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	
Exhibit No : (SDG&F-05-WP)	

# WORKPAPERS TO PREPARED DIRECT TESTIMONY OF WALLACE E. RAWLS ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

May 2022



# 2024 General Rate Case - APP INDEX OF WORKPAPERS

# **Exhibit SDG&E-05-WP - GAS SYSTEM STAFF & TECHNOLOGY**

DOCUMENT	PAGE
Overall Summary For Exhibit No. SDG&E-05-WP	1
Summary of Non-Shared Services Workpapers	2
Category: A. DAMAGE PREVENTION	3
1SI001.000 - DAMAGE PREVENTION	4
1SI001.001 - DAMAGE PREVENTION	17
Appendix A: List of Non-Shared Cost Centers	31

## Overall Summary For Exhibit No. SDG&E-05-WP

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Description
Non-Shared Services
Shared Services
Total

In 2021 \$ (000) Incurred Costs									
Adjusted-Recorded Adjusted-Forecast									
2021	2022	2023	2024						
95	423	697	901						
0	0	0	0						
95	423	697	901						

**Adjusted-Forecast** 

2023

697

697

423

423

2024

901

901

GAS SYSTEM STAFF & TECHNOLOGY Area:

Witness: Wallace E. Rawls

### **Summary of Non-Shared Services Workpapers:**

In 2021 \$ (000) Incurred Costs Adjusted-Recorded Description 2021 2022 A. DAMAGE PREVENTION 95 95 Total

Area: GAS SYSTEM STAFF & TECHNOLOGY

Adjusted-Recorded

0.0

2021

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION

Workpaper: VARIOUS

FTE

#### Summary for Category: A. DAMAGE PREVENTION

Labor	0	93	310	410
Non-Labor	95	330	387	491
NSE	0	0	0	0
Total	95	423	697	901
FTE	0.0	1.1	3.3	4.3
Workpapers belonging	to this Category:			
1SI001.000 Damage F	Prevention			
Labor	0	4	5	5
Non-Labor	92	327	331	435
NSE	0	0	0	0
Total	92	331	336	440
FTE	0.0	0.2	0.2	0.2
1SI001.001 Damage F	Prevention			
Labor	0	89	305	405
Non-Labor	3	3	56	56
NSE	0	0	0	0
Total	3	92	361	461

0.9

2022

In 2021\$ (000) Incurred Costs

**Adjusted-Forecast** 

3.1

2024

4.1

2023

Beginning of Workpaper 1SI001.000 - Damage Prevention

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION
Category-Sub 1. DAMAGE PREVENTION
Workpaper: 1SI001.000 - Damage Prevention

#### **Activity Description:**

SDG&E has developed and implemented a federally mandated Public Awareness program, as prescribed in 49 CFR 192.616. The Public Awareness program contributes to enhanced public safety by providing certain risk mitigation measures. In adopting these Public Awareness program requirements, the Pipeline and Hazardous Materials Safety Administration (PHMSA) determined that "effective public awareness programs are vital to continued safe pipeline Operations" and that "such programs are an important factor in establishing communications with affected stakeholders, providing information necessary to enhance public awareness of pipelines, and communicating stakeholder roles relative to pipeline safety." The federal regulations directing the implementation of this program specifically require that the program include activities to educate the public, appropriate government organizations, and persons engaged in excavation-related activities regarding: (1) Use of the one-call notification system prior to excavation and other damage prevention activities; (2) possible hazards associated with unintended releases from a gas pipeline facility; (3) Physical indications that such a release may have occurred; (4) steps that should be taken for public safety in the event of a gas pipeline release; and (5) procedures for reporting such an event.

Units for this workpaper are the number of USA tickets at SDG&E (both Distribution & Transmission). Units are as follows: 2021 - 168,232; 2022 - 174,961; 2023 - 181,960; 2024 - 189,238.

#### **Forecast Explanations:**

#### Labor - Base YR Rec

The forecast method developed for this cost category is base year 2021. Over the next five years, construction in Southern California is expected to grow, especially when the effects of the recent federal infrastructure bill begin to be realized (H.R.3684 - Infrastructure Investment and Jobs Act). As such, the Public Awareness Program needs to keep up with the anticipated growth in the region. This method is most appropriate because this activity has grown in recent years due to construction growth and regulatory mandates and the base year is representative of our expectations for TY 2024.

#### Non-Labor - Base YR Rec

The forecast method developed for this cost category is base year 2021. This method is most appropriate because this activity has changed in recent years and the base year is representative of our expectations for TY 2024. Adjustments were made to the forecast to accommodate anticipated growth between the base year and test year. A non-labor adjustment was made to bring the forecast to normal spending levels. Current spending levels are lower than typically necessary due to canceled public awareness events in 2020 and 2021 as a result of the COVID-19 pandemic.

#### **NSE - Base YR Rec**

NSE is not applicable to this workgroup.

GAS SYSTEM STAFF & TECHNOLOGY Area:

Wallace E. Rawls Witness:

A. DAMAGE PREVENTION Category: 1. DAMAGE PREVENTION Category-Sub 1SI001.000 - Damage Prevention Workpaper:

#### **Summary of Results:**

		In 2021\$ (000) Incurred Costs									
		Adju	ısted-Recor	ded		Ad	justed-Fore	cast			
Years	2017	2018	2019	2020	2021	2022	2023	2024			
Labor	0	0	0	0	0	4	5	5			
Non-Labor	193	88	207	-28	92	327	331	435			
NSE	0	0	0	0	0	0	0	0			
Total	193	88	207	-28	92	331	336	440			
FTE	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2			

#### Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION
Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.000 - Damage Prevention

#### **Summary of Adjustments to Forecast:**

	In 2021 \$(000) Incurred Costs													
Forecast Method Base Forecast				st	Forec	ast Adjust	ments	Adjus	Adjusted-Forecast					
Years	s	2022	2023	2024	2022	2023	2024	2022	2023	2024				
Labor	Base YR Rec	0	0	0	4	5	5	4	5	5				
Non-Labor	Base YR Rec	92	92	92	235	239	343	327	331	435				
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0				
Tota	ıl	92	92	92	239	244	348	331	336	440				
FTE	Base YR Rec	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2				

#### 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:	Non-labor adjustment to bring forecast to normal spending levels. Current spending levels are lower than typically necessary due to canceled events in 2020 and 2021 as a result of the COVID-19 pandemic.								
2022	0	85	0	85	0.0	1-Sided Adj			
Explanation:	Public Awareness MP (	T1-T4)							
2022	3	0	0	3	0.1	1-Sided Adj			
Explanation:	Outreach for Latent 3rd	Party Damage	es (MP)						
2022	1	0	0	1	0.1	1-Sided Adj			
Explanation:	Outreach for Latent 3rd	Party Damage	es (HP)						
2022 Total	4	235	0	239	0.2				
2023	0	150	0	150	0.0	1-Sided Adj			
Explanation:	Non-labor adjustment t than typically necessar pandemic.	•	•	•	•	•			
2023	0	89	0	89	0.0	1-Sided Adj			
Explanation:	Public Awareness MP (	T1-T4)							
2023	4	0	0	4	0.1	1-Sided Adj			
Explanation:	Outreach for Latent 3rd	Party Damage	es (MP)						
2023	1	0	0	1	0.1	1-Sided Adj			
Explanation:	Outreach for Latent 3rd	Party Damage	es (HP)						
2023 Total	5	239	0	244	0.2				
2024	0	250	0	250	0.0	1-Sided Adj			
Explanation:	Non-labor adjustment to bring forecast to normal spending levels. Current spending levels are lower than typically necessary due to canceled events in 2020 and 2021 as a result of the COVID-19 pandemic.								

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION
Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.000 - Damage Prevention

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj_Type	
2024	0	93	0	93	0.0	1-Sided Adj	
Explanation:	Public Awareness MF	P (T1-T4)					
2024	4	0	0	4	0.1	1-Sided Adj	
Explanation:	Outreach for Latent 3	rd Party Damages	s (MP)				
2024	1	0	0	1	0.1	1-Sided Adj	
Explanation:	Outreach for Latent 3	rd Party Damages	s (HP)				
2024 Total	5	343	0	348	0.2		

#### Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION

Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.000 - Damage Prevention

#### **Determination of Adjusted-Recorded (Incurred Costs):**

•	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	173	81	195	-27	92
NSE	0	0	0	0	0
Total	173	81	195	-27	92
FTE	0.0	0.0	0.0	0.0	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
Recorded-Adjusted (Nomina	al \$)				
Labor	0	0	0	0	0
Non-Labor	173	81	195	-27	92
NSE	0	0	0	0	0
Total	173	81	195	-27	92
FTE	0.0	0.0	0.0	0.0	0.0
acation & Sick (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
scalation to 2021\$					
Labor	0	0	0	0	0
Non-Labor	20	7	12	-2	0
NSE	0	0	0	0	0
Total	20	7	12	-2	0
FTE	0.0	0.0	0.0	0.0	0.0
ecorded-Adjusted (Consta	int 2021\$)				
Labor	0	0	0	0	0
Non-Labor	193	88	207	-28	92
NSE	0	0	0	0	0
Total	193	88	207	-28	92
FTE	0.0	0.0	0.0	0.0	0.0

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION

Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.000 - Damage Prevention

#### 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					
FTE		0.0	0.0	0.0	0.0	0.0					

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

#### Non-Shared Service Workpapers

GAS SYSTEM STAFF & TECHNOLOGY Area:

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION 1. DAMAGE PREVENTION Category-Sub: Workpaper: 1SI001.000 - Damage Prevention

#### RAMP Item # 1

#### **RAMP Activity**

RAMP Chapter: SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: C15-T1 thru T4

RAMP Line Item Name: Public Awareness (MP) (T1 - T4)

Tranche(/s): Tranche1: The Affected Public (MP); Tranche2: Emergency Officials (MP); Tranche3: Local Public

Officials (MP); Tranche4: Excavators (MP)

#### **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	74	107	110	113	250	303
Tranche 2 Cost Estimate	0	3	3	3	3	3
Tranche 3 Cost Estimate	0	17	17	18	16	20
Tranche 4 Cost Estimate	0	20	21	21	20	25

#### **Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast		RAMP Activities
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 # of communications sent	1,443,090.00	1,498,965.00	1,543,934.00	1,590,252.00	1,510,739.00	1,828,789.00
Tranche 2 # of communications sent	362.00	414.00	427.00	440.00	418.00	506.00
Tranche 3 # of communications sent	1,548.00	362.00	373.00	384.00	346.00	442.00
Tranche 4 # of communications sent	44,547.00	44,038.00	45,359.00	46,720.00	44,384.00	53,728.00

#### Work Unit Changes from RAMP:

The GRC forecast is outside the RAMP range due to forecast updates

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION
Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.000 - Damage Prevention

#### Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	61.000	17.000	
Tranche 2	61.000	20.000	
Tranche 3	61.000	14.000	
Tranche 4	61.000	124.000	

#### **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). The GRC RSE was calculated using all four Public Awareness HP tranches combined

#### Non-Shared Service Workpapers

GAS SYSTEM STAFF & TECHNOLOGY Area:

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION 1. DAMAGE PREVENTION Category-Sub: Workpaper: 1SI001.000 - Damage Prevention

#### RAMP Item # 2

#### **RAMP Activity**

RAMP Chapter: SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: C16-T1 thru T4

RAMP Line Item Name: Public Awareness (HP) (T1 - T4)

Tranche(/s): Tranche1: The Affected Public (HP); Tranche2: Emergency Officials (HP); Tranche3: Local Public

Officials (HP); Tranche4: Excavators (HP)

#### **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	17	20	21	21	57	69
Tranche 2 Cost Estimate	0	1	1	1	1	1
Tranche 3 Cost Estimate	0	4	4	4	4	5
Tranche 4 Cost Estimate	0	5	5	5	5	6

#### **Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast		RAMP Activities
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 # of communications sent	328,910.00	341,645.00	351,895.00	362,452.00	344,329.00	416,819.00
Tranche 2 # of communications sent	82.00	94.00	97.00	100.00	95.00	115.00
Tranche 3 # of communications sent	355.00	83.00	85.00	88.00	79.00	101.00
Tranche 4 # of communications sent	10,153.00	10,037.00	10,338.00	10,648.00	10,116.00	12,246.00

#### Work Unit Changes from RAMP:

The GRC forecast is outside the RAMP range due to forecast updates

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION
Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.000 - Damage Prevention

#### Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	117.000	38.000	
Tranche 2	117.000	51.000	
Tranche 3	117.000	39.000	
Tranche 4	117.000	287.000	

#### **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). The GRC RSE was calculated using all four Public Awareness HP tranches combined

Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION

Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.000 - Damage Prevention

#### RAMP Item # 3

#### **RAMP Activity**

RAMP Chapter: SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: M09

RAMP Line Item Name: Outreach for Latent 3rd Party Damages (MP)

Tranche(/s): Tranche1: N/A

GRC Forecast Cost Estima	ites (\$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	3	4	4	3	4
Cost Estimate Changes from						

GRC Work Unit/Activity Level	I Estimates					
Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RA Range Act Low	
Tranche 1 No feasible units	0.00	0.00	0.00	0.00	0.00	0.00
Work Unit Changes from RAM GRC forecast is within the RAM						

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	_

#### **RSE Changes from RAMP:**

An RSE was not calculated for this activity. 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)

#### Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION

Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.000 - Damage Prevention

#### RAMP Item # 4

#### **RAMP Activity**

RAMP Chapter: SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: M10

RAMP Line Item Name: Outreach for Latent 3rd Party Damages (HP)

Tranche(/s): Tranche1: N/A

GRC Forecast Cost Estima	ites (\$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	1	1	1	1	1
Cost Estimate Changes from						

GRC Work Unit/Activity Level	<u>  Estimates</u>					
Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RA Range Act Low	
Tranche 1 No feasible units	0.00	0.00	0.00	0.00	0.00	0.00
Work Unit Changes from RAM GRC forecast is within the RAM						

OF DAMP DOE	
SE RAMP RSE	
0.000	
	0.000

An RSE was not calculated for this activity. 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 1SI001.001 - Damage Prevention

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION
Category-Sub 1. DAMAGE PREVENTION
Workpaper: 1SI001.001 - Damage Prevention

#### **Activity Description:**

Damage Prevention Strategies manages the damage prevention program focusing on preventing excavation damages to SDGE's buried pipelines. Damages resulting from excavation activity are the greatest threat to SDG&E's pipeline infrastructure with potential for catastrophic consequences to public safety . SDG&E is dedicated to mitigating the risk and associated hazards of excavation damages through the expansion of its Damage Prevention program by employing additional resources to proactively identify specific threats to its pipelines. The Damage Prevention Analyst Program works to reduce the number of third-party damages to gas facilities by identifying at-risk excavating contractors and educating them on proper one-call and safe digging techniques. The Damage Prevention Analyst Program strives to reduce the number of third-party damages to gas facilities by identifying at-risk excavating contractors through data analysis. The benefit of the damage prevention analyst is threefold. First, it enables SDG&E to stop a job before an incident occurs if no underground markings are present or the excavator is not practicing safe digging techniques. Second, it provides an opportunity to educate contractors on the requirements before digging or when digging around gas facilities before damage is done. This education has far-reaching benefits as the contractor will perform future projects and the education can be applied to those future projects. Third, it creates a list of contractors who might be repeat offenders and/or prevalent site characteristics to improve prioritization of future construction site inspections.

Units for this workpaper are the number of USA tickets at SDG&E (both Distribution & Transmission). Units are as follows: 2021 - 168,232; 2022 - 174,961; 2023 - 181,960; 2024 - 189,238.

#### Forecast Explanations:

#### Labor - Base YR Rec

The forecast method developed for this cost category is base year 2021. Over the next five years, construction in Southern California is expected to grow, especially when the effects of the recent federal infrastructure bill begin to be realized (H.R.3684 - Infrastructure Investment and Jobs Act). As such, the Damage Prevention Strategies team has grown to keep up with the anticipated growth in the region with a goal of preventing damages. This forecasting method is most appropriate because this activity has grown significantly in recent years and the base year is representative of our expectations for TY 2024. A labor adjustment was made to accommodate the hiring of 1 additional Damage Prevention Analyst and 1 Supervisor.

#### Non-Labor - Base YR Rec

The forecast method developed for this cost category is base year 2021. Over the next five years, construction in Southern California is expected to grow, especially when the effects of the recent federal infrastructure bill begin to be realized (H.R.3684 - Infrastructure Investment and Jobs Act). As such, the Damage Prevention Strategies team has grown to keep up with the anticipated growth in the region with a goal of preventing damages. This forecasting method is most appropriate because this activity has grown significantly in recent years and the base year is representative of our expectations for TY 2024. A non-labor adjustment was made to accommodate for the estimated non-labor expenses for new employees, which includes rental vehicles, fuel for rental vehicles, employee development, training, office equipment, computers, etc.

#### **NSE - Base YR Rec**

NSE is not applicable to this workgroup.

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION
Category-Sub 1. DAMAGE PREVENTION
Workpaper: 1SI001.001 - Damage Prevention

#### **Summary of Results:**

		In 2021\$ (000) Incurred Costs								
		Adjι	ısted-Recor	Ad	justed-Fore	cast				
Years	2017	2018	2019	2020	2021	2022	2023	2024		
Labor	0	0	0	0	0	89	305	405		
Non-Labor	0	0	0	3	3	4	57	57		
NSE	0	0	0	0	0	0	0	0		
Total	0	0	0	3	3	93	362	462		
FTE	0.0	0.0	0.0	0.0	0.0	0.9	3.1	4.1		

#### Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION
Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.001 - Damage Prevention

#### **Summary of Adjustments to Forecast:**

	In 2021 \$(000) Incurred Costs									
Forecast	Forecast Method Base Forecast			Forec	ast Adjust	ments	Adjusted-Forecast			
Years	s	2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	0	0	0	89	305	405	89	305	405
Non-Labor	Base YR Rec	3	3	3	0	53	53	3	56	56
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Tota	ıl	3	3	3	89	358	458	92	361	461
FTE	Base YR Rec	0.0	0.0	0.0	0.9	3.1	4.1	0.9	3.1	4.1

#### Forecast Adjustment Details:

Forecast Adjustr	ment Details:						
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type	
2022	76	0	0	76	0.8	1-Sided Adj	
Explanation:	Incremental labor for RA	MP mitigation:	Locate and	Mark Photog	raphs (MP)		
2022	13	0	0	13	0.1	1-Sided Adj	
Explanation:	Incremental labor for RA	MP mitigation:	Locate and	Mark Photog	raphs (HP)		
2022 Total	89	0	0	89	0.9		
2023	14	0	0	14	0.1	1-Sided Adj	
Explanation:	Incremental labor for RA	MP Mitigation:	Automate 3ı	rd Party Repo	rting (MP)		
2023	2	0	0	2	0.1	1-Sided Adj	
Explanation:	Incremental labor for RA	MP Mitigation:	Automate 3	rd Party Repo	rting (HP)		
2023	200	53	0	253	2.0	1-Sided Adj	
	A labor adjustment was made for an incremental Damage Prevention Advisor and Team Supervisor that will expand the capabilities of the Damage Prevention Strategies Team . 2 incremental employees are planned to be hired in 2023, at an average of \$100,000/new employee in labor.  2 * \$100k = \$200,000  Non-labor expenses for an incremental Damage Prevention Advisor and Team Supervisor . Expenses include rental vehicles, fuel for rental vehicles, employee development, training, office equipment, computers, etc. These costs average \$26,420 annually per employee with a rental vehicle based on historical incurred costs for the DPAs.  2023: 2 * \$26,420 = \$52,840  2024: 2 * \$26,420 = \$52,840						
2023	76	0	0	76	8.0	1-Sided Adj	
Explanation:	Incremental labor for RA	MP mitigation:	Locate and	Mark Photog	raphs (MP)		
2023	13	0	0	13	0.1	1-Sided Adj	
Explanation:	Incremental labor for RA	MP mitigation:	Locate and	Mark Photog	raphs (HP)		
2023 Total	305	53	0	358	3.1		
2024	200	53	0	253	2.0	1-Sided Adj	

#### Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION
Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.001 - Damage Prevention

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj_Type		
Explanation:	A labor adjustment was made for an incremental Damage Prevention Advisor and Team Supervisor that will expand the capabilities of the Damage Prevention Strategies Team. 2 incremental employees are planned to be hired in 2023, at an average of \$100,000/new employee in labor.  2 * \$100k = \$200,000  Non-labor expenses for an incremental Damage Prevention Advisor and Team Supervisor. Expenses include rental vehicles, fuel for rental vehicles, employee development, training, office equipment,							
	computers, etc. These chistorical incurred costs 2023: 2 * \$26,420 = \$52 2024: 2 * \$26,420 = \$52	costs average \$ for the DPAs. 2,840		•		• •		
2024	86	0	0	86	0.9	1-Sided Adj		
Explanation:	Incremental labor for RA	AMP mitigation	: Damage Pre	evention Analy	sts - SDGE (M	IP)		
2024	14	0	0	14	0.1	1-Sided Adj		
Explanation:	Incremental labor for RA	AMP mitigation	: Damage Pre	vention Analy	sts - SDGE (H	P)		
2024	14	0	0	14	0.1	1-Sided Adj		
Explanation:	Incremental labor for RA	AMP Mitigation	: Automate 3r	d Party Repor	ting (MP)			
2024	2	0	0	2	0.1	1-Sided Adj		
Explanation:	Incremental labor for RA	AMP Mitigation	: Automate 3r	d Party Repor	ting (HP)			
2024	76	0	0	76	8.0	1-Sided Adj		
Explanation:	Incremental labor for RA	AMP mitigation	: Locate and	Mark Photogra	aphs (MP)			
2024	13	0	0	13	0.1	1-Sided Adj		
Explanation:	Incremental labor for RA	AMP mitigation	: Locate and	Mark Photogra	aphs (HP)			
2024 Total	405	53	0	458	4.1			

#### Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION

Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.001 - Damage Prevention

**Determination of Adjusted-Recorded (Incurred Costs):** 

otomination of Aujustou	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	0	0	0	3	4
NSE	0	0	0	0	0
Total	0	0	0	3	4
FTE	0.0	0.0	0.0	0.0	0.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	-1
NSE	0	0	0	0	0
Total	0	0	0	0	-1
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nomina	al \$)				
Labor	0	0	0	0	0
Non-Labor	0	0	0	3	3
NSE	0	0	0	0	0
Total	0	0	0	3	3
FTE	0.0	0.0	0.0	0.0	0.0
/acation & Sick (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
Escalation to 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
Recorded-Adjusted (Consta	nt 2021\$)				
Labor	0	0	0	0	0
Non-Labor	0	0	0	3	3
NSE	0	0	0	0	0
Total	0	0	0	3	3
FTE	0.0	0.0	0.0	0.0	0.0

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION

Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.001 - Damage Prevention

#### 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	-0.200	-0.600		
NSE		0	0	0	0	0		
	Total		0 -	0 -	-0.200	-0.600		
FTE		0.0	0.0	0.0	0.0	0.0		

#### Detail of Adjustments to Recorded:

<u>Year</u>	<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 Total	0	0	0	0.0		
2020	0	0	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related Catastrophic Event Memora		•	requested f	or recovery through a non-GRC	
2020 Total	0	0	0	0.0		
2021	0	-1	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related Catastrophic Event Memora		•	requested f	or recovery through a non-GRC	
2021 Total	0	-1	0	0.0		

#### Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION

Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.001 - Damage Prevention

#### RAMP Item # 1

#### **RAMP Activity**

RAMP Chapter: SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: C11

RAMP Line Item Name: Damage Prevention Analyst Program (MP)

Tranche(/s): Tranche1: N/A

#### **GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost		2023 Forecast	2024 Forecast	2024 RAMP Range (2020 Incurred \$)	
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	0	0	86	235	301

#### **Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates

#### **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 employees or contractors supported	1.00	3.00	3.00	3.00	3.00	3.00

#### Work Unit Changes from RAMP:

GRC forecast is within the RAMP range

#### Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	120.000	40.000	

#### **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)

#### Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION

Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.001 - Damage Prevention

#### RAMP Item # 2

#### **RAMP Activity**

RAMP Chapter: SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: C12

RAMP Line Item Name: Damage Prevention Analyst Program (HP)

Tranche(/s): Tranche1: N/A

#### **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	0	0	0	14	45	57

#### **Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates

#### **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 employees or contractors supported	0.00	0.00	0.00	0.00	0.00	0.00

#### Work Unit Changes from RAMP:

GRC forecast is within the RAMP range. The units for this control are included in SDG&E-Risk-7: C11 - Damage Prevention Analyst Program (MP)

#### Risk Spend Efficiency (RSE)

 GRC RSE
 RAMP RSE

 Tranche 1
 57.000
 19.000

#### **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)

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION

Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.001 - Damage Prevention

#### RAMP Item #3

#### **RAMP Activity**

RAMP Chapter: SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: M01

RAMP Line Item Name: Automate Third Party Excavation Incident Reporting (MP)

Tranche(/s): Tranche1: N/A

# 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	14	14	13	16

#### **Cost Estimate Changes from RAMP:**

The 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 No feasible units	0.00	0.00	0.00	0.00	0.00	0.00

#### Work Unit Changes from RAMP:

GRC forecast is within the RAMP range

#### Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	35.000	17.000	

#### **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)

Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION 1. DAMAGE PREVENTION Category-Sub: Workpaper: 1SI001.001 - Damage Prevention

#### RAMP Item #4

#### **RAMP Activity**

RAMP Chapter: SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: M02

RAMP Line Item Name: Automate Third Party Excavation Incident Reporting (HP)

Tranche(/s): Tranche1: N/A

GRC Forecast Cost Estimates (\$000)					
				2024	
2021 Historical	2022	2023	2024	RAMP Ra	inge
Embedded Cost	Forecast	Forecast	Forecast	(2020 Incu	rred \$)
(2024 6)	(2024 ¢)	(2024 ¢)	(2024 ¢)	1	ماسالا

High (20<u>21 </u>\$) (2021 \$) (2021 \$) (2021 \$) 2 Tranche 1 Cost Estimate 0 0 2 2

#### **Cost Estimate Changes from RAMP:**

The 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 No feasible units	0.00	0.00	0.00	0.00	0.00	0.00

#### Work Unit Changes from RAMP:

GRC forecast is within the RAMP range

#### Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	47.000	31.000

#### **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)

#### Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION

Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.001 - Damage Prevention

#### RAMP Item # 5

#### **RAMP Activity**

RAMP Chapter: SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: C21

RAMP Line Item Name: Gold Shovel Standard Program (MP)

Tranche(/s): Tranche1: N/A

#### **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	0	0	0	0	0

#### **Cost Estimate Changes from RAMP:**

The scopes of the Medium Pressure and High Pressure Gold Shovel Programs were modified to create a system-wide Gold Shovel Program. The funding for this control is being requested in workpaper 1GS002.000 by Gas Distribution

#### **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 No feasible units	0.00	0.00	0.00	0.00	0.00	0.00

#### Work Unit Changes from RAMP:

GRC forecast is within the RAMP range

#### Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	

#### **RSE Changes from RAMP:**

An RSE was not calculated for this activity. 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)

Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION 1. DAMAGE PREVENTION Category-Sub:

Workpaper: 1SI001.001 - Damage Prevention

#### RAMP Item # 6

#### **RAMP Activity**

RAMP Chapter: SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: M03

RAMP Line Item Name: Locate and Mark Photographs (MP)

Tranche(/s): Tranche1: N/A

GRC	Forecast	Cost	<b>Estimates</b>	(0002)
GRU	Forecast	COST	Estimates	(2000)

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	0	76	76	69	88

#### **Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates

#### **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 employees or contractors supported	0.00	0.00	1.00	1.00	1.00	1.00

#### Work Unit Changes from RAMP:

The GRC forecast is outside the RAMP range due to forecast updates

#### Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	

#### **RSE Changes from RAMP:**

An RSE was not calculated for this activity. 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)

#### Non-Shared Service Workpapers

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

Category: A. DAMAGE PREVENTION

Category-Sub: 1. DAMAGE PREVENTION

Workpaper: 1SI001.001 - Damage Prevention

#### RAMP Item #7

#### **RAMP Activity**

RAMP Chapter: SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: M04

RAMP Line Item Name: Locate and Mark Photographs (HP)

Tranche(/s): Tranche1: N/A

<u>GRC</u>	<u>Forecast</u>	Cost	Estimate	<u>s (\$000)</u>

	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	0	0	13	13	11	14

#### **Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates

#### **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 employees or contractors supported	0.00	0.00	0.00	0.00	0.00	0.00

#### Work Unit Changes from RAMP:

Headcount accounted for in SDG&E-Risk-7: M3 - Locate and Mark Photogrtaphs (MP)

#### Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	

#### **RSE Changes from RAMP:**

An RSE was not calculated for this activity. 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)

Area: GAS SYSTEM STAFF & TECHNOLOGY

Witness: Wallace E. Rawls

#### Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2100-3612	000	SDG&E PUBLIC AWARENESS
2100-4057	000	DAMAGE PREVENTION STRATEGIES PRJ SDGE