

SAN DIEGO GAS & ELECTRIC COMPANY

Risk Assessment and Mitigation Phase

2025 Report

Chapter: SDG&E-Risk-3

Number: SDG&E-R03-WP

Medium Pressure Gas System O&M Workpapers

SAN DIEGO GAS & ELECTRIC COMPANY

May 15, 2025



2025 Risk Assessment & Mitigation Phase

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Risk Chapter 1OR03: SDG&E-RISK-3 MEDIUM PRESSURE GAS SYSTEM

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Summary of Risk Chapter: 1OR03 - SDG&E-Risk-3 Medium Pressure Gas System

In 2024 \$ (000s) Incurred Costs												
	Adjusted Recorded					Adjusted Forecast						
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Control/Mitigation	18,476	18,921	17,933	16,530	17,315	17,415	17,729	17,834	18,334	18,438	18,645	18,753
Units	See detailed pages for Units as the unit measure can vary for each mitigation.											

Note: Totals may include rounding differences.

Risk Chapter: **SDG&E-Risk-3 Medium Pressure Gas System**

Risk ID: **1OR03**

In 2024 \$ (000s) Incurred Costs

Mitigation		Unit Measure	Adjusted Recorded					Adjusted Forecast						
ID	Name		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
C005	Gas Distribution Emergency	Responses	2,239	2,319	1,477	1,893	1,555	1,641	1,641	1,641	1,641	1,641	1,641	1,641
C101	Cathodic Protection Program	CP and follow-up	2,109	2,338	2,357	2,138	2,278	2,258	2,258	2,258	2,258	2,258	2,258	2,258
C115	Regulator Station Valve and	Inspections	2,951	2,961	3,113	3,093	3,117	3,194	3,272	3,353	3,436	3,521	3,608	3,697
C131	Leak Repair	Leaks Repaired	2,538	3,026	2,775	2,674	3,313	3,313	3,313	3,313	3,313	3,313	3,313	3,313
C134	Pipeline Monitoring	Inspections	3,516	3,609	4,302	3,924	4,173	4,173	4,173	4,173	4,173	4,173	4,173	4,173
C144	Human Factors Mitigation –	Employees	3	91	120	166	142	142	142	142	142	142	142	142
C169	Human Factors Mitigations -	OpQuals Trainers	2,767	2,092	2,118	2,148	2,077	2,116	2,337	2,337	2,337	2,337	2,337	2,337
C182	Distribution Risk Evaluation	No feasible	2,353	2,485	1,671	494	660	578	593	617	1,034	1,053	1,173	1,192

Units

Mitigation		Unit Measure	Adjusted Recorded					Adjusted Forecast						
ID	Name		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
C005	Gas Distribution Emergency	Responses	1,538	1,452	1,546	1,313	1,591	1,483	1,483	1,483	1,483	1,483	1,483	1,483
C101	Cathodic Protection Program	CP and follow-up	25,730	23,272	27,009	26,175	23,376	25,520	25,520	25,520	25,520	25,520	25,520	25,520
C115	Regulator Station Valve and	Inspections	5,434	4,471	5,769	6,000	5,673	5,813	5,956	6,103	6,254	6,408	6,566	6,728
C131	Leak Repair	Leaks Repaired	437	325	336	494	860	860	860	860	860	860	860	860
C134	Pipeline Monitoring	Inspections	941	904	912	975	972	972	972	972	972	972	972	972
C144	Human Factors Mitigation –	Employees	2	2	3	3	4	4	4	4	4	4	4	4
C169	Human Factors Mitigations -	OpQuals Trainers	834	922	1,290	836	899	956	1,056	1,056	1,056	1,056	1,056	1,056
C182	Distribution Risk Evaluation	No feasible	0	0	0	0	0	0	0	0	0	0	0	0

Note: Totals may include rounding differences.

Supplemental Workpapers

San Diego Gas and Electric -- Medium Pressure Gas System
Supplemental Workpaper for RAMP - 1OR03 - WP

Forecast (Thousands of 2024\$)																	
[A]	[B]	[C]	[D]	2025		2026		2027		2028		2029		2030		2031	
				[E]	[F] [ExD]	[G]	[H] [GxD]	[I]	[J] [IxD]	[I]	[J] [IxD]	[I]	[J] [IxD]	[I]	[J] [IxD]	[I]	[J] [IxD]
Workpaper Detail:	RAMP Activity	Unit	Unit Cost	Forecast Units	Forecast	Forecast Units	Forecast	Forecast Units	Forecast	Forecast Units	Forecast	Forecast Units	Forecast	Forecast Units	Forecast	Forecast Units	Forecast
1OR03C005	Gas Emergency Department	# of responses	\$ 1.11	1,483	\$ 1,641	1,483	\$ 1,641	1,483	\$ 1,641	1,483	\$ 1,641	1,483	\$ 1,641	1,483	\$ 1,641	1,483	\$ 1,641
1OR03C101	Cathodic Protection - O&M	# of CP reads	\$ 0.09	25,520	\$2,258	25,520	\$2,258	25,520	\$2,258	25,520	\$2,258	25,520	\$2,258	25,520	\$2,258	25,520	\$2,258
1OR03C115	Reg Station, Valve, Large Meter Set Inspections	# of Inspections	\$ 0.55	5,813	\$3,194	5,956	\$3,272	6,103	\$3,353	6,254	\$3,436	6,408	\$3,521	6,566	\$3,608	6,728	\$3,697
1OR03C131	Leak Repair - O&M	# of leaks repaired	\$ 3.85	860	\$3,313	860	\$3,313	860	\$3,313	860	\$3,313	860	\$3,313	860	\$3,313	860	\$3,313
1OR03C134	Pipeline Monitoring	# of surveys	\$4.29	972	\$4,173	972	\$4,173	972	\$4,173	972	\$4,173	972	\$4,173	972	\$4,173	972	\$4,173
1OR03C144	Human Factors Mitigations - QA/QC Program - Mandated Compliance Activities	# of employees	\$ 35.50	4	\$142	4	\$142	4	\$142	4	\$142	4	\$142	4	\$142	4	\$142
1OR03C169	Human Factors Mitigation - OpQual Training	# of OpQuals Trained	\$ 2.21	956	\$2,116	1,056	\$2,337	1,056	\$2,337	1,056	\$2,337	1,056	\$2,337	1,056	\$2,337	1,056	\$2,337

Notes: Amounts include vacation and sick leave.

Risk Chapter: **SDG&E-Risk-3 Medium Pressure Gas System**
Risk ID: **1OR03**

Appendix A: Forecast Methodology

Mitigation ID	Mitigation Name	Labor	Non-Labor	NSE	Units
C005	Gas Distribution Emergency Department	Zero-Based	Zero-Based	Zero-Based	Zero-Based
C101	Cathodic Protection Program - O&M	Zero-Based	Zero-Based	Zero-Based	Zero-Based
C115	Regulator Station Valve and Large Meter Set Inspection	Zero-Based	Zero-Based	Zero-Based	Zero-Based
C131	Leak Repair	Zero-Based	Zero-Based	Zero-Based	Zero-Based
C134	Pipeline Monitoring	Zero-Based	Zero-Based	Zero-Based	Zero-Based
C144	Human Factors Mitigation – QA/QC Program – Mandated Compliance A	Zero-Based	Zero-Based	Zero-Based	Zero-Based
C169	Human Factors Mitigations - Op. Qual. Training	Zero-Based	Zero-Based	Zero-Based	Zero-Based
C182	Distribution Risk Evaluation & Monitoring System (DREAMS)	Base YR Rec	Base YR Rec	Base YR Rec	Base YR Rec

Risk Chapter: SDG&E-Risk-3 Medium Pressure Gas System

Risk ID: 1OR03

Appendix B: Unit Measure

Mitigation ID	Mitigation Name	Unit Measure
C005	Gas Distribution Emergency Department	Responses
C101	Cathodic Protection Program - O&M	CP and follow up reads
C115	Regulator Station Valve and Large Meter Set Inspection	Inspections
C131	Leak Repair	Leaks Repaired
C134	Pipeline Monitoring	Inspections & Surveys
C144	Human Factors Mitigation – QA/QC Program – Mandated Compliance Activities	Employees
C169	Human Factors Mitigations - Op. Qual. Training	OpQuals Trained
C182	Distribution Risk Evaluation & Monitoring System (DREAMS)	No feasible units