

Application of SAN DIEGO GAS & ELECTRIC)
COMPANY for authority to update its gas and)
electric revenue requirement and base rates)
effective January 1, 2024 (U 902-M))

Application No. 22-05-016

Exhibit No.: (SDG&E-31-WP-R)

REVISED WORKPAPERS TO
PREPARED DIRECT TESTIMONY
OF KENNETH J. DEREMER
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

AUGUST 2022



**2024 General Rate Case - REVISED
INDEX OF WORKPAPERS**

Exhibit SDG&E-31-WP-R - SAFETY MANAGEMENT SYSTEMS

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Overall Summary For Exhibit No. SDG&E-31-WP-R

Area:	SAFETY MANAGEMENT SYSTEMS
Witness:	Kenneth J. Deremer

Description	In 2021 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Non-Shared Services	12,074	12,669	14,656	15,762
Shared Services	1,023	1,249	1,189	1,249
Total	13,097	13,918	15,845	17,011

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer

Summary of Non-Shared Services Workpapers:

Description	In 2021 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
A. Safety Management Systems	864	759	1,347	2,304
B. Safety	2,721	3,019	2,859	2,882
C. Enterprise Risk Management	5,475	5,567	5,965	6,114
D. Asset Management	3,014	3,324	4,485	4,462
Total	12,074	12,669	14,656	15,762

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Workpaper: 1SM001.000

Summary for Category: A. Safety Management Systems

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	381	471	558	616
Non-Labor	483	288	789	1,688
NSE	0	0	0	0
Total	864	759	1,347	2,304
FTE	2.9	3.6	4.9	4.9

Workpapers belonging to this Category:

1SM001.000 Safety Management System

Labor	381	471	558	616
Non-Labor	483	288	789	1,688
NSE	0	0	0	0
Total	864	759	1,347	2,304
FTE	2.9	3.6	4.9	4.9

Note: Totals may include rounding differences.

Beginning of Workpaper
1SM001.000 - Safety Management System

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: A. Safety Management Systems
Category-Sub: 1. Safety Management Systems
Workpaper: 1SM001.000 - Safety Management System

Activity Description:

SDG&E has developed and is operating within a Safety Management System (SMS) framework to improve its safety performance and culture with a structured, systematic, aligned approach to risk and safety. The SMS takes a process-based approach to build risk, safety, and asset management into all programs, projects and activities. SDG&E is currently implementing its developed SMS processes and will continue to measure and evaluate program effectiveness for continuous safety improvement.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases. For labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental labor increases from the base year are requested in order to complete the proposed initiatives. This is a new program with less 5 years of cost history. Therefore, a Base Year forecast plus incremental increases is appropriate since the program is not fully built out and did not incur consistent costs over the past three to five years to support an Average cost forecast. Base Year costs include SMS dedicated support (2 FTEs) that manage the development and implementation of the SMS. Test Year forecast includes additional SMS dedicated support (2 additional FTEs) focused on effective change management, ongoing review and data analysis, as well as the following proposed risk mitigation activities that were included in SDG&E's RAMP filing (SMS Cross-functional Factor Chapter) to realize the full benefit of the SMS and provide continuous safety improvement within the SMS framework: Enhanced engagement, including SMS competence, awareness, surveys/training; Integration of new technology and enhanced data and analytics capabilities for early risk identification and continuous safety improvement; Enhanced documentation and recordkeeping practices; Enhanced Stakeholder feedback and Key Performance Indicator monitoring, tracking and reporting; Implementation of a strong Management of Change platform with benchmarking, measurement and maturity assessments.

Non-Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases. For non-labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental non-labor increases from the base year are requested in order to complete the proposed initiatives. Since the SMS is newly developed with less than five (5) years of cost history, a Base Year forecast plus incremental increases is appropriate. Additionally, the historical non-labor costs incurred during program development are not representative of the ongoing program implementation and management. Therefore, a Base Year forecast plus incremental increases is appropriate since the program is not fully built out and did not incur consistent costs over the past three to five years to support an Average cost forecast. Base Year costs include no non-labor costs or technology resources. Test Year forecast includes additional SMS dedicated support focused on effective change management, ongoing review and data analysis, as well as the following proposed risk mitigation activities that were included in SDG&E's RAMP filing (SMS Cross-functional Factor Chapter) to realize the full benefit of the SMS and provide continuous safety improvement within the SMS framework: Enhanced engagement, including SMS competence, awareness, surveys/training; Integration of new technology and enhanced data and analytics capabilities for early risk identification and continuous safety improvement; Enhanced documentation and recordkeeping practices; Enhanced Stakeholder feedback and Key Performance Indicator monitoring, tracking and reporting; Implementation of a strong Management of Change platform with benchmarking, measurement and maturity assessments.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Category-Sub: 1. Safety Management Systems
 Workpaper: 1SM001.000 - Safety Management System

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		82	104	131	243	381	471	558	616	
Non-Labor		9	5	8	790	483	287	788	1,687	
NSE		0	0	0	0	0	0	0	0	
Total		92	109	138	1,034	864	758	1,346	2,303	
FTE		0.8	0.8	1.0	1.7	2.9	3.6	4.9	4.9	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Category-Sub: 1. Safety Management Systems
 Workpaper: 1SM001.000 - Safety Management System

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	381	381	381	90	177	235	471	558	616
Non-Labor	Base YR Rec	483	483	483	-195	306	1,205	288	789	1,688
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		864	864	864	-105	483	1,440	759	1,347	2,304
FTE	Base YR Rec	2.9	2.9	2.9	0.7	2.0	2.0	3.6	4.9	4.9

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	-200	0	-200	0.0	1-Sided Adj
Explanation:	2100-4113 non-labor Reduction in consultant costs from 2021 \$-47.62 X 4200 employees Ramp 1					
2022	90	5	0	95	0.7	1-Sided Adj
Explanation:	CC 2100-4113 Adding SMS Safety Analyst/Data Scientist (May2022)					
2022 Total	90	-195	0	-105	0.7	
2023	135	3	0	138	1.0	1-Sided Adj
Explanation:	CC 2100-4113 SMS Safety Analyst/Data Scientist					
2023	0	100	0	100	0.0	1-Sided Adj
Explanation:	CC 2100-4113 Enhanced Employee & Stakeholder Engagement, Including SMS Competence, Awareness, Survey and Training (non-labor survey and training development); \$23.81 X 4200 employees					
2023	0	200	0	200	0.0	1-Sided Adj
Explanation:	CC 2100-4113 SMS Program Benchmarking, Measurement and Maturity Assessment for Continuous Improvement (non-labor third party fees); \$47.62 X 4200 employees					
2023	42	3	0	45	1.0	1-Sided Adj
Explanation:	CC 2100-4113 SMS Process Safety Advisor CC 2100-4113 SMS Safety Mgmt Specialist					
2023 Total	177	306	0	483	2.0	
2024	0	100	0	100	0.0	1-Sided Adj
Explanation:	CC 2100-4113 Enhanced Employee & Stakeholder Engagement, Including SMS Competence, Awareness, Survey and Training (non-labor survey and training development); \$23.81 X 4200 employees					
2024	0	200	0	200	0.0	1-Sided Adj
Explanation:	CC 2100-4113 SMS Program Benchmarking, Measurement and Maturity Assessment for Continuous Improvement (non-labor third party fees); \$47.62 X 4200 employees					
2024	100	5	0	105	1.0	1-Sided Adj
Explanation:	CC 2100-4113 SMS Process Safety Advisor CC 2100-4113 SMS Safety Mgmt Specialist					

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Category-Sub: 1. Safety Management Systems
 Workpaper: 1SM001.000 - Safety Management System

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2024	0	200	0	200	0.0	1-Sided Adj
Explanation:	CC 2100-4113 Enhanced Stakeholder Feedback and Key Performance Indicator Monitoring, Tracking & Reporting (non-labor technology development); \$47.62 X 4200 employees					
2024	0	300	0	300	0.0	1-Sided Adj
Explanation:	CC 2100-4113 Development and Implementation of a Strong Management of Change Platform (non-labor technology development); \$71.43 X 4200 employees					
2024	135	300	0	435	1.0	1-Sided Adj
Explanation:	CC 2100-4113 Integration of New Technology and Enhanced Data and Analytics Capabilities for Continuous Safety Improvement (non-labor technology development); \$71.43 X 4200 employees CC 2100-4113 SMS Safety Analyst/Data Scientist					
2024	0	100	0	100	0.0	1-Sided Adj
Explanation:	CC 2100-4113 Enhanced documentation and recordkeeping practices (non-labor technology development); \$23.81 X 4200 employees (Ramp4)					
2024 Total	235	1,205	0	1,440	2.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Category-Sub: 1. Safety Management Systems
 Workpaper: 1SM001.000 - Safety Management System

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	64	83	108	206	331
Non-Labor	8	5	7	743	484
NSE	0	0	0	0	0
Total	72	88	115	949	815
FTE	0.7	0.7	0.9	1.5	2.5
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	-1	-1
NSE	0	0	0	0	0
Total	0	0	0	-1	-1
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	64	83	108	206	331
Non-Labor	8	5	7	741	483
NSE	0	0	0	0	0
Total	72	88	115	948	814
FTE	0.7	0.7	0.9	1.5	2.5
Vacation & Sick (Nominal \$)					
Labor	10	13	15	29	50
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	10	13	15	29	50
FTE	0.1	0.1	0.1	0.2	0.4
Escalation to 2021\$					
Labor	9	8	7	8	0
Non-Labor	1	0	0	49	0
NSE	0	0	0	0	0
Total	10	9	8	57	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	82	104	131	243	381
Non-Labor	9	5	8	790	483
NSE	0	0	0	0	0
Total	92	109	138	1,034	864
FTE	0.8	0.8	1.0	1.7	2.9

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Category-Sub: 1. Safety Management Systems
 Workpaper: 1SM001.000 - Safety Management System

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	0	0	0
Non-Labor	0	0	0	-1	-1
NSE	0	0	0	0	0
Total	0	0	0	-1	-1
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017 Total	0	0	0	0.0	
2018 Total	0	0	0	0.0	
2019 Total	0	0	0	0.0	
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020 Total	0	-1	0	0.0	
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021 Total	0	-1	0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Category-Sub: 1. Safety Management Systems
 Workpaper: 1SM001.000 - Safety Management System

RAMP Item # 1

RAMP Activity

RAMP Chapter: SDG&E-CFF-7 Safety Management System

RAMP Line Item ID: 6

RAMP Line Item Name: Enhanced Stakeholder Feedback and Key Performance Indicator Monitoring, Tracking, and Reporting

Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	0	0	200	200	300

Cost Estimate Changes from RAMP:

GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 NA	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:

No single unit of measure available

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:

NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Category-Sub: 1. Safety Management Systems
 Workpaper: 1SM001.000 - Safety Management System

RAMP Item # 2

RAMP Activity

RAMP Chapter: SDG&E-CFF-7 Safety Management System

RAMP Line Item ID: 7

RAMP Line Item Name: Development and Implementation of a Strong Management of Change Platform

Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	0	0	300	500	1,000

Cost Estimate Changes from RAMP:

GRC forecast is outside the RAMP range due to forecast updates

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 NA	1.00	0.00	0.00	1.00	1.00	1.00

Work Unit Changes from RAMP:

No single unit of measure available.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:

NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Category-Sub: 1. Safety Management Systems
 Workpaper: 1SM001.000 - Safety Management System

RAMP Item # 3

RAMP Activity

RAMP Chapter: SDG&E-CFF-7 Safety Management System
 RAMP Line Item ID: 1
 RAMP Line Item Name: Development and Implementation of an Enterprise-Wide SMS
 Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	718	517	762	821	500	600

Cost Estimate Changes from RAMP:
 GRC forecast is outside the RAMP range due to forecast updates

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 NA	1.00	0.00	0.00	1.00	1.00	1.00

Work Unit Changes from RAMP:
 No single unit of measure available

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:
 TBD

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Category-Sub: 1. Safety Management Systems
 Workpaper: 1SM001.000 - Safety Management System

RAMP Item # 4

RAMP Activity

RAMP Chapter: SDG&E-CFF-7 Safety Management System

RAMP Line Item ID: 2

RAMP Line Item Name: Enhanced Employee and Stakeholder Engagement, including SMS Competence, Awareness, Survey and Training

Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	0	100	100	400	600

Cost Estimate Changes from RAMP:

GRC forecast is outside the RAMP range due to forecast updates

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 NA	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:

No Single Unit of Measure available

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:

NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Category-Sub: 1. Safety Management Systems
 Workpaper: 1SM001.000 - Safety Management System

RAMP Item # 5

RAMP Activity

RAMP Chapter: SDG&E-CFF-7 Safety Management System

RAMP Line Item ID: 3

RAMP Line Item Name: Integration of New Technology and Enhanced Data and Analytics Capabilities for Continuous Safety Improvement

Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	95	138	437	500	1,000

Cost Estimate Changes from RAMP:

GRC forecast is outside the RAMP range due to forecast updates

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 NA	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:

No Single Unit of Measure Available

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:

NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Category-Sub: 1. Safety Management Systems
 Workpaper: 1SM001.000 - Safety Management System

RAMP Item # 6

RAMP Activity

RAMP Chapter: SDG&E-CFF-7 Safety Management System

RAMP Line Item ID: 8

RAMP Line Item Name: SMS Program Benchmarking, Measurement, and Maturity Assessment for Continuous Improvement

Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	0	200	200	200	300

Cost Estimate Changes from RAMP:

GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 NA	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:

No one single unit of measure available

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:

NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety Management Systems
 Category-Sub: 1. Safety Management Systems
 Workpaper: 1SM001.000 - Safety Management System

RAMP Item # 7

RAMP Activity

RAMP Chapter: SDG&E-CFF-7 Safety Management System
 RAMP Line Item ID: 4
 RAMP Line Item Name: Enhanced Documentation and Recordkeeping Practices
 Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	0	0	100	100	300

Cost Estimate Changes from RAMP:
 GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 NA	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:
 No Single Unit of Measure Available

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:
 NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: B. Safety
Workpaper: VARIOUS

Summary for Category: B. Safety

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	1,841	1,912	1,912	1,912
Non-Labor	880	1,107	947	970
NSE	0	0	0	0
Total	2,721	3,019	2,859	2,882
FTE	15.3	16.0	16.0	16.0

Workpapers belonging to this Category:

1SM002.000 Safety

Labor	393	393	393	393
Non-Labor	272	145	95	95
NSE	0	0	0	0
Total	665	538	488	488
FTE	2.7	2.7	2.7	2.7

1SM002.001 Safety

Labor	440	470	470	470
Non-Labor	212	536	426	449
NSE	0	0	0	0
Total	652	1,006	896	919
FTE	3.8	3.9	3.9	3.9

1SM002.002 Safety

Labor	1,008	1,049	1,049	1,049
Non-Labor	240	240	240	240
NSE	0	0	0	0
Total	1,248	1,289	1,289	1,289
FTE	8.8	9.4	9.4	9.4

1SM002.003 Safety

Labor	0	0	0	0
Non-Labor	156	186	186	186
NSE	0	0	0	0
Total	156	186	186	186
FTE	0.0	0.0	0.0	0.0

Note: Totals may include rounding differences.

Beginning of Workpaper
1SM002.000 - Safety

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.000 - Safety

Activity Description:

The Safety department establishes a framework of clear guidance by ensuring safety standards, safety policies, safety programs and essential safety training are designed to protect employees from hazards and are used to communicate safe work practices to the workforce to create a safe work environment for employees. The safety guidance to all employees embedded in our safety standards, policies and programs is to never compromise personal and public safety for production, no activity is so important that it should jeopardize safety. We encourage employees to speak up and/or give feedback on safety to effectively manage risks and unsafe practices. We promote strong safety principles throughout the Company, and foster a culture of continuous safety improvement.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental labor increases from the base year are requested in order to completed additional initiatives.

Non-Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For non-labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental non-labor increases from the base year are requested in order to completed additional initiatives.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		589	475	412	415	393	393	393	393	
Non-Labor		156	149	52	160	272	145	95	95	
NSE		0	0	0	0	0	0	0	0	
Total		745	623	463	576	665	538	488	488	
FTE		4.7	3.5	2.9	2.9	2.7	2.7	2.7	2.7	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.000 - Safety

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	393	393	393	0	0	0	393	393	393
Non-Labor	Base YR Rec	272	272	272	-127	-177	-177	145	95	95
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		665	665	665	-127	-177	-177	538	488	488
FTE	Base YR Rec	2.7	2.7	2.7	0.0	0.0	0.0	2.7	2.7	2.7

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	-177	0	-177	0.0	1-Sided Adj
Explanation:	CC 2100-3628 - removing costs as program spend ended in 2021					
2022	0	50	0	50	0.0	1-Sided Adj
Explanation:	CC 2100-3628 Safety event (Jan/Feb)					
2022 Total	0	-127	0	-127	0.0	
2023	0	-177	0	-177	0.0	1-Sided Adj
Explanation:	CC 2100-3628 - removing costs as program spend ended in 2021					
2023 Total	0	-177	0	-177	0.0	
2024	0	-177	0	-177	0.0	1-Sided Adj
Explanation:	CC 2100-3628 - removing costs as program spend ended in 2021					
2024 Total	0	-177	0	-177	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: B. Safety
Category-Sub: 1. Safety
Workpaper: 1SM002.000 - Safety

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	459	380	340	353	437
Non-Labor	140	137	49	180	278
NSE	0	0	0	0	0
Total	600	517	389	532	715
FTE	4.0	3.0	2.5	2.5	3.3
Adjustments (Nominal \$) **					
Labor	0	0	0	0	-96
Non-Labor	0	0	0	-29	-6
NSE	0	0	0	0	0
Total	0	0	0	-29	-102
FTE	0.0	0.0	0.0	0.0	-1.0
Recorded-Adjusted (Nominal \$)					
Labor	459	380	340	353	341
Non-Labor	140	137	49	150	272
NSE	0	0	0	0	0
Total	600	517	389	503	614
FTE	4.0	3.0	2.5	2.5	2.3
Vacation & Sick (Nominal \$)					
Labor	68	58	49	50	51
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	68	58	49	50	51
FTE	0.7	0.5	0.4	0.4	0.4
Escalation to 2021\$					
Labor	61	38	23	13	0
Non-Labor	16	12	3	10	0
NSE	0	0	0	0	0
Total	77	49	26	23	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	589	475	412	415	393
Non-Labor	156	149	52	160	272
NSE	0	0	0	0	0
Total	745	623	463	576	665
FTE	4.7	3.5	2.9	2.9	2.7

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.000 - Safety

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	0	0	-96
Non-Labor	0	0	0	-29	-6
NSE	0	0	0	0	0
Total	0	0	0	-29	-102
FTE	0.0	0.0	0.0	0.0	-1.0

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017 Total	0	0	0	0.0	
2018 Total	0	0	0	0.0	
2019 Total	0	0	0	0.0	
2020	0	-29	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020 Total	0	-29	0	0.0	
2021	0	-6	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	-96	0	0	-1.0	CCTR Transf To 2100-3629.000
Explanation:	Project Advisor positioning transferring from CC 2100-3628 to CC 2100-3629 within Safety Organization.				
2021 Total	-96	-6	0	-1.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.000 - Safety

RAMP Item # 1

RAMP Activity

RAMP Chapter: SDG&E-Risk-8 Incident Involving an Employee
 RAMP Line Item ID: C14
 RAMP Line Item Name: Enhanced Safety in Action Program
 Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	177	0	0	0	0	0

Cost Estimate Changes from RAMP:
 Program spend ended in 2021

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 NA	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:
 Program spend ended in 2021

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:
 NA

Beginning of Workpaper
1SM002.001 - Safety

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.001 - Safety

Activity Description:

Safety Compliance is primarily responsible for compliance with safety regulations and establishing and managing programs, policies and guidelines to promote the safety of SDG&E employees.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental labor increases from the base year are requested in order to complete additional initiatives. This method is most representative of the current organizational structure.

Non-Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For non-labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental non-labor increases from the base year are requested in order to completed additional initiatives. This method is most representative of the current organizational structure.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		0	0	0	325	440	470	470	470	
Non-Labor		239	194	125	178	212	536	426	449	
NSE		0	0	0	0	0	0	0	0	
Total		239	194	125	502	651	1,006	896	919	
FTE		0.0	0.0	0.0	2.6	3.8	3.9	3.9	3.9	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.001 - Safety

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	440	440	440	30	30	30	470	470	470
Non-Labor	Base YR Rec	212	212	212	324	214	237	536	426	449
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		651	651	651	354	244	267	1,005	895	918
FTE	Base YR Rec	3.8	3.8	3.8	0.1	0.1	0.1	3.9	3.9	3.9

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	150	0	150	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Rental break/rest trailers with filtered air systems to reduce wildfire smoke exposure. (Cal/OSHA Protection from Wildfire Smoke) \$10k per trailer per month					
2022	0	80	0	80	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Purchase and test more protective respiratory protection for wildfire smoke particulates. (Cal/OSHA Protection from Wildfire Smoke). \$2000/respirator					
2022	30	35	0	65	0.1	1-Sided Adj
Explanation:	CC 2100-3629 Contract support for welding exposure assessment. \$100/hour (\$10K) CC 2100-3629 Contract support for lead and other health hazard exposure assessments to comply with pending Cal/OSHA Lead Standard and other emerging health standards. \$100/hour (\$12K) CC 2100-3629 Asbestos negative exposure assessments (wall drilling/cable cutting – contractor abatement work) \$1k p/month (\$12K) CC 2100-3629 Increase in asbestos inventory inspections cost (\$1K) CC 2100-3629 corrected for annualized salary					
2022	0	15	0	15	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Professional conferences and courses to maintain certifications. \$5000/Industrial Hygienist (IH)					
2022	0	12	0	12	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Travel (airfare/lodging) to business meetings. \$1000/month					
2022	0	32	0	32	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Industrial hygiene data management/Sharepoint organization. \$100/hour. Safety Compliance documents are stored on 3 Sharepoint sites due to organizational changes over the years, contributing to challenges with accessing records. Developing and implementing a standardized, recordkeeping system will enable Safety Compliance to achieve consistency in maintaining and storing compliance records.					

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.001 - Safety

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>
2022 Total	30	324	0	354	0.1	
2023	0	150	0	150	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Rental break/rest trailers with filtered air systems to reduce wildfire smoke exposure. (Cal/OSHA Protection from Wildfire Smoke) \$10k per trailer per month					
2023	0	2	0	2	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Purchase replacement filters and equipment for respiratory protection for wildfire smoke program. \$25/replacement filters and equipment					
2023	0	15	0	15	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Professional conferences and courses to maintain certifications. \$5000/Industrial Hygienist (IH)					
2023	0	12	0	12	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Travel (airfare/lodging) to business meetings. \$1000/month					
2023	30	35	0	65	0.1	1-Sided Adj
Explanation:	<p>CC 2100-3629 Contract support for silica exposure assessment (Cal/ OSHA Silica Dust Control Program). \$100/hour (\$10K)</p> <p>CC 2100-3629 Contract support for lead and other health hazard exposure assessments to comply with pending Cal/OSHA Lead Standard and other emerging health standards. \$100/hour (\$12K)</p> <p>CC 2100-3629 Asbestos negative exposure assessments (wall drilling/cable cutting – contractor abatement work) \$1k p/month (\$12K)</p> <p>CC 2100-3629 Increase in asbestos inventory inspections cost (\$1K)</p> <p>CC 2100-3629 corrected for annualized salary</p>					
2023 Total	30	214	0	244	0.1	
2024	0	150	0	150	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Rental break/rest trailers with filtered air systems to reduce wildfire smoke exposure. (Cal/OSHA Protection from Wildfire Smoke) \$10k per trailer per month					
2024	0	2	0	2	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Purchase replacement filters and equipment for respiratory protection for wildfire smoke program. \$25/replacement filters and equipment					
2024	0	28	0	28	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Instructional designer support to update & convert safety training curriculum to web based. Contractor for 6 months					
2024	0	15	0	15	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Professional conferences and courses to maintain certifications. \$5000/Industrial Hygienist (IH)					
2024	0	12	0	12	0.0	1-Sided Adj

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.001 - Safety

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
Explanation:	CC 2100-3629 Travel (airfare/lodging) to business meetings. \$1000/month					
2024	30	29	0	59	0.1	1-Sided Adj
Explanation:	CC 2100-3629 Contract support for lead and other health hazard exposure assessments to comply with pending Cal/OSHA Lead Standard and other emerging health standards. \$100/hour (\$12K)					
	CC 2100-3629 Asbestos negative exposure assessments (wall drilling/cable cutting – contractor abatement work) \$1k p/month (\$12K)					
	CC 2100-3629 Increase in asbestos inventory inspections cost (\$1K)					
	CC 2100-3629 Increase in Safety Data Sheet Management System (3E) cost (\$1.5K)					
	CC 2100-3629 Increase in respirator fit testing, medical evaluations, and mobile hearing van costs (Cal/OSHA Respiratory Protection and Hearing Conservation Programs) (\$2.3K)					
	CC 2100-3629 corrected for annualized salary					
2024	0	1	0	1	0.0	1-Sided Adj
Explanation:	CC 2100-3629 Increase in respirator medical evaluation costs for Wildfire Smoke Program					
2024 Total	30	237	0	267	0.1	

Note: Totals may include rounding differences.

SDG&E/SAFETY MANAGEMENT SYSTEMS/Exh No:SDG&E-31-WP-R/Witness: K. Deremer

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: B. Safety
Category-Sub: 1. Safety
Workpaper: 1SM002.001 - Safety

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	276	286
Non-Labor	214	179	118	482	507
NSE	0	0	0	0	0
Total	214	179	118	758	793
FTE	0.0	0.0	0.0	2.2	2.2
Adjustments (Nominal \$) **					
Labor	0	0	0	0	96
Non-Labor	0	0	0	-315	-295
NSE	0	0	0	0	0
Total	0	0	0	-315	-199
FTE	1.0	0.0	0.0	0.0	1.0
Recorded-Adjusted (Nominal \$)					
Labor	0	0	0	276	382
Non-Labor	214	179	118	167	212
NSE	0	0	0	0	0
Total	214	179	118	442	594
FTE	1.0	0.0	0.0	2.2	3.2
Vacation & Sick (Nominal \$)					
Labor	0	0	0	39	57
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	39	57
FTE	0.2	0.0	0.0	0.4	0.6
Escalation to 2021\$					
Labor	0	0	0	10	0
Non-Labor	25	15	7	11	0
NSE	0	0	0	0	0
Total	25	15	7	21	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	0	0	0	325	440
Non-Labor	239	194	125	178	212
NSE	0	0	0	0	0
Total	239	194	125	502	651
FTE	1.2	0.0	0.0	2.6	3.8

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: B. Safety
Category-Sub: 1. Safety
Workpaper: 1SM002.001 - Safety

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0.030	0	0	0	96
Non-Labor	0	0	0	-315	-295
NSE	0	0	0	0	0
Total	0.030	0	0	-315	-199
FTE	1.0	0.0	0.0	0.0	1.0

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	0	0	0	1.0	1-Sided Adj
Explanation: 5 mos salary for Industrial Hygienist backfill; add 1 FTE					
2017 Total	0	0	0	1.0	
2018 Total	0	0	0	0.0	
2019 Total	0	0	0	0.0	
2020	0	-315	0	0.0	1-Sided Adj
Explanation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).					
2020 Total	0	-315	0	0.0	
2021	0	-295	0	0.0	1-Sided Adj
Explanation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).					
2021	96	0	0	1.0	CCTR Transf From 2100-3628.000
Explanation: Project Advisor positioning transferring from CC 2100-3628 to CC 2100-3629 within Safety Organization.					
2021 Total	96	-295	0	1.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.001 - Safety

RAMP Item # 1

RAMP Activity

RAMP Chapter: SDG&E-Risk-8 Incident Involving an Employee
 RAMP Line Item ID: M02
 RAMP Line Item Name: Break/rest trailers with filtered air systems
 Tranche(/s): Tranche1: Non-Vehicle incident

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	150	150	150	143	172

Cost Estimate Changes from RAMP:
 GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of staging area trailers	0.00	15.00	15.00	15.00	10.00	15.00

Work Unit Changes from RAMP:
 GRC forecast is within the RAMP range

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	20.000	7.000

RSE Changes from RAMP:
 General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology ,
 as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex.
 SCG-03/SDG&E-03, Chapter 2)

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.001 - Safety

RAMP Item # 2

RAMP Activity

RAMP Chapter: SDG&E-Risk-8 Incident Involving an Employee
 RAMP Line Item ID: M01
 RAMP Line Item Name: Respiratory protection for wildfire smoke particulates
 Tranche(/s): Tranche1: Overall

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	80	2	2	2	2

Cost Estimate Changes from RAMP:
 GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # replacenet filters purchased	0.00	40.00	0.00	0.00	40.00	46.00

Work Unit Changes from RAMP:
 Projected to purchase filters in 2022 as opposed to 2024

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	59.000	516.000

RSE Changes from RAMP:
 General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology ,
 as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex.
 SCG-03/SDG&E-03, Chapter 2)

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.001 - Safety

RAMP Item # 3

RAMP Activity

RAMP Chapter: SDG&E-Risk-8 Incident Involving an Employee

RAMP Line Item ID: C01

RAMP Line Item Name: Mandatory Employee Health and Safety Training Programs and Standardized Policies

Tranche(/s): Tranche1: Overall

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	496	561	561	554	776	940

Cost Estimate Changes from RAMP:

GRC forecast is outside the RAMP range due to forecast updates

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of employees	4,796.00	4,940.00	5,137.00	5,394.00	4,400.00	4,800.00

Work Unit Changes from RAMP:

GRC forecast is outside the RAMP range due to forecast updates

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:

NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.001 - Safety

RAMP Item # 4

RAMP Activity

RAMP Chapter: SDG&E-Risk-8 Incident Involving an Employee
 RAMP Line Item ID: M04
 RAMP Line Item Name: Designer support to update & convert safety training
 Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	0	0	28	22	31

Cost Estimate Changes from RAMP:
 GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of internal employees	0.00	0.00	0.00	0.20	0.20	0.30

Work Unit Changes from RAMP:
 GRC forecast is within the RAMP range

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:
 NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.001 - Safety

RAMP Item # 5

RAMP Activity

RAMP Chapter: SDG&E-Risk-8 Incident Involving an Employee
 RAMP Line Item ID: C17
 RAMP Line Item Name: Employee Wildfire Smoke Protection Cal/OSHA emergency regulation
 Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	15	0	0	16	16	20

Cost Estimate Changes from RAMP:
 GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of Employee requiring medical evaluations	650.00	650.00	650.00	650.00	650.00	747.00

Work Unit Changes from RAMP:
 GRC forecast is within the RAMP range

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:
 NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.001 - Safety

RAMP Item # 6

RAMP Activity

RAMP Chapter: SDG&E-Risk-8 Incident Involving an Employee

RAMP Line Item ID: C13

RAMP Line Item Name: Enhanced Mandatory Employee Training (OSHA): Certified Occupational Safety Specialist, Certified Utility Safety Professional; Certified Safety Professional

Tranche(/s): Tranche1: Overall

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	6	0	0	6	14	17

Cost Estimate Changes from RAMP:

GRC forecast is outside the RAMP range due to forecast updates

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of employees trained	30.00	30.00	30.00	30.00	30.00	34.00

Work Unit Changes from RAMP:

GRC forecast is within the RAMP range

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	1,997.000	138.000

RSE Changes from RAMP:

General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology , as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2)

Beginning of Workpaper
1SM002.002 - Safety

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.002 - Safety

Activity Description:

Contractor Safety is responsible for managing the oversight of Class 1 contractors engaged with SDG&E construction activities. Contractor Safety manages contractor compliance, performs job site observations, ensures safety rules and regulations are followed, per the Contractor Safety Manual, ensuring the safety of SDG&E contractors. Contractor Safety has internal resources that support Class 1 Contractor pre-qualification, maintain oversight of compliance status, and communicate to Business Units as well as contractors details around the program to help ensure compliance. Additional resources are tasked with field oversight through safety observations, incident/near-miss investigations, corrective actions and mitigation identification relating to incident/near-miss events, training verification, and safety subject matter expertise to support Class 1 work. Data obtained is communicated to internal and external parties and used proactively to focus oversight in the higher risk areas or when opportunities for improvement are identified.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental labor increases from the base year are requested in order to completed additional initiatives. This method is most representative of the current organizational structure.

Non-Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For non-labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental non-labor increases from the base year are requested in order to completed additional initiatives. This method is most representative of the current organizational structure.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		0	0	758	988	1,008	1,049	1,049	1,049	
Non-Labor		0	0	123	237	240	241	241	241	
NSE		0	0	0	0	0	0	0	0	
Total		0	0	881	1,226	1,249	1,290	1,290	1,290	
FTE		0.0	0.0	7.1	8.7	8.8	9.4	9.4	9.4	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.002 - Safety

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	1,008	1,008	1,008	41	41	41	1,049	1,049	1,049
Non-Labor	Base YR Rec	240	240	240	0	0	0	240	240	240
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		1,249	1,249	1,249	41	41	41	1,290	1,290	1,290
FTE	Base YR Rec	8.8	8.8	8.8	0.6	0.6	0.6	9.4	9.4	9.4

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	41	0	0	41	0.6	1-Sided Adj
Explanation: C1CC 2100-4058 revised for annualized salary						
2022 Total	41	0	0	41	0.6	
2023	41	0	0	41	0.6	1-Sided Adj
Explanation: CC 2100-4058 revised for annualized salary						
2023 Total	41	0	0	41	0.6	
2024	41	0	0	41	0.6	1-Sided Adj
Explanation: CC 2100-4058 revised for annualized salary						
2024 Total	41	0	0	41	0.6	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: B. Safety
Category-Sub: 1. Safety
Workpaper: 1SM002.002 - Safety

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	627	839	877
Non-Labor	0	0	116	229	294
NSE	0	0	0	0	0
Total	0	0	743	1,068	1,171
FTE	0.0	0.0	6.1	7.5	7.5
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	-6	-54
NSE	0	0	0	0	0
Total	0	0	0	-6	-54
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	0	0	627	839	877
Non-Labor	0	0	116	222	240
NSE	0	0	0	0	0
Total	0	0	743	1,061	1,117
FTE	0.0	0.0	6.1	7.5	7.5
Vacation & Sick (Nominal \$)					
Labor	0	0	90	119	132
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	90	119	132
FTE	0.0	0.0	1.0	1.2	1.3
Escalation to 2021\$					
Labor	0	0	42	31	0
Non-Labor	0	0	7	15	0
NSE	0	0	0	0	0
Total	0	0	49	45	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	0	0	758	988	1,008
Non-Labor	0	0	123	237	240
NSE	0	0	0	0	0
Total	0	0	881	1,226	1,249
FTE	0.0	0.0	7.1	8.7	8.8

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.002 - Safety

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	0	0	0
Non-Labor	0	0	0	-6	-54
NSE	0	0	0	0	0
Total	0	0	0	-6	-54
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017 Total	0	0	0	0.0	
2018 Total	0	0	0	0.0	
2019 Total	0	0	0	0.0	
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	-5	0	0.0	1-Sided Adj
Explanation:	SDG&E has developed an Overhead Pool for Contractor Field Safety Management to more accurately track and manage costs to perform Class 1 Contractor safety oversight.				
2020 Total	0	-6	0	0.0	
2021	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	0	-52	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021 Total	0	-54	0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.002 - Safety

RAMP Item # 1

RAMP Activity

RAMP Chapter: SDG&E-Risk-4 Incident Involving a Contractor

RAMP Line Item ID: C01

RAMP Line Item Name: Contractor Oversight Program

Tranche(/s): Tranche1: Overall

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	1,027	1,068	1,068	1,068	1,008	1,220

Cost Estimate Changes from RAMP:

GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of FTE providing oversight	9.00	9.00	10.00	11.00	10.00	11.00

Work Unit Changes from RAMP:

GRC forecast is within the RAMP range

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	283.000	139.000

RSE Changes from RAMP:

General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology, as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2)

Beginning of Workpaper
1SM002.003 - Safety

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: B. Safety
Category-Sub: 1. Safety
Workpaper: 1SM002.003 - Safety

Activity Description:

Electromagnetic Field (EMF) Services are primarily responsible for establishing and managing programs, policies and guidelines to promote the safety of SDG&E employees. Additionally EMF Services provides CPUC approved compliance programs for customers, employees, and the public. EMF Services tracks the EMF science and makes objective EMF health literature available to customers and employees. EMF Services responds to customer and employee inquiries on health issues and coordinates responses to customer inquiries received by other operational areas of the Company. EMF Services also conducts measurements in accordance with CPUC Decision 93-11-013. EMF Services responds to requests from school districts or their environmental consulting firms for data to comply with the EMF provisions of California Title 5 Standards for School Site Selection.4 14 To maintain compliance with CPUC EMF Decision 15 93-11-013 and the reaffirmed CPUC Decision 06-01-042, EMF Services provides oversight compliance checks and reviews mandated EMF Management Plans for all SDG&E transmission construction projects requiring CPUC GO-131D compliance and provides EMF information for Company environmental documents. Also, in compliance with the CPUC EMF decisions, EMF Services maintains an EMF Measurement Program whereby EMF Services (Staff & Hired Contractors) conduct onsite EMF measurements for customers upon request; averaging 250+ visits per year over the last five (5) years. EMF Representatives provide training to key in-house audiences and meet with project advisory committees and community groups to promote open communication on EMF issues related to specific projects upon request.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental labor increases from the base year are requested in order to completed additional initiatives. This base year forecast method is most appropriate because it is indicative of the Safety Department structure, which was re-organized since the 2019 General Rate Case. Use of alternative forecast methodologies which utilize historical data are not appropriate because the historical costs do not represent the current and future structure of this organization and its planned risk mitigation activities.

Non-Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For non-labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental non-labor increases from the base year are requested in order to completed additional initiatives. This base year forecast method is most appropriate because it is indicative of the Safety Department structure, which was re-organized since the 2019 General Rate Case. Use of alternative forecast methodologies which utilize historical data are not appropriate because the historical costs do not represent the current and future structure of this organization and its planned risk mitigation activities.

NSE - Base YR Rec

N/A

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: B. Safety
Category-Sub: 1. Safety
Workpaper: 1SM002.003 - Safety

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		119	115	115	110	0	0	0	0	
Non-Labor		185	184	166	211	156	186	186	186	
NSE		0	0	0	0	0	0	0	0	
Total		304	300	281	321	156	186	186	186	
FTE		1.0	0.9	1.0	0.9	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.003 - Safety

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	0	0	0	0	0	0	0	0	0
Non-Labor	Base YR Rec	156	156	156	30	30	30	186	186	186
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		156	156	156	30	30	30	186	186	186
FTE	Base YR Rec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	30	0	30	0.0	1-Sided Adj
Explanation: 2100 - 0215 EMF vendor technician spend						
2022 Total		0	30	0	30	0.0
2023	0	30	0	30	0.0	1-Sided Adj
Explanation: 2100 - 0215 EMF vendor technician spend						
2023 Total		0	30	0	30	0.0
2024	0	30	0	30	0.0	1-Sided Adj
Explanation: 2100 - 0215 EMF vendor technician spend						
2024 Total		0	30	0	30	0.0

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: B. Safety
Category-Sub: 1. Safety
Workpaper: 1SM002.003 - Safety

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	93	92	95	93	0
Non-Labor	166	170	156	198	156
NSE	0	0	0	0	0
Total	258	262	251	292	156
FTE	0.9	0.8	0.9	0.8	0.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	93	92	95	93	0
Non-Labor	166	170	156	198	156
NSE	0	0	0	0	0
Total	258	262	251	292	156
FTE	0.9	0.8	0.9	0.8	0.0
Vacation & Sick (Nominal \$)					
Labor	14	14	14	13	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	14	14	14	13	0
FTE	0.1	0.1	0.1	0.1	0.0
Escalation to 2021\$					
Labor	12	9	6	3	0
Non-Labor	19	14	10	13	0
NSE	0	0	0	0	0
Total	31	24	16	17	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	119	115	115	110	0
Non-Labor	185	184	166	211	156
NSE	0	0	0	0	0
Total	304	300	281	321	156
FTE	1.0	0.9	1.0	0.9	0.0

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
 2024 GRC - REVISED
 Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: B. Safety
 Category-Sub: 1. Safety
 Workpaper: 1SM002.003 - Safety

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
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Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: C. Enterprise Risk Management
Workpaper: VARIOUS

Summary for Category: C. Enterprise Risk Management

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	2,856	2,908	3,290	3,443
Non-Labor	2,618	2,658	2,671	2,670
NSE	0	0	3	0
Total	5,474	5,566	5,964	6,113
FTE	20.6	21.1	24.8	26.0

Workpapers belonging to this Category:

1SM000.000 VP- Risk Mgmt & Chf Compl Ofcr

Labor	379	379	379	379
Non-Labor	39	39	39	39
NSE	0	0	0	0
Total	418	418	418	418
FTE	1.6	1.6	1.6	1.6

1SM005.000 Enterprise Risk Management

Labor	1,682	1,706	2,006	2,159
Non-Labor	2,013	2,049	2,064	2,063
NSE	0	0	3	0
Total	3,695	3,755	4,073	4,222
FTE	12.0	12.3	15.2	16.4

1SM006.000 Energy Risk Management

Labor	795	823	905	905
Non-Labor	566	570	568	568
NSE	0	0	0	0
Total	1,361	1,393	1,473	1,473
FTE	7.0	7.2	8.0	8.0

Note: Totals may include rounding differences.

Beginning of Workpaper
1SM000.000 - VP- Risk Mgmt & Chf Compl Ofcr

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: C. Enterprise Risk Management
 Category-Sub: 1. Enterprise Risk Management
 Workpaper: 1SM000.000 - VP- Risk Mgmt & Chf Compl Ofcr

Activity Description:

SDG&E recognizes the importance of identifying, analyzing, and mitigating risks across the company. The company is committed to incorporating risk management principles and practices into its operations and making risk management an integral part of the company's decision making, planning, communications, reporting, and day to day operational processes. The Vice President of Enterprise Risk Management and Chief Compliance Officer is responsible for implementing risk management policies while promoting the integration of risk management concepts into company processes.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases. For labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental labor increases from the base year are requested in order to completed additional initiatives. This base year forecast method is most appropriate because it is indicative of the current risk management structure, which was re-organized in recent years. Use of alternative forecast methodoligies which utilize historical data are not appropriate because the historical costs do not represent the current and future structure of this organization and its planned risk mitigation activities.

Non-Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases. For non-labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental non-labor increases from the base year are requested in order to completed additional initiatives. This base year forecast method is most appropriate because it is indicative of the current risk management structure, which was re-organized in recent years. Use of alternative forecast methodoligies which utilize historical data are not appropriate because the historical costs do not represent the current and future structure of this organization and its planned risk mitigation activities.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		332	180	168	375	379	379	379	379	
Non-Labor		39	38	34	50	39	39	39	39	
NSE		0	0	0	0	0	0	0	0	
Total		371	218	202	425	418	418	418	418	
FTE		1.3	0.9	0.9	1.6	1.6	1.6	1.6	1.6	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: C. Enterprise Risk Management
 Category-Sub: 1. Enterprise Risk Management
 Workpaper: 1SM000.000 - VP- Risk Mgmt & Chf Compl Ofcr

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	379	379	379	0	0	0	379	379	379
Non-Labor	Base YR Rec	39	39	39	0	0	0	39	39	39
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		418	418	418	0	0	0	418	418	418
FTE	Base YR Rec	1.6	1.6	1.6	0.0	0.0	0.0	1.6	1.6	1.6

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
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Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: C. Enterprise Risk Management
Category-Sub: 1. Enterprise Risk Management
Workpaper: 1SM000.000 - VP- Risk Mgmt & Chf Compl Ofcr

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	259	144	139	318	330
Non-Labor	35	35	32	47	39
NSE	0	0	0	0	0
Total	294	179	171	366	369
FTE	1.2	0.7	0.8	1.4	1.4
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	-1	-1
NSE	0	0	0	0	0
Total	0	0	0	-1	-1
FTE	-0.1	0.1	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	259	144	139	318	330
Non-Labor	35	35	32	47	39
NSE	0	0	0	0	0
Total	294	179	171	365	368
FTE	1.1	0.8	0.8	1.4	1.4
Vacation & Sick (Nominal \$)					
Labor	38	22	20	45	50
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	38	22	20	45	50
FTE	0.2	0.1	0.1	0.2	0.2
Escalation to 2021\$					
Labor	35	14	9	12	0
Non-Labor	4	3	2	3	0
NSE	0	0	0	0	0
Total	39	17	11	15	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	332	180	168	375	379
Non-Labor	39	38	34	50	39
NSE	0	0	0	0	0
Total	371	218	202	425	418
FTE	1.3	0.9	0.9	1.6	1.6

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: C. Enterprise Risk Management
 Category-Sub: 1. Enterprise Risk Management
 Workpaper: 1SM000.000 - VP- Risk Mgmt & Chf Compl Ofcr

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	-0.345	0.173	0	0	0
Non-Labor	0	0	0	-0.550	-0.550
NSE	0	0	0	0	0
Total	-0.345	0.173	0	-0.550	-0.550
FTE	-0.1	0.1	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	0	0	0	-0.1	1-Sided Adj
Explanation:	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2017 Total	0	0	0	-0.1	
2018	0	0	0	0.1	1-Sided Adj
Explanation:	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2018 Total	0	0	0	0.1	
2019 Total	0	0	0	0.0	
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020 Total	0	-1	0	0.0	
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021 Total	0	-1	0	0.0	

Note: Totals may include rounding differences.

Beginning of Workpaper
1SM005.000 - Enterprise Risk Management

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: C. Enterprise Risk Management
 Category-Sub: 1. Enterprise Risk Management
 Workpaper: 1SM005.000 - Enterprise Risk Management

Activity Description:

SDG&E recognizes risk is an inherent element of all company operations. The purpose of the Enterprise Risk Management (“ERM”) organization is to establish SDG&E’s risk management governance structure, risk identification and management processes, and assign responsibilities to promote a consistent and holistic approach to risk management. SDG&E seeks to increase the use of advanced data analytics to ensure valuable risk-based decision making across the Company. The ERM organization advises and collaborates with operating groups to incorporate data analytics into their processes and to provide a quantitative analysis of the effectiveness of proposed mitigations

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental labor increases from the base year are requested in order to completed additional initiatives. This base year forecast method is most appropriate because it is indicative of the current risk management structure, which was re-organized in recent years. Use of alternative forecast methodologies which utilize historical data are not appropriate because the historical costs do not represent the current and future structure of this organization and its planned risk mitigation activities.

Non-Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For non-labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental non-labor increases from the base year are requested in order to completed additional initiatives. This base year forecast method is most appropriate because it is indicative of the current risk management structure, which was re-organized in recent years. Use of alternative forecast methodologies which utilize historical data are not appropriate because the historical costs do not represent the current and future structure of this organization and its planned risk mitigation activities.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		1,344	1,485	1,247	1,448	1,682	1,706	2,006	2,159	
Non-Labor		3,390	1,466	3,229	2,784	2,013	2,050	2,065	2,064	
NSE		0	0	0	0	0	0	3	0	
Total		4,734	2,951	4,476	4,232	3,696	3,756	4,074	4,223	
FTE		10.0	9.9	9.4	10.4	12.0	12.3	15.2	16.4	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: C. Enterprise Risk Management
 Category-Sub: 1. Enterprise Risk Management
 Workpaper: 1SM005.000 - Enterprise Risk Management

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	1,682	1,682	1,682	24	324	477	1,706	2,006	2,159
Non-Labor	Base YR Rec	2,013	2,013	2,013	36	51	50	2,049	2,064	2,063
NSE	Base YR Rec	0	0	0	0	3	0	0	3	0
Total		3,696	3,696	3,696	60	378	527	3,756	4,074	4,223
FTE	Base YR Rec	12.0	12.0	12.0	0.3	3.2	4.4	12.3	15.2	16.4

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	10	0	0	10	0.2	1-Sided Adj
Explanation:	CC 2100-3945 Backfill of Coordinator position that was 2 months vacant in 2021					
2022	0	1	0	1	0.0	1-Sided Adj
Explanation:	CC 2100-3993 \$500 travel expense for conference attendance per employee, 1 employee total.					
2022	0	10	0	10	0.0	1-Sided Adj
Explanation:	CC 2100-3945 adjust travel expense in forecast to reflect pre-covid amounts.					
2022	0	25	0	25	0.0	1-Sided Adj
Explanation:	2100-3590 -\$25K adjusting travel cost per year for CPUC workshops, joint IOU meetings and training opportunities to pre-covid amounts					
2022	14	0	0	14	0.1	1-Sided Adj
Explanation:	CC 2100-3590 Backfill of Quantitative Risk & Ctrls Mgr that was 4 months vacant in 2021					
2022 Total	24	36	0	60	0.3	
2023	69	0	3	72	0.7	1-Sided Adj
Explanation:	CC 2100-3993 Added a Records and Information Project Analyst to assist with data governance tasks . CC 2100-3993 Backfill of Manager position that was 2 months vacant in 2021					
2023	10	20	0	30	0.2	1-Sided Adj
Explanation:	CC 2100-3945 adjust travel expense in forecast to reflect pre-covid amounts. CC 2100-3945 Backfill of Coordinator position that was 2 months vacant in 2021					
2023	222	25	0	247	1.9	1-Sided Adj
Explanation:	CC 210-3590 Added a Senior Risk Analyst to support regulatory filings such as RAMP, WMP, and GRC. CC 2100-3590 Backfill of Data Scientist that was vacant for 7 months vacant 2021 CC 2100-3590 Backfill for Sr Risk Analyst position that was 4 months vacant in 2021 CC 2100-3590 Backfill of Quantitative Risk & Ctrls Mgr that was 4 months vacant in 2021 2100-3590 -\$25K adjusting travel cost per year for CPUC workshops, joint IOU meetings and training opportunities to pre-covid amounts					

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: C. Enterprise Risk Management
 Category-Sub: 1. Enterprise Risk Management
 Workpaper: 1SM005.000 - Enterprise Risk Management

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2023	23	6	0	29	0.4	1-Sided Adj
Explanation:	Added a Data Scientist to analyze work with asset management and engineering data to provide analytics and to assist with risk mitigation 115K*.2 Cloud costs - 4 employees x \$7K x .2					
2023 Total	324	51	3	378	3.2	
2024	120	0	0	120	1.2	1-Sided Adj
Explanation:	CC 2100-3993 Added a Records and Information Project Analyst to assist with data governance tasks . CC 2100-3993 Backfill of Manager position that was 2 months vacant in 2021					
2024	110	0	0	110	1.2	1-Sided Adj
Explanation:	CC 2100 -3945 Added a Senior Enterprise Risk Management Analyst for risk management and SMS support. CC 2100-3945 Backfill of Coordinator position that was 2 months vacant in 2021					
2024	0	20	0	20	0.0	1-Sided Adj
Explanation:	CC 2100-3945 adjust travel expense in forecast to reflect pre-covid amounts.					
2024	224	25	0	249	1.8	1-Sided Adj
Explanation:	CC 2100-3590 Backfill of Data Scientist that was vacant for 7 months vacant 2021 CC 2100-3590 Backfill for Sr Risk Analyst position that was 4 months vacant in 2021 CC 2100-3590 Backfill of Quantitative Risk & Ctrls Mgr that was 4 months vacant in 2021 CC 210-3590 Added a Senior Risk Analyst to support regulatory filings such as RAMP , WMP and GRC 2100-3590 -\$25K adjusting travel cost per year for CPUC workshops, joint IOU meetings and training opportunities to pre-coivd amounts					
2024	23	5	0	28	0.2	1-Sided Adj
Explanation:	CC 2100-3590 Added a Data Scientist to analyze work with asset management and engineering data to provide analytics and to assist with risk mitigation assessments 67,083*20% CC 2100-3590 Cloud costs - 4 employees x \$7K x 20%%					
2024 Total	477	50	0	527	4.4	

Note: Totals may include rounding differences.

SDG&E/SAFETY MANAGEMENT SYSTEMS/Exh No:SDG&E-31-WP-R/Witness: K. Deremer

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: C. Enterprise Risk Management
Category-Sub: 1. Enterprise Risk Management
Workpaper: 1SM005.000 - Enterprise Risk Management

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	490	583	594	939	1,062
Non-Labor	1,471	195	1,510	2,251	1,840
NSE	0	0	0	0	0
Total	1,961	778	2,104	3,190	2,901
FTE	3.8	4.5	4.4	6.6	7.4
Adjustments (Nominal \$) **					
Labor	558	605	437	290	401
Non-Labor	1,569	1,156	1,530	367	174
NSE	0	0	0	0	0
Total	2,128	1,761	1,967	656	575
FTE	4.8	3.9	3.7	2.4	2.8
Recorded-Adjusted (Nominal \$)					
Labor	1,049	1,188	1,031	1,229	1,463
Non-Labor	3,040	1,352	3,040	2,618	2,013
NSE	0	0	0	0	0
Total	4,089	2,539	4,071	3,846	3,476
FTE	8.6	8.4	8.1	8.9	10.2
Vacation & Sick (Nominal \$)					
Labor	156	180	148	174	220
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	156	180	148	174	220
FTE	1.4	1.5	1.3	1.5	1.8
Escalation to 2021\$					
Labor	140	118	69	45	0
Non-Labor	350	114	189	166	0
NSE	0	0	0	0	0
Total	490	232	258	211	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	1,344	1,485	1,247	1,448	1,682
Non-Labor	3,390	1,466	3,229	2,784	2,013
NSE	0	0	0	0	0
Total	4,734	2,951	4,476	4,232	3,696
FTE	10.0	9.9	9.4	10.4	12.0

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: C. Enterprise Risk Management
 Category-Sub: 1. Enterprise Risk Management
 Workpaper: 1SM005.000 - Enterprise Risk Management

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	558	605	437	290	401
Non-Labor	1,569	1,156	1,530	367	174
NSE	0	0	0	0	0
Total	2,128	1,761	1,967	656	575
FTE	4.8	3.9	3.7	2.4	2.8

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	558	1,569	0	4.8	CCTR Transf From 2100-3590.000
Explanation:	Transfer to USS 2100-3590 to CC NSS 2100-3945 because 2100-3590 is no longer a shared service.				
2017 Total	558	1,569	0	4.8	
2018	605	1,156	0	3.9	CCTR Transf From 2100-3590.000
Explanation:	Transfer to USS 2100-3590 to CC NSS 2100-3945 because 2100-3590 is no longer a shared service				
2018 Total	605	1,156	0	3.9	
2019	0	239	0	0.0	CCTR Transf From 2100-3555.000
Explanation:	Transfer CPUC Audit Fees to cost center where activity resides.				
2019	437	1,291	0	3.7	CCTR Transf From 2100-3590.000
Explanation:	Transfer to USS 2100-3590 to CC NSS 2100-3945 because 2100-3590 is no longer a shared service.				
2019 Total	437	1,530	0	3.7	
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	281	0	0.0	CCTR Transf From 2100-3555.000
Explanation:	Transfer CPUC Audit fees to cost center where activity resides.				
2020	-60	-39	0	-0.5	CCTR Transf To 2100-4144.000
Explanation:	The transfer of 2020 ADA/AFN related labor and non-labor expenses				
2020	350	127	0	2.9	CCTR Transf From 2100-3590.000
Explanation:	Transfer to USS 2100-3590 to CC NSS 2100-3945 because 2100-3590 is no longer a shared service.				

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: C. Enterprise Risk Management
 Category-Sub: 1. Enterprise Risk Management
 Workpaper: 1SM005.000 - Enterprise Risk Management

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
2020 Total	290	367	0	2.4	
2021	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	0	3	0	0.0	CCTR Transf From 2100-3555.000
Explanation:	Transfer CPUC Audit Fees to cost center where activity resides.				
2021	401	173	0	2.8	CCTR Transf From 2100-3590.000
Explanation:	Transfer to USS 2100-3590 to CC NSS 2100-3945 because 2100-3590 is no longer a shared service.				
2021 Total	401	174	0	2.8	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: C. Enterprise Risk Management
 Category-Sub: 1. Enterprise Risk Management
 Workpaper: 1SM005.000 - Enterprise Risk Management

RAMP Item # 1

RAMP Activity

RAMP Chapter: SDG&E-CFF-1 Asset Management

RAMP Line Item ID: 4

RAMP Line Item Name: AIMDAT (Data Analytics)

Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	156	156	183	183	450	600

Cost Estimate Changes from RAMP:

GRC forecast is outside the RAMP range due to forecast updates

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 NA	0.00	0.00	0.00	1.00	0.00	0.00

Work Unit Changes from RAMP:

No Single Unit of Measure Available

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:

NA

Beginning of Workpaper
1SM006.000 - Energy Risk Management

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: C. Enterprise Risk Management
 Category-Sub: 1. Enterprise Risk Management
 Workpaper: 1SM006.000 - Energy Risk Management

Activity Description:

The Energy Risk Management department oversees all risks associated with Electric & Fuel Procurement (E&FP), including identifying, managing, monitoring, and reporting on market, credit, financial and operational risks. Additionally, Energy Risk Management includes Major Market Credit risk analysis and functions for the entire company, which includes credit reviews of major end-users and risk reviews of commercial contracts prior to execution.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental labor increases from the base year are requested in order to completed additional initiatives.

Non-Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For non-labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental non-labor increases from the base year are requested in order to completed additional initiatives.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		632	631	541	741	795	823	905	905	
Non-Labor		318	222	262	329	566	570	568	568	
NSE		0	0	0	0	0	0	0	0	
Total		950	853	803	1,070	1,361	1,393	1,473	1,473	
FTE		5.5	5.6	4.5	4.8	7.0	7.2	8.0	8.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: C. Enterprise Risk Management
 Category-Sub: 1. Enterprise Risk Management
 Workpaper: 1SM006.000 - Energy Risk Management

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	795	795	795	28	110	110	823	905	905
Non-Labor	Base YR Rec	566	566	566	4	2	2	570	568	568
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		1,361	1,361	1,361	32	112	112	1,393	1,473	1,473
FTE	Base YR Rec	7.0	7.0	7.0	0.2	1.0	1.0	7.2	8.0	8.0

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	28	4	0	32	0.2	1-Sided Adj
Explanation:	2100-0665 - 1 incremental position in Energy Risk to increase depth and frequency of credit analysis and be more forward-looking and strategic in expanding risk-based support to broader organization. The Non Labor includes technology, training and travel.					
2022 Total	28	4	0	32	0.2	
2023	110	2	0	112	1.0	1-Sided Adj
Explanation:	2100-0665 - 1 incremental position in Energy Risk to increase depth and frequency of credit analysis and be more forward-looking and strategic in expanding risk-based support to broader organization					
2023 Total	110	2	0	112	1.0	
2024	110	2	0	112	1.0	1-Sided Adj
Explanation:	2100-0665 - 1 incremental position in Energy Risk to increase depth and frequency of credit analysis and be more forward-looking and strategic in expanding risk-based support to broader organization					
2024 Total	110	2	0	112	1.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: C. Enterprise Risk Management
Category-Sub: 1. Enterprise Risk Management
Workpaper: 1SM006.000 - Energy Risk Management

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	493	505	447	553	633
Non-Labor	285	205	246	310	569
NSE	0	0	0	0	0
Total	778	709	693	863	1,202
FTE	4.7	4.8	3.9	3.5	5.5
Adjustments (Nominal \$) **					
Labor	0	0	0	76	58
Non-Labor	0	0	0	-1	-2
NSE	0	0	0	0	0
Total	0	0	0	75	55
FTE	0.0	0.0	0.0	0.6	0.5
Recorded-Adjusted (Nominal \$)					
Labor	493	505	447	629	691
Non-Labor	285	205	246	309	566
NSE	0	0	0	0	0
Total	778	709	693	938	1,257
FTE	4.7	4.8	3.9	4.1	6.0
Vacation & Sick (Nominal \$)					
Labor	73	76	64	89	104
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	73	76	64	89	104
FTE	0.8	0.8	0.6	0.7	1.0
Escalation to 2021\$					
Labor	66	50	30	23	0
Non-Labor	33	17	15	20	0
NSE	0	0	0	0	0
Total	99	67	45	43	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	632	631	541	741	795
Non-Labor	318	222	262	329	566
NSE	0	0	0	0	0
Total	950	853	803	1,070	1,361
FTE	5.5	5.6	4.5	4.8	7.0

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: C. Enterprise Risk Management
 Category-Sub: 1. Enterprise Risk Management
 Workpaper: 1SM006.000 - Energy Risk Management

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	0	76	58
Non-Labor	0	0	0	-1	-2
NSE	0	0	0	0	0
Total	0	0	0	75	55
FTE	0.0	0.0	0.0	0.6	0.5

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017 Total	0	0	0	0.0	
2018 Total	0	0	0	0.0	
2019 Total	0	0	0	0.0	
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	76	0	0	0.6	CCTR Transf From 2100-3590.000
Explanation:	Move 2 Credit Collections Analyst from ERM 2100-3590 to Energy Risk Management 2100-0665				
2020 Total	76	-1	0	0.6	
2021	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	58	0	0	0.5	1-Sided Adj
Explanation:	CC 2100-0665 Adjust labor for vacancies in 2021 that are not expected in 2022.				
2021 Total	58	-2	0	0.5	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: D. Asset Management
Workpaper: VARIOUS

Summary for Category: D. Asset Management

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	1,440	1,563	2,114	2,272
Non-Labor	1,573	1,760	2,370	2,189
NSE	0	0	0	0
Total	3,013	3,323	4,484	4,461
FTE	12.6	13.4	18.9	20.0

Workpapers belonging to this Category:

1SM003.000 Asset Management

Labor	337	446	963	1,110
Non-Labor	356	541	1,147	966
NSE	0	0	0	0
Total	693	987	2,110	2,076
FTE	2.5	3.1	8.0	9.1

1SM004.000 Business Technology Solutions

Labor	1,103	1,117	1,151	1,162
Non-Labor	1,217	1,219	1,223	1,223
NSE	0	0	0	0
Total	2,320	2,336	2,374	2,385
FTE	10.1	10.3	10.9	10.9

Note: Totals may include rounding differences.

Beginning of Workpaper
1SM003.000 - Asset Management

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: D. Asset Management
Category-Sub: 1. Asset Management
Workpaper: 1SM003.000 - Asset Management

Activity Description:

In collaboration with key operating units, the Asset Management teams develop, implement, and enable strategies and solutions in the areas of regulatory compliance, business technology, data management and integrated asset management in support of the safe, clean, and reliable delivery of energy to our customers.

The Asset Integrity Management (AIM) program advances the development and implementation of a comprehensive, integrated, and risk-informed Asset Management System (AMS). The AIM program links the management of asset activities holistically and supports risk management and new regulatory requirement associated with risk-based decision making. The AIM program will expand.

The Asset Data Systems and Records Management (ADS&R) group manages the development, implementation and integration of enterprise asset data systems and tools that support the objectives of the broader AIM program, including measuring asset performance and enabling data driven, risk-informed decision making. Integrating asset data into a central data repository enables access to the best quality data and ensures the consistency of data within a common platform. The platform provides a holistic view of each asset that incorporates tabular data and imagery, which enables the measurement of current asset performance and allows business users within engineering and operations to understand risk at the asset level.

The Asset Risk and Accountability Reporting group leads the process implementation and reporting efforts for SDG&E's RAMP and RSAR filings, focusing on improving the processes, procedures and systems needed to comply with requirements of the Commission's Safety Model Assessment Proceeding (S-MAP) decision for risk-informed decision making.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental labor increases from the base year are requested in order to completed additional initiatives.

Non-Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For non-labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental non-labor increases from the base year are requested in order to completed additional initiatives.

NSE - Base YR Rec

N/A

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM003.000 - Asset Management

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		164	265	282	236	337	447	964	1,111	
Non-Labor		11	662	323	391	356	541	1,147	966	
NSE		0	0	0	0	0	0	0	0	
Total		175	928	605	627	693	988	2,111	2,077	
FTE		0.9	1.9	2.2	1.9	2.5	3.1	8.0	9.1	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM003.000 - Asset Management

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	337	337	337	109	626	773	446	963	1,110
Non-Labor	Base YR Rec	356	356	356	185	791	610	541	1,147	966
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		693	693	693	294	1,417	1,383	987	2,110	2,076
FTE	Base YR Rec	2.5	2.5	2.5	0.6	5.5	6.6	3.1	8.0	9.1

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	20	0	20	0.0	1-Sided Adj
Explanation:	CC 2100-4064 Cloud computing cost to establish repository for investment prioritization tool that supports asset management's objective of driving risk-informed data-driven decision-making					
2022	109	2	0	111	0.6	1-Sided Adj
Explanation:	CC 2100-4177 \$108k to annualize the cost of an Asset Management Risk and Accountability Manager added in 2021 to lead SDG&E's investment prioritization and RAMP/RSAR process implementation and reporting efforts.					
2022	0	33	0	33	0.0	1-Sided Adj
Explanation:	CC 2100-4060 Cloud computing costs support the expansion and maintenance of the asset data foundation					
2022	0	30	0	30	0.0	1-Sided Adj
Explanation:	2100-4061 Cloud consumption costs to support asset management's advancement of intelligent image processing (IIP) capabilities.					
2022	0	100	0	100	0.0	1-Sided Adj
Explanation:	Non-labor costs to support the build out costs for the asset data foundation and to establish and advance data governance activities.					
2022 Total	109	185	0	294	0.6	
2023	145	576	0	721	1.6	1-Sided Adj

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM003.000 - Asset Management

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>
Explanation:	Increase current headcount to a higher percentage O&M based on resources providing increase support to the steady state operation of the AIM program. Non-labor costs to support effective change management activities for implementation of the Asset Integrity Management program, including Investment Prioritization, Risk Spend Accountability Reporting (RSAR), and RAMP to GRID integration process improvements. Non-labor costs to pursue International Standards Organization (ISO) 55000 Asset Management certification. Cloud computing cost to support the expansion of the investment prioritization software solution added in 2022 as the implementation advances to include other lines of business and annualize maintenance costs to sustain asset management's risk-informed decision-making process. Non-labor costs associated with increasing current consulting to higher % O&M based on changing responsibilities.					
2023	0	46	0	46	0.0	1-Sided Adj
Explanation:	CC 2100-4060 \$13k to continue fund cloud computing costs in addition to the \$33k added in 2022 to establish and advance cloud adoption for advanced analytics and asset data foundation					
2023	362	6	0	368	2.9	1-Sided Adj
Explanation:	CC 2100-4177 Adding a Business Analyst to coordinate SDG&E s RAMP and RSAR process implementation and reporting efforts. \$254k to fund the addition of Asset Management Risk and Accountability Manager added in 2021, a Risk & Accountability Project Manager added in 2022, a Business Analyst added in 2022. Non-labor costs associated with the 4 FTEs mentioned above					
2023	0	60	0	60	0.0	1-Sided Adj
Explanation:	2100-4061 \$60k to continue to fund IIP cloud consumption costs added in 2022 to support asset management in advancing intelligent image processing					
2023	119	103	0	222	1.0	1-Sided Adj
Explanation:	CC 2100-4060 Adding a Data Product Owner to support the asset data foundation for Gas, Smart Meter, Facilities, and IT. Increase current headcount to a higher percentage O&M based on resources providing increase support to the steady state operation of the asset data foundation. \$22k to fund the addition of Business Analyst to support data governance activities for the asset data foundation. \$103k of non-labor costs to continue to fund the build out and expansion costs added in 2022 for the asset data foundation to support Gas, Smart Meter, Facilities, and IT					
2023 Total	626	791	0	1,417	5.5	
2024	0	58	0	58	0.0	1-Sided Adj
Explanation:	CC 2100-4060 CC 2100-4060 \$15k to continue fund cloud computing costs in addition to the \$33k added in 2022 to establish and advance cloud adoption for advanced analytics and asset data foundation					
2024	438	6	0	444	3.4	1-Sided Adj

Note: Totals may include rounding differences.

SDG&E/SAFETY MANAGEMENT SYSTEMS/Exh No:SDG&E-31-WP-R/Witness: K. Deremer

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM003.000 - Asset Management

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
Explanation:	CC 2100-4177 \$418k to continue to support the addition of Asset Management Risk and Accountability Manager added in 2021, a Risk & Accountability Project Manager added in 2022, a Business Analyst added in 2022 and a Business Analyst added in 2023. Non-labor costs associated with the 4 FTEs mentioned above					
2024	0	60	0	60	0.0	1-Sided Adj
Explanation:	2100-4061 \$60k to continue to support IIP cloud consumption costs added in 2022 to support asset management in advancing intelligent image processing					
2024	194	383	0	577	2.0	1-Sided Adj
Explanation:	<p>\$49k to annualize the addition of Asset Strategy Advisor added in 2023 to support for Fleet, Facilities, and IT.</p> <p>\$145k to continue to support increasing current headcount to a higher percentage O&M in 2023, based on resources providing increase support to the steady state operation of the AIM program .</p> <p>\$220k to continue to support non-labor costs to support effective change management activities added in 2023 for implementation of the Asset Integrity Management program , including Investment Prioritization, Risk Spend Accountability Reporting (RSAR), and RAMP to GRID integration process improvements.</p> <p>Cloud computing cost to support the annualization of the investment prioritization software solution maintenance costs to sustain asset management's risk-informed decision-making process</p>					
2024	141	103	0	244	1.2	1-Sided Adj
Explanation:	CC 2100-4060 Adding a Data Product Owner to support building the asset data for emerging lines of business (clean transportation \$66k to continue to fund the addition of a Data Product Owner to support Gas, Smart Meter, Facilities and IT added in 2023, a Senior Data Analyst added in 2023, a Senior Data Analyst added in 2024, and allocating a higher % O&M to current headcount \$75K					
2024 Total	773	610	0	1,383	6.6	

Note: Totals may include rounding differences.

SDG&E/SAFETY MANAGEMENT SYSTEMS/Exh No:SDG&E-31-WP-R/Witness: K. Deremer

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: D. Asset Management
Category-Sub: 1. Asset Management
Workpaper: 1SM003.000 - Asset Management

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	128	212	237	221	293
Non-Labor	10	611	304	371	360
NSE	0	0	0	0	0
Total	137	823	542	592	654
FTE	0.8	1.6	2.0	1.8	2.1
Adjustments (Nominal \$) **					
Labor	0	0	-4	-21	0
Non-Labor	0	0	0	-5	-4
NSE	0	0	0	0	0
Total	0	0	-4	-25	-4
FTE	0.0	0.0	-0.1	-0.2	0.0
Recorded-Adjusted (Nominal \$)					
Labor	128	212	233	200	293
Non-Labor	10	611	304	367	356
NSE	0	0	0	0	0
Total	137	823	537	567	649
FTE	0.8	1.6	1.9	1.6	2.1
Vacation & Sick (Nominal \$)					
Labor	19	32	33	28	44
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	19	32	33	28	44
FTE	0.1	0.3	0.3	0.3	0.4
Escalation to 2021\$					
Labor	17	21	16	7	0
Non-Labor	1	52	19	24	0
NSE	0	0	0	0	0
Total	18	73	35	32	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	164	265	282	236	337
Non-Labor	11	662	323	391	356
NSE	0	0	0	0	0
Total	175	928	605	627	693
FTE	0.9	1.9	2.2	1.9	2.5

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: D. Asset Management
Category-Sub: 1. Asset Management
Workpaper: 1SM003.000 - Asset Management

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	-4	-21	0
Non-Labor	0	0	0	-5	-4
NSE	0	0	0	0	0
Total	0	0	-4	-25	-4
FTE	0.0	0.0	-0.1	-0.2	0.0

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj_Type
2017 Total	0	0	0	0.0	
2018 Total	0	0	0	0.0	
2019	-4	0	0	-0.1	CCTR Transf From 2100-3590.000
Explanation:	Move 2 Data Analyst from Asset Management 2100-4064 to ERM 2100-3590				
2019 Total	-4	0	0	-0.1	
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	-3	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	-21	0	0	-0.2	CCTR Transf From 2100-3590.000
Explanation:	Move 2 Data Analyst from Asset Management 2100-4064 to ERM 2100-3590				
2020 Total	-21	-5	0	-0.2	
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	0	0	0	0.0	CCTR Transf From 2100-4098.000
Explanation:	This cost center is no longer used. Transferring costs to used cost center in same area.				
2021	0	-2	0	0.0	1-Sided Adj

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM003.000 - Asset Management

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	0	0	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	73	-2	0	0.4	CCTR Transf From 2100-4177.000
Explanation:	As of January 2022 the employee and associated costs were moved to CC 2100-4040.				
2021	-73	2	0	-0.4	CCTR Transf To 2100-4040.000
Explanation:	As of January 2022 the employee and associated costs were moved to CC 2100-4040.				
2021 Total	0	-4	0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM003.000 - Asset Management

RAMP Item # 1

RAMP Activity

RAMP Chapter: SDG&E-CFF-1 Asset Management

RAMP Line Item ID: 1

RAMP Line Item Name: AIM (Gov, Strat, AIP)

Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	425	445	1,144	1,001	1,200	1,500

Cost Estimate Changes from RAMP:

GRC forecast is outside the RAMP range due to forecast updates

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 Asset management system processes and asset management plans (per asset class)	11.00	20.00	20.00	20.00	9.00	12.00

Work Unit Changes from RAMP:

GRC forecast is outside the RAMP range due to forecast updates Modified work unit

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:

NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM003.000 - Asset Management

RAMP Item # 2

RAMP Activity

RAMP Chapter: SDG&E-CFF-1 Asset Management
 RAMP Line Item ID: 2
 RAMP Line Item Name: Asset Data Syst & Rec Mgt (Gov, Quality, Rec Mgt)
 Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	33	48	58	400	700

Cost Estimate Changes from RAMP:

GRC forecast is outside the RAMP range due to forecast updates

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 NA	1.00	0.00	0.00	1.00	1.00	1.00

Work Unit Changes from RAMP:

No single unit of measure available

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:

NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM003.000 - Asset Management

RAMP Item # 3

RAMP Activity

RAMP Chapter: SDG&E-CFF-1 Asset Management
 RAMP Line Item ID: 3
 RAMP Line Item Name: Asset Data Syst & Rec Mgt (Data Integration)
 Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	149	259	370	393	350	500

Cost Estimate Changes from RAMP:
 GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 NA	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:
 No single unit of measure available

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:
 NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM003.000 - Asset Management

RAMP Item # 4

RAMP Activity

RAMP Chapter: SDG&E-CFF-1 Asset Management

RAMP Line Item ID: 1

RAMP Line Item Name: AIM (Gov, Strat, AIP)

Tranche(/s): Tranche1: na

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	99	208	467	543	0	0

Cost Estimate Changes from RAMP:

Department was created after RAMP was filed

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 Employees	0.40	1.00	3.30	4.00	0.00	0.00

Work Unit Changes from RAMP:

Department was created after RAMP was filed

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:

NA

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM003.000 - Asset Management

RAMP Item # 5

RAMP Activity

RAMP Chapter: SDG&E-CFF-1 Asset Management
 RAMP Line Item ID: 3
 RAMP Line Item Name: Asset Data Syst & Rec Mgt (Data Integration)
 Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	30	60	60	0	0

Cost Estimate Changes from RAMP:

GRC forecast is outside the RAMP range due to forecast updates

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 NA	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:

No single unit of measure available

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

RSE Changes from RAMP:

NA

Beginning of Workpaper
1SM004.000 - Business Technology Solutions

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM004.000 - Business Technology Solutions

Activity Description:

The Business Technology Services group provides support for: Construction Planning and Design, Telecommunications Asset Management (TAMS), Pole Loading, Document Management, Vendor Billing, GIS Mobile/Desktop/Web/Portal Application Design and Support, Project Coordination/Support, Project Management, and Computer Hardware and Software Support. This includes providing functional support for systems, requirements development, change management planning, facilitation of business domain testing, application and data development and design, coordination of software or application release testing, post implementation/storm support, training, advancements in overall IT innovation, optimization of hardware and software utilization, and stakeholder and business unit engagement.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental labor increases from the base year are requested in order to completed additional initiatives.

Non-Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For non-labor, base year provides an appropriate baseline in comparison to future targets for the organization. Incremental non-labor increases from the base year are requested in order to completed additional initiative

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		1,363	1,547	1,476	1,188	1,103	1,117	1,151	1,162	
Non-Labor		1,090	1,022	890	644	1,217	1,219	1,223	1,223	
NSE		0	0	0	0	0	0	0	0	
Total		2,453	2,570	2,365	1,833	2,320	2,336	2,374	2,385	
FTE		13.7	14.4	13.1	11.0	10.1	10.3	10.9	10.9	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM004.000 - Business Technology Solutions

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	1,103	1,103	1,103	14	48	59	1,117	1,151	1,162
Non-Labor	Base YR Rec	1,217	1,217	1,217	2	6	6	1,219	1,223	1,223
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		2,320	2,320	2,320	16	54	65	2,336	2,374	2,385
FTE	Base YR Rec	10.1	10.1	10.1	0.2	0.8	0.8	10.3	10.9	10.9

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	14	2	0	16	0.2	1-Sided Adj
Explanation:	CC 2100-4062 Field Computing Analyst for IOS and Hardware Support					
2022 Total	14	2	0	16	0.2	
2023	23	2	0	25	0.3	1-Sided Adj
Explanation:	CC 2100-4061 Backfill of 2021 Project Manager II					
2023	14	2	0	16	0.2	1-Sided Adj
Explanation:	CC 2100-4062 Field Computing Analyst for IOS and Hardware Support					
2023	11	2	0	13	0.3	1-Sided Adj
Explanation:	CC 2100-4063 Business Systems Analyst II for GBS support, regulatory requests, EOC activations, company projects, and operational items. Regulatory Driven					
2023 Total	48	6	0	54	0.8	
2024	23	2	0	25	0.3	1-Sided Adj
Explanation:	CC 2100-4061 Backfill of 2021 Project Manager II					
2024	14	2	0	16	0.2	1-Sided Adj
Explanation:	CC 2100-4062 Field Computing Analyst for IOS and Hardware Support					
2024	22	2	0	24	0.3	1-Sided Adj
Explanation:	CC 2100-4063 Business Systems Analyst II for GBS support, regulatory requests, EOC activations, company projects, and operational items. Regulatory Driven					
2024 Total	59	6	0	65	0.8	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: D. Asset Management
Category-Sub: 1. Asset Management
Workpaper: 1SM004.000 - Business Technology Solutions

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	1,405	1,552	1,489	1,039	969
Non-Labor	1,003	974	875	636	1,445
NSE	0	0	0	0	0
Total	2,408	2,526	2,364	1,676	2,414
FTE	15.8	16.6	15.1	9.7	8.8
Adjustments (Nominal \$) **					
Labor	-342	-314	-269	-31	-10
Non-Labor	-26	-31	-38	-32	-228
NSE	0	0	0	0	0
Total	-368	-346	-307	-63	-238
FTE	-4.0	-4.3	-3.8	-0.3	-0.1
Recorded-Adjusted (Nominal \$)					
Labor	1,063	1,237	1,220	1,009	959
Non-Labor	978	943	837	604	1,217
NSE	0	0	0	0	0
Total	2,041	2,180	2,057	1,613	2,176
FTE	11.8	12.3	11.3	9.4	8.6
Vacation & Sick (Nominal \$)					
Labor	158	187	175	143	144
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	158	187	175	143	144
FTE	1.9	2.1	1.8	1.6	1.5
Escalation to 2021\$					
Labor	142	123	81	37	0
Non-Labor	113	80	52	40	0
NSE	0	0	0	0	0
Total	254	202	134	77	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	1,363	1,547	1,476	1,188	1,103
Non-Labor	1,090	1,022	890	644	1,217
NSE	0	0	0	0	0
Total	2,453	2,570	2,365	1,833	2,320
FTE	13.7	14.4	13.1	11.0	10.1

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM004.000 - Business Technology Solutions

Summary of Adjustments to Recorded:

		In Nominal \$ (000) Incurred Costs				
Years	2017	2018	2019	2020	2021	
Labor	-342	-314	-269	-31	-10	
Non-Labor	-26	-31	-38	-32	-228	
NSE	0	0	0	0	0	
Total	-368	-346	-307	-63	-238	
FTE	-4.0	-4.3	-3.8	-0.3	-0.1	

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	0	-12	0	0.0	CCTR Transf To 2100-0030.000
Explanation:	Transfer of telecommunication expense from cost center 2100-3584 in 1SM004 Business Technology Safety Management System to CSFC workpaper 1FC001 Customer Field Operations to align historical costs with the workgroup in which the activity will be forecasted.				
2017	-94	0	0	-1.0	CCTR Transf To 2100-3792.000
Explanation:	Transfer of Dispatch Operations Assistant and Scheduling Coordinator from cost center 2100-3584 in 1SM004 Business Technology Safety Management System to workpaper 1FC003 Work Management in Customer Service Field Operations to align historical costs with the workgroup in which the activity will be forecasted.				
2017	-248	0	0	-3.0	CCTR Transf To 2100-4125.000
Explanation:	Transfer of Customer Field Operations Analysts and Business Technologist from cost center 2100-3584 in 1SM004 Business Technology Safety Management System to workpaper 1FC004 Customer Field Operations Support to align historical costs with the workgroup in which the activity will be forecasted.				
2017	0	-13	0	0.0	CCTR Transf To 2100-4125.000
Explanation:	Transfer of employee expense from cost center 2100-3584 in 1SM004 Business Technology Safety Management System to 1FC004 Customer Field Operations Support to align historical costs with the workgroup in which the activity will be forecasted.				
2017 Total	-342	-26	0	-4.0	
2018	0	-18	0	0.0	CCTR Transf To 2100-0030.000
Explanation:	Transfer of telecommunication expense from cost center 2100-3584 in 1SM004 Business Technology Safety Management System to CSFC workpaper 1FC001 Customer Field Operations to align historical costs with the workgroup in which the activity will be forecasted.				
2018	-64	0	0	-1.3	CCTR Transf To 2100-3792.000

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM004.000 - Business Technology Solutions

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
Explanation:	Transfer of Dispatch Operations Assistant and Scheduling Coordinator from cost center 2100-3584 in 1SM004 Business Technology Safety Management System to workpaper 1FC003 Work Management in Customer Service Field Operations to align historical costs with the workgroup in which the activity will be forecasted.				
2018	-251	-13	0	-3.0	CCTR Transf To 2100-4125.000
Explanation:	Transfer of Customer Field Operations Analysts and Business Technologist from cost center 2100-3584 in 1SM004 Business Technology Safety Management System to workpaper 1FC004 Customer Field Operations Support to align historical costs with the workgroup in which the activity will be forecasted.				
2018 Total	-314	-31	0	-4.3	
2019	0	-33	0	0.0	CCTR Transf To 2100-0030.000
Explanation:	Transfer of telecommunication expense from cost center 2100-3584 in 1SM004 Business Technology Safety Management System to CSFC workpaper 1FC001 Customer Field Operations to align historical costs with the workgroup in which the activity will be forecasted.				
2019	-10	0	0	-0.8	CCTR Transf To 2100-3792.000
Explanation:	Transfer of Dispatch Operations Assistant and Scheduling Coordinator from cost center 2100-3584 in 1SM004 Business Technology Safety Management System to workpaper 1FC003 Work Management in Customer Service Field Operations to align historical costs with the workgroup in which the activity will be forecasted.				
2019	-248	-3	0	-2.9	CCTR Transf To 2100-4125.000
Explanation:	Transfer of Customer Field Operations Analysts and Business Technologist from cost center 2100-3584 in 1SM004 Business Technology Safety Management System to workpaper 1FC004 Customer Field Operations Support to align historical costs with the workgroup in which the activity will be forecasted.				
2019	-11	-1	0	-0.1	CCTR Transf To 2100-4143.000
Explanation:	Transfer costs to GOSI CC 2100-4143 related to SB1371 (BNE) Emissions Strategy Program				
2019 Total	-269	-38	0	-3.8	
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	-9	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	-6	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: D. Asset Management
 Category-Sub: 1. Asset Management
 Workpaper: 1SM004.000 - Business Technology Solutions

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
2020	0	-13	0	0.0	CCTR Transf To 2100-0030.000
Explanation:	Transfer of telecommunication expense from cost center 2100-3584 in 1SM004 Business Technology Safety Management System to CSFC workpaper 1FC001 Customer Field Operations in order to align historical costs with the workgroup in which the activity will be forecasted.				
2020	9	0	0	0.1	CCTR Transf To 2100-4125.000
Explanation:	Transfer of Customer Field Operations Analysts and Business Technologist from cost center 2100-3584 in 1SM004 Business Technology Safety Management System to workpaper 1FC004 Customer Field Operations Support to align historical costs with the workgroup in which the activity will be forecasted.				
2020	-32	0	0	-0.3	CCTR Transf To 2100-4143.000
Explanation:	Transfer costs to GOSI CC 2100-4143 related to SB1371 (BNE) Emissions Strategy Program				
2020	-7	-1	0	-0.1	1-Sided Adj
Explanation:	SDG&E OH Pools GRC Update - Capital and O&M Impacts				
2020 Total	-31	-32	0	-0.3	
2021	0	-3	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	0	-6	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	0	-7	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	-10	0	0	-0.1	1-Sided Adj
Explanation:	Adjustment to remove non-GRC costs related to the SB1371 Emissions Strategy Program that are being recovered through a separate regulatory process.				
2021	0	-213	0	0.0	1-Sided Adj
Explanation:	CC 2100-4062 reducing 2021 for software licensese that was expensed twice due to accounting change.				
2021 Total	-10	-228	0	-0.1	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
 2024 GRC - REVISED
 Shared Services Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer

Summary of Shared Services Workpapers:

Description	In 2021 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
A. Safety	1,023	1,249	1,189	1,249
Total	1,023	1,249	1,189	1,249

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Shared Services Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety
 Cost Center: 2100-0214.000

Summary for Category: A. Safety

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	840	846	846	846
Non-Labor	184	403	343	403
NSE	0	0	0	0
Total	1,024	1,249	1,189	1,249
FTE	7.3	7.4	7.4	7.4

Cost Centers belonging to this Category:

2100-0214.000 SDG&E FIELD SAFETY

Labor	840	846	846	846
Non-Labor	184	403	343	403
NSE	0	0	0	0
Total	1,024	1,249	1,189	1,249
FTE	7.3	7.4	7.4	7.4

Note: Totals may include rounding differences.

Beginning of Workpaper
2100-0214.000 - SDG&E FIELD SAFETY

San Diego Gas & Electric Company
2024 GRC - REVISED
Shared Services Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety
 Category-Sub: 1. Safety
 Cost Center: 2100-0214.000 - SDG&E FIELD SAFETY

Activity Description:

Field Safety Advisors provide important field and office operations support in the area of safety compliance , safety programs and initiatives, safety communications, incident management and statistical analysis. The objectives for the safety advisors is to reinforce safe work behaviors and encourage and solicit employees' candid feedback during meetings, tailgates, field visits and committee attendance to promote a continuous improvement mindset we are fostering a continuous improvement mindset in our safety culture.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For labor, the base year provides the most recent full year of recorded costs and the most accurate representation of Field Safety Advisors and safety initiatives captured within this workpaper . The majority of these safety programs and activities will continue through the test year and are most closely forecasted using base year recorded costs. Adding incremental funding forecasts for programs that are new or expanding, such as the Safety In Motion program, since 2021 base year recorded costs provides the most accurate forecast for the 2024 test year.

Non-Labor - Base YR Rec

The forecast method developed for this cost category is Base Year Recorded Plus Incremental Increases . For non-labor, the base year provides the most recent full year of recorded costs and the most accurate representation of Field Safety Advisors and safety initiatives captured within this workpaper . The majority of these safety programs and activities will continue through the test year and are most closely forecasted using base year recorded costs. Adding incremental funding forecasts for programs that are new or expanding, such as the Safety In Motion program, since 2021 base year recorded costs provides the most accurate forecast for the 2024 test year.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		523	528	682	814	840	846	846	846	
Non-Labor		441	443	253	267	184	402	342	402	
NSE		0	0	0	0	0	0	0	0	
Total		964	971	935	1,081	1,023	1,248	1,188	1,248	
FTE		4.9	4.9	5.9	7.0	7.3	7.4	7.4	7.4	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Shared Services Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety
 Category-Sub: 1. Safety
 Cost Center: 2100-0214.000 - SDG&E FIELD SAFETY

Cost Center Allocations (Incurred Costs):

	2021 Adjusted-Recorded					2022 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	22	0	22	0.0	0	22	0	22	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	840	161	0	1,001	7.3	846	380	0	1,226	7.4
Total Incurred	840	183	0	1,023	7.3	846	402	0	1,248	7.4
% Allocation										
Retained	95.28%	95.28%				95.28%	95.28%			
SEU	0.00%	0.00%				0.00%	0.00%			
CORP	2.49%	2.49%				2.49%	2.49%			
Unreg	2.23%	2.23%				2.23%	2.23%			

	2023 Adjusted-Forecast					2024 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	22	0	22	0.0	0	22	0	22	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	846	320	0	1,166	7.4	846	380	0	1,226	7.4
Total Incurred	846	342	0	1,188	7.4	846	402	0	1,248	7.4
% Allocation										
Retained	95.28%	95.28%				95.28%	95.28%			
SEU	0.00%	0.00%				0.00%	0.00%			
CORP	2.49%	2.49%				2.49%	2.49%			
Unreg	2.23%	2.23%				2.23%	2.23%			

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2021

Allocated costs based on supported client groups

Cost Center Allocation Percentage for 2022

Allocated costs based on supported client groups

Cost Center Allocation Percentage for 2023

Allocated costs based on supported client groups

Cost Center Allocation Percentage for 2024

Allocated based on supported client groups

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Shared Services Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety
 Category-Sub: 1. Safety
 Cost Center: 2100-0214.000 - SDG&E FIELD SAFETY

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	840	840	840	6	6	6	846	846	846
Non-Labor	Base YR Rec	184	184	184	219	159	219	403	343	403
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		1,024	1,024	1,024	225	165	225	1,249	1,189	1,249
FTE	Base YR Rec	7.3	7.3	7.3	0.1	0.1	0.1	7.4	7.4	7.4

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	185	0	185	0.0	1-Sided Adj
Explanation:	Safety Barometer (National Safety Council - NSC); actual costs every 2 years (\$60K) Annual SDG&E Safety Congress (\$120K) Increase in AED maintenance costs (\$5K)					
2022	6	34	0	40	0.1	1-Sided Adj
Explanation:	Annual fleet vehicle maintenance. \$19,926.40/vehicle					
2022 Total	6	219	0	225	0.1	
2023	6	34	0	40	0.1	1-Sided Adj
Explanation:	Annual fleet vehicle maintenance. \$19,926.40/vehicle					
2023	0	125	0	125	0.0	1-Sided Adj
Explanation:	Annual SDG&E Safety Congress (\$120K) Increase in AED maintenance costs (\$5K)					
2023 Total	6	159	0	165	0.1	
2024	0	185	0	185	0.0	1-Sided Adj
Explanation:	Safety Barometer (National Safety Council - NSC); actual costs every 2 years (\$60K) Annual SDG&E Safety Congress (\$120K) Increase in AED maintenance costs (\$5K)					
2024	6	34	0	40	0.1	1-Sided Adj
Explanation:	Annual fleet vehicle maintenance. \$19,926.40/vehicle					
2024 Total	6	219	0	225	0.1	

Note: Totals may include rounding differences.

SDG&E/SAFETY MANAGEMENT SYSTEMS/Exh No:SDG&E-31-WP-R/Witness: K. Deremer

San Diego Gas & Electric Company
2024 GRC - REVISED
Shared Services Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer
Category: A. Safety
Category-Sub: 1. Safety
Cost Center: 2100-0214.000 - SDG&E FIELD SAFETY

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	413	424	565	685	730
Non-Labor	400	410	239	257	184
NSE	0	0	0	0	0
Total	813	835	805	942	914
FTE	4.2	4.2	5.1	6.0	6.2
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	-1	-1
NSE	0	0	0	0	0
Total	0	0	0	-1	-1
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	413	424	565	685	730
Non-Labor	400	410	239	256	184
NSE	0	0	0	0	0
Total	813	835	805	941	914
FTE	4.2	4.2	5.1	6.0	6.2
Vacation & Sick (Nominal \$)					
Labor	61	64	81	97	110
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	61	64	81	97	110
FTE	0.7	0.7	0.8	1.0	1.1
Escalation to 2021\$					
Labor	49	39	36	32	0
Non-Labor	41	33	13	11	0
NSE	0	0	0	0	0
Total	89	72	49	43	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	523	528	682	814	840
Non-Labor	441	443	253	267	184
NSE	0	0	0	0	0
Total	964	971	935	1,081	1,023
FTE	4.9	4.9	5.9	7.0	7.3

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Shared Services Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety
 Category-Sub: 1. Safety
 Cost Center: 2100-0214.000 - SDG&E FIELD SAFETY

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	0	0	0
Non-Labor	0	0	0	-1	-0.600
NSE	0	0	0	0	0
Total	0	0	0	-1	-0.600
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017 Total	0	0	0	0.0	
2018 Total	0	0	0	0.0	
2019 Total	0	0	0	0.0	
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020 Total	0	-1	0	0.0	
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021 Total	0	-1	0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - REVISED
Shared Services Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety
 Category-Sub: 1. Safety
 Cost Center: 2100-0214.000 - SDG&E FIELD SAFETY

RAMP Item # 1

RAMP Activity

RAMP Chapter: SDG&E-Risk-8 Incident Involving an Employee
 RAMP Line Item ID: C03
 RAMP Line Item Name: Strong Safety Culture
 Tranche(/s): Tranche1: NA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	52	237	177	237	223	270

Cost Estimate Changes from RAMP:
 GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 survey and conferences cost	52.00	237.00	177.00	237.00	223.00	270.00

Work Unit Changes from RAMP:
 GRC forecast is within the RAMP range

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	379.000	78.000

RSE Changes from RAMP:
 General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology ,
 as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex.
 SCG-03/SDG&E-03, Chapter 2)

San Diego Gas & Electric Company
2024 GRC - REVISED
Shared Services Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
 Witness: Kenneth J. Deremer
 Category: A. Safety
 Category-Sub: 1. Safety
 Cost Center: 2100-0214.000 - SDG&E FIELD SAFETY

RAMP Item # 2

RAMP Activity

RAMP Chapter: SDG&E-Risk-8 Incident Involving an Employee
 RAMP Line Item ID: C09
 RAMP Line Item Name: Safe Driving Programs
 Tranche(s): Tranche1: Vehicle Incident

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	90	0	0	91	89	108

Cost Estimate Changes from RAMP:
 GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of employees in safe driving program	2,200.00	2,200.00	2,200.00	2,200.00	2,200.00	2,400.00

Work Unit Changes from RAMP:
 GRC forecast is within the RAMP range

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	165.000	57.000

RSE Changes from RAMP:
 General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology ,
 as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex.
 SCG-03/SDG&E-03, Chapter 2)

San Diego Gas & Electric Company
2024 GRC - REVISED
Non-Shared Service Workpapers

Area: SAFETY MANAGEMENT SYSTEMS
Witness: Kenneth J. Deremer

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2100-0121	000	ENTERP SYS SOLUS
2100-0215	000	EMF SERVICES MANGER
2100-0665	000	ENERGY RISK
2100-3535	000	ESS PROD SUPPORT
2100-3572	000	SES DIRECTOR - SDG&E
2100-3584	000	CST - SORT
2100-3591	000	HEALTH F& SAFETY - SDG&E
2100-3628	000	SAFETY
2100-3629	000	SAFETY COMPLIANCE - SDG&E
2100-3758	000	CPD
2100-3771	000	ENTERPRISE SYSTEMS SUPPORT DIRECTOR
2100-3819	000	ESS PRODUCTION SUPPORT SDGE
2100-3876	000	DIRECTOR ASST MGMT & SMART GRID
2100-3878	000	ADV ASSET PERF ANALYTICS & INTEGRATION
2100-3911	000	GEOGRAPHIC BUSINESS SOLUTIONS MOBILE/WEB
2100-3912	000	GEOGRAPHIC BUSINESS SOLUTIONS DESKTOP
2100-3934	000	VP ENTERPRISE RISK MANAGEMENT
2100-3942	000	PIPELINE SAFE & COMP
2100-3945	000	COMPL & RISK MANAGEMENT
2100-3993	000	SDG&E AFFILIATE COMPLIANCE GROUP
2100-4040	000	DIRECTOR ASSET MANAGEMENT
2100-4058	000	Contractor Safety Services
2100-4060	000	BUSINESS TECHNOLOGY SOLUTIONS
2100-4061	000	PROJECT ENGAGEMENT SERVICES
2100-4062	000	FIELD & DISPATCH SERVICES
2100-4063	000	ASSET MGMT SERVICES
2100-4064	000	ASSET MANAGEMENT PROGRAM
2100-4113	000	SAFETY MANAGEMENT SYSTEM
2100-4177	000	ASSET MANAGEMENT RISK AND ACCOUNTABILITY