Application of SOUTHERN CALIFORNIA GAS)
COMPANY for authority to update its gas revenue)
requirement and base rates)
effective January 1, 2024 (U 904-G))
Application No. 22-05	
Exhibit No · (SCG-09-WP)	

WORKPAPERS TO PREPARED DIRECT TESTIMONY OF AMY KITSON / TRAVIS T. SERA ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

May 2022



2024 General Rate Case - APP INDEX OF WORKPAPERS

Exhibit SCG-09-WP - GAS INTEGRITY PROGRAMS

DOCUMENT	PAGE
Overall Summary For Exhibit No. SCG-09-WP	1
Summary of Non-Shared Services Workpapers	2
Category: A. TIMP	3
2TD001.000 - TIMP	4
Category: B. DIMP	19
2TD002.000 - DIMP	20
Category: C. SIMP	32
2TD003.000 - SIMP	33
Category: D. FIMP	42
2TD004.000 - FIMP	43
Category: E. GSEP	54
2TD005.000 - GAS SAFETY ENHANCEMENT PROGRAMS	55
Summary of Shared Services Workpapers	69
Category: A. TIMP	70
2200-7000.000 - TIMP SUPPORT FOR SDG&E	71
Category: B. DIMP	80
2200-7001.000 - DIMP SUPPORT FOR SDG&E	81
Category: C. FIMP	89
2200-7002.000 - FIMP SUPPORT FOR SDG&E	90
Category: D. GSEP	98
2200-7003.000 - GAS SAFETY ENHANCEMENT PROGRAMS SUPPORT FOR SDG&E	99
Appendix A: List of Non-Shared Cost Centers	109

Overall Summary For Exhibit No. SCG-09-WP

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson

Description
Non-Shared Services
Shared Services
Total

In 2021 \$ (000) Incurred Costs								
Adjusted-Recorded		Adjusted-Forecast						
2021	2022	2023	2024					
165,778	227,283	189,080	221,877					
2,120	2,703	2,284	2,499					
167,898	229,986	191,364	224,376					

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson

Summary of Non-Shared Services Workpapers:

Description
A. TIMP
B. DIMP
C. SIMP
D. FIMP
E. GSEP

	In 2021 \$ (000) Incurred Costs								
Adjusted- Recorded	Adjusted-Forecast								
2021	2022	2023	2024						
103,657	159,739	117,123	135,434						
45,321	48,419	52,799	53,159						
16,800	18,875	17,435	16,675						
0	0	0	14,953						
0	250 1,723 1,656								
165,778	227,283	189,080	221,877						

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Workpaper: 2TD001.000

Summary for Category: A. TIMP

		In 2021\$ (000) Incu	urred Costs	
	Adjusted-Recorded		Adjusted-Forecast	
	2021	2022	2023	2024
Labor	25,189	36,078	31,521	34,238
Non-Labor	78,467	123,660	85,601	101,195
NSE	0	0	0	0
Total	103,656	159,738	117,122	135,433
FTE	237.9	340.7	297.7	323.4

Workpapers belonging to this Category:

	• •			
2TD001.000 TIMP				
Labor	25,189	36,078	31,521	34,238
Non-Labor	78,467	123,660	85,601	101,195
NSE	0	0	0	0
Total	103,656	159,738	117,122	135,433
FTE	237.9	340.7	297.7	323.4

Beginning of Workpaper 2TD001.000 - TIMP

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub 1. TIMP

Workpaper: 2TD001.000 - TIMP

Activity Description:

TIMP assessments, remediation, preventative & mitigative measures, and other activities in compliance with 49 CFR Part 192, Subpart O, as well as new requirements of 49 CFR § 192.710.

Forecast Explanations:

Labor - Base YR Rec

SoCalGas company labor in support of the TIMP.

Non-Labor - Base YR Rec

SoCalGas non-labor costs (e.g., contracts) in support of the TIMP.

NSE - Base YR Rec

N/A

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	13,238	15,515	18,694	22,363	25,189	36,078	31,521	34,238		
Non-Labor	36,696	55,638	62,613	89,040	78,467	123,660	85,601	101,195		
NSE	0	0	0	0	0	0	0	0		
Total	49,934	71,153	81,307	111,404	103,657	159,738	117,122	135,433		
FTE	133.0	151.7	174.6	212.5	237.9	340.7	297.7	323.4		

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

Summary of Adjustments to Forecast:

			In 202	1 \$(000) I	ncurred Co	sts				
Forecast	t Method	Base Forecast			Forec	ast Adjust	ments	Adjusted-Forecast		
Years	5	2022	2022 2023 2024 2022 2023 2024			2022	2023	2024		
Labor	Base YR Rec	25,189	25,189	25,189	10,889	6,332	9,049	36,078	31,521	34,238
Non-Labor	Base YR Rec	78,467	78,467	78,467	45,193	7,134	22,728	123,660	85,601	101,195
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Tota	I	103,657	103,657	103,657	56,082	13,466	31,777	159,739	117,123	135,434
FTE	Base YR Rec	237.9	237.9	237.9	102.8	59.8	85.5	340.7	297.7	323.4

Forecast Adjustment Details:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type	
2022	10,889	45,193	0	56,082	102.8	1-Sided Adj	
Explanation:	This adjustment capture. Cost forecasts are prime the required compliance particularly the threat e (e.g., data management)	narily driven by e assessment o valuation proce	the number of cycles. With esses, per un	of expected as continuous en it costs and ge	ssessments (32 hancements to	the TIMP and	

2022 Total	10,889	45,193	0	56,082	102.8		
2023	6,332	7,134	0	13,466	59.8	1-Sided Adj	
Explanation:	This adjustment capture	s the increme	ntal 2023 costs	above the	e base vear record	ed. Cost forecasts	

are primarily driven by the number of expected assessments (25) as determined by the required compliance assessment cycles.

2023 Total	6,332	7,134	0	13,466	59.8		
2024	9,049	22,728	0	31,777	85.5	1-Sided Adj	
Explanation:	This adjustment captur are primarily driven by compliance assessmer	the number of e			•		

2024 Total 9,049 22,728 0 31,777 85.5

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

Determination of Adjusted-Recorded (Incurred Costs):

terrimation of Aujusteu	-Recorded (Incurred Cos 2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
corded (Nominal \$)*					
Labor	10,151	12,221	14,891	18,517	21,774
Non-Labor	32,602	51,368	58,490	83,160	79,663
NSE	0	0	0	0	0
Total	42,753	63,588	73,381	101,676	101,437
FTE	113.1	129.0	146.7	178.3	203.4
ljustments (Nominal \$) **					
Labor	-1	-24	-11	-53	-363
Non-Labor	6	-359	-85	-441	-1,196
NSE	0	0	0	0	0
Total	5	-383	-96	-494	-1,559
FTE	-0.2	-0.5	-0.5	-0.7	-3.2
ecorded-Adjusted (Nomin	al \$)				
Labor	10,150	12,197	14,880	18,464	21,411
Non-Labor	32,608	51,009	58,405	82,718	78,467
NSE	0	0	0	0	0
Total	42,758	63,205	73,285	101,182	99,878
FTE	112.9	128.5	146.2	177.6	200.2
cation & Sick (Nominal \$)				
Labor	1,720	2,099	2,821	3,253	3,779
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	1,720	2,099	2,821	3,253	3,779
FTE	20.1	23.2	28.4	34.9	37.7
scalation to 2021\$					
Labor	1,367	1,219	993	646	0
Non-Labor	4,088	4,629	4,208	6,322	0
NSE	0	0	0	0	0
Total	5,455	5,849	5,200	6,968	0
FTE	0.0	0.0	0.0	0.0	0.0
ecorded-Adjusted (Consta	ant 2021\$)				
Labor	13,238	15,515	18,694	22,363	25,189
Non-Labor	36,696	55,638	62,613	89,040	78,467
NSE	0	0	0	0	0
Total	49,934	71,153	81,307	111,404	103,657
FTE	133.0	151.7	174.6	212.5	237.9

^{*} After company-wide exclusions of Non-GRC costs

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

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs							
	Years	2017	2018	2019	2020	2021	
Labor		-0.839	-24	-11	-53	-363	
Non-Labor		6	-359	-85	-441	-1,196	
NSE		0	0	0	0	0	
	Total		-383	-96	-494	-1,559	
FTE		-0.2	-0.5	-0.5	-0.7	-3.2	

Detail of Adjustments to Recorded:

<u>Year</u>		<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adi Type</u>		
2017		0	7	0	0.0	1-Sided Adj		
Explanation:	Adjustment to account for missed internal settlements. Sempra incurred costs for TIMP.							
2017		0	0	0	0.0	1-Sided Adj		
Explanation:	Costs are associate	d with a non-re	efundable IO.					
2017		0	0	0	0.0	1-Sided Adj		
Explanation:	Costs are associate	d with a non-re	efundable IO.					
2017		0	0	0	0.0	CCTR Transf To 2200-7000.000		
Explanation:	Support for SDG&E	TIMP.						
2017		-1	0	0	-0.1	CCTR Transf To 2200-7000.000		
Explanation:	Support for SDG&E	TIMP.						
2017		0	0	0	-0.1	CCTR Transf To 2200-7000.000		
Explanation:	Support for SDG&E	TIMP.						
2017 Total		-1	6	0	-0.2			
2018		4	000	0	0.4	1-Sided Adj		
		-4	-206	U	-0.1	1-Sided Adj		
Explanation:	Incremental costs the	at are anticipa				n a non-GRC Catastrophic Event		
Explanation: 2018		at are anticipa				•		
2018	Memorandum Accou	nat are anticipa unt (CEMA). 0 nat are anticipa	ited to be reque	sted for reco	overy through	a non-GRC Catastrophic Event		
2018 Explanation: 2018	Memorandum Accou	nat are anticipa unt (CEMA). 0 nat are anticipa	ited to be reque	sted for reco	overy through	n a non-GRC Catastrophic Event 1-Sided Adj		
2018 Explanation:	Memorandum Accou	nat are anticipa unt (CEMA). 0 nat are anticipa unt (CEMA). 0 nat are anticipa	-5 sted to be reque	o sted for reco	0.0 overy through	1-Sided Adj n a non-GRC Catastrophic Event		

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

<u>Year</u>	Labor	NLbr	NSE	<u>FTE</u>	Adj Type
xplanation:		anticipated to be re			gh a non-GRC Catastrophic Event
2018	0	-162	0	0.0	1-Sided Adj
xplanation:	Incremental costs that are Memorandum Account (CE	•	equested for re		gh a non-GRC Catastrophic Event
2018	0	18	0	0.0	1-Sided Adj
xplanation:	Adjustment to account for r	nissed internal set	lements. Sem	npra incurred	costs for TIMP.
2018	0	-2	0	0.0	1-Sided Adj
xplanation:	Capitalized property tax				
2018	-14	0	0	-0.2	CCTR Transf To 2200-7000.000
xplanation:	Support for SDG&E TIMP.				
2018	-5	-1	0	-0.1	CCTR Transf To 2200-7000.000
xplanation:	Support for SDG&E TIMP.				
2018	-1	0	0	-0.1	CCTR Transf To 2200-7000.000
xplanation:	Support for SDG&E TIMP.				
2018 Total	-24	-359	0	-0.5	
2019	0	-31	0	0.0	1-Sided Adj
xplanation:	Incremental costs that are Memorandum Account (CE	•	equested for re	ecovery throu	gh a non-GRC Catastrophic Event
2019	0	-13	0	0.0	1-Sided Adj
xplanation:	Incremental costs that are Memorandum Account (CE	•	equested for re	ecovery throu	gh a non-GRC Catastrophic Event
2019	0	-40	0	0.0	1-Sided Adj
2019 explanation:		anticipated to be re			1-Sided Adj gh a non-GRC Catastrophic Event
	Incremental costs that are	anticipated to be re			•
explanation:	Incremental costs that are Memorandum Account (CE	anticipated to be re MA).	equested for re	ecovery throu	gh a non-GRC Catastrophic Event CCTR Transf To 2200-2011.000
xplanation: 2019	Incremental costs that are Memorandum Account (CE -9 Costs associated with blow	anticipated to be re EMA). 0 down reduction ac	equested for re	ecovery throu	gh a non-GRC Catastrophic Event CCTR Transf To 2200-2011.000
xplanation: 2019 xplanation: 2019	Incremental costs that are Memorandum Account (CE -9 Costs associated with blow remapping rules.	anticipated to be re EMA). 0 down reduction ac	equested for re 0 stivities that we	ecovery throu -0.1 ere erroneous	gh a non-GRC Catastrophic Event CCTR Transf To 2200-2011.000 sly mapped to TIMP due to
xplanation: 2019 xplanation: 2019	Incremental costs that are Memorandum Account (CE -9 Costs associated with blow remapping rules.	anticipated to be re EMA). 0 down reduction ac	equested for re 0 stivities that we	ecovery throu -0.1 ere erroneous	gh a non-GRC Catastrophic Event CCTR Transf To 2200-2011.000 sly mapped to TIMP due to
2019 Explanation: 2019 2019 Explanation:	Incremental costs that are Memorandum Account (CE -9 Costs associated with blow remapping rules. O Capitalized property tax	anticipated to be re EMA). 0 down reduction ac	equested for re 0 stivities that we	-0.1 ere erroneous 0.0	gh a non-GRC Catastrophic Event CCTR Transf To 2200-2011.000 Sly mapped to TIMP due to 1-Sided Adj
2019 Explanation: 2019 Explanation: 2019 Explanation: 2019	Incremental costs that are Memorandum Account (CE -9 Costs associated with blow remapping rules. O Capitalized property tax	anticipated to be resemble. Over the second	equested for re 0 stivities that we	-0.1 ere erroneous 0.0	gh a non-GRC Catastrophic Event CCTR Transf To 2200-2011.000 Sly mapped to TIMP due to 1-Sided Adj

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

Year	Labor	NLbr	NSE	FTE	Adj Type		
2019		0	0	-0.1	1-Sided Adj		
Explanation:	Costs incurred for PSEP						
2019	0	-1	0	0.0	1-Sided Adj		
Explanation:	Costs incurred for PSEP						
2019	0	0	0	-0.1	1-Sided Adj		
xplanation:	Support for TIMP SDG&E.						
2019	0	0	0	0.0	1-Sided Adj		
Explanation:	One-sided Entry, shareholder fun	ded OBE Refun	dable Code				
2019 Total	-11	-85	0	-0.5			
2020	0	-3	0	0.0	1-Sided Adj		
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	•	-	uested for re	ecovery through a non-GRC		
2020	0	-16	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	30	184	0	0.3	CCTR Transf From 2200-2296.001		
xplanation:	TIMP activity mapped to DIMP.						
2020	0	-2	0	0.0	1-Sided Adj		
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	•	-	uested for re	ecovery through a non-GRC		
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	-3	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		
2020	0	-3	0	0.0	1-Sided Adj		
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	•	-	uested for re	ecovery through a non-GRC		
2020	0	0	0	0.0	1-Sided Adj		
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	•	-	uested for re	ecovery through a non-GRC		

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

<u>Year</u>		<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type		
2020		0	0	0	0.0	1-Sided Adj		
Explanation:	Incremental COVID Catastrophic Event				uested for re	covery through a non-GRC		
2020		0	-3	0	0.0	1-Sided Adj		
xplanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).							
2020		0	-3	0	0.0	1-Sided Adj		
Explanation:	Incremental COVID Catastrophic Event		-		uested for re	covery through a non-GRC		
2020		0	-3	0	0.0	1-Sided Adj		
explanation:	Incremental COVID Catastrophic Event		-		uested for re	covery through a non-GRC		
2020		0	-3	0	0.0	1-Sided Adj		
Explanation:	Incremental COVID Catastrophic Event		-		uested for re	covery through a non-GRC		
2020		0	-4	0	0.0	1-Sided Adj		
xplanation:	Incremental COVID Catastrophic Event				uested for re	covery through a non-GRC		
2020		0	-1	0	0.0	1-Sided Adj		
xplanation:	Incremental COVID Catastrophic Event		-		uested for re	covery through a non-GRC		
2020		0	-1	0	0.0	1-Sided Adj		
explanation:	Incremental COVID Catastrophic Event		-		uested for re	covery through a non-GRC		
2020		0	-18	0	0.0	1-Sided Adj		
Explanation:	Incremental COVID Catastrophic Event		•		uested for re	covery through a non-GRC		
2020		0	-13	0	0.0	1-Sided Adj		
Explanation:	Incremental COVID Catastrophic Event		•		uested for re	covery through a non-GRC		
2020		0	-8	0	0.0	1-Sided Adj		
xplanation:			that are anticipant Account (CEM		uested for re	covery through a non-GRC		
	Catastrophic Event	Memorandun	(= = = = = = = = = = = = = = = = = = =	•				
2020	Catastrophic Event	0	-9	0	0.0	1-Sided Adj		

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

Workpaper.						
<u>Year</u>		<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2020		0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID Catastrophic Event		•		quested for re	ecovery through a non-GRC
2020		-67	-279	0	-0.5	CCTR Transf To 2200-2011.000
Explanation:	Costs associated was remapping rules.	vith blowdown	reduction activiti	es that were	erroneously	mapped to TIMP due to
2020		0	0	0	-0.1	CCTR Transf To 2200-2011.001
Explanation:	Transfer costs to G	OSI CC 2200	-2011.001 related	to SB1371	(BLP) Emiss	ions Strategy Program
2020		0	0	0	-0.1	CCTR Transf To 2200-2011.001
Explanation:	Transfer costs to G	OSI CC 2200	-2011.001 related	to SB1371	(BLP) Emiss	ions Strategy Program
2020		7	0	0	0.1	CCTR Transf To 2200-0244.000
Explanation:	Reversal of duplica	te transfer				
2020		-7	0	0	-0.1	CCTR Transf To 2200-0244.000
Explanation:	PI-Execution team	support of PS	EP projects.			
2020		0	2	0	0.0	CCTR Transf To 2200-2428.000
Explanation:	Costs are associate PSEP witness area		rt for O&M activit	ies by PSEP	resources a	nd should be transferred to the
2020		9	0	0	0.1	CCTR Transf To 2200-2428.000
Explanation:	Costs are associate PSEP witness area		rt for O&M activit	ies by PSEP	resources a	nd should be transferred to the
2020		0	-2	0	0.0	CCTR Transf To 2200-2428.000
Explanation:	PI Construction sup	port of PSEP	projects.			
2020		-9	0	0	-0.1	CCTR Transf To 2200-2428.000
Explanation:	Integrity Manageme	ent Assessme	nt team support	of PSEP proj	ects.	
2020		0	0	0	-0.1	CCTR Transf To 2200-2011.002
Explanation:	Transfer costs to G	OSI CC 2200	-2011.002 related	to SB1371	(BLM) Emiss	sions Strategy Program
2020		0	0	0	-0.1	CCTR Transf To 2200-2011.002
Explanation:	Transfer costs to G	OSI CC 2200	-2011.002 related	to SB1371	(BLM) Emiss	sions Strategy Program
2020		0	-237	0	0.0	CCTR Transf To 2200-0087.000
Explanation:	SIMP activity mapp	ed to TIMP. S	SIMP order 30080	5514.		
2020		-7	0	0	-0.1	1-Sided Adj
Explanation:	Costs incurred for I	PSEP				
2020		-9	0	0	-0.1	1-Sided Adj

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

Workpaper.	218001.000					
<u>Year</u>		<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
Explanation:	Costs incurred for F 2200-2428.	PSEP; FTE no	t adjusted to accou	ınt for ove	radjustment v	vith other adjustment to
2020		0	-2	0	0.0	1-Sided Adj
Explanation:	Costs incurred for F	PSEP				
2020		0	0	0	0.1	1-Sided Adj
xplanation:	Reverse over-adjus	stment of FTE				
2020		0	-1	0	0.0	1-Sided Adj
xplanation:	Capitalized propert	y tax				
2020		0	-2	0	0.0	CCTR Transf To 2200-0288.000
xplanation:	Costs for UGS MIT	and Tank/Ves	sel Inspections.			
2020		0	-1	0	0.0	CCTR Transf To 2200-7000.000
Explanation:	Support for SDG&E	TIMP.				
2020 Total		-53	-441	0	-0.7	
2021		0	-2	0	0.0	1-Sided Adj
xplanation:	Incremental COVID		-		quested for re	ecovery through a non-GRC
2021		0	-8	0	0.0	1-Sided Adj
xplanation:	Incremental COVID Catastrophic Event		-		quested for re	ecovery through a non-GRC
2021		0	0	0	0.0	CCTR Transf From 2200-2038.000
xplanation:	Transfer from FIMP	WKP 2TD004	4 to witness area W	VKP 2TD0	01, GOTD	
2021		0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID Catastrophic Event		-		quested for re	ecovery through a non-GRC
2021		0	-1	0	0.0	1-Sided Adj
explanation:	Incremental COVID Catastrophic Event				quested for re	ecovery through a non-GRC
2021		0	-1	0	0.0	1-Sided Adj
xplanation:	Incremental COVID Catastrophic Event		•		quested for re	ecovery through a non-GRC
2021		-262	-881	0	-2.1	1-Sided Adj
xplanation:	Adjustment to remo			SB1371 I	Emissions Sti	rategy Program that are being
2021		0	-2	0	0.0	1-Sided Adj

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

vvorkpaper:	21D001.000 - 11MP					
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	NSE	<u>FTE</u>	Adj Type	
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	-		uested for re	ecovery through a non-GRC	
2021	0	-3	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum			uested for re	covery through a non-GRC	
2021	0	-1	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	-		uested for re	ecovery through a non-GRC	
2021	0	0	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	-		uested for re	ecovery through a non-GRC	
2021	0	0	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	•		uested for re	ecovery through a non-GRC	
2021	0	-3	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum			uested for re	ecovery through a non-GRC	
2021	0	-2	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	-		uested for re	ecovery through a non-GRC	
2021	0	-3	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	-		uested for re	ecovery through a non-GRC	
2021	0	-2	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	-		uested for re	ecovery through a non-GRC	
2021	0	-5	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum			uested for re	ecovery through a non-GRC	
2021	0	-1	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	•		uested for re	ecovery through a non-GRC	
2021	0	-1	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related costs Catastrophic Event Memorandum	•		uested for re	ecovery through a non-GRC	
2021	0	-15	0	0.0	1-Sided Adj	

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	ecovery through a non-GRC
2021	0	-6	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	ecovery through a non-GRC
2021	0	-20	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	ecovery through a non-GRC
2021	0	-9	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	ecovery through a non-GRC
2021	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	ecovery through a non-GRC
2021	0	0	0	-0.1	1-Sided Adj
Explanation:	Adjustment to remove non-GRC correctovered through a separate regul		ne SB1371 E	missions St	rategy Program that are being
2021	0	0	0	0.0	1-Sided Adj
Explanation:	One-sided adjustment to offset one activiites.	-sided adjustm	ent in 2TD00	05.000 for co	osts that were incurred for TIMP
2021	-2	0	0	0.0	1-Sided Adj
Explanation:	One Sided Entry, IM support for CA	VAMA - exclud	ed from GRO		
2021	-1	0	0	0.0	1-Sided Adj
Explanation:	One Sided Entry, non-GRC IM supp	oort for PSEP,	Ref Code PE	2	
2021	-3	-112	0	0.0	1-Sided Adj
Explanation:	One Sided Entry, non-GRC IM supp	oort for PSEP,	Ref Code PE	2	
2021	-1	0	0	0.0	1-Sided Adj
Explanation:	One Sided Entry, non-GRC IM supp	oort for PSEP,	Ref Code PE	2	
2021	0	0	0	0.0	1-Sided Adj
Explanation:	One Sided Entry, non-GRC IM supp	oort for PSEP,	Ref PL2		
2021	0	0	0	0.0	1-Sided Adj
Explanation:	One-sided Entry, COVID charged in	ncorrect IO, SA	P correction	in 2022	
2021	0	37	0	0.0	1-Sided Adj
Explanation:	One-sided Entry, move Matl Compa	any Use to GRO	C from NonG	RC	
2021	0	-2	0	0.0	1-Sided Adj

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

Year	Labor	All by	NSE	FTE	Adi Tuno
Explanation:	One-sided Entry, move cost	NLbr element 6610123	NSE cap prop tax		Adj Type not balanced cost
2021	11	0	0	0.1	1-Sided Adj
Explanation:	One-sided Entry, move Matl	-	-		
2021	12	183	0	0.1	1-Sided Adj
Explanation:	One-sided Entry, move CE 6	900200 to GRC fr	om NonGRC		,
2021	-12	0	0	-0.1	1-Sided Adj
Explanation:	One-sided Entry, move costs	s to NonGRC, SEI	O Settlement	Shareholder	funded, IO 300813260
2021	-79	-6	0	-0.9	1-Sided Adj
Explanation:	One-sided Entry, move costs	s to NonGRC, SEI	O Settlement	Shareholder	funded, IO 300813262
2021	-7	0	0	0.0	1-Sided Adj
Explanation:	One-sided Entry, move costs	s to NonGRC, SEI	O Settlement	Shareholder	funded, IO 300813263
2021	-19	-323	0	-0.2	1-Sided Adj
Explanation:	One-sided Entry, move costs	s to NonGRC, SEI	Settlement:	Shareholder	funded, IO 300813264
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	One-sided Entry, costs are r	on-GRC			
2021 Total	-363	-1,196	0	-3.2	

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-Risk-1 Incident Related to the High Pressure System (Excluding Dig-in)

RAMP Line Item ID: C21 & M2 T1-T2

RAMP Line Item Name: Integrity Assessments & Remediation (HCA and Non-HCA)

Tranche(/s): Tranche1: Transmission - HCA; Tranche2: Transmission - non-HCA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost	2022 Forecast	2023 Forecast	2024 Forecast	202 RAMP (2020 Inc	
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	46,851	65,035	28,030	82,537	49,336	118,313
Tranche 2 Cost Estimate	56,805	94,703	89,092	52,896	45,324	80,490

Cost Estimate Changes from RAMP:

Costs are within the RAMP range. Since the RAMP report, SoCalGas determined that the Gas Transmission Safety Rule Part 1 verification of material properties and attributes should be considered a TIMP activity. C21 and M2 have been combined as a result.

GRC	Work	I Init/∆	ctivity I	امريم	Estimates
GRU	VVOIR	Ullium	CUVILVI	_evei	ESIIIIIaies

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RA Range Ac	
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 Miles assessed - HCA	202.40	126.70	56.60	169.30	155.00	198.00
Tranche 2 Miles assessed -	245.40	184.50	179.90	108.50	300.00	383.00

Work Unit Changes from RAMP:

Tranche 2

Units have been updated since the RAMP report based on project changes. SoCalGas continuously updates the TIMP assessment plan and manages projects in alignment within compliance cycles.

2.500

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	4.600	83.100	

85.500

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Workpaper: 2TD001.000 - TIMP

RSE Changes from RAMP:

RSE inputs have been updated since the RAMP report.

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Workpaper: 2TD002.000

Summary for Category: B. DIMP

		In 2021\$ (000) Inc	urred Costs	
	Adjusted-Recorded		Adjusted-Forecast	
	2021	2022	2023	2024
Labor	12,496	13,890	15,089	13,937
Non-Labor	32,824	34,528	37,709	39,221
NSE	0	0	0	0
Total	45,320	48,418	52,798	53,158
FTE	127.8	142.1	154.3	142.5

Workpapers belonging to this Category:

2TD002.000 DIMP				
Labor	12,496	13,890	15,089	13,937
Non-Labor	32,824	34,528	37,709	39,221
NSE	0	0	0	0
Total	45,320	48,418	52,798	53,158
FTE	127.8	142.1	154.3	142.5

Beginning of Workpaper 2TD002.000 - DIMP

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub 1. DIMP

Workpaper: 2TD002.000 - DIMP

Activity Description:

DIMP activities and projects such as DREAMS, GIPP, SLIP, DRIP and other various activities in compliance with 49 CFR Part 192, Subpart P.

Forecast Explanations:

Labor - Base YR Rec

SoCalGas company labor in support of the DIMP.

Non-Labor - Base YR Rec

SoCalGas non-labor costs (e.g., contracts) in support of the DIMP.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs									
		Adju	ısted-Recor	Ad	justed-Fored	cast					
Years	2017	2018	2019	2020	2021	2022	2023	2024			
Labor	12,821	15,794	14,313	13,416	12,496	13,891	15,090	13,938			
Non-Labor	29,354	31,179	30,621	34,954	32,824	34,528	37,709	39,221			
NSE	0	0	0	0	0	0	0	0			
Total	42,175	46,973	44,934	48,370	45,321	48,419	52,799	53,159			
FTE	137.8	192.3	180.2	135.6	127.8	142.1	154.3	142.5			

GAS INTEGRITY PROGRAMS Area:

Amy Kitson Witness: B. DIMP Category: Category-Sub: 1. DIMP

Workpaper: 2TD002.000 - DIMP

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs										
Forecast	Method	Base Forecast			Forec	ast Adjust	ments	Adjus	ted-Forec	ast	
Years	3	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Labor	Base YR Rec	12,496	12,496	12,496	1,394	2,593	1,441	13,890	15,089	13,937	
Non-Labor	Base YR Rec	32,824	32,824	32,824	1,704	4,885	6,397	34,528	37,709	39,221	
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0	
Tota	I	45,321	45,321	45,321	3,098	7,478	7,838	48,419	52,799	53,159	
FTE	Base YR Rec	127.8	127.8	127.8	14.3	26.5	14.7	142.1	154.3	142.5	

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type			
2022	239	171	0	410	2.5	1-Sided Adj			
xplanation:	This adjustment capture alignment with D.19-09 of non-state-of-the-art p Costs include a portion management, and develoased on projected spe	-051, SoCalGa pipe and O&M of DIMP mana elopment of pro	s is generally program man gement activ	forecasting a agement cost ities such as r	n increase to t s are partly dri eporting , data	he rate of replacement ven by this activity.			
2022	793	1,095	0	1,888	8.1	1-Sided Adj			
xplanation:	driven by the amount of costs are expected to in DIMP management acti	This adjustment captures DRIP incremental 2022 costs above the base year recorded. O&M costs are driven by the amount of inspections expected and are based on average per-unit costs; the per-unit costs are expected to increase slightly due to higher contract rates. Costs also include a portion of DIMP management activities such as reporting, data and records management, and development of prospective PAARs that have been allocated to each existing PAAR based on projected spend.							
2022	224	233	0	457	2.3	1-Sided Adj			
xplanation:	This adjustment captures GIPP incremental 2022 costs above the base year recorded. O&M costs are driven by the capital mitigations. Costs include a portion of DIMP management activities such as reporting, data and records management, and development of prospective PAARs that have been allocated to each existing PAAR based on projected spend.								
2022	138	205	0	343	1.4	1-Sided Adj			
xplanation:	This adjustment capture	es SLIP increm	ental 2022 co	osts above the	e base vear red	corded. O&M costs are			

driven by the amount of inspections expected and are based on average per-unit costs. Costs also include a portion of DIMP management activities such as reporting, data and records management, and development of prospective PAARs that have been allocated to each existing PAAR based on projected spend.

2022 Total	1,394	1,704	0	3,098	14.3	
2023	929	1,097	0	2,026	9.5	1-Sided Adj

Southern California Gas Company 2024 GRC - APP

Non-Shared Service Workpapers

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Workpaper: 2TD002.000 - DIMP

Workpaper:	2TD002.000 - DIMP							
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj_Type		
Explanation:	This adjustment captures alignment with D.19-09-0 of non-state-of-the-art pip Costs include a portion of management, and developased on projected spen	51, SoCalGa be and O&M p f DIMP mana opment of pro	s is generally program mana gement activi	forecasting an agement costs ties such as re	n increase to the are partly drive porting, data	ne rate of replacement ven by this activity. and records		
2023	1,137	2,174	0	3,311	11.6	1-Sided Adj		
Explanation:	This adjustment captures driven by the amount of i costs are expected to inc DIMP management activ prospective PAARs that I	nspections ex rease slightly ities such as i	spected and a due to highe reporting, dat	re based on a r contract rate a and records	verage per-un s. Costs also ii management,	it costs; the per-unit nclude a portion of and development of		
2023	257	294	0	551	2.6	1-Sided Adj		
Explanation:	This adjustment captures driven by the capital mition reporting, data and recornallocated to each existing	gations. Costs ds managem	s include a po ent, and deve	rtion of DIMP lopment of pro	management a	activities such as		
2023	270	1,320	0	1,590	2.8	1-Sided Adj		
	driven by the amount of i include a portion of DIMF and development of prosprojected spend.	P managemer pective PAAF	nt activities su Rs that have b	ch as reportin een allocated	g, data and re to each existir	cords management,		
2023 Total	2,593	4,885	0	7,478	26.5			
2024	505	1,008	0	1,513	5.1	1-Sided Adj		
Explanation:	alignment with D.19-09-0 of non-state-of-the-art pip Costs include a portion of	This adjustment captures DREAMS incremental 2024 costs above the base year recorded. In alignment with D.19-09-051, SoCalGas is generally forecasting an increase to the rate of replacement of non-state-of-the-art pipe and O&M program management costs are partly driven by this activity. Costs include a portion of DIMP management activities such as reporting, data and records management, and development of prospective PAARs that have been allocated to each existing PAAR						
2024	658	2,889	0	3,547	6.7	1-Sided Adj		
Explanation:	This adjustment captures DRIP incremental 2024 costs above the base year recorded. O&M costs are driven by the amount of inspections expected and are based on average per-unit costs; the per-unit costs are expected to increase slightly due to higher contract rates. Costs also include a portion of DIMP management activities such as reporting, data and records management, and development of prospective PAARs that have been allocated to each existing PAAR based on projected spend.							
2024	165	275	0	440	1.7	1-Sided Adj		
Explanation:	This adjustment captures driven by the capital mitig reporting, data and recor allocated to each existing	gations. Costs ds managem	s include a po ent, and deve	rtion of DIMP lopment of pro	management a	activities such as		

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Workpaper: 2TD002.000 - DIMP

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	NSE	<u>Total</u>	<u>FTE</u>	Adj_Type		
2024	113	2,225	0	2,338	1.2	1-Sided Adj		
Explanation:	driven by the amount of DI	This adjustment captures SLIP incremental 2024 costs above the base year recorded. O&M costs are driven by the amount of inspections expected and are based on average per-unit costs. Costs also include a portion of DIMP management activities such as reporting, data and records management, and development of prospective PAARs that have been allocated to each existing PAAR based on						
2024 Total	1,441	6,397	0	7,838	14.7			

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Workpaper: 2TD002.000 - DIMP

Determination of Adjusted-Recorded (Incurred Costs):

eriiiilation of Aujusteu	-Recorded (incurred Cos 2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
corded (Nominal \$)*					
Labor	10,152	12,416	11,523	11,107	10,419
Non-Labor	26,126	28,713	28,474	32,656	32,728
NSE	0	0	0	0	0
Total	36,278	41,129	39,997	43,763	43,147
FTE	117.2	163.1	151.0	113.8	105.7
justments (Nominal \$) **					
Labor	-321	0	-129	-30	202
Non-Labor	-43	-128	89	-184	96
NSE	0	0	0	0	0
Total	-364	-128	-40	-215	299
FTE	-0.1	0.0	-0.1	-0.3	1.9
corded-Adjusted (Nomin	al \$)				
Labor	9,831	12,416	11,393	11,077	10,622
Non-Labor	26,084	28,585	28,563	32,472	32,824
NSE	0	0	0	0	0
Total	35,914	41,001	39,956	43,549	43,446
FTE	117.1	163.1	150.9	113.5	107.6
cation & Sick (Nominal \$)				
Labor	1,666	2,137	2,160	1,952	1,875
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	1,666	2,137	2,160	1,952	1,875
FTE	20.7	29.2	29.3	22.1	20.2
calation to 2021\$					
Labor	1,324	1,241	760	388	0
Non-Labor	3,270	2,594	2,058	2,482	0
NSE	0	0	0	0	0
Total	4,594	3,835	2,818	2,869	0
FTE	0.0	0.0	0.0	0.0	0.0
corded-Adjusted (Consta	ant 2021\$)				
Labor	12,821	15,794	14,313	13,416	12,496
Non-Labor	29,354	31,179	30,621	34,954	32,824
NSE	0	0	0	0	0
Total	42,175	46,973	44,934	48,370	45,321
FTE	137.8	192.3	180.2	135.6	127.8

^{*} After company-wide exclusions of Non-GRC costs

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

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Workpaper: 2TD002.000 - DIMP

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs								
	Years	2017	2018	2019	2020	2021		
Labor		-321	0	-129	-30	202		
Non-Labor		-43	-128	89	-184	96		
NSE		0	0	0	0	0		
	Total –	-364	-128	-40	-215	299		
FTE		-0.1	0.0	-0.1	-0.3	1.9		

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adi Type
2017	-321	-43	0	-0.1	1-Sided Adj
Explanation:	Cost adjustment to amend Cap 002760 as well.	ital to O&M transfer	due to 201	6 activity. Or	ne-sided adjustment made in
2017	380	150	0	4.0	1-Sided Adj
Explanation:	DIMP O&M orders erroneously account for this change.	marked with Capita	ıl BC; equiv	alent one-sid	led adjustment made to D07560 to
2017	-380	-150	0	-4.0	1-Sided Adj
Explanation:	Reversal of previous adjustmen	nt - error.			
2017 Total	-321	-43	0	-0.1	
2018	0	-128	0	0.0	1-Sided Adj
Explanation:	Cost adjustment to amend Cap 002760 as well.	ital to O&M transfer	due to 201	6 activity. Or	ne-sided adjustment made in
2018	111	5	0	1.1	1-Sided Adj
Explanation:	DIMP O&M orders erroneously account for this change.	marked with Capita	ll BC; equiv	alent one-sid	led adjustment made to D07560 to
2018	-111	-5	0	-1.1	1-Sided Adj
Explanation:	Reversal of previous adjusmen	t - error.			
2018 Total	0	-128	0	0.0	
2019	-129	89	0	-0.1	1-Sided Adj
Explanation:	Cost adjustment to amend Cap 002760 as well.	ital to O&M transfer	due to 201	6 activity. Or	ne-sided adjustment made in
2019	69	1	0	0.6	1-Sided Adj

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Workpaper: 2TD002.000 - DIMP

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2019	-69	-1	0	-0.6	1-Sided Adj
Explanation:	Reversal of previous adjusment -	error.			
2019 Total	-129	89	0	-0.1	
2020	38	2	0	0.3	1-Sided Adj
Explanation:	DIMP O&M orders erroneously m account for this change.	arked with Capit	al BC; equiva	alent one-sid	ded adjustment made to D07560 to
2020	-30	-184	0	-0.3	CCTR Transf To 2200-2407.000
Explanation:	TIMP activity mapped to DIMP.				
2020	-38	-2	0	-0.3	1-Sided Adj
Explanation:	Reversal of previous adjusment -	error.			
2020 Total	-30	-184	0	-0.3	
2021	-2	0	0	-0.1	1-Sided Adj
Explanation:	Adjustment to remove non-GRC or recovered through a separate reg			missions St	rategy Program that are being
2021	3	8	0	0.1	CCTR Transf To 2200-0450.000
Explanation:	Transfer in costs from GOGD to C	OTD, WKP 2TE	0002; costs ir	curred for D	DIMP activity
2021	1	-8	0	0.1	CCTR Transf To 2200-0451.000
Explanation:	Transfer in from GOGD for DIMP	CPD orders			
2021	4	21	0	0.1	CCTR Transf To 2200-0451.000
Explanation:	Transfer in costs from GOGD to C	SOTD, WKP 2TE	0002; costs ir	curred for D	DIMP activity
2021	1	75	0	0.1	CCTR Transf To 2200-0453.000
Explanation:	Transfer in costs from GOGD to C	SOTD, WKP 2TD	0002; costs ir	curred for D	DIMP activity
2021	195	0	0	1.5	CCTR Transf To 2200-0483.000
Explanation:	Transfer in costs from GOGD to C	SOTD, WKP 2TD	0002; costs ir	curred for D	DIMP activity
2021	1	0	0	0.1	CCTR Transf To 2200-0566.000
Explanation:	Transfer in from CSFC for DIMP (CPD orders.			
2021 Total	202	96	0	1.9	

Southern California Gas Company 2024 GRC - APP

Non-Shared Service Workpapers

GAS INTEGRITY PROGRAMS Area:

Witness: Amy Kitson B. DIMP Category: 1. DIMP Category-Sub:

2TD002.000 - DIMP Workpaper:

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)

RAMP Line Item ID: C21 T1-T2

RAMP Line Item Name: DIMP - Distribution Risk Evaluation and Monitoring System (DREAMS)

Tranche(/s): Tranche1: Plastic - Main (VIPP); Tranche2: Steel -Main (BSRP)

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost	2022 Forecast	2023 Forecast	2024 Forecast	202 RAMP F (2020 Inc	Range
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	1,820	4,362	5,493	5,133	45,515	55,100
Tranche 2 Cost Estimate	4,001	1,869	2,354	2,200	19,505	23,615

Cost Estimate Changes from RAMP:

There were errors in forecasting for the RAMP report and O&M costs were inflated as a result. The GRC forecast is in line with what the RAMP forecast should have been.

GRC Work Unit/Activity Level 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			
Tranche 2 No feasible units	0.00	0.00	0.00	0.00	0.00	0.00			
Work Unit Changes from RAMP: No change to the work units from the RAMP report.									

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	0.300	1.200	
Tranche 2	0.100	0.900	
RSE Changes from RAMP: Refer to Capital workpapers.			

.....

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Workpaper: 2TD002.000 - DIMP

RAMP Item # 2

RAMP Activity

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)

RAMP Line Item ID: C20

RAMP Line Item Name: DIMP - Distribution Riser Inspection Program (DRIP)

Tranche(/s): Tranche1: Steel - Service

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost	2022 Forecast	2023 Forecast	2024 Forecast	202 RAMP F (2020 Inc	Range
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	20,478	22,365	23,788	24,024	22,260	28,445

Cost Estimate Changes from RAMP:

Costs estimates are within the RAMP range.

GRC Work Unit/Activity Level Estimates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast		RAMP Activities
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 # of Inspections	193,000.00	200,000.00	200,000.00	200,000.00	153,000.00	195,500.00

Work Unit Changes from RAMP:

SoCalGas considers the change in units from the RAMP report to be immaterial.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	115.500	21.200	

RSE Changes from RAMP:

RSE inputs have been updated since the RAMP report.

Southern California Gas Company 2024 GRC - APP

Non-Shared Service Workpapers

Area: **GAS INTEGRITY PROGRAMS**

Witness: Amy Kitson Category: B. DIMP 1. DIMP Category-Sub:

Workpaper: 2TD002.000 - DIMP

RAMP Item #3

RAMP Activity

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)

RAMP Line Item ID: C22

RAMP Line Item Name: DIMP - Gas Infrastructure Protection Program (GIPP)

Tranche(/s): Tranche1: Meter & Beyond

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost		2023 Forecast			2024 RAMP Range (2020 Incurred \$)	
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High	
Tranche 1 Cost Estimate	1,107	1,564	1,658	1,548	10,430	13,325	

Cost Estimate Changes from RAMP:

There were errors in forecasting for the RAMP report and O&M costs were inflated as a result. The GRC forecast is in line with what the RAMP forecast should have been.

GRC Work Unit/Activity Level Estimates

	2021 Historical	2022	2023	2024	2024 RA	
Unit of Measure	Embedded Activities	Forecast Activities	Forecast Activities	Forecast Activities	Range Act Low	ivities High
					-	
Tranche 1 No feasible units	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:

SoCalGas has determined that GIPP O&M activity is generally driven by capital activities presented in workpaper 002770 and therefore, O&M units are not forecasted nor applicable. Refer to workpaper 002770 for work unit estimates.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	36.300	221.000	

RSE Changes from RAMP:

Refer to Capital workpapers .

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Workpaper: 2TD002.000 - DIMP

RAMP Item # 4

RAMP Activity

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)

RAMP Line Item ID: C23

RAMP Line Item Name: DIMP - Sewer Lateral Inspection Project (SLIP)

Tranche(/s): Tranche1: Plastic Main & Plastic Services

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost	2022 Forecast	2023 Forecast	2024 Forecast	202 RAMP R (2020 Inc	Range
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	17,915	18,258	19,505	20,253	22,260	28,445

Cost Estimate Changes from RAMP:

Since the RAMP report, per unit costs have been evaluated and updated.

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP Range Activities	
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 # of Inspections	60,000.00	60,000.00	60,000.00	60,000.00	54,000.00	69,000.00

Work Unit Changes from RAMP:

The GRC forecasted units are within range of the RAMP report.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	i E	
Tranche 1	1 000	10.700		

RSE Changes from RAMP:

RSE inputs have been updated since the RAMP report .

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson C. SIMP Category: 2TD003.000 Workpaper:

Summary for Category: C. SIMP

		In 2021\$ (000) Inci	urred Costs	
	Adjusted-Recorded		Adjusted-Forecast	
	2021	2022	2023	2024
Labor	6,172	6,523	6,025	5,763
Non-Labor	10,628	12,352	11,410	10,912
NSE	0	0	0	0
Total	16,800	18,875	17,435	16,675
FTE	51.8	54.7	50.6	48.4

Workpapers belonging to this Category:

2TD003.000 SIMP				
Labor	6,172	6,523	6,025	5,763
Non-Labor	10,628	12,352	11,410	10,912
NSE	0	0	0	0
Total	16,800	18,875	17,435	16,675
FTE	51.8	54.7	50.6	48.4

Beginning of Workpaper 2TD003.000 - SIMP

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. SIMP
Category-Sub 1. SIMP

Workpaper: 2TD003.000 - SIMP

Activity Description:

SIMP activities such as well inspections, threat assessment, data management, and other related activities in compliance with state and federal regulatory requirements.

Forecast Explanations:

Labor - Base YR Rec

SoCalGas company labor in support of the SIMP.

Non-Labor - Base YR Rec

SoCalGas non-labor costs (e.g., contracts) in support of the SIMP.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs						
	Adjusted-Recorded				Adjusted-Forecast			
Years	2017	2018	2019	2020	2021	2022	2023	2024
Labor	2,506	4,294	5,289	5,629	6,172	6,523	6,025	5,763
Non-Labor	15,986	10,835	9,369	13,045	10,628	12,352	11,410	10,912
NSE	0	0	0	0	0	0	0	0
Total	18,492	15,128	14,658	18,674	16,800	18,875	17,435	16,675
FTE	19.9	36.0	41.7	46.8	51.8	54.7	50.6	48.4

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. SIMP
Category-Sub: 1. SIMP

Workpaper: 2TD003.000 - SIMP

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs										
Forecast	t Method	Base Forecast			Forec	Forecast Adjustments			Adjusted-Forecast		
Years	S	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Labor	Base YR Rec	6,172	6,172	6,172	351	-147	-409	6,523	6,025	5,763	
Non-Labor	Base YR Rec	10,628	10,628	10,628	1,724	782	284	12,352	11,410	10,912	
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0	
Tota	I	16,800	16,800	16,800	2,075	635	-125	18,875	17,435	16,675	
FTE	Base YR Rec	51.8	51.8	51.8	2.9	-1.2	-3.4	54.7	50.6	48.4	

Forecast Adjustment Details:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type	
2022	351	1,724	0	2,075	2.9	1-Sided Adj	

Explanation:

This adjustment captures incremental SIMP 2022 costs above the base year recorded. SIMP costs include program management, data & records management, risk & threat evaluation, regulatory reporting, and well inspections. Activity levels are primarily driven by well inspections, which are forecasted to decrease in 2022 to 37 wells; however, program costs are expected to increase due to additional data management and tools/process evaluation initiatives.

2022 Total	351	1,724	0	2,075	2.9	
2023	-147	782	0	635	-1.2	1-Sided Adj

Explanation:

This adjustment captures incremental SIMP 2023 costs above the base year recorded. SIMP costs include program management, data & records management, risk & threat evaluation, regulatory reporting, and well inspections. Activity levels are primarily driven by well inspections, which are forecasted to decrease to 25 wells; however, program costs are expected to increase due to data management and tools/process evaluation initiatives.

2023 Total	-147	782	0	635	-1.2	
2024	-409	284	0	-125	-3.4	1-Sided Adj

Explanation:

This adjustment captures SIMP 2023 costs as compared to the base year recorded. SIMP costs include program management, data & records management, risk & threat evaluation, regulatory reporting, and well inspections. Activity levels are primarily driven by well inspections, which are forecasted to decrease to 22 wells.

0 -125 -3.4	0	284	-409	2024 Total
-------------	---	-----	------	------------

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. SIMP
Category-Sub: 1. SIMP

Workpaper: 2TD003.000 - SIMP

Determination of Adjusted-Recorded (Incurred Costs):

•	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
ecorded (Nominal \$)*					
Labor	2,109	3,559	4,214	4,647	5,245
Non-Labor	14,135	9,909	8,741	11,133	9,759
NSE	0	0	0	0	0
Total	16,244	13,468	12,955	15,780	15,005
FTE	18.1	32.3	36.0	39.2	43.5
djustments (Nominal \$) **					
Labor	-188	-183	-4	0	1
Non-Labor	70	24	-2	986	869
NSE	0	0	0	0	0
Total	-117	-160	-5	986	869
FTE	-1.3	-1.8	-1.1	0.0	0.1
ecorded-Adjusted (Nomina	al \$)				
Labor	1,922	3,375	4,210	4,647	5,246
Non-Labor	14,205	9,933	8,739	12,119	10,628
NSE	0	0	0	0	0
Total	16,127	13,308	12,950	16,766	15,874
FTE	16.9	30.5	35.0	39.2	43.6
acation & Sick (Nominal \$))				
Labor	326	581	798	819	926
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	326	581	798	819	926
FTE	3.0	5.5	6.7	7.6	8.2
scalation to 2021\$					
Labor	259	337	281	163	0
Non-Labor	1,781	901	630	926	0
NSE	0	0	0	0	0
Total	2,040	1,239	910	1,089	0
FTE	0.0	0.0	0.0	0.0	0.0
ecorded-Adjusted (Consta	int 2021\$)				
Labor	2,506	4,294	5,289	5,629	6,172
Non-Labor	15,986	10,835	9,369	13,045	10,628
NSE	0	0	0	0	0
Total	18,492	15,128	14,658	18,674	16,800
FTE	19.9	36.0	41.7	46.8	51.8

^{*} After company-wide exclusions of Non-GRC costs

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

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. SIMP
Category-Sub: 1. SIMP

Workpaper: 2TD003.000 - SIMP

Summary of Adjustments to Recorded:

	In Nominal \$ (000) Incurred Costs										
Years 2017 2018 2019 2020 2021											
Labor		-188	-183	-4	0	0.748					
Non-Labor		70	24	-2	986	869					
NSE		0	0	0	0	0					
	Total –	-117	-160	-5	986	869					
FTE		-1.3	-1.8	-1.1	0.0	0.1					

Detail of Adjustments to Recorded:

<u>Year</u>	<u>Labor</u> <u>!</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type				
2017	-156	-5	0	-1.1	CCTR Transf To 2200-0279.000				
Explanation:	Costs associated with support for UGS F	Field Mainten	ance activity	/, which is a r	non-SIMP activity.				
2017	-31	-8	0	-0.2	CCTR Transf To 2200-0279.000				
Explanation:	Costs associated with support for UGS F	Field Mainten	ance activity	/, which is a r	non-SIMP activity.				
2017	0	83	0	0.0	1-Sided Adj				
Explanation:	Adjustment to account for missed interna	al settlements	s. Sempra ir	curred costs	for SIMP.				
2017 Total	-188	70	0	-1.3					
2018	-102	-9	0	-1.1	CCTR Transf To 2200-0279.000				
Explanation:	Costs associated with support for UGS F	Field Mainten	ance activity	/, which is a r	non-SIMP activity.				
2018	0	-8	0	0.1	CCTR Transf To 2200-0279.000				
Explanation:	Costs associated with support for UGS Field Maintenance activity, which is a non-SIMP activity.								
2018	-82	-9	0	-0.8	CCTR Transf To 2200-0279.000				
Explanation:	Costs associated with support for UGS F	Field Mainten	ance activity	/, which is a r	non-SIMP activity.				
2018	0	-6	0	0.0	CCTR Transf To 2200-0288.000				
Explanation:	Costs associated with support for the Sto	orage Monito	ring Prograr	n, which is no	ot a SIMP program.				
2018	0	-6	0	0.0	CCTR Transf To 2200-0288.000				
Explanation:	Costs incurred for AGS activity (pressure	e monitoring)							
2018	0	57	0	0.0	1-Sided Adj				
Explanation:	Adjustment to account for missed interna	al settlements	s. Sempra ir	curred costs	for SIMP.				
2018	0	6	0	0.0	CCTR Transf To 2200-0288.000				
Explanation:	Adjustment to offset a duplicate transfer.								
2018 Total	-183	24	0	-1.8					

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. SIMP
Category-Sub: 1. SIMP

Workpaper: 2TD003.000 - SIMP

<u>Year</u>	<u>ı</u>	<u>abor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type		
2019		-2	0	0	-0.6	CCTR Transf To 2200-0279.000		
Explanation:	Costs associated wit	h support fo	r UGS Field Mai	ntenance acti	vity, which is	a non-SIMP activity.		
2019		0	0	0	0.0	CCTR Transf To 2200-0279.000		
Explanation:	Costs associated wit	h support fo	r UGS Field Maiı	ntenance acti	vity, which is	a non-SIMP activity.		
2019		-2	0	0	-0.5	CCTR Transf To 2200-0279.000		
xplanation:	Costs associated wit	h support fo	r UGS Field Mai	ntenance acti	vity, which is	a non-SIMP activity.		
2019		0	-3	0	0.0	CCTR Transf To 2200-0288.000		
xplanation:	Costs associated wit	h support fo	r the Storage Mo	onitoring Prog	ram, which is	s not a SIMP program.		
2019		0	-3	0	0.0	CCTR Transf To 2200-0288.000		
Explanation:	Costs incurred for AC	GS activity (բ	oressure monitor	ing)				
2019		0	2	0	0.0	1-Sided Adj		
xplanation:	Adjustment to accou	nt for misse	d internal settlem	nents. Sempra	a incurred co	sts for SIMP.		
2019		0	3	0	0.0	CCTR Transf To 2200-0288.000		
Explanation:	Adjustment to offset a duplicate transfer.							
2019 Total		-4	-2	0	-1.1			
2020		0	-4	0	0.0	1-Sided Adj		
xplanation:					uested for re	ecovery through a non-GRC		
	Catastrophic Event N	<i>M</i> emorandur	n Account (CEM	A).				
2020		0	-1	0	0.0	1-Sided Adj		
xplanation:	Incremental COVID- Catastrophic Event N		•		uested for re	ecovery through a non-GRC		
2020		0	-4	0	0.0	1-Sided Adj		
xplanation:	Incremental COVID- Catastrophic Event N		•		uested for re	ecovery through a non-GRC		
2020		0	-3	0	0.0	1-Sided Adj		
Explanation:	Incremental COVID- Catastrophic Event N				uested for re	ecovery through a non-GRC		
2020		0	-1	0	0.0	CCTR Transf To 2200-0288.000		
xplanation:	Costs associated wit	h support fo	r the Storage Mo	onitoring Prog	ram, which is	s not a SIMP program.		
2020		0	-22	0	0.0	CCTR Transf To 2200-0325.000		
Explanation:	Consultant costs for not a SIMP funded a	-	ment of EAM stra	ategy that we	re charged to	Integrity Management. EAM is		
		•	0	0	0.0	CCTR Transf To 2200-2011.001		
2020		0	0	0	0.0	CCTR Transi to 2200-2011.001		

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. SIMP
Category-Sub: 1. SIMP

Workpaper: 2TD003.000 - SIMP

<u>Year</u>		<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2020		0		0	0.0	CCTR Transf To 2200-0288.000
xplanation:	Costs incurred for A		-		0.0	
2020		0	783	0	0.0	1-Sided Adj
xplanation:	Adjustment to acco	unt for missed	l internal settlem	nents. Sempra	a incurred co	sts for SIMP.
2020		0	1	0	0.0	CCTR Transf To 2200-0288.000
xplanation:	Adjustment to offse	t a duplicate t	ransfer.			
2020		0	237	0	0.0	CCTR Transf From 2200-0256.000
xplanation:	SIMP activity mapp	ed to TIMP. S	IMP order 3008	05514.		
2020 Total		0	986	0	0.0	
2021		0	-4	0	0.0	1-Sided Adj
xplanation:	Incremental COVID Catastrophic Event		•		uested for re	ecovery through a non-GRC
2021		0	-1	0	0.0	1-Sided Adj
xplanation:	Incremental COVID Catastrophic Event		•		uested for re	ecovery through a non-GRC
2021		0	-4	0	0.0	1-Sided Adj
explanation:	Incremental COVID Catastrophic Event		•		uested for re	ecovery through a non-GRC
2021		0	-2	0	0.0	1-Sided Adj
xplanation:	Incremental COVID Catastrophic Event		-		uested for re	ecovery through a non-GRC
2021		-1	0	0	0.0	1-Sided Adj
xplanation:	One Sided Entry, IN	/I support for (CAVAMA - exclu	ded from GR	C	
2021		0	-1	0	0.0	1-Sided Adj
explanation:	Incremental COVID Catastrophic Event		•		uested for re	ecovery through a non-GRC
2021		0	0	0	0.0	1-Sided Adj
xplanation:	One Sided Entry, no	on-GRC IM su	ipport for PSEP	, Ref Code PS	SC .	
2021		0	-51	0	0.0	1-Sided Adj
xplanation:	One Sided Entry, S	IMP Application	on filing fees. No	t eligible for b	alancing.	
2021		2	78	0	0.1	1-Sided Adj
xplanation:	One Sided Entry to	move costs fr	om NonGRC SI	MP to GRC; o	cost mapping	error
2021		0	854	0	0.0	1-Sided Adj
xplanation:	One Sided Entry to	move interco	mpany costs fro	m Sempra int	ercompany t	o SIMP to GRC

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. SIMP
Category-Sub: 1. SIMP

Workpaper: 2TD003.000 - SIMP

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type	
2021 Total	1	869	0	0.1		

Non-Shared Service Workpapers

GAS INTEGRITY PROGRAMS Area:

Witness: Amy Kitson C. SIMP Category: Category-Sub: 1. SIMP

Workpaper: 2TD003.000 - SIMP

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-Risk-4 Incident Related to the Storage System (Excluding Dig-in)

RAMP Line Item ID: C01

RAMP Line Item Name: Integrity Demonstration, Verification, and Monitoring Practices

Tranche(/s): Tranche1: Underground Components

GRC Forecast Cost Estimates (\$000)

	2021 Historical	2022	2023	2024	2024 RAMP Range	
	Embedded Cost (2021 \$)	Forecast (2021 \$)	Forecast (2021 \$)	Forecast (2021 \$)	(2020 Inc Low	urred \$) High_
Tranche 1 Cost Estimate	16,800	18,875	17,435	16,675	14,834	17,957

Cost Estimate Changes from RAMP:

Forecasted costs are 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 # of assets assessed - Wells	52.00	37.00	25.00	22.00	58.00	70.00

Work Unit Changes from RAMP:

Forecasted units have been updated since the time of the RAMP report.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	4.300	0.300	

RSE Changes from RAMP:

RSE inputs have been updated since the RAMP report.

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson D. FIMP Category: 2TD004.000 Workpaper:

Summary for Category: D. FIMP

	In 2021\$ (000) Incurred Costs								
	Adjusted-Recorded		Adjusted-Forecast						
	2021	2022	2023	2024					
Labor	0	0	0	6,081					
Non-Labor	0	0	0	8,872					
NSE	0	0	0	0					
Total	0	0		14,953					
FTE	-0.7	0.0	0.0	50.7					

Workpapers belonging to this Category:

2TD004.000 FIMP				
Labor	0	0	0	6,081
Non-Labor	0	0	0	8,872
NSE	0	0	0	0
Total	0	0	0	14,953
FTE	-0.7	0.0	0.0	50.7

Beginning of Workpaper 2TD004.000 - FIMP

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: D. FIMP
Category-Sub 1. FIMP

Workpaper: 2TD004.000 - FIMP

Activity Description:

FIMP is a newly developed integrity management program that will enhance the safety of facilities in the SoCalGas system by applying integrity management principles to facility equipment. FIMP includes facilities such as compressor stations, storage facilities, pressure limiting stations, natural gas vehicle stations, renewable natural gas facilities and associated equipment. FIMP O&M activities include inspections, remediation, and other associated activities.

Forecast Explanations:

Labor - Zero-Based

SoCalGas company labor in support of the FIMP.

Non-Labor - Zero-Based

SoCalGas non-labor costs (e.g., contracts) in support of the FIMP.

NSE - Zero-Based

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs									
		Adjı	ısted-Recor	ded		Ad	justed-Fore	cast			
Years	2017	2018	2019	2020	2021	2022	2023	2024			
Labor	0	0	0	0	0	0	0	6,081			
Non-Labor	0	0	0	0	0	0	0	8,872			
NSE	0	0	0	0	0	0	0	0			
Total		0	0	0	0	0	0	14,953			
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.7			

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: D. FIMP
Category-Sub: 1. FIMP

Workpaper: 2TD004.000 - FIMP

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs										
Forecast	t Method	Base Forecast			Forecast Adjustments			Adjus	Adjusted-Forecast		
Years	5	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Labor	Zero-Based	0	0	0	0	0	6,081	0	0	6,081	
Non-Labor	Zero-Based	0	0	0	0	0	8,872	0	0	8,872	
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	
Tota	I	0	0	0	0	0	14,953	0	0	14,953	
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	50.7	0.0	0.0	50.7	

Forecast Adjustment Details:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type
2022 Total	0	0	0	0	0.0	
2023 Total	0	0	0	0	0.0	
2024	4,704	6,370	0	11,074	39.2	1-Sided Adj

Explanation:

Zero-based forecast for FIMP Storage activities. The FIMP will be a new incremental program in 2024 that provides a comprehensive, systematic, and integrated approach for managing and enhancing the safety and integrity of facilities and associated equipment. Costs include activities related to program development; pressure vessel, tank, and electrical equipment inspections and remediation for 4 facilities; data collection, integration, and management; and process improvement. Refer to supplemental workpapers in workpaper 2TD004.000 for more detail.

2024 **Explanation**:

Zero-based forecast for FIMP Transmission activities. The FIMP will be a new incremental program in 2024 that provides a comprehensive, systematic, and integrated approach for managing and enhancing the safety and integrity of facilities and associated equipment. Costs include activities related to program development; pressure vessel, tank, and electrical equipment inspections and remediation for 9 stations; data collection, integration, and management; and process improvement. Refer to supplemental workpapers in workpaper 2TD004.000 for more detail.

2,482

2024

25

1,352

1,372

1,130

1,397

0.2

11.3

1-Sided Adj

1-Sided Adj

Explanation:

Zero-based forecast for FIMP Distribution activities. The FIMP will be a new incremental program in 2024 that provides a comprehensive, systematic, and integrated approach for managing and enhancing the safety and integrity of facilities and associated equipment. Costs include activities related to program development; pressure vessel, tank, and electrical equipment inspections and remediation for 15 NGV facilities; data collection, integration, and management; and process improvement. Refer to supplemental workpapers in workpaper 2TD004.000 for more detail.

2024 Total

6.081

8.872

14.953

50.7

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: D. FIMP
Category-Sub: 1. FIMP

Workpaper: 2TD004.000 - FIMP

Determination of Adjusted-Recorded (Incurred Costs):

retermination of Aujusteu-i	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	441
Non-Labor	0	0	0	0	1,759
NSE	0	0	0	0	0
Total	0	0	0	0	2,200
FTE	0.0	0.0	0.0	0.0	3.9
Adjustments (Nominal \$) **					
Labor	0	0	0	0	-440
Non-Labor	0	0	0	0	-1,760
NSE	0	0	0	0	0
Total	0	0	0	0	-2,200
FTE	0.0	0.0	0.0	0.0	-4.6
Recorded-Adjusted (Nomina	I \$)				
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	-0.7
/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 (Constar	nt 2021\$)				
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total		0			
FTE	0.0	0.0	0.0	0.0	-0.7

^{*} After company-wide exclusions of Non-GRC costs

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

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: D. FIMP
Category-Sub: 1. FIMP

Workpaper: 2TD004.000 - FIMP

Summary of Adjustments to Recorded:

	In Nominal \$ (000) Incurred Costs										
	Years	2017	2018	2019	2020	2021					
Labor		0	0	0	0	-440					
Non-Labor		0	0	0	-0.375	-1,760					
NSE		0	0	0	0	0					
	Total	0	0	0	-0.375	-2,200					
FTE		0.0	0.0	0.0	0.0	-4.6					

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		•	e requested t	for recovery through a non-GRC
2020 Total	0	0	0	0.0	
2021	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related Catastrophic Event Memora		•	e requested t	for recovery through a non-GRC
2021	0	0	0	0.0	
Explanation:	Transfer from FIMP WKP 2	TD004 to witness	area WKP 21	TD001, GOT	D
2021	-12	0	0	-0.1	CCTR Transf To 2200-0285.000
Explanation:	Transfer from FIMP WKP 2	TD004 to base bus	siness WKP	2US001; bas	se O&M activity
2021	-205	-1,641	0	-2.0	CCTR Transf To 2200-0288.000
Explanation:	Transfer from FIMP WKP 2	TD004 to base bus	siness WKP	2US001; bas	se O&M activity
2021	0	-4	0	0.0	CCTR Transf To 2200-0289.000
Explanation:	Transfer from FIMP WKP 2	TD004 to base bus	siness WKP	2US001; bas	se O&M activity
2021	-23	0	0	-0.2	CCTR Transf To 2200-0296.000
Explanation:	Transfer from FIMP WKP 2	TD004 to base bus	siness WKP	2US001; bas	se O&M activity
2021	-176	-7	0	-1.4	CCTR Transf To 2200-1107.000
Explanation:	Transfer from FIMP WKP 2 workgroup in which the acti			er to align the	e historical expenses with the

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: D. FIMP
Category-Sub: 1. FIMP

Workpaper: 2TD004.000 - FIMP

V		- l	All ba	NOF		Address
<u>Year</u>	<u>L</u>	<u>abor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2021		0	-1	0	-0.1	CCTR Transf To 2200-2265.000
Explanation:	Transfer from FIMP V	VKP 2TD004	o base business	WKP 2EN	002; base O	&M activity
2021		0	0	0	0.0	CCTR Transf To 2200-2300.000
Explanation:	Transfer from FIMP V workgroup in which the			in order to	align the his	torical expenses with the
2021		0	0	0	-0.1	CCTR Transf To 2200-1178.000
Explanation:	Transfer from FIMP V	VKP 2TD004	o witness area (GOEN; base	e business a	ctivity.
2021		-1	0	0	-0.1	CCTR Transf To 2200-1219.000
Explanation:	Transfer from FIMP V	VKP 2TD004	o base business	WKP 2GT	001; base O	&M activity
2021		-1	0	0	-0.1	CCTR Transf To 2200-2173.000
Explanation:	Transfer from FIMP V	VKP 2TD004	o base business	WKP 2GT	001; base O	&M activity
2021		-2	0	0	-0.1	CCTR Transf To 2200-0322.000
Explanation:	Transfer from FIMP V workgroup in which the			22 in order	to align the	historical expenses with the
2021		0	0	0	-0.1	CCTR Transf To 2200-1096.000
Explanation:	Transfer from FIMP V	VKP 2TD004	o witness area (GOEN; base	e business a	ctivity.
2021		-20	-1	0	-0.2	CCTR Transf To 2200-0026.000
Explanation:	Transfer from FIMP V workgroup in which the			26 in order	to align the	historical expenses with the
2021		0	-103	0	-0.1	CCTR Transf To 2200-0255.000
Explanation:	Transfer from FIMP V	VKP 2TD004	o base business	WKP 2GT	001; base O	&M activity
2021 Total		-440	-1,760	0	-4.6	

Non-Shared Service Workpapers

Area: **GAS INTEGRITY PROGRAMS**

Witness: Amy Kitson Category: D. FIMP Category-Sub: 1. FIMP

Workpaper: 2TD004.000 - FIMP

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-Risk-1 Incident Related to the High Pressure System (Excluding Dig-in)

RAMP Line Item ID: C20

RAMP Line Item Name: Facilities Integrity Management Program (FIMP) - Transmission

Tranche(/s): Tranche1: Transmission Facilities

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	2,482	3,284	6,100

Cost Estimate Changes from RAMP:

The current forecast is informed by updated cost assumptions based on existing inspection activities. Refer to supplemental workpapers in workpaper 2TD004.000 for more detail.

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 assets	0.00	0.00	0.00	9.00	1.00	10.00

Work Unit Changes from RAMP:

Upon further analysis, SoCalGas has determined that the 2024 activities under the FIMP should be performed on 5 compressor stations and 4 Renewable Natural Gas (RNG) stations, which is within range.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	3.100	0.000	

RSE Changes from RAMP:

RSE Score has been calculated since RAMP report.

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: D. FIMP
Category-Sub: 1. FIMP

Workpaper: 2TD004.000 - FIMP

RAMP Item # 2

RAMP Activity

RAMP Chapter: SCG-Risk-4 Incident Related to the Storage System (Excluding Dig-in)

RAMP Line Item ID: M01

RAMP Line Item Name: Facility Integrity Management Program (FIMP) - Storage

Tranche(/s): Tranche1: Aboveground Facilities

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	11,074	1,330	2,470

Cost Estimate Changes from RAMP:

The FIMP scope has been updated since the RAMP report to incorporate new integrity related activities such as pre-assessment and post-assessment evaluations. In addition, FIMP's scope expanded to include electrical and rotating equipment at storage facilities. This update supports the application of integrity management processes above and beyond existing operational activities and is intended to enhance processes for managing the safety and integrity of facilities infrastructure. Refer to supplemental workpapers in workpaper 2TD004.000 for more detail.

CDC W	ark IIni	t/Activit	v I aval	Fstimates

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 assets	0.00	0.00	0.00	4.00	1.00	4.00

assessed - Storage Facilities

Work Unit Changes from RAMP:

No change to the work units since the RAMP report.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE
Tranche 1	1.000	0.000

RSE Changes from RAMP:

RSE score has been calculated since RAMP report.

Non-Shared Service Workpapers

Area: **GAS INTEGRITY PROGRAMS**

Witness: Amy Kitson Category: D. FIMP 1. FIMP Category-Sub:

Workpaper: 2TD004.000 - FIMP

RAMP Item #3

RAMP Activity

RAMP Chapter: SCG-Risk-1 Incident Related to the High Pressure System (Excluding Dig-in)

RAMP Line Item ID: NEW 01

RAMP Line Item Name: NEW - Facility Integrity Management Program (FIMP) - Distribution

Tranche(/s): Tranche1: Supply Line (Facilities)

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	1,397	0	0

Cost Estimate Changes from RAMP:

Applying the FIMP to distribution facilities was not considered at the time of the RAMP report. This update supports the application of integrity management processes above and beyond existing operational activities and is intended to enhance processes for managing the safety and integrity of facilities infrastructure. Refer to supplemental workpapers in workpaper 2TD004.000 for more detail.

GRC Work Unit/Activity Level Estimates

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RA	
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 # of assets assessed - Facilities	0.00	0.00	0.00	15.00	0.00	0.00

Work Unit Changes from RAMP:

As noted above, applying the FIMP to distribution facilities was not considered at the time of the RAMP report. The updated forecast of 2024 scope includes pressure vessels and electrical equipment at 15 Natural Gas Vehicle (NGV) facilities.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	15.500	0.000	

RSE Changes from RAMP:

RSE score has been calculated since RAMP report.

Supplemental Workpapers for Workpaper 2TD004.000

FIMP SCG O&M Supplemental Workpaper

	Table 1: 2024 SCG O&M Non-Shared Services Forecast											
Organization	Workpaper #	Category	Labor	Non-labo	r	Total		Units	Unit Measure	\$/Un	nit	Narrative
		Data Management	\$ 7,800	\$	992,280	\$	1,000,080	0		\$		Data management costs include data collection, record research, data entry and data integration. In addition, this cost includes process improvement by implementing an inspection workflow lifecycle solution to track fixed equipment inspections throughout the lifecycle of the equipment.
		Electrical Equipment	٠ .	ė	287,025	¢	287,025	15	Facilities	ė		Electrical equipment costs include planning and scheduling support for inspections, NFPA 708 inspections, repairs and remediations resulting from inspections at SoCalGas' 15 Natural Gas Vehicle stations.
Distribution	2TD004.000	Electrical Equipment	· -	,	207,023	,	207,023	13	racincies	7		Program management costs include program development and governance, program performance
		Program Management	\$ 17,100	\$	3,637	\$	20,737	0		\$		monitoring and tracking.
		Fixed Equipment	\$ -	\$	89,200		89,200	28	Equipment	\$		Fixed equipment costs include pressure vessels preassessment, assessment and post assessment activities for approximately 28 vessels at 15 Natural Gas Vehicle stations. These activities include planning, scheduling, equipment preparation for inspection, inspection and data analysis, post inspection data QA/QC, repairs and alterations as a result of inspections.
Distribution Totals			\$ 24,900	\$	1,372,142	\$	1,397,042					
		Data Management	\$ 1,248,000	\$	364,800	\$	1,612,800	0		\$		Data management costs include data collection, record research, data entry and data integration. In addition, this cost includes process improvement by implementing an inspection workflow lifecycle solution to track fixed equipment inspections throughout the lifecycle of the equipment.
Storage	2TD004.000	Electrical Equipment	\$ 360,000	\$	685,688	\$	1,045,688	4	Facilities	\$ 2		Electrical equipment costs include planning and scheduling support for inspections, NFPA 70B inspections, repairs and remediations resulting from inspections at SoCalGas' 4 Storage facilities. Rotating equipment costs include inspections on rotating equipment, repairs resulting from
		Rotating Equipment	\$ 120,000	\$	240,000	\$	360,000	6	Compressor	\$	60,000	inspections at 6 compressor stations located within storage facilities.
		Program Management	\$ 2,736,000	\$	581,963	\$	3,317,963	0		\$		Program management costs include scoping, identification of threats and risk assessment, program development, program performance monitoring, governance and tracking.
		Fixed Equipment	\$ 240,000		4,497,796	-		520	Equipment	\$		Fixed equipment costs include pressure vessels, tanks, and piping pre-assessment, assessment and post assessment activities for approximately 520 equipment at 4 storage facilities. These activities include equipment preparation for inspection, data analysis, post inspection data QA/QC, repairs and alterations as a result of inspections.
Storage Totals			\$ 4,704,000	\$	6,370,247	\$ 1	1,074,247					
		Data Management	\$ 273,000	\$	88,920	\$	361,920	0		\$		Data management costs include data collection, record research, data entry and data integration. In addition, this cost includes process improvement by implementing an inspection workflow lifecycle solution to track fixed equipment inspections throughout the lifecycle of the equipment.
		Electrical Equipment	\$ 240,000	\$	447,200	\$	687,200	9	Compressor	\$		Electrical equipment costs include planning and scheduling support for inspections, NFPA 70B inspections, repairs and remediations resulting from inspections at SoCalGas' 5 compressor stations and 4 renewable natural gas facilities.
Transmission	2TD004.000	Rotating Equipment	\$ 120,000	\$	110,000	\$	230,000	5	Compressor	\$		Rotating equipment costs include inspections on rotating equipment, repairs resulting from inspections at 5 compressor stations.
		Program Management	\$ 598,500	\$	141,854	\$	740,354	0		\$		Program management costs include scoping, identification of threats and risk assessment, program development, program performance monitoring, governance and tracking.
		Fixed Equipment	\$ 120,000		341,800		461,800	75	Equipment	\$		Fixed equipment costs include pressure vessels, tanks, and piping pre-assessment, assessment and post assessment activities for approximately 75 equipment at 5 compressor stations. These activities include equipment preparation for inspection, data analysis, post inspection data QA/QC, repairs and alterations as a result of inspections.
Transmission Totals			\$ 1,351,500		1,129,774							
	Total Combined		\$ 6,080,400	\$	8,872,163	\$ 1	4,952,563					

Notes:
1-19.5%, 80%, and 0.5% of the total Gas Engineering and IM&SP non-labor costs (Shown in Table 3) were distributed between Transmission, Storage, and Distribution, respectively.
2-17.5%, 80%, and 0.5% of the total Gas Engineering and IM&SP labor costs (Shown in Table 3) were distributed between Transmission, Storage, and Distribution, respectively.
3-Gas Engineering and IM&SP Rotating equipment costs (Shown in Table 3) were only distributed between Storage and Transmission.

	Table 2: 2024 O&M Shared Services with SDG&E									
Organization	Workpaper #	Category	Labor	Non-labor	To	tal	Units	Unit Measure	\$/Unit	Narrative
Distribution	2200-7002.000	Shared Services	\$49,80	9	\$0	\$49,800	0			These costs are associated to labor for program development.
Transmission	2200-7002.000	Shared Services	\$49,80	9	\$0	\$49,800	0			These costs are associated to labor for program development.
Total	Total Shared Services \$ 99,600 \$ - \$ 99,600 \$ -									
Note: 2% of the total Gas	ote: 2% of the total Gas Engineering and IM&SP labor cost (Shown in Table 3) was used for Transmission and Distribution Shared services (1% percent each).									

Table 3: 2024 SCG O&M Gas Engineering and IM&SP Forecast								
Organization	Category	Labor	Non-labor	Total				
Gas Engr	Electrical Equipment	\$0	\$120,000	\$120,000				
Gas Engr	Rotating Equipment	\$0	\$300,000	\$300,000				
Gas Engr	Fixed Equipment	\$0	\$240,000	\$240,000				
Total Gas Engr		\$0	\$660,000	\$660,000				
IM&SP	Data Management	\$1,560,000	\$456,000	\$2,016,000				
IM&SP	Program Management	\$3,420,000	\$727,454	\$4,147,454				
Total IM&SP		\$4,980,000	\$1,183,454	\$6,163,454				
Total Combined		\$4,980,000	\$1,843,454	\$6,823,454				

Notes:
1.19.5%, 80%, and 0.5% of the total non-labor costs in Table 3 were distributed between Transmission, Storage, and Distribution, respectively in Table 1.
2.17.5%, 80%, and 0.5% of the total labor costs in Table 3 were distributed between Transmission, Storage, and Distribution, respectively in Table 1.
3-The Rotating equipment costs in Table 3 were only distributed between Storage and Transmission in Table 1.

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: E. GSEP
Workpaper: 2TD005.000

Summary for Category: E. GSEP

		In 2021\$ (000) Incu	irred Costs	
	Adjusted-Recorded		Adjusted-Forecast	
	2021	2022	2023	2024
Labor	0	50	345	331
Non-Labor	0	200	1,378	1,325
NSE	0	0	0	0
Total	0	250	1,723	1,656
FTE	0.0	0.5	3.2	3.3

Workpapers belonging to this Category:

2TD005.000 Gas Safety Enhancement Programs

Labor	0	50	345	331
Non-Labor	0	200	1,378	1,325
NSE	0	0	0	0
Total	0	250	1,723	1,656
FTE	0.0	0.5	3.2	3.3

Beginning of Workpaper
2TD005.000 - Gas Safety Enhancement Programs

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson Category: E. GSEP

Category-Sub

1. Gas Rules & Regulations Implementation

Workpaper: 2TD005.000 - Gas Safety Enhancement Programs

Activity Description:

Implementation of new gas safety rules and regulations activities as follows: MAOP Reconfirmation as required by PHMSA's Gas Transmission Safety Rule (GTSR) Part 1 (49 CFR 192.624); GTSR Part 2, which includes corrosion management and remediation measures; and the Valve Installation and Minimum Rupture Standards Rule (Valve Rule).

Forecast Explanations:

Labor - Zero-Based

SoCalGas company labor to implement and comply with new gas safety rules and regulations requirements.

Non-Labor - Zero-Based

SoCalGas non-labor costs (e.g., contracts) in support of implementing and complying with new gas safety rules and regulations.

NSE - Zero-Based

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs							
		Adjusted-Recorded					Adjusted-Forecast		
Years	2017	2018	2019	2020	2021	2022	2023	2024	
Labor	0	0	0	0	0	50	345	331	
Non-Labor	0	0	0	0	0	200	1,378	1,325	
NSE	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	250	1,723	1,656	
FTE	0.0	0.0	0.0	0.0	0.0	0.5	3.2	3.3	

Non-Shared Service Workpapers

GAS INTEGRITY PROGRAMS Area:

Witness: Amy Kitson E. GSEP Category:

Category-Sub: 1. Gas Rules & Regulations Implementation

Workpaper: 2TD005.000 - Gas Safety Enhancement Programs

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs											
Forecas	t Method	Base Forecast			Forec	ast Adjust	ments	Adjusted-Forecast				
Years	s	2022	2023	2024	2022	2023	2024	2022	2023	2024		
Labor	Zero-Based	0	0	0	50	345	331	50	345	331		
Non-Labor	Zero-Based	0	0	0	200	1,378	1,325	200	1,378	1,325		
NSE	Zero-Based	0	0	0	0	0	0	0	0	0		
Tota	al	0	0	0	250	1,723	1,656	250	1,723	1,656		
FTE	Zero-Based	0.0	0.0	0.0	0.5	3.2	3.3	0.5	3.2	3.3		

Forecast Adjusti	ment Details:								
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type			
2022	50	200	0	250	0.5	1-Sided Adj			
Explanation:		Zero-based forecast for reconfirming pipeline MAOP as required by the GTSR Part 1. Refer to supplemental workpapers in workpaper 2TD005.000 for more detail.							
2022 Total	50	200	0	250	0.5				
2023	200	800	0	1,000	2.0	1-Sided Adj			
Explanation:	Zero-based forecast for supplemental workpape	• .	•	•	•	art 1. Refer to			
2023	44	174	0	218	0.4	1-Sided Adj			
Explanation:	Zero-based forecast for workpaper 2TD005.000		•	ctivities. Refer	to supplement	al workpapers in			
2023	101	404	0	505	0.8	1-Sided Adj			
Explanation:	Zero-based forecast for workpaper 2TD005.000		•	vities. Refer to	o supplemental	workpapers in			
2023 Total	345	1,378	0	1,723	3.2				
2024	200	800	0	1,000	2.0	1-Sided Adj			
Explanation:	Zero-based forecast for supplemental workpape	• .	•	•	•	art 1. Refer to			
2024	55	220	0	275	0.5	1-Sided Adj			
Explanation:	Zero-based forecast for workpaper 2TD005.000		•	ctivities. Refer	to supplement	al workpapers in			
2024	76	305	0	381	0.8	1-Sided Adj			
Explanation:		Zero-based forecast for Valve Rule compliance activities. Refer to supplemental workpapers in workpaper 2TD005.000 for more detail.							
2024 Total	331	1,325	0	1,656	3.3				

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson Category: E. GSEP

Category-Sub: 1. Gas Rules & Regulations Implementation

Workpaper: 2TD005.000 - Gas Safety Enhancement Programs

Determination of Adjusted-Recorded (Incurred Costs):

Determination of Aujusteu	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (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
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	<u>-1</u>
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nomin	al \$)				
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
Vacation & Sick (Nominal \$	5)				
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	ant 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

^{*} After company-wide exclusions of Non-GRC costs

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

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson Category: E. GSEP

Category-Sub: 1. Gas Rules & Regulations Implementation

Workpaper: 2TD005.000 - Gas Safety Enhancement Programs

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	-1			
NSE		0	0	0	0	0			
	Total		0	0	0	-1			
FTE		0.0	0.0	0.0	0.0	0.0			

Detail of Adjustments to Recorded:

<u>Year</u>	<u>Lab</u>	oor <u>N</u>	<u>Lbr N</u>	ISE .	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 Total		0	0	0	0.0	
2021		0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-relat Catastrophic Event Mem		•	o be reques	sted for recov	very through a non-GRC
2021		0	0	0	0.0	1-Sided Adj
Explanation:	Costs incurred were for 7	TIMP activities.				
2021 Total		0	-1	0	0.0	

Non-Shared Service Workpapers

Area: **GAS INTEGRITY PROGRAMS**

Witness: Amy Kitson E. GSEP Category:

Category-Sub: 1. Gas Rules & Regulations Implementation

Workpaper: 2TD005.000 - Gas Safety Enhancement Programs

RAMP Item #1

RAMP Activity

RAMP Chapter: SCG-Risk-1 Incident Related to the High Pressure System (Excluding Dig-in)

RAMP Line Item ID: M01 T1-T2

RAMP Line Item Name: Gas Transmission Safety Rule - MAOP Reconfirmation (HCA and Non-HCA)

Tranche(/s): Tranche1: Transmission - HCA; Tranche2: Transmission - Non-HCA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost	2022 Forecast	2023 Forecast	2024 Forecast	202 RAMP F (2020 Inc	Range
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	191	765	765	28,755	92,016
Tranche 2 Cost Estimate	0	59	235	235	11,745	37,584

Cost Estimate Changes from RAMP:

Since the RAMP report, pressure testing costs are forecasted as capital expenditures based on FERC guidance (refer to testimony); costs have generally shifted to the capital workpapers and remaining O&M costs are driven by program management activities.

GRC	Work	I Init/A	ctivity	امىم ا	Estimates
GRU	VVOIR	UIIIUA	CLIVILY	LUVUI	ESumates

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	17.45	59.33
Tranche 2 No feasible units	0.00	0.00	0.00	0.00	7.15	24.31

Work Unit Changes from RAMP:

Since the RAMP report, pressure testing costs are forecasted as capital expenditures based on FERC guidance (refer to testimony). O&M costs consist of program management activities (e.g., data management and reporting) and identifying a unit of measure is not feasible.

Risk S	pend	Efficiency	(RSE)
--------	------	------------	-------

	GRC RSE	RAMP RSE	
Tranche 1	3.300	2.700	
Tranche 2	11.400	1.800	

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson Category: E. GSEP

Category-Sub: 1. Gas Rules & Regulations Implementation

Workpaper: 2TD005.000 - Gas Safety Enhancement Programs

RSE Changes from RAMP:

RSE inputs have been updated since the RAMP report.

RAMP Item # 2

RAMP Activity

RAMP Chapter: SCG-Risk-1 Incident Related to the High Pressure System (Excluding Dig-in)

RAMP Line Item ID: NEW 03

RAMP Line Item Name: NEW - Gas Transmission Safety Program (GTSR) Part 2

Tranche(/s): Tranche1: Transmission - HCA & non-HCA

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	218	275	0	0

Cost Estimate Changes from RAMP:

GTSR Part 2 was not considered at the time of the RAMP report since the requirements and timing of publication were not known at the time. PHMSA has established a projected publication date of June 2022 and forecasts have been developed for expected requirements.

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:

A unit of measure is not feasible for the wide range of activities that are expected to be required under GTSR Part 2. Refer to supplemental workpapers in workpaper 2TD005.000 for additional detail.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	

RSE Changes from RAMP:

New mitigation since the RAMP Report.

Non-Shared Service Workpapers

Area: **GAS INTEGRITY PROGRAMS**

Witness: Amy Kitson E. GSEP Category:

Category-Sub: 1. Gas Rules & Regulations Implementation

Workpaper: 2TD005.000 - Gas Safety Enhancement Programs

RAMP Item #3

RAMP Activity

RAMP Chapter: SCG-Risk-1 Incident Related to the High Pressure System (Excluding Dig-in)

RAMP Line Item ID: NEW 02

RAMP Line Item Name: NEW - Valve Rule

Tranche(/s): Tranche1: Transmission - HCA & non-HCA

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	505	381	0	0

Cost Estimate Changes from RAMP:

The Valve Rule was not considered at the time of the RAMP report since the timing of publication was not known. PHMSA has since issued the Valve Rule as of March 2022 and forecasts have been developed based on a preliminary analysis of required compliance activities.

GRC Work	Unit/Activity	L AVAL F	etimatae
GRC WOIK	UIIII/ACIIVIIV	Level	Sumates

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:

Since O&M costs are driven by capital activities, units are presented in workpaper X03670.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	

RSE Changes from RAMP:

New mitigation since the RAMP Report.

Supplemental Workpapers for Workpaper 2TD005.000

Non-Shared Service Workpapers

PRIVILEGED AND CONFIDENTIAL/WORK PRODUCT: Created at the Direction of Counsel Setareh Mortazavi

SCG O&M Supplemental Workpaper

Workpaper: 2TD005.000

	Labor	Non-Labor	Total
2021	\$ -	\$ -	\$ -
2022	\$ 50,000.00	\$200,000.00	\$ 250,000.00
2023	\$200,000.00	\$800,000.00	\$1,000,000.00
2024	\$200,000.00	\$800,000.00	\$1,000,000.00
2025	\$200,000.00	\$800,000.00	\$1,000,000.00
2026	\$200,000.00	\$800,000.00	\$1,000,000.00
2027	\$200,000.00	\$800,000.00	\$1,000,000.00

^{**}based on SME input

O&M costs may include elements of program management such as reporting, training, etc.

Non-Shared Service Workpapers

PRIVILEGED AND CONFIDENTIAL/WORK PRODUCT: Created at the Direction of Counsel Setareh Mortazavi

GSEP Part 2 Supplemental Workpaper - SCG O&M, SCG Capital, SDGE O&M, SDGE Capital, Shared Services

192.461 and 192.319

Total Survey Scope for DCVG/ACVG (All Programs)

	CY2022 Coating Survey Scope	CY2023 Coating Survey Scope	CY2024 Coating Survey Scope	CY2025 Coating Survey Scope	CY2026 Coating Survey Scope	CY2027 Coating Survey Scope
Item	(feet/year)	(feet/year)	(feet/year)	(feet/year)	(feet/year)	(feet/year)
Class 1	-	158,024.39	8,943.73	-	110,880.00	-
Class 2	-	-	-	-	-	-
Class 3	-	19,008.00	-	52,944.00	44,352.00	-
Class 4	-	-	-	-	-	-
Total (feet/year)	-	177,032.39	8,943.73	52,944.00	155,232.00	-
Total (miles/year)	-	33.53	1.69	10.03	29.40	-

Area	C	oating Survey Cost (\$/mile)	Coating Sur (\$/foo	•
Class 1	\$	17,000.00	\$	3.22
Class 2	\$	18,000.00	\$	3.41
Class 3	\$	26,666.67	\$	5.05
Class 4	\$	43,333.33	\$	8.21

Notes

The average cost to do a coating survey was obtained from the 2016 PHMSA Impact Assessment and adjusted based on feedback from the SME.

Average Remediation/Mitigation costs per foot.

Item	Recoat Average Cost (\$/foot of repair)
Repair Cost	\$4,458.22

Notes

Based on approximated historical project costs

Program Estimate (Gross, non-adjusted)

	CY2022 Program	CY2023 Program	CY2024 Program	CY2025 Program	CY	2026 Program	C	Y2027 Program
	Estimate	Estimate	Estimate	Estimate		Estimate		Estimate
Item	(2021 dollars)	(2021 dollars)	(2021 dollars)	(2021 dollars)	(2	2021 dollars)		(2021 dollars)
Coating Survey (DCVG/ACVG)	\$ -	\$ 604,790.65	\$ 28,796.10	\$ 267,393.94	\$	581,000.00	\$	-
Repair (Recoat)	\$ -	\$ 1,317,336.30	\$ 66,552.23	\$ 393,967.75	\$	1,155,114.88	\$	-
Total	\$ -	\$ 1,922,126.95	\$ 95,348.33	\$ 661,361.69	\$	1,736,114.88	\$	-

Notes

It is assumed projects will take one year

Program Scaling Factors

Item	Ramp Up					
	CY2022	CY2023	CY2024	CY2025	CY2026	CY2027
	(unitless)	(unitless)	(unitless)	(unitless)	(unitless)	(unitless)
Scaling Factor	0.01	0.50	0.65	0.75	0.85	1.00

Notes

The scaling factors (0-1) are designed to account for the gradual increase in spend as the program scales.

Shared Service Factor

Item	Shared Services CY2022 (unitless)
SoCalGas	0.94
SDG&E	0.06

Notes

The shared service factor includes the distribution of costs between SoCalGas and SDG&E, and was based on the ratio of transmission lines in company database

Capital vs. O&M Distribution Factors

Item	Distribution CY2022 (unitless)
Capital	0.95
O&M	0.05

Notes

The distribution factors are being included to account for the fact that the cost per dig factor includes the remediation cost.

Capital vs. O&M Distribution of the Program Estimate for Each Utility

CY2022 Program CY2023 Program CY2024 Program CY2025 Program CY2026 Program CY2027 Program Estimate Estimate Estimate Estimate Estimate Estimate ltem (2021 dollars) (2021 dollars) (2021 dollars) (2021 dollars) (2021 dollars) (2021 dollars) SoCalGas 55,344.94 858,229.68 442,946.99 1,317,798.00 Capital 0&M 45,169.98 2,912.89 23,313.00 69,357.79 903,399.67 58,257.83 466,259.99 1,387,155.79 SoCalGas Total SDG&E apital 54,780.62 \$ 3,532.66 28,273.21 84,114.77 0&M 0 \$ 2,594.87 167.34 1,339.26 3,984.38 Shared Services 288.32 18.59 148.81 442.71 3.718.58 \$ 88.541.86 SDG&E Total 57.663.81 \$ 29.761.28 \$ o s Grand Total

Workpaper X03670.003 2TD005.000

214770.003 1TD005.000 2200.7003

Non-Shared Service Workpapers

PRIVILEGED AND CONFIDENTIAL/WORK PRODUCT: Created at the Direction of Counsel Setareh Mortazavi

GSEP Part 2 Supplemental Workpaper - SCG O&M, SCG Capital, SDGE O&M, SDGE Capital, Shared Services

192.465

Total Incremental Survey Scope for Close Interval Surveys (CIS), by Class Location

Item	CY2022 CIS 1 Scope (feet/year)	CY2023 CIS 1 Scope (feet/year)	CY2024 CIS 1 Scope (feet/year)	CY2025 CIS 1 Scope (feet/year)	CY2026 CIS 1 Scope (feet/year)	CY2027 CIS 1 Scope (feet/year)
Class 1	48960	48960	48960	48960	48960	48960
Class 2	3060	3060	3060	3060	3060	3060
Class 3	91800	91800	91800	91800	91800	91800
Class 4	3060	3060	3060	3060	3060	3060
Total (feet/year)	146,880	146,880	146,880	146,880	146,880	146,880
Total (miles/year)	28	28	28	28	28	28

Area	Close Interval Survey Cost (\$/mile)			CIS Cost (\$/foot)
Class 1	\$	34,000.00	\$	6.44
Class 2	\$	36,000.00	\$	6.82
Class 3	\$	53,333.33	\$	10.10
Class 4	\$	86,666.67	\$	16.41

Notes

The average cost to do a coating survey was obtained from the 2016 PHMSA Impact Assessment and adjusted based on feedback from the SME.

The cost per mile of conducting a CIS includes a factor of 2 to account for proposed language requiring 5 ft. interval spacing for a CIS (current practice is 10 ft)

Average Remediation/Mitigation costs per foot.

Item	Recoat Average Cost (\$/foot of repair)
Repair Cost	\$12,737.77

Notes

Based on approximated historical project costs

Program Estimate (Gross, non-adjusted)

	CY2022 Program	CY2023 Program	CY2024 Program	CY2025 Program	C١	2026 Program	C١	/2027 Program
	Estimate	Estimate	Estimate	Estimate		Estimate		Estimate
Item	(2021 dollars)	(2021 dollars)	(2021 dollars)	(2021 dollars)	(2021 dollars)	(2021 dollars)
CIS 1	\$ 1,313,636.36	\$ 1,313,636.36	\$ 1,313,636.36	\$ 1,313,636.36	\$	1,313,636.36	\$	1,313,636.36
Repair (Recoat)	\$ -	\$ 5,667,091.67	\$ 5,667,091.67	\$ 5,667,091.67	\$	5,667,091.67	\$	5,667,091.67
CIS 2	\$ -	\$ -	\$ 1,545,454.55	\$ 1,545,454.55	\$	1,545,454.55	\$	1,545,454.55
Total	\$ 1,313,636.36	\$ 6,980,728.03	\$ 8,526,182.58	\$ 8,526,182.58	\$	8,526,182.58	\$	8,526,182.58

Notes

It is assumed projects will take one year and permitting will take one year

Program Scaling Factors

r rogram coaming r actors	•					
	Ramp Up					
Item	CY2022	CY2023	CY2024	CY2025	CY2026	CY2027
	(unitless)	(unitless)	(unitless)	(unitless)	(unitless)	(unitless)
Scaling Factor	0.01	0.50	0.65	0.75	0.85	1.00

The scaling factors (0-1) are designed to account for the gradual increase in spend as the program scales.

Shared Service Facto

Shared Service Factor					
	Shared Services				
Item	CY2022				
	(unitless)				
SoCalGas	0.94				
SDG&E	0.06				
Same assumptions as for 192.461 and 192.319					

Capital vs. O&M Distribution Factors

Oupital V3. Outil Distribution Lactors						
Item	Distribution CY2022					
	(unitless)					
Capital	0.95					
O&M	0.05					

Notes

.

Capital vs. O&M Distribution of the Program Estimate for Each Utility

	CY2022 Program	CY2023 Program	CY2024 Program	CY2025 Program	CY2026 Program		C	Y2027 Program	
	Estimate	Estimate	Estimate	Estimate		Estimate		Estimate	
Item	(2021 dollars)	(2021 dollars)	(2021 dollars)	(2021 dollars)	(2021 dollars)	(2021 dollars		
SoCalGas								-	
Capital	0	\$ 3,116,895.07	\$ 4,949,022.68	\$ 5,710,410.78	\$	6,471,798.88	\$	7,613,881.04	
O&M	0	\$ 164,047.11	\$ 260,474.88	\$ 300,547.94	\$	340,620.99	\$	400,730.58	
SoCalGas Total	0	\$ 3,280,942.17	\$ 5,209,497.55	\$ 6,010,958.72	\$	6,812,419.88	\$	8,014,611.62	
SDG&E									
Capital	0	\$ 198,950.75	\$ 315,895.06	\$ 364,494.31	\$	413,093.55	\$	485,992.41	
0&M	0	\$ 9,423.98	\$ 14,963.45	\$ 17,270.02	\$	19,567.59	\$	23,020.69	
Shared Services	0	1047.109	1662.606	1913.891	2174.177		7 2557.855		
SDG&E Total	0	\$ 209,421.84	\$ 332,521.12	\$ 383,678.22	\$	434,835.31	\$	511,570.95	
Grand Total	0	\$ 3,490,364.02	\$ 5,542,018.67	\$ 6,394,636.93	\$	7,247,255.19	\$	8,526,182.58	

Workpaper X03670.003 2TD005.000

214770.003 1TD005.000 2200.7003

Non-Shared Service Workpapers

PRIVILEGED AND CONFIDENTIAL/WORK PRODUCT: Created at the Direction of Counsel Setareh Mortazavi

GSEP Part 2 Supplemental Workpaper - SCG O&M, SCG Capital, SDGE O&M, SDGE Capital, Shared Services

192.473

Total Incremental Survey Scope for Interference Current Surveys, by Class Location

					CY2026	CY2027
	CY2022 Interference	CY2023 Interference	CY2024 Interference	CY2025 Interference	Interference	Interference
	Current Survey Scope	Current Survey Scope	Current Survey Scope	Current Survey Scope	Current Survey	Current Survey
	(miles/year)	(miles/year)	(miles/year)	(miles/year)	Scope	Scope
Item					(miles/year)	(miles/year)
Class 1	4.198	4.198	4.198	4.198	4.198	4.198
Class 2	0.26	0.26	0.26	0.26	0.26	0.26
Class 3	3.144	3.144	3.144	3.144	3.144	3.144
Class 4	0	0	0	0	0	0
Total (feet/year)	40138.56	40138.56	40138.56	40138.56	40138.56	40138.56
Total (miles/year)	7.60	7.60	7.60	7.60	7.60	7.60

Estimated Cost to Complete an Interference Current Survey, by Class Location

	Interf	erence Current
	s	urvey Cost
Area		(\$/mile)
Class 1	\$	17,000.00
Class 2	\$	18,000.00
Class 3	\$	26,666.67
Class 4	\$	43,333.33

Notes

The average cost to do a coating survey was obtained from the 2016 PHMSA Impact Assessment and adjusted based on feedback from the SME.

Average Remediation/Mitigation costs per mile, by Class Location.

ltem	Average AC Mitigation Cost (\$/mile)
Class 1	\$1,666,799.34
Class 2	\$2,083,499.18
Class 3	\$2,916,898.85
Class 4	\$0.00

Notes

Based on approximated historical project costs

Program Estimate (Gross, non-adjusted)

	CY2022 Program		CY2023 Program	CY2024 Program		CY2025 Program		026 Program	CY	2027 Program
	Estimate		Estimate	Estimate	Estimate		Estimate			Estimate
Item	(2021 dollars)		(2021 dollars)	(2021 dollars)		(2021 dollars)	(2	021 dollars)	(2	2021 dollars)
Interference Current Survey	\$ 159,886.00	\$	159,886.00	\$ 159,886.00	\$	159,886.00	\$	159,886.00	\$	159,886.00
Repair (AC Mitigation)	\$ -	\$	216,974.37	\$ 216,974.37	\$	216,974.37	\$	216,974.37	\$	216,974.37
Total	\$ 159,886.00	\$	376,860.37	\$ 376,860.37	\$	376,860.37	\$	376,860.37	\$	376,860.37

Notes

It is assumed interference current studies will take one year and AC mitigation will take one year

Program Scaling Factors

Section Feature 0.04 0.50 0.55 0.75 0.05 1.00	Item	Ramp Up CY2022 (unitless)	Ramp Up CY2023 (unitless)	Ramp Up CY2024 (unitless)	Ramp Up CY2025 (unitless)	Ramp Up CY2026 (unitless)	Ramp Up CY2027 (unitless)
Scaling Factor 0.01 0.50 0.65 0.75 0.65 1.00	Scaling Factor	0.01	0.50	0.65	0.75	0.85	1.00

Notes

The scaling factors (0-1) are designed to account for the gradual increase in spend as the program scales.

Shared Service Factor

ltem	Shared Services CY2022 (unitless)
SoCalGas	0.94
SDG&E	0.06

Capital vs. O&M Distribution Factors

Distribution Item CY2022 (unitless)					
	Distribution				
Item	CY2022				
	(unitless)				
Capital	0.95				
O&M	0.05				

Notes

Same assumptions as for 192.461 and 192.319

Capital vs. O&M Distribution of the Program Estimate for Each Utility

Workpaper X03670.003 2TD005.000

214770.003 1TD005.000 2200.7003

	CY2022 Program	CY2023 Program	CY2024 Program	CY2025 Program		CY2026 Program		C١	2027 Program
	Estimate	Estimate	Estimate		Estimate		Estimate	Estimate	
Item	(2021 dollars)	(2021 dollars)	(2021 dollars)		(2021 dollars)	(:	2021 dollars)	(2021 dollars)	
SoCalGas									
Capital	0	\$ 168,268.15	\$ 218,748.60	\$	252,402.23	\$	286,055.86	\$	336,536.31
0&M	0	\$ 8,856.22	\$ 11,513.08	\$	13,284.33	\$	15,055.57	\$	17,712.44
SoCalGas Total	0	\$ 177,124.37	\$ 230,261.68	\$	265,686.56	\$	301,111.43	\$	354,248.74
SDG&E									
Capital	0	\$ 10,740.52	\$ 13,962.68	\$	16,110.78	\$	18,258.88	\$	21,481.04
0&M	0	\$ 508.76	\$ 661.39	\$	763.14	\$	864.89	\$	1,017.52
Shared Services	0	\$ 56.53	\$ 73.49	\$	84.79	\$	96.10	\$	113.06
SDG&E Total	0	\$ 11,305.81	\$ 14,697.55	\$	16,958.72	\$	19,219.88	\$	22,611.62
Grand Total	0	\$ 188,430.18	\$ 244,959.24	\$	282,645.27	\$	320,331.31	\$	376,860.37

Non-Shared Service Workpapers

PRIVILEGED AND CONFIDENTIAL/WORK PRODUCT: Created at the Direction of Counsel Setareh Mortazavi

GSEP Valve Rule Supplemental Workpaper - SCG O&M, SCG Capital, SDGE O&M, SDGE Capital, Shared Services

Project Scope for Valve Rule

	CY2022	CY2023	CY2024	CY2025	CY2026	CY2027	
Project Name	Replacement	Replacement	Replacement	Replacement	Replacement	Replacement	
Project Name	Pipeline	Pipeline Pipeline		Pipeline	Pipeline	Pipeline	
	(miles/year)	(miles/year)	(miles/year)	(miles/year)	(miles/year)	(miles/year)	
Total	0.00	15.92	9.00	9.84	9.84	0.00	

Notes

Estimating projects that start after effective date

Valve Requirements for the Rule

	CY2022 Valve	CY2023 Valve	CY2024 Valve	CY2025 Valve	CY2026 Valve	CY2027 Valve
Project Name	Requirement	Requirement	Requirement	Requirement	Requirement	Requirement
	(valves/year)	(valves/year)	(valves/year)	(valves/year)	(valves/year)	(valves/year)
Total	0	4	2	2	2	2

Notes

Based on spacing requirements (8) and project mileage assumptions

Item	CY2022 Program Estimate (2021 dollars)	CY2023 Program Estimate (2021 dollars)	CY2024 Program Estimate (2021 dollars)	CY2025 Program Estimate (2021 dollars)	CY2026 Program Estimate (2021 dollars)	CY2027 Program Estimate (2021 dollars)
Valves and Valve Installation	\$0.00	\$14,328,000.00	\$8,100,000.00	\$8,856,000.00	\$8,856,000.00	\$8,856,000.00
Total	\$0.00	\$14.328.000.00	\$8.100.000.00	\$8.856.000.00	\$8.856.000.00	\$8.856.000.00

Notes

Based on historical valve project costs, assume \$3.6M per valve

Program Scaling Factors

	Ramp Up					
Item	CY2022	CY2023	CY2024	CY2025	CY2026	CY2027
	(unitless)	(unitless)	(unitless)	(unitless)	(unitless)	(unitless)
Scaling Factor	0.00	0.75	1.00	1.00	1.00	1.00

Notes

The scaling factors (0-1) are designed to account for the gradual increase in spend as the program scales.

2022 is assumed to be 0 since the effective date of these activities are in early 2023

Program Estimate (net, adjusted)

	CY2022 Program	CY2023 Program	CY2024 Program	CY2025 Program	CY2026 Program	CY2027 Program
Item	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
	(2021 dollars)	(2021 dollars)	(2021 dollars)	(2021 dollars)	(2021 dollars)	(2021 dollars)
Valves and Valve Installation	\$0.00	\$10,746,000.00	\$8,100,000.00	\$8,856,000.00	\$8,856,000.00	\$8,856,000.00
Total	\$0.00	\$10,746,000.00	\$8,100,000.00	\$8,856,000.00	\$8,856,000.00	\$8,856,000.00

Notes

The adjusted (net) program estimate incorporates the abandonment factor and program scaling factor.

Shared Service Factor

Item	Shared Services (unitless)		
SoCalGas	0.94		
SDG&E	0.06		

Notes

The shared service factor includes the distribution of costs between SoCalGas and SDG&E, and was based on the ratio of transmission lines in company database

Capital vs. O&M Distribution Factors

Item	Distribution (unitless)		
Capital	0.95		
O&M	0.05		

Notes

O&M based on SME judgment of possible non-capital costs associated with the requirements

Capital vs. O&M Distribution of the Program Estimate for Each Utility

Item	CY2022 Program Estimate (2021 dollars)	CY2023 Program Estimate (2021 dollars)	CY2024 Program Estimate (2021 dollars)	CY2025 Program Estimate (2021 dollars)	CY2026 Program Estimate (2021 dollars)	CY2027 Program Estimate (2021 dollars)
SoCalGas						
Capital	\$0.00	\$9,596,178.00	\$7,233,300.00	\$7,908,408.00	\$7,908,408.00	\$7,908,408.00
O&M	\$0.00	\$505,062.00	\$380,700.00	\$416,232.00	\$416,232.00	\$416,232.00
SoCalGas Total	\$0.00	\$10,101,240.00	\$7,614,000.00	\$8,324,640.00	\$8,324,640.00	\$8,324,640.00
SDG&E						
Capital	\$0.00	\$612,522.00	\$461,700.00	\$504,792.00	\$504,792.00	\$504,792.00
O&M	\$0.00	\$32,238.00	\$24,300.00	\$26,568.00	\$26,568.00	\$26,568.00
Shared Services	\$0.00	\$ 3,223.80	\$ 2,430.00	\$ 2,656.80	\$ 2,656.80	\$ 2,656.80
SDG&E Total	\$0.00	\$644,760.00	\$486,000.00	\$531,360.00	\$531,360.00	\$531,360.00
Grand Total	\$0.00	\$10,746,000.00	\$8,100,000.00	\$8,856,000.00	\$8,856,000.00	\$8,856,000.00

Workpaper X03670.005 2TD005.000 214770.005 1TD005.000 2200.7003

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson

Summary of Shared Services Workpapers:

Description
A. TIMP
B. DIMP
C. FIMP
D. GSEP
Total

In 2021 \$ (000) Incurred Costs					
Adjusted- Recorded	Adjusted-Forecast				
2021	2022	2023	2024		
1,496	1,975	1,448	1,591		
624	728	820	794		
0	0	0	100		
0	0	16	14		
2,120	2,703	2,284	2,499		

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson Category: A. TIMP

Cost Center: 2200-7000.000

Summary for Category: A. TIMP

FTE

	In 2021\$ (000) Incurred Costs				
	Adjusted-Recorded		Adjusted-Forecast		
	2021	2022	2023	2024	
Labor	1,266	1,667	1,224	1,344	
Non-Labor	230	308	224	247	
NSE	0	0	0	0	
Total	1,496	1,975	1,448	1,591	
FTE	12.5	16.5	12.1	13.3	
Cost Centers belongir	ng to this Category:				
2200-7000.000 TIMP	Support for SDG&E				
Labor	1,266	1,667	1,224	1,344	
Non-Labor	230	308	224	247	
NSE	0	0	0	0	
Total	1,496	1,975	1,448	1,591	

16.5

12.1

12.5

13.3

Beginning of Workpaper 2200-7000.000 - TIMP Support for SDG&E

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub 1. TIMP

Cost Center: 2200-7000.000 - TIMP Support for SDG&E

Activity Description:

SoCalGas program support for the SDG&E TIMP.

Forecast Explanations:

Labor - Base YR Rec

SoCalGas company labor in support of the SDG&E TIMP.

Non-Labor - Base YR Rec

SoCalGas non-labor costs (e.g., contracts) in support of the SDG&E TIMP.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs									
		Adju	ısted-Recor	Ad	justed-Fore	cast					
Years	2017	2018	2019	2020	2021	2022	2023	2024			
Labor	526	596	954	1,109	1,266	1,667	1,224	1,344			
Non-Labor	251	86	155	486	230	308	224	247			
NSE	0	0	0	0	0	0	0	0			
Total	777	682	1,109	1,594	1,496	1,975	1,448	1,591			
FTE	5.7	6.3	9.4	11.1	12.5	16.5	12.1	13.3			

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Cost Center: 2200-7000.000 - TIMP Support for SDG&E

Cost Center Allocations (Incurred Costs):

Directly Retained
Directly Allocated
Subj. To % Alloc.
Total Incurred
% Allocation
Retained
SEU
CORP
Unreg

•	2021 Adju	sted-Reco	rded		2022 Adjusted-Forecast						
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE		
0	0	0	0	0.0	0	0	0	0	0.0		
1,266	230	0	1,496	12.5	1,667	308	0	1,975	16.5		
0	0	0	0	0.0	0	0	0	0	0.0		
1,266	230	0	1,496	12.5	1,667	308	0	1,975	16.5		
0.00%	0.00%				0.00%	0.00%					
100.00%	100.00%				100.00%	100.00%					
0.00%	0.00%				0.00%	0.00%					
0.00%	0.00%	-			0.00%	0.00%		-			

Directly Retained
Directly Allocated
Subj. To % Alloc.
Total Incurred
% Allocation
Retained
SEU
CORP
Unreg

	2023 Adju	sted-Fore	cast		2024 Adjusted-Forecast					
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE	
0	0	0	0	0.0	0	0	0	0	0.0	
1,224	224	0	1,448	12.1	1,344	247	0	1,591	13.3	
0	0	0	0	0.0	0	0	0	0	0.0	
1,224	224	0	1,448	12.1	1,344	247	0	1,591	13.3	
0.00%	0.00%				0.00%	0.00%				
100.00%	100.00%				100.00%	100.00%				
0.00%	0.00%	•		•	0.00%	0.00%	•	•	·	
0.00%	0.00%				0.00%	0.00%				

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2021

The allocation of shared services is based on the scope of TIMP work expected at SDG&E.

Cost Center Allocation Percentage for 2022

The allocation of shared services is based on the scope of TIMP work expected at SDG&E.

Cost Center Allocation Percentage for 2023

The allocation of shared services is based on the scope of TIMP work expected at SDG&E.

Cost Center Allocation Percentage for 2024

The allocation of shared services is based on the scope of TIMP work expected at SDG&E.

GAS INTEGRITY PROGRAMS Area:

Witness: Amy Kitson A. TIMP Category: Category-Sub: 1. TIMP

Cost Center: 2200-7000.000 - TIMP Support for SDG&E

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs										
Forecast	Forecast Method Base Forecast			Forec	Forecast Adjustments Adjusted-Forecast				ast		
Years	5	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Labor	Base YR Rec	1,266	1,266	1,266	401	-42	78	1,667	1,224	1,344	
Non-Labor	Base YR Rec	230	230	230	78	-6	17	308	224	247	
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0	
Tota	I	1,496	1,496	1,496	479	-48	95	1,975	1,448	1,591	
FTE	Base YR Rec	12.5	12.5	12.5	4.0	-0.4	0.8	16.5	12.1	13.3	

2024 Total

			I.			I		
Forecast Adjustn	nent Details:							
<u>Year</u>	Labo	<u>r NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type		
2022	40	78	C	479	4.0	1-Sided Adj		
Explanation:	•	costs are incurred			•	ecorded. SoCalGas gly, costs are driven by	the	
2022 Total	40	78	0	479	4.0			
2023	-4	-6	C	-48	-0.4	1-Sided Adj		
Explanation:	This adjustment captures the incremental 2023 costs above the base year recorded. SoCalGas shared service costs are incurred in support of the SDG&E TIMP; accordingly, costs are driven by the level of activity in SDG&E.							
2023 Total	-4	-6	0	-48	-0.4			
2024	7	78 17	C	95	0.8	1-Sided Adj		
Explanation:	This adjustment captures the incremental 2024 costs above the base year recorded. SoCalGas shared service costs are incurred in support of the SDG&E TIMP; accordingly, costs are driven by the level of activity in SDG&E.							

0

95

8.0

Note: Totals may include rounding differences.

78

17

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Cost Center: 2200-7000.000 - TIMP Support for SDG&E

Determination of Adjusted-Recorded (Incurred Costs):

Determination of Aujusteu-i	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	406	449	758	904	1,076
Non-Labor	227	79	147	464	230
NSE	0	0	0	0	0
Total	632	527	905	1,368	1,306
FTE	4.7	4.9	7.7	9.3	10.5
Adjustments (Nominal \$) **					
Labor	1	21	0	0	0
Non-Labor	0	1	0	1	0
NSE	0	0	0	0	0
Total	1	22	0	1	0
FTE	0.2	0.5	0.2	0.0	0.0
Recorded-Adjusted (Nomina	l \$)				
Labor	407	470	759	904	1,076
Non-Labor	227	79	147	466	230
NSE	0	0	0	0	0
Total	634	549	905	1,370	1,306
FTE	4.9	5.4	7.9	9.3	10.5
/acation & Sick (Nominal \$)					
Labor	69	81	144	159	190
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	69	81	144	159	190
FTE	0.8	0.9	1.5	1.8	2.0
scalation to 2021\$					
Labor	51	45	52	45	0
Non-Labor	24	6	8	20	0
NSE	0	0	0	0	0
Total	75	51	60	65	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constar	nt 2021\$)				
Labor	526	596	954	1,109	1,266
Non-Labor	251	86	155	486	230
NSE	0	0	0	0	0
Total	777	682	1,109	1,594	1,496
FTE	5.7	6.3	9.4	11.1	12.5

^{*} After company-wide exclusions of Non-GRC costs

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

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Cost Center: 2200-7000.000 - TIMP Support for SDG&E

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs										
	Years	2017	2018	2019	2020	2021				
Labor		0.839	21	0.225	0	0				
Non-Labor		0.492	0.717	0	1	0				
NSE		0	0	0	0	0				
	Total	1	22	0.225	1	0				
FTE		0.2	0.5	0.2	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	-406	-227	0	-4.7	SSD_Type Transf FROM IO_Ret			
Explanation:	Costs are incurred by a NSS Cos	t Center but are	allocated to	SDG&E for S	SDG&E program support.			
2017	406	227	0	4.7	SSD_Type Transf TO IO_Alloc			
Explanation:	Costs are incurred by a NSS Cos	t Center but are	allocated to	SDG&E for \$	SDG&E program support.			
2017	0	0	0	0.0	CCTR Transf From 2200-2407.000			
Explanation:	Support for SDG&E TIMP.							
2017	1	0	0	0.1	CCTR Transf From 2200-2299.000			
Explanation:	Support for SDG&E TIMP.							
2017	0	0	0	0.1	CCTR Transf From 2200-2295.000			
Explanation:	Support for SDG&E TIMP.							
2017 Total	1	0	0	0.2				
2018	-449	-79	0	-4.9	SSD_Type Transf FROM IO_Ret			
Explanation:	Costs are incurred by a NSS Cos	t Center but are	allocated to	SDG&E for \$	SDG&E program support.			
2018	449	79	0	4.9	SSD_Type Transf TO IO_Alloc			
Explanation:	Costs are incurred by a NSS Cos	t Center but are	allocated to	SDG&E for S	SDG&E program support.			
2018	1	0	0	0.1	1-Sided Adj			
Explanation:	Costs that should have been map	ped to 2200-700	0 for TIMP s	support.				
2018	14	0	0	0.2	CCTR Transf From 2200-2299.000			
Explanation:	Support for SDG&E TIMP.							
2018	5	1	0	0.1	CCTR Transf From 2200-2298.000			
Explanation:	Support for SDG&E TIMP.							
2018	1	0	0	0.1	CCTR Transf From 2200-2295.000			
Explanation:	Support for SDG&E TIMP.							
NI-4 T -4-1								

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Cost Center: 2200-7000.000 - TIMP Support for SDG&E

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type			
2018 Total	21	1	0	0.5				
2019	-758	-147	0	-7.7	SSD_Type Transf FROM IO_Ret			
Explanation:	Costs are incurred by a NSS C	ost Center but are	allocated to	SDG&E for	SDG&E program support.			
2019	758	147	0	7.7	SSD_Type Transf TO IO_Alloc			
Explanation:	Costs are incurred by a NSS C	ost Center but are	allocated to	SDG&E for	SDG&E program support.			
2019	0	0	0	0.1	1-Sided Adj			
Explanation:	Costs that should have been mapped to 2200-7000 for TIMP support.							
2019	0	0	0	0.1	CCTR Transf From 2200-2299.000			
Explanation:	Support for SDG&E TIMP.							
2019 Total	0	0	0	0.2				
2020	-904	-464	0	-9.3	SSD_Type Transf FROM IO_Ret			
Explanation:	Costs are incurred by a NSS C	ost Center but are	allocated to	SDG&E for	SDG&E program support.			
2020	904	464	0	9.3	SSD_Type Transf TO IO_Alloc			
Explanation:	Costs are incurred by a NSS C	ost Center but are	allocated to	SDG&E for	SDG&E program support.			
2020	0	0	0	0.0	1-Sided Adj			
Explanation:	Costs that should have been m	apped to 2200-70	00 for TIMP s	upport.				
2020	0	1	0	0.0	CCTR Transf From 2200-0256.000			
Explanation:	Support for SDG&E TIMP.							
2020 Total	0	1	0	0.0				
2021	-1,076	-230	0	10.5	SSD_Type Transf FROM IO_Ret			
Explanation:	Costs are allocated to SDG&E.							
2021	1,076	230	0	10.5	SSD_Type Transf TO IO_Alloc			
Explanation:	Costs are allocated to SDG&E.							
2021 Total	0	0	0	0.0				

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Cost Center: 2200-7000.000 - TIMP Support for SDG&E

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-Risk-1 Incident Related to the High Pressure System (Excluding Dig-in)

RAMP Line Item ID: C21 & M2 T1-T2

RAMP Line Item Name: Integrity Assessments & Remediation (HCA and Non-HCA)

Tranche(/s): Tranche1: Transmission - HCA; Tranche2: Transmission - non-HCA

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	1,004	1,762	1,249	1,512	49,336	118,313
Tranche 2 Cost Estimate	492	214	200	80	45,324	80,490

Cost Estimate Changes from RAMP:

Costs presented in workpaper 2200-7000 are a portion of costs forecasted for the SDG&E TIMP and were presented in the SDG&E RAMP report. The RAMP report reflected costs after allocations but for the GRC, costs are captured where they are incurred. The remainder of activities & costs related to the SDG&E TIMP are presented in workpaper 1TD001.000

GRC Work	Unit/Activity	Level Estimates
-----------------	---------------	-----------------

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP Range Activities	
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 Miles assessed - HCA	0.00	0.00	0.00	0.00	155.00	198.00
Tranche 2 Miles assessed -	0.00	0.00	0.00	0.00	300.00	383.00

Work Unit Changes from RAMP:

Units are accounted for in workpaper 1TD001.000. SoCalGas program support to SDG&E is not measured in units since it consists of activities such as data management, records management, and reporting.

Risk	Spend	Efficiency	(RSF)
1/13/	ODEIIG		

	GRC RSE	RAMP RSE	
Tranche 1	4.600	83.100	

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: A. TIMP
Category-Sub: 1. TIMP

Cost Center: 2200-7000.000 - TIMP Support for SDG&E

Tranche 2 2.500 85.500

RSE Changes from RAMP:

RSEs reflect SoCalGas activities. For SDG&E RSEs, refer to workpaper 1TD001.000.

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Cost Center: 2200-7001.000

Summary for Category: B. DIMP

		In 2021\$ (000) Incu	irred Costs	
	Adjusted-Recorded		Adjusted-Forecast	
	2021	2022	2023	2024
Labor	587	683	769	745
Non-Labor	37	45	51	49
NSE	0	0	0	0
Total	624	728	820	794
FTE	6.2	7.2	8.1	7.9

Cost Centers belonging to this Category:

2200-7001.000 DIMP	Support for SDG&E
Lahor	507

Labor	587	683	769	745
Non-Labor	37	45	51	49
NSE	0	0	0	0
Total	624	728	820	794
FTE	6.2	7.2	8.1	7.9

Beginning of Workpaper 2200-7001.000 - DIMP Support for SDG&E

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub 1. DIMP

Cost Center: 2200-7001.000 - DIMP Support for SDG&E

Activity Description:

SoCalGas program support of the SDG&E DIMP.

Forecast Explanations:

Labor - Base YR Rec

SoCalGas company labor in support of the SDG&E DIMP.

Non-Labor - Base YR Rec

SoCalGas non-labor costs (e.g., contracts) in support of the SDG&E DIMP.

NSE - Base YR Rec

N/A

Summary of Results:

[In 2021\$ (000) Incurred Costs										
		Adju	ısted-Recor	ded		Adjusted-Forecast					
Years	2017	2018	2019	2022	2023	2024					
Labor	343	395	425	518	587	683	769	745			
Non-Labor	11	56	25	79	37	45	51	49			
NSE	0	0	0	0	0	0	0	0			
Total	354	451	450	597	624	728	820	794			
FTE	3.5	4.1	4.5	5.4	6.2	7.2	8.1	7.9			

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Cost Center: 2200-7001.000 - DIMP Support for SDG&E

Cost Center Allocations (Incurred Costs):

Directly Retained
Directly Allocated
Subj. To % Alloc.
Total Incurred
% Allocation
Retained
SEU
CORP
Unreq

	2021 Adjւ	sted-Reco	rded		2022 Adjusted-Forecast				
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
0	0	0	0	0.0	0	0	0	0	0.0
587	37	0	624	6.2	683	45	0	728	7.2
0	0	0	0	0.0	0	0	0	0	0.0
587	37	0	624	6.2	683	45	0	728	7.2
0.00%	0.00%				0.00%	0.00%			
100.00%	100.00%				100.00%	100.00%			
0.00%	0.00%				0.00%	0.00%			
0.00%	0.00%				0.00%	0.00%			

Directly Retained
Directly Allocated
Subj. To % Alloc.
Total Incurred
% Allocation
Retained
SEU
CORP
Unreg

	2023 Adju	sted-Fore	cast		2024 Adjusted-Forecast				
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
0	0	0	0	0.0	0	0	0	0	0.0
769	51	0	820	8.1	745	49	0	794	7.9
0	0	0	0	0.0	0	0	0	0	0.0
769	51	0	820	8.1	745	49	0	794	7.9
0.00%	0.00%				0.00%	0.00%			
100.00%	100.00%				100.00%	100.00%			
0.00%	0.00%				0.00%	0.00%			
0.00%	0.00%				0.00%	0.00%			

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2021

The allocation of shared services is based on the scope of DIMP work expected at SDG&E.

Cost Center Allocation Percentage for 2022

The allocation of shared services is based on the scope of DIMP work expected at SDG&E.

Cost Center Allocation Percentage for 2023

The allocation of shared services is based on the scope of DIMP work expected at SDG&E.

Cost Center Allocation Percentage for 2024

The allocation of shared services is based on the scope of DIMP work expected at SDG&E.

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Cost Center: 2200-7001.000 - DIMP Support for SDG&E

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs										
Forecas	t Method	Bas	se Foreca	st	Forec	Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024	
Labor	Base YR Rec	587	587	587	96	182	158	683	769	745	
Non-Labor	Base YR Rec	37	37	37	8	14	12	45	51	49	
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0	
Tota	ıl	624	624	624	104	196	170	728	820	794	
FTE	Base YR Rec	6.2	6.2	6.2	1.0	1.9	1.7	7.2	8.1	7.9	

Forecast Adjustment Details:									
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type			
2022	96	8	0	104	1.0	1-Sided Adj			
Explanation:	This adjustment captures SDG&E DIMP activities.				•				
2022 Total	96	8	0	104	1.0				
2023	182	14	0	196	1.9	1-Sided Adj			
Explanation:	This adjustment captures SDG&E DIMP activities.				•				
2023 Total	182	14	0	196	1.9				
2024	158	12	0	170	1.7	1-Sided Adj			
Explanation:	This adjustment captures SDG&E DIMP activities.								
2024 Total	158	12	0	170	1.7				

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Cost Center: 2200-7001.000 - DIMP Support for SDG&E

Determination of Adjusted-Recorded (Incurred Costs):

retermination of Aujusteu-r	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	265	312	338	423	498
Non-Labor	10	52	24	76	37
NSE	0	0	0	0	0
Total	275	364	362	498	534
FTE	3.0	3.5	3.8	4.5	5.1
djustments (Nominal \$) **					
Labor	0	0	0	0	2
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	2
FTE	0.0	0.0	0.0	0.0	0.1
Recorded-Adjusted (Nomina	l \$)				
Labor	265	312	338	423	499
Non-Labor	10	52	24	76	37
NSE	0	0	0	0	0
Total	275	364	362	498	536
FTE	3.0	3.5	3.8	4.5	5.2
acation & Sick (Nominal \$)					
Labor	45	54	64	74	88
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	45	54	64	74	88
FTE	0.5	0.6	0.7	0.9	1.0
scalation to 2021\$					
Labor	33	30	23	21	0
Non-Labor	1	4	1	3	0
NSE	0	0	0	0	0
Total	34	34	24	24	
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constar	nt 2021\$)				
Labor	343	395	425	518	587
Non-Labor	11	56	25	79	37
NSE	0	0	0	0	0
Total	354	451	450	597	624
FTE	3.5	4.1	4.5	5.4	6.2

^{*} After company-wide exclusions of Non-GRC costs

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

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Cost Center: 2200-7001.000 - DIMP Support for SDG&E

Summary of Adjustments to Recorded:

	In Nominal \$ (000) Incurred Costs										
Years 2017 2018 2019 2020 2021											
Labor		0	0	0	0	2					
Non-Labor		0	0	0	0	0					
NSE		0	0	0	0	0					
	Total		0		0 -	2					
FTE		0.0	0.0	0.0	0.0	0.1					

Detail of Adjustments to Recorded:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2017	-265	-10	0	-3.0	SSD_Type Transf FROM IO_Ret
Explanation:	Costs are incurred by a NSS (Cost Center but are	allocated to	SDG&E for	SDG&E program support.
2017	265	10	0	3.0	SSD_Type Transf TO IO_Alloc
Explanation:	Costs are incurred by a NSS (Cost Center but are	allocated to	SDG&E for \$	SDG&E program support.
2017 Total	0	0	0	0.0	
2018	-312	-52	0	-3.5	SSD_Type Transf FROM IO_Ret
Explanation:	Costs are incurred by a NSS (Cost Center but are	allocated to	SDG&E for \$	SDG&E program support.
2018	312	52	0	3.5	SSD_Type Transf TO IO_Alloc
Explanation:	Costs are incurred by a NSS (Cost Center but are	allocated to	SDG&E for \$	SDG&E program support.
2018 Total	0	0	0	0.0	
2019	-338	-24	0	-3.8	SSD_Type Transf FROM IO_Ret
Explanation:	Costs are incurred by a NSS (Cost Center but are	allocated to	SDG&E for \$	SDG&E program support.
2019	338	24	0	3.8	SSD_Type Transf TO IO_Alloc
Explanation:	Costs are incurred by a NSS (Cost Center but are	allocated to	SDG&E for \$	SDG&E program support.
2019 Total	0	0	0	0.0	
2020	-423	-76	0	-4.5	SSD_Type Transf FROM IO_Ret
Explanation:	Costs are incurred by a NSS (Cost Center but are	allocated to	SDG&E for \$	SDG&E program support.
2020	423	76	0	4.5	SSD_Type Transf TO IO_Alloc
Explanation:	Costs are incurred by a NSS (Cost Center but are	allocated to	SDG&E for	SDG&E program support.
2020 Total	0	0	0	0.0	
2020 Total 2021	0 -498	0 -37	0 0	0.0 -5.1	SSD_Type Transf FROM IO_Ret

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Cost Center: 2200-7001.000 - DIMP Support for SDG&E

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2021	498	37	0	5.1	SSD_Type Transf TO IO_Alloc
Explanation:	Costs are allocated to SDG&E.				
2021	2	0	0	0.1	1-Sided Adj
Explanation:	One-sided entry - SAP adj using	cost element 690	0200, costs i	in nonGRC,	should be in GRC
2021 Total	2	0	0	0.1	

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: B. DIMP
Category-Sub: 1. DIMP

Cost Center: 2200-7001.000 - DIMP Support for SDG&E

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)

RAMP Line Item ID: C21 T1

RAMP Line Item Name: DIMP - Distribution Risk Evaluation and Monitoring System (DREAMS)

Tranche(/s): Tranche1: Plastic - Main (VIPP)

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	624	728	820	794	45,515	55,097

Cost Estimate Changes from RAMP:

Costs presented in workpaper 2200-7001 are a portion of costs forecasted for the SDG&E DIMP that are incurred as shared services and were presented in the SDG&E RAMP report. The RAMP report reflected costs after allocations but for the GRC, costs are captured where they are incurred. SoCalGas's RAMP range should not be referenced; rather, remainder of activities & costs related to the SDG&E DIMP are presented in workpaper 1TD002.000.

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:

Units as compared to RAMP are addressed in workpaper 1TD002.000. SoCalGas program support to SDG&E is a portion of the SDG&E DIMP O&M costs.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	0.300	1.200	

RSE Changes from RAMP:

RSEs reflect SoCalGas activities. For SDG&E RSEs, refer to workpaper 1TD002.000.

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. FIMP
Cost Center: 2200-7002.000

Summary for Category: C. FIMP

		In 2021\$ (000) Inc	curred Costs	
	Adjusted-Recorded		Adjusted-Forecast	
	2021	2022	2023	2024
Labor	0	0	0	100
Non-Labor	0	0	0	0
NSE	0	0	0	0
Total		0	0	100
FTE	0.0	0.0	0.0	0.8

Cost Centers belonging to this Category:

2200-7002.000 FIMP Supp	ort for SDG&E			
Labor	0	0	0	100
Non-Labor	0	0	0	0
NSE	0	0	0	0
Total	0	0	0	100
FTE	0.0	0.0	0.0	0.8

Beginning of Workpaper 2200-7002.000 - FIMP Support for SDG&E

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. FIMP
Category-Sub 1. FIMP

Cost Center: 2200-7002.000 - FIMP Support for SDG&E

Activity Description:

SoCalGas program support of the SDG&E FIMP.

Forecast Explanations:

Labor - Zero-Based

SoCalGas company labor in support of the SDG&E FIMP.

Non-Labor - Zero-Based

SoCalGas non-labor costs (e.g., contracts) in support of the SDG&E FIMP.

NSE - Zero-Based

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs									
		Adju	ısted-Recor		Adjusted-Forecast						
Years	2017	2018	2019	2020	2021	2022	2023	2024			
Labor	0	0	0	0	0	0	0	100			
Non-Labor	0	0	0	0	0	0	0	0			
NSE	0	0	0	0	0	0	0	0			
Total	0	0	0	0	0	0	0	100			
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8			

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. FIMP
Category-Sub: 1. FIMP

Cost Center: 2200-7002.000 - FIMP Support for SDG&E

Cost Center Allocations (Incurred Costs):

Directly Retained
Directly Allocated
Subj. To % Alloc.
Total Incurred
% Allocation
Retained
SEU
CORP

Unreg

	2021 Adju	sted-Reco	rded			2022 Adjı	usted-Fore	cast	
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
0	0	0	0	0.0	0	0	0	0	0.0
0	0	0	0	0.0	0	0	0	0	0.0
0	0	0	0	0.0	0	0	0	0	0.0
0	0	0	0	0.0	0	0	0	0	0.0
0.00%	0.00%				0.00%	0.00%			
100.00%	100.00%				100.00%	100.00%			
0.00%	0.00%				0.00%	0.00%			
0.00%	0.00%				0.00%	0.00%			

Directly Retained
Directly Allocated
Subj. To % Alloc.
Total Incurred
% Allocation
Retained
SEU
CORP

Unreg

	2023 Adju	sted-Fore	cast		2024 Adjusted-Forecast				
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
0	0	0	0	0.0	0	0	0	0	0.0
0	0	0	0	0.0	100	0	0	100	0.8
0	0	0	0	0.0	0	0	0	0	0.0
0	0	0	0	0.0	100	0	0	100	0.8
0.00%	0.00%				0.00%	0.00%			
100.00%	100.00%				100.00%	100.00%			
0.00%	0.00%	•			0.00%	0.00%		•	·
0.00%	0.00%				0.00%	0.00%			

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2021

The allocation of shared services is based on the scope of SDG&E FIMP and costs are directly sent to SDG&E.

Cost Center Allocation Percentage for 2022

The allocation of shared services is based on the scope of SDG&E FIMP and costs are directly sent to SDG&E.

Cost Center Allocation Percentage for 2023

The allocation of shared services is based on the scope of SDG&E FIMP and costs are directly sent to SDG&E.

Cost Center Allocation Percentage for 2024

The allocation of shared services is based on the scope of SDG&E FIMP and costs are directly sent to SDG&E.

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. FIMP
Category-Sub: 1. FIMP

Cost Center: 2200-7002.000 - FIMP Support for SDG&E

50

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs									
Forecast Method Base Forecast			Forec	ast Adjust	ments	Adjusted-Forecast				
Years	s	2022 2023 2024 2022 2023		2024	2022	2023	2024			
Labor	Zero-Based	0	0	0	0	0	100	0	0	100
Non-Labor	Zero-Based	0	0	0	0	0	0	0	0	0
NSE	Zero-Based	0	0	0	0	0	0	0	0	0
Tota	ıl	0	0	0	0	0	100	0	0	100
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.8

Forecast Adjustment Details:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type
2022 Total	0	0	0	0	0.0	
2023 Total	0	0	0	0	0.0	
2024	50	0	0	50	0.4	1-Sided Adj
	-	(FILED T				

Explanation:

Zero-based forecast for FIMP Transmission activities. The FIMP will be a new incremental program in 2024 that provides a comprehensive, systematic, and integrated approach for managing and enhancing the safety and integrity of facilities and associated equipment. Costs included in this line item are related to incremental labor costs for integrity management and gas engineering teams that will support both SCG and SDG&E efforts related to the FIMP. Refer to supplemental workpapers in workpaper 2TD004.000 for more detail.

50

0.4

1-Sided Adj

Explanation:

2024

Zero-based forecast for FIMP Distribution activities. The FIMP will be a new incremental program in 2024 that provides a comprehensive, systematic, and integrated approach for managing and enhancing the safety and integrity of facilities and associated equipment. Costs included in this line item are related to incremental labor costs for integrity management and gas engineering teams that will support both SCG and SDG&E efforts related to the FIMP. Refer to supplemental workpapers in workpaper 2TD004.000 for more detail.

2024 Total	100	0	0	100	0.8

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. FIMP
Category-Sub: 1. FIMP

Cost Center: 2200-7002.000 - FIMP Support for SDG&E

Determination of Adjusted-Recorded (Incurred Costs):

Determination of Aujusted	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (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
Adjustments (Nominal \$) **	•				
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nomin	nal \$)				
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
Vacation & Sick (Nominal \$	5)				
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 (Const	ant 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

^{*} After company-wide exclusions of Non-GRC costs

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

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. FIMP
Category-Sub: 1. FIMP

Cost Center: 2200-7002.000 - FIMP Support for SDG&E

Summary of Adjustments to Recorded:

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

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

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. FIMP
Category-Sub: 1. FIMP

Cost Center: 2200-7002.000 - FIMP Support for SDG&E

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-Risk-1 Incident Related to the High Pressure System (Excluding Dig-in)

RAMP Line Item ID: NEW 01

RAMP Line Item Name: NEW - Facilities Integrity Management Program (FIMP) - SDGE Distribution

Tranche(/s): Tranche1: Supply Line - Facilities

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	50	0	0

Cost Estimate Changes from RAMP:

Applying the FIMP to SDG&E distribution facilities was not considered at the time of the RAMP report so shared services costs are new. Costs for the SDG&E FIMP activities are presented in workpaper 1TD004.000. More detail about shared services costs can be found in the supplemental workpaper in workpaper 2TD004.000.

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 No feasible units	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:

Units are accounted for in workpaper 1TD004.000. SoCalGas program support to SDG&E is not measured in units since it consists of activities such as data management, records management and reporting.

Risk Spend Efficiency (RSE)

 GRC RSE
 RAMP RSE

 Tranche 1
 15.500
 0.000

RSE Changes from RAMP:

RSEs reflect SoCalGas activities. For SDG&E RSEs, refer to workpaper 1TD004.000.

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: C. FIMP
Category-Sub: 1. FIMP

Cost Center: 2200-7002.000 - FIMP Support for SDG&E

RAMP Item # 2

RAMP Activity

RAMP Chapter: SCG-Risk-1 Incident Related to the High Pressure System (Excluding Dig-in)

RAMP Line Item ID: NEW 04

RAMP Line Item Name: NEW - Facilities Integrity Management Program (FIMP) - SDG&E Transmission

Tranche(/s): Tranche1: Transmission Facilities

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	50	0	0

Cost Estimate Changes from RAMP:

Applying the FIMP to SDG&E transmission facilities was not considered at the time of the RAMP report so shared services costs are new. Costs for the SDG&E FIMP activities are presented in workpaper 1TD004.000. More detail about shared services costs can be found in the supplemental workpaper in workpaper 2TD004.000.

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 No feasible units	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:

Units are accounted for in workpaper 1TD004.000. SoCalGas program support to SDG&E is not measured in units since it consists of activities such as data management, records management and reporting.

Risk Spend Efficiency (RSE)

Tranche 1	3.100	0.000

GRC RSE

RSE Changes from RAMP:

RSEs reflect SoCalGas activities. For SDG&E RSEs, refer to workpaper 1TD004.000.

RAMP RSE

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: D. GSEP
Cost Center: 2200-7003.000

Summary for Category: D. GSEP

	In 2021\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2021	2022	2023	2024			
Labor	0	0	8	7			
Non-Labor	0	0	8	7			
NSE	0	0	0	0			
Total	0	0	16	14			
FTE	0.0	0.0	0.3	0.3			

Cost Centers belonging to this Category:

2200-7003.000 Gas Safety Enhancement Programs Support for SDG&E

Labor	0	0	8	7
Non-Labor	0	0	8	7
NSE	0	0	0	0
Total	0	0	16	14
FTE	0.0	0.0	0.3	0.3

Beginning of Workpaper 2200-7003.000 - Gas Safety Enhancement Programs Support for SDG&E

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson Category: D. GSEP

Category-Sub 1. Gas Rules & Regulations Implementation

Cost Center: 2200-7003.000 - Gas Safety Enhancement Programs Support for SDG&E

Activity Description:

SoCalGas program support for SDG&E gas safety rules and regulations implementation.

Forecast Explanations:

Labor - Zero-Based

SoCalGas company labor for SDG&E gas safety rules and regulations implementation.

Non-Labor - Zero-Based

SoCalGas non-labor costs (e.g., contracts) in support of SDG&E gas safety rules and regulations implementation.

NSE - Zero-Based

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs							
		Adju	ısted-Recor	Adjusted-Forecast					
Years	2017	2018	2019	2020	2021	2022	2023	2024	
Labor	0	0	0	0	0	0	8	7	
Non-Labor	0	0	0	0	0	0	8	7	
NSE	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	16	14	
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson
Category: D. GSEP

Category-Sub: 1. Gas Rules & Regulations Implementation

Cost Center: 2200-7003.000 - Gas Safety Enhancement Programs Support for SDG&E

Cost Center Allocations (Incurred Costs):

Directly Retained
Directly Allocated
Subj. To % Alloc.
Total Incurred
% Allocation
Retained
SEU
CORP

Unreg

	2021 Adju	sted-Reco	rded		2022 Adjusted-Forecast					
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE	
0	0	0	0	0.0	0	0	0	0	0.0	
0	0	0	0	0.0	0	0	0	0	0.0	
0	0	0	0	0.0	0	0	0	0	0.0	
0	0	0	0	0.0	0	0	0	0	0.0	
0.00%	0.00%				0.00%	0.00%				
100.00%	100.00%				100.00%	100.00%				
0.00%	0.00%				0.00%	0.00%				
0.00%	0.00%				0.00%	0.00%				

Directly Retained
Directly Allocated
Subj. To % Alloc.
Total Incurred
% Allocation
Retained
SEU
CORP
Unreg

	2023 Adju	sted-Fore	cast		2024 Adjusted-Forecast					
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE	
0	0	0	0	0.0	0	0	0	0	0.0	
8	8	0	16	0.3	7	7	0	14	0.3	
0	0	0	0	0.0	0	0	0	0	0.0	
8	8	0	16	0.3	7	7	0	14	0.3	
0.00%	0.00%				0.00%	0.00%				
100.00%	100.00%				100.00%	100.00%				
0.00%	0.00%				0.00%	0.00%				
0.00%	0.00%				0.00%	0.00%				

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2021

The allocation of shared services is based on the scope of SDG&E GSEP compliance activities and costs are directly sent to SDG&E.

Cost Center Allocation Percentage for 2022

The allocation of shared services is based on the scope of SDG&E GSEP compliance activities and costs are directly sent to SDG&E.

Cost Center Allocation Percentage for 2023

The allocation of shared services is based on the scope of SDG&E GSEP compliance activities and costs are directly sent to SDG&E.

Cost Center Allocation Percentage for 2024

The allocation of shared services is based on the scope of SDG&E GSEP compliance activities and costs are directly sent to SDG&E.

GAS INTEGRITY PROGRAMS Area:

Witness: Amy Kitson D. GSEP Category:

Category-Sub: 1. Gas Rules & Regulations Implementation

Cost Center: 2200-7003.000 - Gas Safety Enhancement Programs Support for SDG&E

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	Zero-Based	0	0	0	0	8	7	0	8	7
Non-Labor	Zero-Based	0	0	0	0	8	7	0	8	7
NSE	Zero-Based	0	0	0	0	0	0	0	0	0
Tota	ıl	0	0	0	0	16	14	0	16	14
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.3	0.3

orccast Aujusti	nent Details:					
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type
2022 Total	0	0	0	0	0.0	
2023	5	5	0	10	0.1	1-Sided Adj
Explanation:	SoCalGas costs incurre Safety Rule Part 1 requ activity.	• •		•		
2023	1	1	0	2	0.1	1-Sided Adj
Explanation:	SoCalGas costs incurre Safety Rule Part 2 requ	• •		•		
2023	2	2	0	4	0.1	1-Sided Adj
Explanation:	SoCalGas costs incurre Minimum Rupture Stan	• •		•		
2023 Total	8	8	0	16	0.3	
2024	5	5	0	10	0.1	4 0:4-4 44:
Explanation:	SoCalGas costs incurre				0.1	1-Sided Adj
	Safety Rule Part 1 requactivity.			nplementation	on of the PHMS	SA Gas Transmission
2024	Safety Rule Part 1 requ			nplementation	on of the PHMS	SA Gas Transmission
	Safety Rule Part 1 requactivity.	irement to recor 1 ed in support of t	nfirm pipeline 0 he SDG&E ir	nplementation MAOP. Cos 2 nplementation	on of the PHMS ts are driven b 0.1 on of the PHMS	SA Gas Transmission y the SDG&E level of 1-Sided Adj SA Gas Transmission
	Safety Rule Part 1 requactivity. 1 SoCalGas costs incurre	irement to recor 1 ed in support of t	nfirm pipeline 0 he SDG&E ir	nplementation MAOP. Cos 2 nplementation	on of the PHMS ts are driven b 0.1 on of the PHMS	SA Gas Transmission y the SDG&E level of 1-Sided Adj SA Gas Transmission
Explanation:	Safety Rule Part 1 requactivity. 1 SoCalGas costs incurre Safety Rule Part 2 requ	1 ed in support of to record to reco	ofirm pipeline 0 he SDG&E ir are driven by 0 he SDG&E ir	nplementation MAOP. Cos 2 nplementation the SDG&E 2 nplementation	on of the PHMS ts are driven b 0.1 on of the PHMS Elevel of activit 0.1 on of the Valve	SA Gas Transmission by the SDG&E level of 1-Sided Adj SA Gas Transmission by. 1-Sided Adj Installation and

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson Category: D. GSEP

Category-Sub: 1. Gas Rules & Regulations Implementation

Cost Center: 2200-7003.000 - Gas Safety Enhancement Programs Support for SDG&E

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	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
Adjustments (Nominal \$) *	*				
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nomin	nal \$)				
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
Vacation & Sick (Nominal S	\$)				
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 (Const	tant 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

^{*} After company-wide exclusions of Non-GRC costs

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

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson Category: D. GSEP

Category-Sub: 1. Gas Rules & Regulations Implementation

Cost Center: 2200-7003.000 - Gas Safety Enhancement Programs Support for SDG&E

Summary of Adjustments to Recorded:

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

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

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson Category: D. GSEP

Category-Sub: 1. Gas Rules & Regulations Implementation

Cost Center: 2200-7003.000 - Gas Safety Enhancement Programs Support for SDG&E

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-Risk-1 Incident Related to the High Pressure System (Excluding Dig-in)

RAMP Line Item ID: NEW 03

RAMP Line Item Name: NEW - Gas Transmission Safety Program (GTSR) Part 2

Tranche(/s): Tranche1: Transmission - HCA & non-HCA

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	2	2	0	0

Cost Estimate Changes from RAMP:

GTSR Part 2 was not considered at the time of the RAMP report due to it being a new regulation without a known publication date. Costs presented in workpaper 2200-7003 are a portion of costs forecasted for the SDG&E implementation. The remainder of activities & costs related to the SDG&E implementation are presented in workpaper 1TD005.000.

GRC	Work	Unit/∆	ctivity	I evel	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:

New mitigation since the RAMP report. SoCalGas program support to SDG&E is not measured in units since it consists of activities such as data management, records management, and reporting.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	

RSE Changes from RAMP:

New mitigation since the RAMP Report.

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson Category: D. GSEP

Category-Sub: 1. Gas Rules & Regulations Implementation

Cost Center: 2200-7003.000 - Gas Safety Enhancement Programs Support for SDG&E

RAMP Item # 2

RAMP Activity

RAMP Chapter: SCG-Risk-1 Incident Related to the High Pressure System (Excluding Dig-in)

RAMP Line Item ID: NEW 02

RAMP Line Item Name: Transmission - HCA & non-HCA

Tranche(/s): Tranche1: Overall

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	4	2	0	0

Cost Estimate Changes from RAMP:

The Valve Rule was not considered at the time of the RAMP report due to it being a new regulation without a known publication date. Costs presented in workpaper 2200-7003 are a portion of costs forecasted for the SDG&E implementation. The remainder of activities & costs related to the SDG&E implementation are presented in workpaper 1TD005.000.

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 No feasible units	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:

New mitigation since the RAMP report. SoCalGas program support to SDG&E is not measured in units since it consists of activities such as data management, records management, and reporting.

Risk Spend Efficiency (RSE)

	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	

RSE Changes from RAMP:

New mitigation since the RAMP Report.

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson Category: D. GSEP

Category-Sub: 1. Gas Rules & Regulations Implementation

Cost Center: 2200-7003.000 - Gas Safety Enhancement Programs Support for SDG&E

RAMP Item # 3

RAMP Activity

RAMP Chapter: SCG-Risk-1 Incident Related to the High Pressure System (Excluding Dig-in)

RAMP Line Item ID: M01 T1-T2

RAMP Line Item Name: Gas Transmission Safety Rule - MAOP Reconfirmation (HCA and Non-HCA)

Tranche(/s): Tranche1: Transmission - HCA; Tranche2: Transmission - Non-HCA

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost	2022 Forecast	2023 Forecast	2024 Forecast	202 RAMP F (2020 Inc	Range
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	0	8	8	28,755	92,016
Tranche 2 Cost Estimate	0	0	2	2	11,745	37,584

Cost Estimate Changes from RAMP:

Costs presented in workpaper 2200-7003 are a portion of costs forecasted for the SDG&E implementation and were presented in the SDG&E RAMP report. The RAMP report reflected costs after allocations but for the GRC, costs are captured where they are incurred. The remainder of activities & costs related to the SDG&E implementation are presented in workpaper 1TD005.000.

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 No feasible units	0.00	0.00	0.00	0.00	17.45	59.33
Tranche 2 No feasible units	0.00	0.00	0.00	0.00	7.15	24.31

Work Unit Changes from RAMP:

Units are accounted for in workpaper 1TD005.000. SoCalGas program support to SDG&E is not measured in units since it consists of activities such as data management, records management, and reporting.

Risk S	pend	Efficiency	(RSE)
--------	------	------------	-------

GRC RSE	RAMP RSE	
3.300	2.700	
11.400	1.800	
	3.300	3.300 2.700

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson Category: D. GSEP

Category-Sub: 1. Gas Rules & Regulations Implementation

Cost Center: 2200-7003.000 - Gas Safety Enhancement Programs Support for SDG&E

RSE Changes from RAMP:

RSE reflects SCG data. Refer to 1TD005.000 for the SDG&E RSE.

Area: GAS INTEGRITY PROGRAMS

Witness: Amy Kitson

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0087	000	Integrity Mngment Stratgic Plnng SIMP Re
2200-0181	000	INT MGMT HP FIELD VALIDATION
2200-0238	000	INT MGMT WORKPLACE DEVELOPMENT
2200-0256	000	SPECIAL PROJECTS MANAGER
2200-0319	000	INT MGMT BUDGETS & CONTRACTS
2200-0425	000	UGS DATA INTEGRATION AND TECH DEPLOYMENT
2200-0900	000	Integrity Mngment Stratgic Plnng TIMP Re
2200-0930	000	INTEGRITY MANAGEMENT SIMP ASSESSMENT
2200-0955	000	PI Data Quality
2200-0957	000	PI HPPD DB Risk
2200-0958	000	PI HP Data Integrtn
2200-1015	000	Construction Ops Materials & Recon
2200-2038	000	INTEGRITY MGMT PROGRAM DEVELOPMENT
2200-2108	000	INT MGMT DIRECTOR
2200-2109	000	INT MGMT PROGRAM SUPPORT
2200-2138	000	INT MGMT CORROSION
2200-2203	000	INT MGMT CATHODIC PROTECTION REMEDIATION
2200-2290	000	P&M, WORKFORCE DEV, & POLICY CONTROLS
2200-2291	000	ASSESSMENT PLANNING & RECORDS
2200-2292	000	RISK & THREAT
2200-2293	000	INT MGMT REPORTING MGMT
2200-2294	000	INT MGMT PREVENTATIVE & MITIGATION
2200-2295	000	PI EXECUTION
2200-2296	000	DIMP ANALYSYS & SPECIAL PROJECTS
2200-2298	000	DATA MGMT & GPS-NONSHARED
2200-2299	000	INT MGMT HI PRESSURE DESIGN & ANALY ASMT
2200-2335	000	IM Regulatory Program Management
2200-2407	000	INT MGMT ECDA - SOCAL
2200-2499	000	GIS STRATEGY & APPS-TIMP
2200-2595	000	DIR INTEGRITY MANAGEMENT & STRAT PLNG
2200-2601	000	STORAGE RISK ASSESSMENT & CONTROLS
2200-2619	000	SIMP PMO CAPITAL SETTLEMENT
2200-2631	000	INT MGMT & STRAT PLNG REGULATORY MANAGER-Stor