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-E)

REVISED WORKPAPERS TO PREPARED DIRECT TESTIMONY OF KENNETH J. DEREMER

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ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

ERRATA

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

MAY 2023



2024 General Rate Case - REVISED ERRATA INDEX OF WORKPAPERS

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

DOCUMENT	PAGE
Overall Summary For Exhibit No. SDG&E-31-WP-R-E	1
Summary of Non-Shared Services Workpapers	2
Category: A. Safety Management Systems	3
1SM001.000 - SAFETY MANAGEMENT SYSTEM	4
Category: B. Safety	18
1SM002.000 - SAFETY	19
1SM002.001 - SAFETY	25
1SM002.002 - SAFETY	38
1SM002.003 - SAFETY	44
Category: C. Enterprise Risk Management	50
1SM000.000 - VP- RISK MGMT & CHF COMPL OFCR	51
1SM005.000 - ENTERPRISE RISK MANAGEMENT	56
1SM006.000 - ENERGY RISK MANAGEMENT	64
Category: D. Asset Management	69
1SM003.000 - ASSET MANAGEMENT	70
1SM004.000 - BUSINESS TECHNOLOGY SOLUTIONS	84
Summary of Shared Services Workpapers	91
Category: A. Safety	92
2100-0214.000 - SDG&E FIELD SAFETY	93
Appendix A: List of Non-Shared Cost Centers	101

San Diego Gas & Electric Company 2024 GRC - REVISED ERRATA

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

	Area: SAFETY N	Area: SAFETY MANAGEMENT SYSTEMS					
	Witness: Kenneth J	Witness: Kenneth J. Deremer					
		In 2021 \$ (000) Inc	curred Costs				
	Adjusted-Recorded	Recorded Adjusted-Forecast					
Description	2021	2022	2023	2024			
Non-Shared Services	12,071	12,666	14,453	15,109			
Shared Services	1,023	1,239	1,189	1,239			
Total	13,094	13,905	15,642	16,348			

Area: SAFETY MANAGEMENT SYSTEMS

Witness: Kenneth J. Deremer

Summary of Non-Shared Services Workpapers:

	In 2021 \$ (000) Incurred Costs					
	Adjusted- Recorded	Adjusted-Forecast				
Description	2021	2022	2023	2024		
A. Safety Management Systems	864	759	1,147	1,654		
B. Safety	2,721	3,019	2,859	2,882		
C. Enterprise Risk Management	5,472	5,564	5,962	6,111		
D. Asset Management	3,014	3,324	4,485	4,462		
Total	12,071	12,666	14,453	15,109		

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) Incu	urred Costs	
	Adjusted-Recorded		Adjusted-Forecast	
	2021	2022	2023	2024
Labor	381	471	558	616
Non-Labor	483	288	589	1,038
NSE	0	0	0	0
Total	864	759	1,147	1,654
FTE	2.9	3.6	4.3	4.9

Workpapers belonging to this Category:

ment System			
381	471	558	616
483	288	589	1,038
0	0	0	0
864	759	1,147	1,654
2.9	3.6	4.3	4.9
	483 0 864	381 471 483 288 0 0 864 759	381 471 558 483 288 589 0 0 0 864 759 1,147

Beginning of Workpaper 1SM001.000 - Safety Management System

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 managementt. 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 cata 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.

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:

Γ	In 2021\$ (000) Incurred Costs							
		Adju	isted-Recor	ded		Ad	justed-Fore	cast
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	588	1,037
NSE	0	0	0	0	0	0	0	0
Total	92	109	138	1,034	864	758	1,146	1,653
FTE	0.8	0.8	1.0	1.7	2.9	3.6	4.3	4.9

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 202	1 \$(000) Ir	ncurred Co	sts				
Forecast	t Method	Ba	se Foreca	st	Forec	ast Adjust	ments	Adjus	ted-Forec	ast
Years	6	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	106	555	288	589	1,038
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Tota	I	864	864	864	-105	283	790	759	1,147	1,654
FTE	Base YR Rec	2.9	2.9	2.9	0.7	1.4	2.0	3.6	4.3	4.9

Forecast Adjustment Details:

Year	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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 An	alyst/Data Sc	ientist (May20	022)				
2022 Total	90	-195	0	-105	0.7				
2023	135	3	0	138	1.0	1-Sided Adj			
Explanation:	CC 2100-4113 SMS Sa	afety Analyst/Da	ata Scientist						
2023	0	100	0	100	0.0	1-Sided Adj			
Explanation:	CC 2100-4113 Enhanc Awareness, Survey an employees				-	-			
2023	0	200	0	200	0.0	1-Sided Adj			
Explanation:	CC 2100-4113 SMS Pr Improvement (non-labo	•	•		•	sment for Continuous			
2023	42	-197	0	-155	0.4	1-Sided Adj			
Explanation:	CC 2100-4113 SMS Pi	ocess Safety A	dvisor CC 2	2100-4113 SM	IS Safety Mgm	t Specialist			
	2100-4113 non-labor I	Reduction in cor	nsultant costs	from 2021 \$	-47.62 X 4200 (employees Ramp 1			
2023 Total	177	106	0	283	1.4				
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 Pr Improvement (non-labo	•	•		•	sment for Continuous			

Note: Totals may include rounding differences.

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

Area: Witness: Category: Category-Sub: Workpaper:	SAFETY MANAGE Kenneth J. Dereme A. Safety Managen 1. Safety Managem 1SM001.000 - Safe	r nent Systems ent Systems					
Year	<u>Labor</u>	<u>NLbr</u>	NSE	<u>Total</u>	FTE	Adj_Type	
2024	100	-195	0	-95	1.0	1-Sided Adj	
Explanation:	CC 2100-4113 SMS Sa	fety Mgmt Spe	ecialist (Startin	ng in August)			
	2100-4113 non-labor R	eduction in co	nsultant costs	from 2021 \$-4	7.62 X 4200	employees Ramp 1	
2024	0	200	0	200	0.0	1-Sided Adj	
Explanation:	CC 2100-4113 Enhance & Reporting (non-labor t			•		or Monitoring, Tracking	
2024	0	75	0	75	0.0	1-Sided Adj	
Explanation:	CC 2100-4113 Develop (non-labor technology d	•		•	agement of C	hange Platform	
2024	135	75	0	210	1.0	1-Sided Adj	
Explanation:	CC 2100-4113 Integration Continuous Safety Impr CC 2100-4113 SMS Sat	ovement (non	-labor technol		-	•	
2024	0	100	0	100	0.0	1-Sided Adj	
Explanation:	CC 2100-4113 Enhance development); \$23.81 X			dkeeping pract	ices (non-lab	or technology	
2024 Total	235	555	0	790	2.0		

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)
ecorded (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
djustments (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
ecorded-Adjusted (Nomir	nal \$)				
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
acation & Sick (Nominal \$	5)				
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
scalation 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
ecorded-Adjusted (Const	ant 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.*

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 Co	osts		
	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	Lab	or <u>NI</u>	Lbr <u>NS</u>	<u>se</u>	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-relate Catastrophic Event Memo		-	be reques	ted for recov	ery through a non-GRC
2020		0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-relate Catastrophic Event Memo		•	be reques	ted for recov	ery through a non-GRC
2020 Total		0	-1	0	0.0	
2021		0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-relate Catastrophic Event Memo		•	be reques	sted for recov	ery through a non-GRC
2021		0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-relate Catastrophic Event Memo		•	be reques	sted for recov	ery through a non-GRC
2021 Total		0	-1	0	0.0	

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	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inci	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	0	0	200	200	300
Cost Estimate Changes fro						

GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates 2021 Historical 2022 2023 2024 2024 RAMP Unit of Embedded Forecast Forecast Forecast **Range Activities** Measure Activities Activities Activities 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			

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)

					2024	1
	2021 Historical	2022	2023	2024	RAMP R	ange
	Embedded Cost	Forecast	Forecast	Forecast	(2020 Inci	urred \$)
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	0	0	75	500	1,000

Cost Estimate Changes from RAMP:

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

No sing	le unit o	t measure	available.

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	
RSE Changes from RAMP: NA			

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	2022 2023	2024	2024 RAMP Range		
	Embedded Cost (2021 \$)	Forecast (2021 \$)	Forecast (2021 \$)	Forecast (2021 \$)	(2020 Inci Low	urred \$) High
Tranche 1 Cost Estimate	718	517	562	621	500	600

Cost Estimate Changes from RAMP:

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

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	
RSE Changes from RAMP: TBD			

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 Estima	<u>ites (\$000)</u>					
	2021 Historical Embedded Cost	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inci	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	0	100	100	400	600
Cost Estimate Changes fro	om RAMP:					

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

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	
RSE Changes from RAMP: NA			

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 Estima	<u>ites (\$000)</u>					
	2021 Historical Embedded Cost	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inci	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	95	138	212	500	1,000
Cost Estimate Changes fro	m RAMP:					

Cost Estimate Changes from RAMP:

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

Risk Spend Efficiency (RSE)						
	GRC RSE	RAMP RSE				
Tranche 1	0.000	0.000				
RSE Changes from RAMP: NA						

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

GRC forecast is within the RAMP range

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

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	
RSE Changes from RAMP: NA			

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

GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast		
Activities	Activities	Activities	Activities	Low	High
0.00	0.00	0.00	0.00	0.00	0.00
:					
	Embedded Activities 0.00	Embedded ActivitiesForecast Activities0.000.00	Embedded ActivitiesForecast ActivitiesForecast Activities0.000.000.00	Embedded ActivitiesForecast ActivitiesForecast ActivitiesForecast 	Embedded ActivitiesForecast ActivitiesForecast ActivitiesForecast ActivitiesRange Activities0.000.000.000.000.000.00

Risk Spend Efficiency (RSE)						
	GRC RSE	RAMP RSE				
Tranche 1	0.000	0.000				
RSE Changes from RAMP: NA						

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

Summary for Category: B. Safety

Г	In 2021\$ (000) Incurred Costs					
	Adjusted-Recorded	<u>III 202 I @ (000/ IIIC</u>	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	o 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		

Beginning of Workpaper 1SM002.000 - Safety

Area:SAFETY MANAGEMENT SYSTEMSWitness:Kenneth J. DeremerCategory:B. SafetyCategory-Sub1. SafetyWorkpaper: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				Ad	justed-Fored	cast	
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

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	t Method	Base Forecast			Forecast Adjustments			Adjusted-Forecast			
Years	s	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	
Tota	ıl	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:

<u>Year</u>	Labor	<u>. NI</u>	<u>_br NSI</u>	<u> </u>	<u>otal</u>	FTE	Adj Type
2022		0 -1	77	0	-177	0.0	1-Sided Adj
Explanation:	CC 2100-3628	- removing cost	s as program s	pend ende	ed in 2021		
2022		0	50	0	50	0.0	1-Sided Adj
Explanation:	CC 2100-3628	Safety event (J	lan/Feb)				
2022 Total		0 -1	27	0	-127	0.0	
2023		0 -1	77	0	-177	0.0	1-Sided Adj
Explanation:	CC 2100-3628	- removing cost	s as program s	pend ende	ed in 2021		
2023 Total		0 -1	77	0	-177	0.0	
2024		0 -1	77	0	-177	0.0	1-Sided Adj
Explanation:	CC 2100-3628	 removing cost 	s as program s	pend ende	ed in 2021		
2024 Total		0 -1	77	0	-177	0.0	

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)
ecorded (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
ljustments (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
ecorded-Adjusted (Nomir	nal \$)				
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
acation & 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
scalation 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
ecorded-Adjusted (Const	ant 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

SAFETY MANAGEMENT SYSTEMS
Kenneth J. Deremer
B. Safety
1. Safety
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	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	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 positiong trai	nsferring from CC	2100-3628 t	o CC 2100-3	3629 within Safety Organization.		
2021 Total	-96	-6	0	-1.0			

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	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Incu	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	177	0	0	0	0	0
Cost Estimate Changes fro						

Progam spend ended in 2021

GRC Work Unit/Activity Level Estimates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RA Range Act	
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 NA	0.00	0.00	0.00	0.00	0.00	0.00
Work Unit Changes from RAMP Progam 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

Area:SAFETY MANAGEMENT SYSTEMSWitness:Kenneth J. DeremerCategory:B. SafetyCategory-Sub1. SafetyWorkpaper:1SM002.001 - Safety

Activity Description:

Safety Compliance is primarily responsibile 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							
		Adju	isted-Recor	ded		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

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 202	1 \$(000) lı	ncurred Co	sts				
Forecas	t Method	Base Forecast			Forec	ast Adjust	ments	Adjusted-Forecast		
Years	s	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
Tota	d	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:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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 Purchas (Cal/OSHA Protection fr				tection for wild	fire smoke particulates.			
2022	30	35	0	65	0.1	1-Sided Adj			
Explanation:	CC 2100-3629 Contract	support for we	elding exposu	re assessmer	nt. \$100/hour (\$	\$10K)			
	CC 2100-3629 Asbesto abatement work) \$1k p/ CC 2100-3629 Increase CC 2100-3629 correcte	month (\$12K) in asbestos in	ventory inspe	·	-	tting – contractor			
2022	0	15	0	15	0.0	1-Sided Adj			
Explanation:	CC 2100-3629 Professi Hygienist (IH)	onal conferenc	es and cours	es to maintair	n certifications.	\$5000/Industrial			
2022	0	12	0	12	0.0	1-Sided Adj			
Explanation:	CC 2100-3629 Travel (a	airfare/lodging)	to business r	neetings. \$10	00/month				
2022	0	32	0	32	0.0	1-Sided Adj			
Explanation:	CC 2100-3629 Industria Compliance documents years, contributing to ch standardized, recordkee maintaining and storing	are stored on allenges with a eping system w	3 Sharepoint accessing rec ill enable Sat	sites due to o ords. Develo	organizational organizational or	hanges over the menting a			

Note: Totals may include rounding differences. SDG&E/SAFETY MANAGEMENT SYSTEMS/Exh No:SDG&E-31-WP-R-E/Witness: K. Deremer Page 27 of 101

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

Year	<u>Labor</u>	<u>NLbr</u>		<u>Total</u>	<u>FTE</u>				
2022 Total	30	324	0	354	0.1				
2023	0	150	0	150	0.0	1-Sided Adj			
xplanation:	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			
xplanation:	CC 2100-3629 Purchas program. \$25/replacem	•		uipment for re	spiratory prot	ection for wildfire smoke			
2023	0	15	0	15	0.0	1-Sided Adj			
xplanation:	CC 2100-3629 Professi Hygienist (IH)	onal conference	ces and course	es to maintain	certifications	. \$5000/Industrial			
2023	0	12	0	12	0.0	1-Sided Adj			
Explanation:	CC 2100-3629 Travel (a	airfare/lodging)	to business r	neetings. \$100	0/month				
2023	30	35	0	65	0.1	1-Sided Adj			
	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)								
	with pending Cal/OSHA CC 2100-3629 Asbesto abatement work) \$1k p/ CC 2100-3629 Increas	Lead Standar os negative ex /month (\$12K) e in asbestos i	d and other en posure assess nventory inspo	nerging healtl ments (wall d	n standards. S	\$100/hour (\$12K)			
2023 Total	with pending Cal/OSHA CC 2100-3629 Asbesto abatement work) \$1k p/ CC 2100-3629 Increas CC 2100-3629 correcte	Lead Standar os negative ex month (\$12K) e in asbestos i ed for annualiz	d and other er posure assess nventory insp ed salary	nerging health ments (wall d ections cost (n standards. \$ rilling/cable ct \$1K)	\$100/hour (\$12K)			
2023 Total 2024	with pending Cal/OSHA CC 2100-3629 Asbesto abatement work) \$1k p/ CC 2100-3629 Increas CC 2100-3629 correcte 30	Lead Standar os negative ex month (\$12K) e in asbestos i ed for annualiz 214	d and other en posure assess nventory inspo ed salary 0	merging health ments (wall d ections cost (244	n standards. \$ rilling/cable ct \$1K) 0.1	\$100/hour (\$12K)			
2023 Total 2024 Explanation:	with pending Cal/OSHA CC 2100-3629 Asbesto abatement work) \$1k p/ CC 2100-3629 Increas CC 2100-3629 correcte	Lead Standar os negative ex month (\$12K) e in asbestos i ed for annualiz 214 150 oreak/rest traile	d and other en posure assess nventory inspe ed salary 0 0 ers with filtered	merging health ments (wall d ections cost (244 150 air systems t	n standards. \$ rilling/cable ct \$1K) 0.1 0.0 o reduce wild	\$100/hour (\$12K) utting – contractor 1-Sided Adj			
2024	with pending Cal/OSHA CC 2100-3629 Asbesto abatement work) \$1k p/ CC 2100-3629 Increas CC 2100-3629 correcte 30 0 CC 2100-3629 Rental b	Lead Standar os negative ex month (\$12K) e in asbestos i ed for annualiz 214 150 oreak/rest traile	d and other en posure assess nventory inspe ed salary 0 0 ers with filtered	merging health ments (wall d ections cost (244 150 air systems t	n standards. \$ rilling/cable ct \$1K) 0.1 0.0 o reduce wild	\$100/hour (\$12K) utting – contractor 1-Sided Adj			
2024 Explanation: 2024	with pending Cal/OSHA CC 2100-3629 Asbesto abatement work) \$1k p/ CC 2100-3629 Increas CC 2100-3629 correcte 30 0 CC 2100-3629 Rental b (Cal/OSHA Protection fr 0	a Lead Standar os negative ex month (\$12K) e in asbestos i ed for annualiz 214 150 oreak/rest traile rom Wildfire Si 2 e replacement	d and other en posure assess nventory inspe ed salary 0 ers with filtered moke) \$10k pe 0 : filters and eq	nerging health ments (wall d ections cost (244 150 air systems t er trailer per m 2	n standards. \$ rilling/cable ct \$1K) 0.0 o reduce wild onth 0.0	\$100/hour (\$12K) utting – contractor 1-Sided Adj fire smoke exposure.			
2024 Explanation:	with pending Cal/OSHA CC 2100-3629 Asbesto abatement work) \$1k p/ CC 2100-3629 Increas CC 2100-3629 correcte 30 CC 2100-3629 Rental b (Cal/OSHA Protection fr 0 CC 2100-3629 Purchas	a Lead Standar os negative ex month (\$12K) e in asbestos i ed for annualiz 214 150 oreak/rest traile rom Wildfire Si 2 e replacement	d and other en posure assess nventory inspe ed salary 0 ers with filtered moke) \$10k pe 0 : filters and eq	nerging health ments (wall d ections cost (244 150 air systems t er trailer per m 2	n standards. \$ rilling/cable ct \$1K) 0.0 o reduce wild onth 0.0	\$100/hour (\$12K) utting – contractor 1-Sided Adj fire smoke exposure. 1-Sided Adj			
2024 Explanation: 2024 Explanation: 2024	with pending Cal/OSHA CC 2100-3629 Asbesto abatement work) \$1k p/ CC 2100-3629 Increas CC 2100-3629 correcte 30 0 CC 2100-3629 Rental b (Cal/OSHA Protection fr 0 CC 2100-3629 Purchas program. \$25/replacement	A Lead Standar os negative ex month (\$12K) e in asbestos i ed for annualiz 214 150 oreak/rest trailer rom Wildfire St 2 e replacement ent filters and 28 onal designer	d and other en posure assess nventory inspe- ed salary 0 ers with filtered moke) \$10k pe 0 : filters and eq equipment 0	nerging health ments (wall d ections cost (244 150 air systems t er trailer per m 2 uipment for re 28	n standards. \$ rilling/cable cr \$1K) 0.1 0.0 o reduce wild onth 0.0 spiratory prote 0.0	\$100/hour (\$12K) utting – contractor 1-Sided Adj fire smoke exposure. 1-Sided Adj ection for wildfire smoke 1-Sided Adj			
2024 Explanation: 2024 Explanation: 2024	with pending Cal/OSHA CC 2100-3629 Asbesto abatement work) \$1k p/ CC 2100-3629 Increas CC 2100-3629 correcte 30 CC 2100-3629 Rental b (Cal/OSHA Protection fr 0 CC 2100-3629 Purchas program. \$25/replacem 0 CC 2100-3629 Instruction	A Lead Standar os negative ex month (\$12K) e in asbestos i ed for annualiz 214 150 oreak/rest trailer rom Wildfire St 2 e replacement ent filters and 28 onal designer	d and other en posure assess nventory inspe- ed salary 0 ers with filtered moke) \$10k pe 0 : filters and eq equipment 0	nerging health ments (wall d ections cost (244 150 air systems t er trailer per m 2 uipment for re 28	n standards. \$ rilling/cable cr \$1K) 0.1 0.0 o reduce wild onth 0.0 spiratory prote 0.0	\$100/hour (\$12K) utting – contractor 1-Sided Adj fire smoke exposure. 1-Sided Adj ection for wildfire smoke 1-Sided Adj			
2024 Explanation: 2024 Explanation: 2024 Explanation:	with pending Cal/OSHA CC 2100-3629 Asbesto abatement work) \$1k p/ CC 2100-3629 Increas CC 2100-3629 correcte 30 0 CC 2100-3629 Rental b (Cal/OSHA Protection fr 0 CC 2100-3629 Purchas program. \$25/replacement 0 CC 2100-3629 Instruction	A Lead Standar os negative ex month (\$12K) e in asbestos i ed for annualiz 214 150 oreak/rest trailer rom Wildfire St 2 e replacement ent filters and 28 onal designer months 15	d and other en posure assess nventory inspe- ed salary 0 ers with filtered moke) \$10k pe 0 : filters and eq equipment 0 support to upd	nerging health ments (wall d ections cost (244 150 air systems t er trailer per m 2 uipment for re 28 ate & convert 15	n standards. \$ rilling/cable co filling/cable co filling/	\$100/hour (\$12K) utting – contractor 1-Sided Adj fire smoke exposure. 1-Sided Adj ection for wildfire smoke 1-Sided Adj g curriculum to web 1-Sided Adj			

Area:	SAFETY MANAGE	MENT SYSTE	EMS			
Witness:	Kenneth J. Dereme	r				
Category:	B. Safety					
Category-Sub:	1. Safety					
Workpaper:	1SM002.001 - Safe	ty				
<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj_Type
Explanation:	CC 2100-3629 Travel (a	irfare/lodging) to business m	neetings. \$100	0/month	
2024	30	29	0	59	0.1	1-Sided Adj
Explanation:	CC 2100-3629 Contract with pending Cal/OSHA	Lead Standa	rd and other er	nerging health	n standards. \$1	00/hour (\$12K)
	CC 2100-3629 Asbestos	s negative exp	posure assessr	nents (wall dr	illing/cable cutti	ing – 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	n respirator me	edical evaluati	ion costs for	Wildfire Smol	ke Program
2024 Total	30	237	0	267	0.1	

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)
corded (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
ljustments (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
corded-Adjusted (Noming	nal \$)				
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
cation & Sick (Nominal S	\$)				
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
calation 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
ecorded-Adjusted (Const	tant 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

SAFETY MANAGEMENT SYSTEMS
Kenneth J. Deremer
B. Safety
1. Safety
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	<u>Labor</u>	<u>NLbr</u>	NSE	<u>FTE</u>	<u>Adj Type</u>			
2017	0	0	0	1.0	1-Sided Adj			
Explanation:	5 mos salary for Industrial H	lygienist 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:	ncremental 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 positiong tra	Insferring from C	C 2100-3628 1	o CC 2100-3	3629 within Safety Organization.			
2021 Total	96	-295	0	1.0				

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	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inc	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	150	150	150	143	172
Cost Estimate Changes fro						

GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RA Range Act	
Measure	Activities	Activities	Activities	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 RAM GRC forecast is within the RAM						

	GRC RSE	RAMP RSE
Tranche 1	20.000	7.000

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)

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	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inci	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	80	2	2	2	2
Cost Estimate Changes fro	om RAMP:					

GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RA Range Act	
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 # replacenent 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	
5	or RSE values are primarily due to changes C Integration testimony of R. Scott Pearsor		

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)

	2024 Wistoriaal	2022	2023	2024	2024	
	2021 Historical Embedded Cost	Forecast	Forecast	2024 Forecast	RAMP R (2020 Incu	-
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	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									
021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 R Range Ac						
Activities	Activities	Activities	Activities	Low	High					
4,796.00	4,940.00	5,137.00	5,394.00	4,400.00	4,800.00					
	Embedded Activities	EmbeddedForecastActivitiesActivities	EmbeddedForecastForecastActivitiesActivitiesActivities	EmbeddedForecastForecastForecastActivitiesActivitiesActivitiesActivities	EmbeddedForecastForecastForecastRange ActivitiesActivitiesActivitiesActivitiesLow					

Work Unit Changes from RAMP:

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	
RSE Changes from RAMP: NA			

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	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inci	lange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	0	0	28	22	31
Cost Estimate Changes fro	om RAMP:					

GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RA Range Act	
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 # of internal employees	0.00	0.00	0.00	0.20	0.20	0.30
Work Unit Changes from R						

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			

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	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inci	lange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	15	0	0	16	16	20
Cost Estimate Changes fro						

Cost Estimate Changes from RAMP:

 $\ensuremath{\mathsf{GRC}}$ forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 R/ Range Ac	
Measure	Activities	Activities	Activities	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 RAM						

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			

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 Estima	<u>tes (\$000)</u>					
	2021 Historical Embedded Cost	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inci	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	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

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

GRC forecast is within the RAMP range

Risk Spend Efficiency (RSE)		
	GRC RSE	RAMP RSE
Tranche 1	1,997.000	138.000
0	or RSE values are primarily due to changes C Integration testimony of R. Scott Pearsor	

SCG-03/SDG&E-03, Chapter 2)

Beginning of Workpaper 1SM002.002 - Safety

Area:SAFETY MANAGEMENT SYSTEMSWitness:Kenneth J. DeremerCategory:B. SafetyCategory-Sub1. SafetyWorkpaper: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								
		Adju	isted-Recor	ded		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	

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									
Forecas	t Method	Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years	s	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
Tota	ıl	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:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	FTE	<u>Adj Type</u>	
2022	41	0	0	41	0.6	1-Sided Adj	
Explanation:	C1CC 2100-4058 r	evised for annu	alized salary				
2022 Total	41	0	0	41	0.6		
2023	41	0	0	41	0.6	1-Sided Adj	
Explanation:	CC 2100-4058 revi	sed for annualiz	ed salary				
2023 Total	41	0	0	41	0.6		
2024	41	0	0	41	0.6	1-Sided Adj	
Explanation:	CC 2100-4058 revi	sed for annualiz	ed salary				
2024 Total	41	0	0	41	0.6		

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)
ecorded (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
djustments (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
ecorded-Adjusted (Nomina	al \$)				
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
acation & 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
scalation 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
ecorded-Adjusted (Consta	nt 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.*

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	Labo	or <u>NLb</u>	or <u>NSE</u>	<u>FTE</u>	Adj Type
2017 Total		0 0) 0	0.0	
2018 Total		0 0) 0	0.0	
2019 Total		0 0) 0	0.0	
2020	() -1	I 0	0.0	1-Sided Adj
Explanation:	Incremental COVID-relate Catastrophic Event Memo		-	e requested f	or recovery through a non-GRC
2020	(0 -5	5 0	0.0	1-Sided Adj
Explanation:	SDG&E has developed an and manage costs to perf			•	Management to more accurately track
2020 Total		0 -6	6 0	0.0	
2021) -2	2 0	0.0	1-Sided Adj
Explanation:	Incremental costs that are Memorandum Account (C	•	requested for	recovery thro	ough a non-GRC Catastrophic Event
2021	(52	2 0	0.0	1-Sided Adj
Explanation:	Incremental COVID-relate Catastrophic Event Memo		-	e requested f	or recovery through a non-GRC
2021 Total		0 -54	1 0	0.0	

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	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inci	lange			
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	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	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RA Range Act	
Measure	Activities	Activities	Activities	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 RAM						

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

Area:SAFETY MANAGEMENT SYSTEMSWitness:Kenneth J. DeremerCategory:B. SafetyCategory-Sub1. SafetyWorkpaper: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

Area:SAFETY MANAGEMENT SYSTEMSWitness:Kenneth J. DeremerCategory:B. SafetyCategory-Sub1. SafetyWorkpaper:1SM002.003 - Safety

Summary of Results:

	In 2021\$ (000) Incurred Costs							
		Adjusted-Recorded					justed-Fored	cast
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

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									
Forecas	t Method	Bas	se Foreca	st	Forecast Adjustments			Adjusted-Forecast		
Years	s	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
Tota	al	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:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	FTE	Adj Type	
2022	0	30	0	30	0.0	1-Sided Adj	
Explanation:	2100 - 0215 EMF v	vendor techniciar	n spend				
2022 Total	0	30	0	30	0.0		
2023	0	30	0	30	0.0	1-Sided Adj	
Explanation:	2100 - 0215 EMF v	vendor techniciar	n spend				
2023 Total	0	30	0	30	0.0		
2024	0	30	0	30	0.0	1-Sided Adj	
Explanation:	2100 - 0215 EMF v	vendor techniciar	n spend				
2024 Total	0	30	0	30	0.0		

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)
ecorded (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
djustments (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
ecorded-Adjusted (Nomir	nal \$)				
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
acation & 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
scalation 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
ecorded-Adjusted (Const	ant 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

SAFETY MANAGEMENT SYSTEMS
Kenneth J. Deremer
B. Safety
1. Safety
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	

Year	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>

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	2,615	2,655	2,668	2,667		
NSE	0	0	3	0		
Total	5,471	5,563	5,961	6,110		
FTE	20.6	21.1	24.8	26.0		

Workpapers belonging to this Category:

1SM000.000 VP- Risk Mg	jmt & 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 F	Risk Management			
Labor	1,682	1,706	2,006	2,159
Non-Labor	2,010	2,046	2,061	2,060
NSE	0	0	3	0
Total	3,692	3,752	4,070	4,219
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

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

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							
		Adju	isted-Recor	ded		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

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									
Forecas	t Method	Bas	se Foreca	st	Forecast Adjustments			Adjusted-Forecast		
Years	s	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
Tota	ıl	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 Labor NLbr NSE Total FTE Adj Type</u>

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)
ecorded (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
djustments (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
ecorded-Adjusted (Nomir	nal \$)				
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
acation & 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
scalation 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
ecorded-Adjusted (Const	ant 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

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	Labo	r NL	br NS	F	FTE	Adj Type
2017	0			_	-0.1	1-Sided Adj
Explanation:	-	anticipated to be	•	-		on-GRC Catastrophic Event
2017 Total	0		0	0	-0.1	
2018	0)	0	0	0.1	1-Sided Adj
Explanation:	Incremental costs that are Memorandum Account (CB		e requested fo	or recovery	/ through a n	on-GRC Catastrophic Event
2018 Total	0	ſ	0	0	0.1	
2019 Total	0	ľ	0	0	0.0	
2020	0		-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related Catastrophic Event Memor		•	be reques	ted for recov	ery through a non-GRC
2020 Total	0		1	0	0.0	
2021	0		-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related Catastrophic Event Memor		•	be reques	ted for recov	ery through a non-GRC
2021 Total	0		1	0	0.0	

Beginning of Workpaper 1SM005.000 - Enterprise Risk Management

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 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							
		Adju	isted-Recor	ded		Ad	cast	
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	2,010	2,047	2,062	2,061
NSE	0	0	0	0	0	0	3	0
Total	4,734	2,951	4,476	4,232	3,693	3,753	4,071	4,220
FTE	10.0	9.9	9.4	10.4	12.0	12.3	15.2	16.4

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	t Method	Bas	Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years	6	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	2,010	2,010	2,010	36	51	50	2,046	2,061	2,060	
NSE	Base YR Rec	0	0	0	0	3	0	0	3	0	
Tota	I	3,693	3,693	3,693	60	378	527	3,753	4,071	4,220	
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:

<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>	
2022	10	0	0	10	0.2	1-Sided Adj	
Explanation:	CC 2100-3945 Backfill o	of Coordinator	position that v	was 2 months	vacant in 202	1	
2022	0	1	0	1	0.0	1-Sided Adj	
Explanation:	CC 2100-3993 \$500 trav	/el expense fo	r conference	attendence pe	er employee, 1	employee total.	
2022	0	10	0	10	0.0	1-Sided Adj	
Explanation:	CC 2100-3945 adjust tra	avel expense i	n forecast to ı	reflect pre-cov	id amounts.		
2022	0	25	0	25	0.0	1-Sided Adj	
Explanation:	2100-3590 -\$25K adjust opportunities to pre-coiv	-	t per year for	CPUC worksł	nops, joint IOU	meetings and training	
2022	14	0	0	14	0.1	1-Sided Adj	
Explanation:	CC 2100-3590 Backfill o	of Quantitative	Risk & Ctrls I	Mgr that was	4 months vaca	nt 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 P	roject Analyst	to assist with o	data governance tasks.	
	CC 2100-3993 Backfill o	of Manager po	sition that wa	s 2 months	acant in 2021		
2023	10	20	0	30	0.2	1-Sided Adj	
Explanation:	CC 2100-3945 adjust tra	avel expense i	n forecast to i	reflect pre-cov	id amounts.		
	CC 2100-3945 Backfill o	f Coordinator	position that v	was 2 months	vacant in 202 ⁻	1	
2023	222	25	0	247	1.9	1-Sided Adj	
Explanation:	 anation: 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-coivd amounts 						
Note: Totals may	/ include rounding differer	nces.					

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

Area:	SAFETY MANAGE	IENT SYSTE	MS			
Witness:	Kenneth J. Deremer					
Category:	C. Enterprise Risk Management					
Category-Sub:	1. Enterprise Risk M	lanagement				
Workpaper:	1SM005.000 - Enter	prise Risk Ma	anagement			
<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj_Type
2023	23	6	0	29	0.4	1-Sided Adj
Explanation:	Added a Data Scientist to analytics and to assist w Cloud costs - 4 employed	ith risk mitiga		-	nd engineering	g data to provide
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 P	roject Analyst	to assist with d	lata governance tasks.
		f Managar n	nition that wa	a 2 monthe v	acount in 2021	
0004	CC 2100-3993 Backfill o					
2024 Explanation:	110 CC 2100 -3945 Added a	0 Senier Enter	0 Diak Ma	110	1.2	1-Sided Adj
	CC 2100-3945 Backfill o			·		-
2024	0	20	. 0	20	0.0	1-Sided Adj
Explanation:	CC 2100-3945 adjust tra					· -····
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%%					
0004 T-4-1						
2024 Total	477	50	0	527	4.4	

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
djustments (Nominal \$) *	*				
Labor	558	605	437	290	401
Non-Labor	1,569	1,156	1,530	367	171
NSE	0	0	0	0	0
Total	2,128	1,761	1,967	656	572
FTE	4.8	3.9	3.7	2.4	2.8
Recorded-Adjusted (Nomin	nal \$)				
Labor	1,049	1,188	1,031	1,229	1,463
Non-Labor	3,040	1,352	3,040	2,618	2,010
NSE	0	0	0	0	0
Total	4,089	2,539	4,071	3,846	3,473
FTE	8.6	8.4	8.1	8.9	10.2
acation & Sick (Nominal S	\$)				
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
scalation 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
ecorded-Adjusted (Const	tant 2021\$)				
Labor	1,344	1,485	1,247	1,448	1,682
Non-Labor	3,390	1,466	3,229	2,784	2,010
NSE	0	0	0	0	0
Total	4,734	2,951	4,476	4,232	3,693
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.*

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	171		
NSE		0	0	0	0	0		
	Total	2,128	1,761	1,967	656	572		
FTE		4.8	3.9	3.7	2.4	2.8		

Detail of Adjustments to Recorded:

Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
2017	558	1,569	0	4.8	CCTR Transf From 2100-3590.000
Explanation:	Transfer to USS 2100-3590 to	CC NSS 2100-394	5 because 2´	100-3590 is ı	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 2100-394	5 because 2´	100-3590 is ı	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 a	ctivity resides	S.	
2019	437	1,291	0	3.7	CCTR Transf From 2100-3590.000
Explanation:	Transfer to USS 2100-3590 to	CC NSS 2100-394	5 because 2 ²	100-3590 is ı	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 co Catastrophic Event Memorand	•		uested for re	ecovery through a non-GRC
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related co Catastrophic Event Memorand			uested for re	ecovery through a non-GRC
2020	0	281	0	0.0	CCTR Transf From 2100-3555.000
Explanation:	Transfer CPUC Audit fees to c	ost center where ac	tivity resides		
2020	-60	-39	0	-0.5	CCTR Transf To 2100-4144.000
Explanation:	The transfer of 2020 ADA/AFN	l related labor and r	on-labor exp	penses	
2020	350	127	0	2.9	CCTR Transf From 2100-3590.000
Explanation:	Transfer to USS 2100-3590 to	CC NSS 2100-394	5 because 2 ²	100-3590 is ı	no longer a shared service.

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

Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type		
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 whe	re activity res	ides.			
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	0	-3	0	0.0	1-Sided Adj		
Explanation:	Removal of shareholder fund	ed Affiliate Audit	Costs.				
2021 Total	401	171	0	2.8			

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)

					2024	1
	2021 Historical	2022	2023	2024	RAMP R	ange
	Embedded Cost	Forecast	Forecast	Forecast	(2020 Inci	urred \$)
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	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

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

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

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:

[ln 2021\$ (00	0) Incurred (Costs		
		Adjusted-Recorded					justed-Fore	cast
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

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 202	1 \$(000) Ir	ncurred Co	sts					
Forecas	t Method	Bas	Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years	5	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	
Tota	I	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:

<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type	
2022	28	4	0	32	0.2	1-Sided Adj	
Explanation:	2100-0665 - 1 incremen and be more forward-lo The Non Labor includes	oking and strate	gic in expan	ding risk-base	-	•	
2022 Total	28	4	0	32	0.2		
2023	110	2	0	112	1.0	1-Sided Adj	
Explanation:	2100-0665 - 1 increment and be more forward-lo	•	•••	•	•		
2023 Total	110	2	0	112	1.0		
2024	110	2	0	112	1.0	1-Sided Adj	
Explanation:	2100-0665 - 1 incremen and be more forward-lo	•	•••	•	•		
2024 Total	110	2	0	112	1.0		

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)
ecorded (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
djustments (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
ecorded-Adjusted (Nomin	nal \$)				
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
acation & Sick (Nominal \$	5)				
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
scalation 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
ecorded-Adjusted (Consta	ant 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

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	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	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:	planation: CC 2100-0665 Adjust labor for vacancies in 2021 that are not expected in 2022.					
2021 Total	58	-2	0	0.5		

Area:SAFETY MANAGEMENT SYSTEMSWitness:Kenneth J. DeremerCategory:D. Asset ManagementWorkpaper:VARIOUS

Summary for Category: D. Asset Management

	In 2021\$ (000) Incurred Costs						
	Adjusted-Recorded						
	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	18.5	19.8			

Workpapers belonging to this Category:

1SM003.000 Asset Mana	gement						
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	7.6	8.9			
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			

Beginning of Workpaper 1SM003.000 - Asset Management

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

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							
		Adju	isted-Recor	ded		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	7.6	8.9	

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	t Method	Bas	se Foreca	st	Forec	ast Adjust	ments	Adjusted-Forecast		
Years	s	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
Tota	ıl	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	5.1	6.4	3.1	7.6	8.9

Forecast Adjustment Details:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type	
2022	0	20	0	20	0.0	1-Sided Adj	
Explanation:	CC 2100-4064 Cloud c supports asset manager						
2022	109	2	0	111	0.6	1-Sided Adj	
Explanation:	CC 2100-4177 \$108k to added in 2021 to lead S and reporting efforts.			•			
2022	0	33	0	33	0.0	1-Sided Adj	
Explanation:	CC 2100-4060 Cloud cn foundation	nputing costs s	upport the ex	pansion and	maintenance o	f the asset data	
2022	0	30	0	30	0.0	1-Sided Adj	
Explanation:	2100-4061 Cloud consu processing (IIP) capabili	•	o support asse	et manageme	ent's advancem	ent of intelligent image	
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	1.2	1-Sided Adj	

Area:	SAFETY MANAGEN	IENT SYSTEN	٨S				
Witness:	Kenneth J. Deremer						
Category:	D. Asset Management						
Category-Sub:	1. Asset Manageme						
Workpaper:	1SM003.000 - Asset						
Year	Labor	NLbr	NSE	Total	FTE	Adj_Type	
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 establish and advance cl						
2023	362	6	0	368	2.9	1-Sided Adj	
Explanation:	CC 2100-4177 Adding R RSAR process implement for 9 months)to coordinat (Starting in April of 2023) development and implement (Starting in July 2023) in added in 2021 and Non-I	itation and rep te SDG&E s R and Risk and nentation of SE addition to Ass	orting efforts AMP and RS Accountabil OGE's invest set Manager	s, Risk and Acc SAR process in ity Business Ar ment prioritizat nent Risk and J	countability Bu nplementation nalyst (\$50K fo ion and optimi Accountability	siness Analyst (\$75K and reporting efforts or 6 month) to support ization process Manager that was	
2023	0	60	0	60	0.0	1-Sided Adj	
Explanation:	2100-4061 \$60k to contin management in advancir			-	added in 2022	to support asset	
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	5.1		
2024	0	58	0	58	0.0	1-Sided Adj	
Explanation:	CC 2100-4060 CC 2100- added in 2022 to establis foundation	4060 \$25k to	continue fur	nd cloud compu	uting costs in a	addtion to the \$33k	
2024	438	6	0	444	3.6	1-Sided Adj	

Note: Totals may include rounding differences.

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

Area:	SAFETY MANAGEM	ENT SYSTE	MS				
Witness:	Kenneth J. Deremer						
Category:	D. Asset Manageme	nt					
Category-Sub:	1. Asset Managemer	it					
Workpaper:	1SM003.000 - Asset	Managemen	t				
Year	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj_Type	
Explanation:	CC 2100-4177 \$438k to o Accountability Manager a two Business Analysts ad above	dded in 2021	, a Risk & Ac	countability Pro	oject Manage	er added in 2023, and	
2024	0	60	0	60	0.0	1-Sided Adj	
Explanation:	2100-4061\$60k to contine management in advancin			•	s added in 20	022 to support asset	
2024	194	383	0	577	1.6	1-Sided Adj	
Explanation:	49k addition of Asset Strategy Advisor to support for Fleet, Facilities, and IT. \$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 . \$200k 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. 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						
2024	141	103	0	244	1.2	1-Sided Adj	
Explanation:	CC 2100-4060 Adding a Data Product Owner (\$22k) to support building the asset data for emerging lines of business (clean transportation, DER) \$44k 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, and allocating a higher % O&M to current headcount \$75K						

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):

etermination et rajuetea	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
djustments (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 (Nomina	al \$)				
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
acation & 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
scalation 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
ecorded-Adjusted (Constant	nt 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.*

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	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	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 N	lanagement 210	0-4064 to E	RM 2100-35	90
2019 Total	-4	0	0	-0.1	
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum			quested for re	ecovery through a non-GRC
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	•		quested for re	ecovery through a non-GRC
2020	0	-3	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum			quested for re	ecovery through a non-GRC
2020	-21	0	0	-0.2	CCTR Transf From 2100-3590.000
Explanation:	Move 2 Data Analyst from Asset N	/lanagement 210	0-4064 to E	RM 2100-35	90
2020 Total	-21	-5	0	-0.2	
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	•		quested for re	ecovery through a non-GRC
2021	0	0	0	0.0	CCTR Transf From 2100-4098.000
Explanation:	This cost center is no longer used	. Transferrig cos	sts to used c	ost center in	same area.
2021	0	-2	0	0.0	1-Sided Adj

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>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
Explanation:	Incremental COVID-related cost Catastrophic Event Memorandu	•		uested for re	covery through a non-GRC
2021	0	0	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related cost Catastrophic Event Memorandu	•		uested for re	covery through a non-GRC
2021	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related cost Catastrophic Event Memorandu			uested for re	covery through a non-GRC
2021	73	-2	0	0.4	CCTR Transf From 2100-4177.000
Explanation:	As ofJanuary 2022 the employe	e and associated co	osts were m	noved to CC	2100-4040.
2021	-73	2	0	-0.4	CCTR Transf To 2100-4040.000
Explanation:	As ofJanuary 2022 the employe	e and associated co	osts were m	noved to CC	2100-4040.
2021 Total	0	-4	0	0.0	

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	2022	2023	2024	2024 RAMP R	
	Embedded Cost (2021 \$)	Forecast (2021 \$)	Forecast (2021 \$)	Forecast (2021 \$)	(2020 Inci Low	urred \$) 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

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RA Range Act	
Measure	Activities	Activities	Activities	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

Risk Spend Efficiency (RSE)						
	GRC RSE	RAMP RSE				
Tranche 1	0.000	0.000				
RSE Changes from RAMP: NA						

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	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inc)	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	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

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

No sing	le unit o	t measure	available

Risk Spend Efficiency (RSE)						
	GRC RSE	RAMP RSE				
Tranche 1	0.000	0.000				
RSE Changes from RAMP: NA						

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	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Ince	ange urred \$)
Tranche 1 Cost Estimate	(2021 \$) 149	(2021 \$) 259	(2021 \$) 370	(2021 \$) 393	Low 350	High 500
Cost Estimate Changes fro GRC forecast is within the F	om RAMP:	200	010	000		

GRC Work Unit/Activity Level Estimates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RA Range Act	
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 NA	0.00	0.00	0.00	0.00	0.00	0.00
Work Unit Changes from RAM No single unit of measure availa						

Risk Spend Efficiency (RSE)					
	GRC RSE	RAMP RSE			
Tranche 1	0.000	0.000			
RSE Changes from RAMP: NA					

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	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP Ra (2020 Incu	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	99	208	467	543	0	0
Cost Estimate Changes fro	om RAMP:					
Department was created aft	er RAMP was filed					

GRC Work Unit/Activity Level Estimates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RA Range Act	
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 Employees	0.40	1.00	3.30	4.00	0.00	0.00
Work Unit Changes from R Department was created after						

Risk Spend Efficiency (RSE)					
	GRC RSE	RAMP RSE			
Tranche 1	0.000	0.000			
RSE Changes from RAMP: NA					

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)

					2024	Ļ
	2021 Historical	2022	2023	2024	RAMP R	ange
	Embedded Cost	Forecast	Forecast	Forecast	(2020 Inci	urred \$)
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	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

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

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

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, Vender 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							
		Adju	isted-Recor	ded		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	

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	t Method	Bas	Base Forecast		Forecast Adjustments			Adjusted-Forecast		
Years	5	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
Tota	ıl	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	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type		
2022	14	2	0	16	0.2	1-Sided Adj		
Explanation:	CC 2100-4062 Field Cor	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 o	f 2021 Project	Manager II					
2023	14	2	0	16	0.2	1-Sided Adj		
Explanation:	CC 2100-4062 Field Cor	mputing Analys	st for IOS and	Hardware S	upport			
2023	11	2	0	13	0.3	1-Sided Adj		
Explanation:	CC 2100-4063 Business company projects, and c	•	•		ulatory reques	ts, EOC activations,		
2023 Total	48	6	0	54	0.8			
2024	23	2	0	25	0.3	1-Sided Adj		
Explanation:	CC 2100-4061 Backfill o	f 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			

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):

····· , ····	1-Recorded (Incurred Cos 2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
ecorded (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
djustments (Nominal \$) **	t i i i i i i i i i i i i i i i i i i i				
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
ecorded-Adjusted (Nomir	nal \$)				
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
acation & Sick (Nominal \$	5)				
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
scalation 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
ecorded-Adjusted (Const	ant 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.*

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	Adi 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:	1SM004 Business Te	chnology Safety	Management	System to	workpaper ?	n cost center 2100-3584 in 1FC003 Work Management in oup in which the activity will be	
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	

Area:	SAFETY MANAGEMENT S	SYSTEMS			
Witness:	Kenneth J. Deremer				
Category:	D. Asset Management				
Category-Sub:	1. Asset Management				
Workpaper:	1SM004.000 - Business Te	chnology Solutior	าร		
Year	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
Explanation:	Transfer of Dispatch Operations A 1SM004 Business Technology Sa Customer Service Field Operation forecasted.	fety Managemer	nt System to	workpaper	1FC003 Work Management in
2018	-251	-13	0	-3.0	CCTR Transf To 2100-4125.000
Explanation:	Transfer of Customer Field Opera 1SM004 Business Technology Sa Operations Support to align histor	fety Managemer	nt System to	workpaper 1	FC004 Customer Field
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 Opera 1SM004 Business Technology Sa Operations Support to align histor	fety Managemer	nt System to	workpaper 1	FC004 Customer Field
2019	-11	-1	0	-0.1	CCTR Transf To 2100-4143.000
Explanation:	Transfer costs to GOSI CC 2100-	4143 related to S	SB1371 (BNE	E) Emissions	Strategy Program
2019 Total	-269	-38	0	-3.8	
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum			uested for re	ecovery through a non-GRC
2020	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum			uested for re	covery through a non-GRC
2020	0	-9	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum			uested for re	ecovery through a non-GRC
2020	0	-6	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum			uested for re	ecovery through a non-GRC

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

Year	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2020	0	-13	0	0.0	CCTR Transf To 2100-0030.000
Explanation:		C workpaper 1FC00	1 Customer F	Field Operat	M004 Business Technology Safety ions in order to align historical
2020	9	0	0	0.1	CCTR Transf To 2100-4125.000
Explanation:	Transfer of Customer Field O 1SM004 Business Technolog Operations Support to align h	/ Safety Manageme	ent System to	workpaper	
2020	-32	0	0	-0.3	CCTR Transf To 2100-4143.000
Explanation:	Transfer costs to GOSI CC 2	00-4143 related to	SB1371 (BNE	E) Emission	s Strategy Program
2020	-7	-1	0	-0.1	1-Sided Adj
Explanation:	SDG&E OH Pools GRC Upda	te - 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 co Catastrophic Event Memoran			uested for r	ecovery through a non-GRC
2021	0	-6	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related co Catastrophic Event Memoran			uested for r	ecovery through a non-GRC
2021	0	-7	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related co Catastrophic Event Memoran			uested for r	ecovery through a non-GRC
2021	-10	0	0	-0.1	1-Sided Adj
Explanation:	Adjustment to remove non-GI recovered through a separate			missions S	trategy Program that are being
	0	-213	0	0.0	1-Sided Adj
2021					-
2021 Explanation:	CC 2100-4062 reducing 2021	for software licene	se that was ex	xpenesed tv	vice due to accounting change.

Area: SAFETY MANAGEMENT SYSTEMS

Witness: Kenneth J. Deremer

Summary of Shared Services Workpapers:

		In 2021 \$ (000) Incurred Costs				
	Adjusted- Recorded		t			
Description	2021	2022	2023	2024		
A. Safety	1,023	1,239	1,189	1,239		
Total	1,023	1,239	1,189	1,239		

Area:SAFETY MANAGEMENT SYSTEMSWitness:Kenneth J. DeremerCategory:A. SafetyCost Center:2100-0214.000

Summary for Category: A. Safety

	In 2021\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Recorded Adjusted-Forecast					
	2021	2022	2023	2024			
Labor	840	846	846	846			
Non-Labor	184	393	343	393			
NSE	0	0	0	0			
Total	1,024	1,239	1,189	1,239			
FTE	7.3	7.4	7.4	7.4			

Cost Centers belonging to this Category:

2100-0214.000 SDG&E F	IELD SAFETY			
Labor	840	846	846	846
Non-Labor	184	393	343	393
NSE	0	0	0	0
Total	1,024	1,239	1,189	1,239
FTE	7.3	7.4	7.4	7.4

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

Area:SAFETY MANAGEMENT SYSTEMSWitness:Kenneth J. DeremerCategory:A. SafetyCategory-Sub1. SafetyCost 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\$ (00	0) Incurred C	Costs		
		Adju	sted-Recor	ded		Ad	justed-Fored	cast
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	392	342	392
NSE	0	0	0	0	0	0	0	0
Total	964	971	935	1,081	1,023	1,238	1,188	1,238
FTE	4.9	4.9	5.9	7.0	7.3	7.4	7.4	7.4

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	370	0	1,216	7.4
Total Incurred	840	183	0	1,023	7.3	846	392	0	1,238	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	370	0	1,216	7.4
Total Incurred	846	342	0	1,188	7.4	846	392	0	1,238	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

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 202	1 \$(000) Ir	ncurred Co	sts				
Forecast	Forecast Method Base Forecast Forecast Adjustments Adjusted-Forecast							ast		
Years	6	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	209	159	209	393	343	393
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Tota	I	1,024	1,024	1,024	215	165	215	1,239	1,189	1,239
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:

<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>	
2022	0	175	0	175	0.0	1-Sided Adj	
Explanation:	Safety Barometer (Natio Annual SDG&E Safety Increase in AED mainte	Congress (\$12	20K)	actual costs e	every 2 years (\$	550K)	
2022	6	34	0	40	0.1	1-Sided Adj	
Explanation:	Annual fleet vehicle ma	intenance. \$19	,926.40/vehic	le			
2022 Total	6	209	0	215	0.1		
2023	6	34	0	40	0.1	1-Sided Adj	
Explanation:	Annual fleet vehicle ma	intenance. \$19	,926.40/vehic	le			
2023	0	125	0	125	0.0	1-Sided Adj	
Explanation:	Annual SDG&E Safety	Congress (\$12	0K) Increase	in AED main	tenance costs ((\$5K)	
2023 Total	6	159	0	165	0.1		
2024	0	175	0	175	0.0	1-Sided Adj	
Explanation:	Safety Barometer (Natio Annual SDG&E Safety Increase in AED mainte	Congress (\$12	0K)	actual costs e	very 2 years (\$	550K)	
2024	6	34	0	40	0.1	1-Sided Adj	
Explanation:	Annual fleet vehicle ma	intenance. \$19	,926.40/vehic	le			
2024 Total	6	209	0	215	0.1		

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)
ecorded (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
djustments (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 (Nomin	al \$)				
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
acation & Sick (Nominal \$	5)				
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
scalation 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 (Consta	ant 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.*

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	Lab	or <u>NLb</u>	or <u>NSE</u>	<u>FTE</u>	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-relate Catastrophic Event Meme		•	e requested f	or recovery through a non-GRC	
2021 Total		0 -1	0	0.0		

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	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inci	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	52	227	177	227	223	270
Cost Estimate Changes from RAMP:						

GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RA Range Ac	
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 survey and conferences cost	52.00	227.00	177.00	227.00	223.00	270.00
Work Unit Changes from R	AMP:					

GRC forecast is within the RAMP range

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	396.000	78.000	
RSE Changes from RAMP:			
5	r RSE values are primarily due to changes	63 /	
as discussed in the RAMP to GRC	Integration testimony of R. Scott Pearsor	and Gregory S. Flores (Ex.	
SCG-03/SDG&E-03, Chapter 2)			

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	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inc	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	90	0	0	91	89	108
Cost Estimate Changes fro	om RAMP:					

GRC forecast is within the RAMP range

GRC Work Unit/Activity Level Estimates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 R Range A	
Measure	Activities	Activities	Activities	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 RAMF) .					

Work Unit Changes from RAMP:

 $\ensuremath{\mathsf{GRC}}$ forecast is within the RAMP range

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	165.000	57.000	
	or RSE values are primarily due to changes C Integration testimony of R. Scott Pearson		

SAFETY MANAGEMENT SYSTEMS Area: Kenneth J. Deremer

Witness:

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