\$ 54	\$ 200	0

Witness Area: Ex. SDG&E-13 Wildfire Mitigation and Vegetation Management

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-Risk-2: Electrical Infrastructure Integrity - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC						
ID	Control / Mitigation Name	2024			RSE	Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High	RSE							
C06	Vegetation Management (non-HFTD)	\$ 37,201	\$ 45,954	15	Ex. SDG&E-13	1WM005.001	Overall	\$ 16,896	\$ 18,155	109	
C25	Substation Inspection & Repair GO-174	\$ 1,500	\$ 1,853	0	Ex. SDG&E-12	1ED006.000	N/A	\$ 1,289	\$ 1,192	0	

Witness Areas: Ex. SDG&E-12 Electric Distribution; Ex. SDG&E-13 Wildfire Mitigation and Vegetation Management

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-Risk-3: Incident Related to High Pressure System (Excluding Dig-in) - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC					
ID	Control / Mitigation Name	2024			Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High	RSE						
C02-T1	Cathodic Protection – Maintenance (HCA)	\$ 23	\$ 29	1075	Ex. SDG&E-06	1GT000.000	Transmission - HCA	\$ 73	\$ 63	3849
C02-T2	Cathodic Protection – Maintenance (non-HCA)	\$ 47	\$ 60	66	Ex. SDG&E-06	1GT000.000	Transmission - Non-HCA	\$ 17	\$ 14	1639
C06-T1	Pipeline Maintenance (HCA)	\$ 182	\$ 232	1038	Ex. SDG&E-06	1GT000.000	Transmission - HCA	\$ 481	\$ 501	363
C06-T2	Pipeline Maintenance (non-HCA)	\$ 369	\$ 472	62	Ex. SDG&E-06	1GT000.000	Transmission - Non-HCA	\$ 106	\$ 110	156
C07	Compressor Station Physical Security	\$ 202	\$ 258	0	Ex. SDG&E-06	No specific funding request in the GRC: Included with other requests				
C09.1	Compressor Station - Maintenance	\$ 2,099	\$ 2,683	403	Ex. SDG&E-06	1GT001.000	Transmission - Facilities	\$ 3,113	\$ 3,113	7
C11-T1	Measure & Reg Station – Maintenance (HCA)	\$ 105	\$ 134	841	Ex. SDG&E-06	1GT000.000	Transmission - HCA	\$ 348	\$ 289	742
C11-T2	Measure & Reg Station – Maintenance (non-HCA)	\$ 213	\$ 272	51	Ex. SDG&E-06	1GT000.000	Transmission - Non-HCA	\$ 77	\$ 64	317
C12	Odorization	\$ 8	\$ 10	22	Ex. SDG&E-06	1GT000.000	Transmission Facilities	\$ 9	\$ 9	2
C14	Engineering, Oversight and Compliance Review	\$ 195	\$ 249	0	Ex. SDG&E-06	1GT000.000	N/A	\$ 83	\$ 83	0
					Ex. SDG&E-06	1GT001.000	N/A	\$ 83	\$ 83	0
					Ex. SDG&E-06	1GT002.000	N/A	\$ 44	\$ 44	0
C15-T1	Integrity Assessments & Remediation (HCA)	\$ 5,030	\$ 6,427	355	Ex. SDG&E-09	1TD001.000	Transmission - HCA	\$ 5,889	\$ 9,038	20
C15-T2	Integrity Assessments & Remediation (Non-HCA)	\$ 1,180	\$ 1,508	300	Ex. SDG&E-09	1TD001.000	Transmission - non-HCA	\$ 2,883	\$ 476	9
M1-T1.3	PSEP - Hydrotesting (Phase 2B, GRC base, HCA)	\$ 6,650	\$ 8,050	161	Ex. SDG&E-09	No specific funding request in the GRC: Rescoped				
M1-T1.4	PSEP - Hydrotesting (Phase 2B, GRC base, non-HCA)	\$ 6,650	\$ 8,050	103	Ex. SDG&E-09	No specific funding request in the GRC: Rescoped				
M2-T1	GTSR - MAOP Reconfirmation (HCA)	\$ 6,480	\$ 20,736	7	Ex. SDG&E-09	1TD005.000	Transmission - HCA	\$ -	\$ 69	5
M2-T2	GTSR - MAOP Reconfirmation (Non-HCA)	\$ 270	\$ 864	4	Ex. SDG&E-09	1TD005.000	Transmission - Non-HCA	\$ -	\$ 21	8
M3-T1	GTSR - Material Verification (HCA)	\$ 18	\$ 56	1	Ex. SDG&E-09	No specific funding in GRC: Included with C15-T1				
M3-T2	GTSR - Material Verification (Non-HCA)	\$ 4	\$ 11	6	Ex. SDG&E-09	No specific funding in GRC: Included with C15-T2				
New 01	NEW - FIMP - Distribution	RAMP Post-Filing			Ex. SDG&E-09	1TD004.000	Supply Line	\$ -	\$ 218	21
New 02	NEW -Valve Rule	RAMP Post-Filing			Ex. SDG&E-09	1TD005.000	N/A	\$ -	\$ 24	0
New 03	NEW - Gas Transmission Safety Rule (GTSR) Part 2	RAMP Post-Filing			Ex. SDG&E-09	1TD005.000	N/A	\$ -	\$ 16	0
New 04	NEW - FIMP - Transmission	RAMP Post-Filing			Ex. SDG&E-09	1TD004.000	Transmission Facilities	\$ -	\$ 40	43

Witness Area: Ex. SDG&E-06 Gas Transmission Operation and Construction; Ex. SDG&E-09 Gas Integrity Management Programs

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-Risk-4: Incident Involving a Contractor - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC					
ID	Control / Mitigation Name	2024			Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High	RSE						
C01	Contractor Oversight Program	\$ 1,008	\$ 1,220	139	Ex. SDG&E-31	1SM002.002	Overall	\$ 1,027	\$ 1,068	283
C02	Field Safety Oversight	\$ 500	\$ 605	35	Ex. SDG&E-12	No funding in GRC: Rescoped, only capital				
C03	Safety Culture	\$ 11	\$ 14	0	Ex. SDG&E-31	No specific funding in GRC: Rescoped				
M1	Enterprise-Wide Contractor Incident and Schedule Mgt	\$ 19	\$ 23	0	Ex. SDG&E-31	No funding in GRC: Rescoped, only capital				
M2	Verify Class 1 Contractor Employee Specific Training	\$ 38	\$ 46	86	Ex. SDG&E-31	No funding in GRC: Rescoped, only capital				

Witness Area: Ex. SDG&E-12 Electric Distribution; Ex. SDG&E-31 Safety, Risk & Asset Management System

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-Risk-5: Customer and Public Safety - Contact with Electric Equipment - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC					
		2024								
ID	Control / Mitigation Name	Low	High	RSE	Witness	Workpaper	Tranche	2021	2024	RSE
C01	General Safety Communications	\$ 1,500	\$ 2,170	0	Ex. SDG&E-19	1IN001.001	N/A	\$ 1,809	\$ 1,550	0

Witness Area: Ex. SDG&E-19 Customer Services - Information

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-Risk-6: Cybersecurity - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC					
ID	Control / Mitigation Name	2024			Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High	RSE						
C01	Perimeter Defenses	\$ 984	\$ 1,257	160	Ex. SDG&E-26	1CS001.000	Overall	\$ 19	\$ 19	527
C02	Internal Defenses	\$ 2,484	\$ 3,173	95	Ex. SDG&E-26	2100-3101.000	Overall	\$ 13,773	\$ 16,358	527
C03	Sensitive Data Protection	\$ 1,848	\$ 2,362	62	Ex. SDG&E-26	Each cyber funding request includes a portion of all cyber mitigations				
C04	Operational Technology (OT) Cybersecurity	\$ 838	\$ 1,071	112	Ex. SDG&E-26	Each cyber funding request includes a portion of all cyber mitigations				
C05	Obsolete IT Infrastructure and Application Replacement	\$ 1,020	\$ 1,303	102	Ex. SDG&E-26	Each cyber funding request includes a portion of all cyber mitigations				

Witness Area: Ex. SDG&E-26 Cybersecurity

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-Risk-7 Excavation Damage (Dig-in) on the Gas System - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC					
ID	Control / Mitigation Name	2024			Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High	RSE						
C01	Locate and Mark Training - (MP)	\$ 103	\$ 124	0	Ex. SDG&E-04	1GD010.000	N/A	\$ 746	\$ 746	0
C02	Locate and Mark Training - (HP)	\$ 15	\$ 18	0	Ex. SDG&E-05	No specific funding request in GRC: Included in other requests				
C03	Locate and Mark Activities - (MP)	\$ 5,135	\$ 6,215	590	Ex. SDG&E-04	1GD002.000	MP	\$ 6,538	\$ 9,436	7
C04	Locate and Mark Activities - (HP)	\$ 1,458	\$ 1,765	61	Ex. SDG&E-04	1GD002.000	HP	\$ 185	\$ 268	482
C05	L&M Annual Training and Competency Program - (MP)	\$ 4	\$ 5	25	Ex. SDG&E-04	No specific funding in GRC: Combined with C01				
C06	L&M Annual Training and Competency Prgm - (HP)	\$ 1	\$ 1	317	Ex. SDG&E-05	No specific funding request in GRC: Included in other requests				
C07	Locate and Mark Operator Qualification - (MP)	\$ 11	\$ 14	0	Ex. SDG&E-04	No specific funding in GRC: Combined with C01				
C08	Locate and Mark Operator Qualification - (HP)	\$ 1	\$ 1	0	Ex. SDG&E-05	No specific funding request in GRC: Included in other requests				
C09	Locate and Mark Quality Assurance - (MP)	\$ 594	\$ 759	1	Ex. SDG&E-04	1GD002.000	MP	\$ 393	\$ 393	2
C10	Locate and Mark Quality Assurance - (HP)	\$ 78	\$ 99	19	Ex. SDG&E-05	No specific funding request in GRC: Included in other requests				
C11	Damage Prevention Analysts - (MP)	\$ 235	\$ 301	40	Ex. SDG&E-05	1SI001.001	N/A	\$ -	\$ 86	120
C12	Damage Prevention Analysts - (HP)	\$ 45	\$ 57	19	Ex. SDG&E-05	1SI001.001	N/A	\$ -	\$ 14	57
C15-T1	Public Awareness - Affected Public - (MP)	\$ 250	\$ 303	17	Ex. SDG&E-05	1SI001.000	Overall	\$ 74	\$ 113	61
C15-T2	Public Awareness - Emergency Officials - (MP)	\$ 3	\$ 3	20	Ex. SDG&E-05	1SI001.000	Overall	\$ -	\$ 3	61
C15-T3	Public Awareness - Local Public Officials - (MP)	\$ 16	\$ 20	14	Ex. SDG&E-05	1SI001.000	Overall	\$ -	\$ 18	61
C15-T4	Public Awareness - Excavators - (MP)	\$ 20	\$ 25	124	Ex. SDG&E-05	1SI001.000	Overall	\$ -	\$ 21	61
C16-T1	Public Awareness - Affected Public - (HP)	\$ 57	\$ 69	38	Ex. SDG&E-05	1SI001.000	Overall	\$ 17	\$ 21	117
C16-T2	Public Awareness - Emergency Officials - (HP)	\$ 1	\$ 1	51	Ex. SDG&E-05	1SI001.000	Overall	\$ -	\$ 1	117
C16-T3	Public Awareness - Local Public Officials - (HP)	\$ 4	\$ 5	39	Ex. SDG&E-05	1SI001.000	Overall	\$ -	\$ 4	117
C16-T4	Public Awareness - Excavators - (HP)	\$ 5	\$ 6	287	Ex. SDG&E-05	1SI001.000	Overall	\$ -	\$ 5	117
C21	Gold Shovel Standard Program - (MP)	\$ 2	\$ 3	0	Ex. SDG&E-04	No specific funding in GRC: Combined with C03				
C22	Gold Shovel Standard Program - (HP)	\$ -	\$ 1	0	Ex. SDG&E-05	No specific funding in GRC: Combined with C03				
C24	Pipeline Patrol and Pipeline Markers - (HP)	\$ 669	\$ 854	6	Ex. SDG&E-05	No specific funding request in GRC: Included in other requests				
C25	Company Excavator Training - (MP)	\$ 134	\$ 171	0	Ex. SDG&E-04	No specific funding in GRC: Combined with C01				
C26	Company Excavator Training - (HP)	\$ 18	\$ 24	0	Ex. SDG&E-05	No specific funding request in GRC: Included in other requests				
C29	Ticket Risk Assess and Evaluating City Permit Data - (MP)	\$ 35	\$ 45	1	Ex. SDG&E-25	No specific funding in GRC: Dollars are incurred by SoCalGas				
C30	Ticket Risk Assess and Evaluating City Permit Data - (HP)	\$ 8	\$ 10	8	Ex. SDG&E-25	No specific funding in GRC: Dollars are incurred by SoCalGas				
C31	Enhance Ticket Management Software - (MP)	\$ 1	\$ 2	17	Ex. SDG&E-25	No specific funding in GRC: Dollars are incurred by SoCalGas				
M01	Automate 3rd Party Excavation Incident Report - (MP)	\$ 13	\$ 16	17	Ex. SDG&E-05	1SI001.001	Overall	\$ -	\$ 14	35
M02	Automate 3rd Party Excavation Incident Report - (HP)	\$ 2	\$ 3	31	Ex. SDG&E-05	1SI001.001	Overall	\$ -	\$ 2	47
M03	Locate and Mark Photographs - (MP)	\$ 69	\$ 88	0	Ex. SDG&E-05	1SI001.001	N/A	\$ -	\$ 76	0
M04	Locate and Mark Photographs - (HP)	\$ 11	\$ 14	0	Ex. SDG&E-05	1SI001.001	N/A	\$ -	\$ 13	0
M09	Outreach for Latent 3rd Party Damages - (MP)	\$ 3	\$ 4	0	Ex. SDG&E-05	1SI001.000	N/A	\$ -	\$ 4	0
M10	Outreach for Latent 3rd Party Damages - (HP)	\$ 1	\$ 1	0	Ex. SDG&E-05	1SI001.000	N/A	\$ -	\$ 1	0
M13	Pipeline Monitoring Technologies - (HP)	\$ 54	\$ 77	0	Ex. SDG&E-05	No funding in GRC: Rescoped				

Witness Area: Ex. SDG&E-04 Gas Distribution; Ex. SDG&E-05 Gas System Staff & Technology

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-Risk-8: Incident Involving an Employee - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC					
ID	Control / Mitigation Name	2024		RSE	Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High							
C01	Mandatory Empl Health and Safety Training Prog et al	\$ 776	\$ 940	0	Ex. SDG&E-12	1ED002.000	N/A	\$ 3	\$ 8	0
					Ex. SDG&E-12	1ED008.000	N/A	\$ 165	\$ 165	0
					Ex. SDG&E-12	1ED013.000	N/A	\$ 27	\$ 27	0
					Ex. SDG&E-31	ISM002.001	N/A	\$ 496	\$ 554	0
C02	Drug and Alcohol Testing Program	\$ 171	\$ 208	0	Ex. SDG&E-32	2100-3414.000	N/A	\$ 81	\$ 125	0
C03	Strong Safety Culture	\$ 223	\$ 270	78	Ex. SDG&E-31	2100-0214.000	Overall	\$ 52	\$ 237	379
C04	Employee Behavioral Accident Prevention Process Program	\$ 818	\$ 990	12	Ex. SDG&E-12	1ED008.000	Overall	\$ 71	\$ 71	123
					Ex. SDG&E-17	1FC001.000	Overall	\$ 249	\$ 249	123
					Ex. SDG&E-17	1FC005.000	Overall	\$ 166	\$ 166	123
C07	Employee Wellness Programs	\$ 733	\$ 888	0	Ex. SDG&E-32	2100-3506.000	N/A	\$ 105	\$ 176	0
C08	OSHA Voluntary Protection Program	\$ 475	\$ 575	14	Ex. SDG&E-12	1ED005.000	Overall	\$ 9	\$ 69	196
					Ex. SDG&E-12	1ED006.000	Overall	\$ 228	\$ 145	196
C09	Safe Driving Programs	\$ 89	\$ 108	57	Ex. SDG&E-31	2100-0214.000	Vehicle Incident	\$ 90	\$ 91	165
C10	Personal Protective Equipment	\$ 1,689	\$ 2,045	0	Ex. SDG&E-12	1ED002.000	N/A	\$ 6	\$ 8	0
					Ex. SDG&E-12	1ED009.000	N/A	\$ 113	\$ 113	0
					Ex. SDG&E-12	1ED012.000	N/A	\$ 20	\$ 20	0
					Ex. SDG&E-17	1FC001.000	N/A	\$ 132	\$ 132	0
					Ex. SDG&E-17	1FC005.000	N/A	\$ 35	\$ 35	0
					Ex. SDG&E-04	1GD005.000	N/A	\$ 441	\$ 441	0
					Ex. SDG&E-12	1ED005.000	N/A	\$ 980	\$ 730	0
					Ex. SDG&E-12	1ED006.000	N/A	\$ 132	\$ 143	0
					Ex. SDG&E-12	1ED006.002	N/A	\$ 22	\$ 27	0
					Ex. SDG&E-12	1ED008.000	N/A	\$ 532	\$ 532	0
					Ex. SDG&E-12	1ED009.001	N/A	\$ 107	\$ 107	0
Ex. SDG&E-12	1ED013.000	N/A	\$ 33	\$ 33	0					
C11	Jobsite Safety Programs	\$ 2,108	\$ 2,551	9	Multiple	No specific funding request in GRC: Included in other funding requests				
C12	Use Industry Best Practices and Industry Benchmark	\$ 668	\$ 808	0	Ex. SDG&E-32	1HR008.000	N/A	\$ 915	\$ 915	0
C13	Enhanced Mandatory Employee Training et al	\$ 14	\$ 17	138	Ex. SDG&E-31	ISM002.001	Overall	\$ 6	\$ 6	1997
C15	Enhanced Employee Safe Driving Training	\$ 523	\$ 633	18	Ex. SDG&E-22	1FS008.000	Vehicle Incident	\$ 548	\$ 848	35
C17	Employee WF Smoke Protection – Cal/OSHA emerg reg	\$ 16	\$ 20	0	Ex. SDG&E-31	ISM002.001	N/A	\$ 15	\$ 16	0
M1	Respiratory protection for wildfire smoke particulates.	\$ 2	\$ 2	516	Ex. SDG&E-13	1WM002.000	Overall	\$ -	\$ 100	59
					Ex. SDG&E-31	ISM002.001	Overall	\$ -	\$ 2	59
M2	Breakfast/rest trailers with filtered air systems	\$ 143	\$ 173	7	Ex. SDG&E-31	ISM002.001	Non-Vehicle incident	\$ -	\$ 150	20
M3	Communications when the Air Quality Index PM2.5	\$ 38	\$ 46	26	Ex. SDG&E-31	No funding requested in GRC: Rescoped				
M4	Designer support to update & convert safety training	\$ 22	\$ 31	0	Ex. SDG&E-31	ISM002.001	N/A	\$ -	\$ 28	0
New01	Industrial Athletic Trainer	RAMP Post-Filing			Ex. SDG&E-12	1ED009.000	Non-Vehicle incident	\$ -	\$ 495	19

Witness Area: Ex. SDG&E-04 Gas Distribution.; Ex. SDG&E-12 Electric Distribution.; Ex. SDG&E-13 Wildfire Mitigation; Ex. SDG&E-17 Customer Service - Field Operations; ExEx. SDG&E-31 Safety, Risk & Asset Mgt.; Ex. SDG&E-32 People and Culture Dept.

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-Risk-9: Incident Related to the Medium Pressure System (Excluding Dig-in) - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC					
ID	Control / Mitigation Name	2024		RSE	Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High							
C01	Cathodic Protection Program - O&M	\$ 1,853	\$ 2,244	13	Ex. SDG&E-04	1GD008.000	Supply Line	\$ 110	\$ 99	17
					Ex. SDG&E-04	1GD008.000	Main-Steel	\$ 1,939	\$ 1,735	1
C04	Regulator station, Valve, and Large Meter Set Inspection	\$ 4,240	\$ 5,132	4	Ex. SDG&E-04	1GD007.000	Supply Line	\$ 81	\$ 80	368
					Ex. SDG&E-04	1GD007.000	Main-Steel & Plastic	\$ 3,947	\$ 3,907	140
C06	Leak Repair	\$ 1,331	\$ 1,611	15	Ex. SDG&E-04	1GD003.000	Main-Plastic	\$ 351	\$ 425	66
					Ex. SDG&E-04	1GD003.000	Main-Steel	\$ 605	\$ 733	37
					Ex. SDG&E-04	1GD004.000	Service-Plastic	\$ 620	\$ 644	1725
					Ex. SDG&E-04	1GD004.000	Service-Steel	\$ 941	\$ 978	1209
C07	Leak Mit, Brdge & Span, Unstable Earth, and Pipe Patrol	\$ 2,756	\$ 3,336	15	Ex. SDG&E-04	1GD001.000	HP Transmission	\$ 24	\$ 24	0
					Ex. SDG&E-04	1GD001.000	Overall	\$ 2,043	\$ 2,043	1009
C11	Gas Distribution Emergency Department	\$ 2,593	\$ 3,138	144	Ex. SDG&E-04	1GD003.000	Main - Steel & Plastic	\$ 1,230	\$ 1,734	58
					Ex. SDG&E-04	1GD004.000	Service -Steel & Plastic	\$ 820	\$ 1,155	344
C14	Human Factors Mitigations - Op Qual Training & Cert	\$ 2,347	\$ 2,841	0.4	Ex. SDG&E-04	1GD010.000	Overall	\$ 1,661	\$ 1,661	0.5
C15	Human Factors Mitigation -QA/QC Program	\$ 342	\$ 414	0	Ex. SDG&E-04	1GD010.000	N/A	\$ 300	\$ 300	0
C16-T1	DIMP: DREAMS- Vintage Integrity Plastic Plan	\$ 2,850	\$ 3,300	3	Ex. SDG&E-09	1TD002.000	Main-Plastic	\$ 2,254	\$ 2,866	0.2
C17	CCM Distribution Field Asset Real Time Monitoring et al	\$ 265	\$ 382	0	Ex. SDG&E-04	1GD007.000	N/A	\$ -	\$ 480	0
C18	Gas Public Safety Communications	\$ 2,395	\$ 3,459	0	Ex. SDG&E-19	1IN001.001	N/A	\$ 2,889	\$ 2,450	0
C19	Field and Public Safety	\$ 9,209	\$ 11,633	0.2	Ex. SDG&E-17	1FC001.000	Meter and Beyond the Meter	\$ 10,278	\$ 10,543	0.03
C20	NGAT or Carbon Monoxide Testing	\$ 105	\$ 322	0.5	Ex. SDG&E-19	1IN002.001	Meter and Beyond the Meter	\$ 161	\$ 625	0.05
C21	CSF Quality Assurance (QA) Program	\$ 185	\$ 224	6	Ex. SDG&E-17	1FC004.000	Meter and Beyond the Meter	\$ 171	\$ 262	0.2

Witness Area: Ex. SDG&E-Gas Distribution; Ex. SDG&E-09 Gas Integrity Management Systems; Ex. SDG&E-17 Customer Service - Field Operations; Ex. SDG&E 19 Customer Service - Information

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-CFF-1: Asset Management - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC					
ID	Control / Mitigation Name	2024		RSE	Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High							
1	AIM (Gov, Strat, AIP)	\$1,200	\$1,500	0	Ex. SDG&E-12	1ED012.000	N/A	\$ -	\$ 6	0
					Ex. SDG&E-04	1GD009.000	N/A	\$ -	\$ 110	0
					Ex. SDG&E-31	1SM003.000	N/A	\$425	\$ 1,001	0
					Ex. SDG&E-31	1SM003.000	N/A	\$ 99	\$ 543	0
2	Asset Data Syst & Rec Mgt (Gov, Quality, Rec Mgt)	\$400	\$700	0	Ex. SDG&E-31	1SM003.000	N/A	\$ -	\$ 58	0
3	Asset Data Syst & Rec Mgt (Data Integration)	\$350	\$500	0	Ex. SDG&E-31	1SM003.000	N/A	\$149	\$ 393	0
					Ex. SDG&E-31	1SM003.000	N/A	\$ -	\$ 60	0
4	AIMDAT (Data Analytics)	\$450	\$600	0	Ex. SDG&E-31	1SM005.000	N/A	\$156	\$ 183	0

Witness Area: Ex. SDG&E-04 Gas Distribution; Ex. SDG&E-12 Electric Distribution; Ex. SDG&E-31 Safety, Risk & Asset Management

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-CFF-3: Emergency Preparedness and Response and Pandemic - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC						
ID	Control / Mitigation Name	2024			RSE	Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High	RSE							
EPR-01 / 12	EOC Activations and Capabilities Expansion	\$ 3,865	\$ 4,724	0	Ex. SDG&E-13			No specific funding request in GRC: Duplicate with Wildfire risk			0
EPR-02 / 11	Training and Exercise Division and ICS Company-wide Program Enhancement	\$ 4,445	\$ 5,433	0	Ex. SDG&E-13			No specific funding request in GRC: Duplicate with Wildfire risk			0
EPR-03 / 13	First Responder Outreach Program and Enhancements	\$ 858	\$ 1,048	0	Ex. SDG&E-13			No specific funding request in GRC: Duplicate with Wildfire risk			0
EPR-05 / 17	After-action Review Program and Enhancements	\$ 265	\$ 324	0	Ex. SDG&E-13			No specific funding request in GRC: Duplicate with Wildfire risk			0
EPR-06 / 15	Aviation Firefighting Program and Expansion	\$ 9,288	\$ 11,352	0	Ex. SDG&E-13			No specific funding request in GRC: Duplicate with Wildfire risk			0
EPR-07	Emergency Operations Center (EOC)	\$ 225	\$ 275	0	Ex. SDG&E-13			No specific funding request in GRC: Duplicate with Wildfire risk			0
EPR-08 / 10	Human Factors Engineering and Expansion	\$ 126	\$ 153	0	Ex. SDG&E-13			No specific funding request in GRC: Duplicate with Wildfire risk			0
EPR-09 / 14	IT and Expanding IT Support for EOC	\$ 105	\$ 129	0	Ex. SDG&E-13			No specific funding request in GRC: Duplicate with Wildfire risk			0
EPR-16	24/7 Watch Command Desk Division	\$ 810	\$ 990	0	Ex. SDG&E-13			No specific funding request in GRC: Duplicate with Wildfire risk			0

Witness Area: Ex. SDG&E-Wildfire Mitigation and Vegetation Management

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-CFF-4: Foundational Technology Systems - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC					
ID	Control / Mitigation Name	2024			Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High	RSE						
1	Data Center Modernization	\$ 1,621	\$ 2,071	0	Ex. SDG&E-25	1IT002.000	N/A	\$ 2,579	\$ 2,619	0
2	Network & Voice System Resiliency	\$ 3,923	\$ 5,013	0	Ex. SDG&E-25	1IT004.000	N/A	\$ 3,195	\$ 2,509	0
3	Monitoring Systems and Services	\$ 1,543	\$ 1,972	0	Ex. SDG&E-25	2100-0207.000	N/A	\$ 19,226	\$ 21,777	0
4	Electric Operations Systems Resiliency	\$ 2,728	\$ 3,486	0	Ex. SDG&E-25	2100-0460.000	N/A	\$ 828	\$ 828	0
5	Gas Operations Systems Resiliency	\$ 1,828	\$ 2,336	0	Ex. SDG&E-25	2100-3073.000	N/A	\$ 3,290	\$ 2,576	0
6	End User Access and Support Services	\$ 1,200	\$ 1,534	0	Ex. SDG&E-25	All CFF-4 funding is spread across all CFF-4 activities				
7	IT Service Continuity	\$ 2,099	\$ 2,682	0	Ex. SDG&E-25	All CFF-4 funding is spread across all CFF-4 activities				
8	Cloud Resiliency Services	\$ 3,137	\$ 4,008	0	Ex. SDG&E-25	All CFF-4 funding is spread across all CFF-4 activities				
9	Emergency Operations Center (EOC) Technology Resiliency	\$ 811	\$ 1,036	0	Ex. SDG&E-25	All CFF-4 funding is spread across all CFF-4 activities				

Witness Area: Ex. SDG&E-25 Information Technology

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-CFF-5: Physical Security - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC						
ID	Control / Mitigation Name	2024			RSE	Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High	RSE							
2	Contract Security	\$ 2,320	\$ 2,836	0	Ex. SDG&E-23	1RE004.000	N/A	\$ 1,342	\$ 1,798	0	
3	Planning, Awareness, Risk Management, and Incident Management	\$ 528	\$ 607	0	Ex. SDG&E-27	1SE000.001	NA	\$ 568	\$ 570	0	

Witness Area: Ex. SDG&E-23 Real Estate, Land Services & Facility Operations; Ex. SDG&E-27 Corporate Center - General Administration

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-CFF-6: Records Management - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC					
ID	Control / Mitigation Name	2024			Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High	RSE						
New01	GIS Jobs Processed	RAMP Post-Filing			Ex. SDG&E-12	1ED003.001	NA	\$ 921	\$ 921	0
New02	Gas Geographic Information System	RAMP Post-Filing			Ex. SDG&E-04	1GD009.000	N/A	\$ 591	\$ 591	0
New03	Gas Geographic Information System	RAMP Post-Filing			Ex. SDG&E-04	1GD009.000	N/A	\$ -	\$ 58	0

Witness Area: Ex. SDG&E-04 Gas Distribution; Ex. SDG&E-12 Electric Distribution

Workpaper 1
SDG&E Test Year 2024 General Rate Case
2021 RAMP to GRC Mapping
SDG&E-CFF-7: Safety Management System - O&M
(\$000s)

2021 RAMP Report					TY 2024 GRC					
ID	Control / Mitigation Name	2024			Witness	Workpaper	Tranche	2021	2024	RSE
		Low	High	RSE						
1	Development and Implementation of an Enterprise-Wide SMS	\$500	\$600	0	Ex. SDG&E-31	ISM001.000	NA	\$ 718	\$ 821	0
2	Enhanced Employee and Stakeholder Engagement,	\$400	\$600	0	Ex. SDG&E-31	ISM001.000	NA	\$ -	\$ 100	0
3	New Technology and Enhanced Data and Analytics Capabilities	\$500	\$1,000	0	Ex. SDG&E-31	ISM001.000	NA	\$ -	\$ 437	0
4	Enhanced Documentation and Recordkeeping Practices	\$100	\$300	0	Ex. SDG&E-31	ISM001.000	NA	\$ -	\$ 100	0
5	Expanded Quality Management Program Focused on Asset Safety	\$200	\$300	0	Ex. SDG&E-31	No funding request in GRC: Rescoped				
6	Enhanced Feedback and Key Performance Indicators	\$200	\$300	0	Ex. SDG&E-31	ISM001.000	NA	\$ -	\$ 200	0
7	Development and Implementation of a Strong Management of Change Platform	\$500	\$1,000	0	Ex. SDG&E-31	ISM001.000	NA	\$ -	\$ 300	0
8	SMS Program Benchmarking, Measurement, and Maturity Assessment	\$200	\$300	0	Ex. SDG&E-31	ISM001.000	NA	\$ -	\$ 200	0

Witness Area: Ex. SDG&E-31 Safety, Risk & Asset Management Systems

Workpaper 1
 SDG&E Test Year 2024 General Rate Case
 2021 RAMP to GRC Mapping
 SDG&E-CFF-8: Workforce Planning / Quality Workforce - O&M
 (\$000s)

2021 RAMP Report					TY 2024 GRC					
		2024								
ID	Control / Mitigation Name	Low	High	RSE	Witness	Workpaper	Tranche	2021	2024	RSE
New01	Workforce Planning	Post RAMP Addition			Ex. SDG&E-32	1HR006.000	N/A	\$ -	\$ 466	0

Witness Area: Ex. SDG&E-32 People and Culture Department