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-19-CWP)

PUBLIC

CAPITAL WORKPAPERS TO PREPARED DIRECT TESTIMONY

OF BRENTON K. GUY

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-19-CWP - FACILITIES/OTHER

DOCUMENT	PAGE

Overall Summary For Exhibit No. SCG-19-CWP	1
Category: A. Infrastructure & Improvements	2
006530 - INFRASTRUCTURE & IMPROVEMENTS	3
Category: B. Safety & Compliance	19
006540 - SAFETY AND COMPLIANCE	20
Category: C. Sustainability and Conservation	30
006550 - SUSTAINABILITY AND ENERGY CONSERVATION	31
Category: D. Fleet Projects	44
007160 - FLEET EQUIPMENT	45
Category: E. Fleet Alternative Refueling	54
007340 - RNG REFUELING STATIONS	55
00734A - HYDROGEN REFUELING STATIONS	69
00734C - ELECTRIC VEHICLE CHARGING	75

Overall Summary For Exhibit No. SCG-19-CWP

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy

In 2021 \$ (000)					
	Adjusted-Forecast				
2022	2023	2024			
52,182	74,899	85,355			
2,388	2,388	2,388			
13,885	9,312	9,312			
2,071	556	556			
9,146	29,973	13,954			
79,672	117,128	111,565			
	2022 52,182 2,388 13,885 2,071 9,146	Adjusted-Forecast 2022 2023 52,182 74,899 2,388 2,388 13,885 9,312 2,071 556 9,146 29,973			

Г

Area:FACILITIES/OTHERWitness:Brenton K. GuyCategory:A. Infrastructure & ImprovementsWorkpaper:006530

Summary for Category: A. Infrastructure & Improvements

In 2021\$ (000)						
Adjusted-Recorded		Adjusted-Forecast				
2021	2022	2023	2024			
1,347	1,484	1,501	1,501			
60,225	50,698	73,398	83,854			
0	0	0	0			
61,572	52,182	74,899	85,355			
10.1	10.8	11.0	11.0			
	2021 1,347 60,225 0 61,572	Adjusted-Recorded 2021 2022 1,347 1,484 60,225 50,698 0 0 61,572 52,182	Adjusted-Recorded Adjusted-Forecast 2021 2022 2023 1,347 1,484 1,501 60,225 50,698 73,398 0 0 0 61,572 52,182 74,899			

006530 Infrastructure & Improvements

Labor	1,347	1,484	1,501	1,501
Non-Labor	60,225	50,698	73,398	83,854
NSE	0	0	0	0
Total	61,572	52,182	74,899	85,355
FTE	10.1	10.8	11.0	11.0

Beginning of Workpaper Group 006530 - Infrastructure & Improvements

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements

Summary of Results (Constant 2021 \$ in 000s):

Forecast	Method		Adjusted Forecast						
Years	s	2017	2018	2019	2020	2021	2022	2023	2024
Labor	3-YR Average	646	555	803	1,506	1,347	1,484	1,501	1,501
Non-Labor	3-YR Average	27,715	16,643	21,146	50,195	60,225	50,698	73,398	83,854
NSE	3-YR Average	0	0	0	0	0	0	0	0
Tota	al	28,361	17,198	21,949	51,701	61,572	52,182	74,899	85,355
FTE	3-YR Average	4.5	3.5	5.6	10.0	10.1	10.8	11.0	11.0

Business Purpose:

The Infrastructure & Improvements forecast funds necessary facility improvements, workspace changes, and equipment upgrades to adequately support business operations. Facility Operations identifies requirements based on the criticality of the facility, the age of the asset, and the implications for failure to complete the replacement or upgrade. For larger facilities, the Infrastructure & Improvements projects are based on a systematic management process to plan for known recurring repairs and replacement requirements that extend the life and retain usable condition of facilities and systems.

Physical Description:

Improvement projects include replacement of boilers, chillers, water heaters, cooling towers, flooring & carpeting, generators, air handlers, roofs, HVAC systems, plumbing, electrical, ceiling tiles, restrooms and parking lot asphalt. This category also includes facility renovations and construction of the CCM building at Pico Rivera. Physical security infrastructure enhancements include security system, fencing and badge panel reader upgrades.

Project Justification:

This funds numerous facility improvements to adequately support business operations, extend the life of assets and protect employees and company property. The requested capital expenditure costs are needed to maintain safety of company facilities and assets, support operational needs, and achieve cost avoidance. These basic infrastructure improvements maintain the functional integrity of our facilities.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements

Forecast Methodology:

Labor - 3-YR Average

The calculations support 10.8 - 11.0 FTEs that have their labor costs spread over multiple projects for each annual budget. The labor forecast was determined using the 3-year average which most accurately forecasts the labor for infrastructure improvements, based on historical projects and the increased support necessary to execute the projects over the past three years. A zero-based labor adjustment was added for CCM building based on the project estimate since there are no historical labor costs recorded for a project of similar scope and size.

Non-Labor - 3-YR Average

The forecast for this cost category was determined using the 3-year year average of infrastructure and improvement projects, facility renovations and security projects. The 3-year average most accurately represents the forecast necessary for improvement projects and facility renovations due to the aging facilities and the change to activity based working model. The CCM building is an incremental forecast adjustment based on the project estimate since there are no historical costs recorded for a project of similar scope and size.

NSE - 3-YR Average

Not applicable.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements

Summary of Adjustments to Forecast

In 2021 \$ (000)										
Forecast Method Base Forecast Forecast Adjustments Adjusted-Forecast								recast		
Years	3	2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	3-YR Average	1,219	1,219	1,219	265	282	282	1,484	1,501	1,501
Non-Labor	3-YR Average	43,855	43,855	43,855	6,843	29,543	39,999	50,698	73,398	83,854
NSE	3-YR Average	0	0	0	0	0	0	0	0	0
Tota	I	45,074	45,074	45,074	7,108	29,825	40,281	52,182	74,899	85,355
FTE	3-YR Average	8.6	8.6	8.6	2.2	2.4	2.4	10.8	11.0	11.0

Forecast Adjustment Details

Year	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>		
2022	265	6,843	0	7,108	2.2		
Explanation:	Incremental forecast for new con	struction of CCM Building	which will house	Gas Control at Pico F	Rivera.		
2022 To	tal 265	6,843	0	7,108	2.2		
2023	282	29,543	0	29,825	2.4		
Explanation:	Incremental forecast for new con	struction of CCM Building	which will house	Gas Control at Pico F	Rivera.		
2023 To	tal 282	29,543	0	29,825	2.4		
2024	282	39,999	0	40,281	2.4		
Explanation: Incremental forecast for new construction of CCM Building which will house Gas Control at Pico Rivera.							
2024 To	tal 282	39,999	0	40,281	2.4		

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements

Determination of Adjusted-Recorded:

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	372	378	546	1,134	1,149
Non-Labor	19,955	13,643	16,433	44,580	58,343
NSE	0	0	0	0	0
Total	20,327	14,020	16,980	45,715	59,492
FTE	3.3	3.0	4.4	8.5	8.6
Adjustments (Nominal \$)	**				
Labor	40	-4	13	-21	-3
Non-Labor	726	-490	1,076	-946	1,881
NSE	0	0	0	0	0
Total	766	-493	1,088	-967	1,878
FTE	0.5	0.0	0.2	-0.1	-0.1
Recorded-Adjusted (Nom	inal \$)				
Labor	412	374	559	1,113	1,145
Non-Labor	20,681	13,153	17,509	43,635	60,225
NSE	0	0	0	0	0
Total	21,093	13,527	18,068	44,748	61,370
FTE	3.8	3.0	4.6	8.4	8.5
Vacation & Sick (Nominal	\$)				
Labor	70	64	106	196	202
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	70	64	106	196	202
FTE	0.7	0.5	1.0	1.6	1.6
Escalation to 2021\$					
Labor	164	116	138	197	0
Non-Labor	7,034	3,490	3,637	6,560	0
NSE	0	0	0	0	0
Total	7,198	3,606	3,775	6,757	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Cons	stant 2021\$)				
Labor	646	555	803	1,506	1,347
Non-Labor	27,715	16,643	21,146	50,195	60,225
NSE	0	0	0	0	0
Total	28,361	17,198	21,949	51,701	61,572
FTE	4.5	3.5	5.6	10.0	10.1

* After company-wide exclusions of Non-GRC costs

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

FACILITIES/OTHER
Brenton K. Guy
00653.0
A. Infrastructure & Improvements
1. Infrastructure & Improvements
006530 - Infrastructure & Improvements

Summary of Adjustments to Recorded:

			In Nominal \$(00	00)		
	Years	2017	2018	2019	2020	2021
Labor		40	-4	13	-21	-3
Non-Labor		726	-490	1,076	-946	1,881
NSE		0	0	0	0	0
	Total	766	-493	1,088	-967	1,878
FTE		0.5	0.0	0.2	-0.1	-0.1

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	<u>NLbr</u>	NSE	Total	FTE
2017	-4	-404	0	-408	-0.1
Explanation:	To transfer xeriscape and sust Sustainability.	ainability project costs	in budget code 653 to	budget code 655	
2017	44	422	0	466	0.4
Explanation:	To transfer infrastructure impro improvements.	ovement project costs	from 655 Sustainability	y to 653 Infrastructure	
2017	5	782	0	787	0.1
Explanation:	To transfer infrastructure impro	ovement project costs	from 654 Safety to 653	Infrastructure improve	ements.
2017	-5	-74	0	-79	0.1
Explanation:	To transfer ADA automatic doc Safety.	r improvement project	costs from 653 Infrast	tructure improvements	s to 654
2017 Total	40	726	0	766	0.5
2018	0	108	0	108	0.0
Explanation:	To transfer infrastructure impro budget code 653 Infrastructure		from budget code 664	Miscellaneous Equipn	nent to
2018	3	82	0	85	0.1
Explanation:	To transfer infrastructure impro improvements.	ovement project costs	from 655 Sustainability	y to 653 Infrastructure	
2018	10	275	0	285	0.1
Explanation:	To transfer infrastructure impro	ovement project costs	from 654 Safety to 653	Infrastructure Improv	ements.
2018	-8	-327	0	-335	-0.1
Explanation:	To transfer xeriscape project c	osts from 653 infrastru	icture to 655 Sustainat	pility.	
2018	-10	-628	0	-637	-0.1
Explanation:	To transfer safety related proje	ct costs from 653 Infra	astructure improvemen	t to 654 Safety.	
2018 Total	-4	-490	0	-493	0.0

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	NSE	<u>Total</u>	<u>FTE</u>
2019	19	534	0	553	0.2
Explanation:	To transfer infrastructure impro budget code 653 Infrastructure	· ·	n budget code 664 M	liscellaneous Equipme	nt to
2019	50	1,827	0	1,876	0.4
Explanation:	To transfer infrastructure impro	ovement project costs f	from 654 Safety to 65	3 Infrastructure Improv	
2019	-31	-817	0 Disfuscionations to CEE	-848	-0.2
Explanation:	To transfer xeriscape and LED				
2019 Evaluation	-25 To transfer safety related proje	-468	0 structuro improvemen	-493	-0.2
Explanation:			istructure improvement		
2019 Total	13	1,076	0	1,088	0.2
2020	73	529	0	602	0.6
Explanation:	To transfer infrastructure impro Infrastructure & Improvements	· ·	from 664 Miscellaneo	us Equipment to 653	
2020	12	1,769	0	1,781	0.1
Explanation:	To transfer infrastructure impro	ovement project costs f	from 654 Safety to 65	3 Infrastructure Improv	ements.
2020	-65	-2,088	0	-2,153	-0.5
Explanation:	To transfer safety related proje	ect costs from 653 Infra	istructure improvemei	nt to 654 Safety.	
2020	-42	-684	0	-726	-0.3
Explanation:	To transfer xeriscape and LED	project costs from 65	3 Infrastructure to 655	Sustainability.	
2020	0	-471	0	-471	0.0
Explanation:	Incremental COVID-related co Catastrophic Event Memoranc		to be requested for r	ecovery through a non	-GRC
2020 Total	-21	-946	0	-967	-0.1
2021	0	-0.532	0	-0.532	0.0
Explanation:	To transfer infrastructure impro Infrastructure & Improvement.	· ·	from 664 Miscellaneo	us Equipment to 653	
2021	23	3,619	0	3,643	0.2
Explanation:	To transfer security project cos	sts from 654 Safety to 6	653 Infrastructure Imp	provements.	
2021	-10	-429	0	-439	-0.1
Explanation:	To transfer xeriscape and LED	project costs from 653	3 Infrastructure to 655	Sustainability.	
2021	-14	-411	0	-424	-0.1
Explanation:	To transfer safety related proje	ect costs from 653 Infra	structure improveme	nt to 654 Safety.	
2021	-3	-898	0	-900	-0.1
Explanation:	To transfer fleet vehicle lift rep	lacements from 653 In	frastructure & Improve	ements to 716 Fleet Pr	ojects.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements

Year	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	FTE
2021 Total	-3	1,881	0	1,878	-0.1

Beginning of Workpaper Sub Details for Workpaper Group 006530

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements
Workpaper Detail:	006530.001 - Infrastructure & Improvements - Distribution

In-Service Date: Not Applicable

Description:

The SoCalGas capital improvement projects include equipment replacements, facility renovations, tenant improvements and workspace upgrades that extend the life and retain usable condition of facilities and systems.

Forecast In 2021 \$(000)				
	Years	2022	2023	2024
Labor		845	845	845
Non-Labor		30,418	30,418	30,418
NSE		0	0	0
	Total	31,263	31,263	31,263
FTE		5.8	5.8	5.8

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements
Workpaper Detail:	006530.002 - Infrastructure & Improvements - General Plant

In-Service Date: Not Applicable

Description:

The SoCalGas capital improvement projects include equipment replacements, facility renovations, tenant improvements and workspace upgrades that extend the life and retain usable condition of facilities and systems.

		Forecast In 202	1 \$(000)	
	Years	2022	2023	2024
Labor		211	211	211
Non-Labor		7,604	7,604	7,604
NSE		0	0	0
	Total	7,815	7,815	7,815
FTE		1.5	1.5	1.5

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements
Workpaper Detail:	006530.003 - CCM Building

In-Service Date: 06/30/2024

Description:

The development of a 68,000 square foot Gas Control Center, Emergency Operations Center (EOC), and ancillary flexible working space that will enhance the monitoring, control, and reliability of the gas system.

		Forecast In 2021	\$(000)	
	Years	2022	2023	2024
Labor		265	282	282
Non-Labor		6,843	29,543	39,999
NSE		0	0	0
	Total	7,108	29,825	40,281
FTE		2.2	2.4	2.4

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements
Workpaper Detail:	006530.004 - RAMP - Physical Security Infrastructure Enhancements - Distribution

In-Service Date: Not Applicable

Description:

The RAMP - Workplace Violence Prevention forecast includes upgrades for security systems, gates, badge panels, high security fencing and the installation of other security improvements to prevent incidents that result in harm to employees.

Forecast In 2021 \$(000)				
	Years	2022	2023	2024
Labor		155	155	155
Non-Labor		5,541	5,541	5,541
NSE		0	0	0
	Total	5,696	5,696	5,696
FTE		1.2	1.2	1.2

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements
Workpaper Detail:	006530.004 - RAMP - Physical Security Infrastructure Enhancements - Distribution

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-Risk-5 Incident Involving an Employee

RAMP Line Item ID: C10

RAMP Line Item Name: Workplace Violence Prevention Programs

Tranche(s): Tranche1: Non-Vehicle

GRC Forecast Cost Estim	<u>ates (\$000)</u>					2022 to	2024
	2021 Historical Embedded Costs	2022 Forecast	2023 Forecast	2024 Forecast	2022 to 2024 Forecast	RAMP	
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	4,390	5,696	5,696	5,696	17,088	3,327	4,068

Cost Estimate Changes from RAMP:

This mitigation is split among two workpapers within this witness area (see also 00653C.002), and the GRC forecast is outside the RAMP range due to forecast updates.

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2022 to 2024 Forecast	RAMP	o 2024 Range ivities
Measure	Activities	Activities	Activities	Activities	Activities	Low	High
Tranche 1 # of sites	36.00	27.00	27.00	27.00	81.00	6.00	6.00
Work Unit Changes from							

	GRC RSE	RAMP RSE
Tranche 1	594.000	498.000

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

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements
Workpaper Detail:	006530.005 - RAMP - Physical Security Infrastructure Enhancements - General Plant

In-Service Date: Not Applicable

Description:

The RAMP - Workplace Violence Prevention forecast includes upgrades for security systems, gates, badge panels, high security fencing and the installation of other security improvements to prevent incidents that result in harm to employees.

Forecast In 2021 \$(000)				
	Years	2022	2023	2024
Labor		8	8	8
Non-Labor		292	292	292
NSE		0	0	0
	Total	300	300	300
FTE		0.1	0.1	0.1

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00653.0
Category:	A. Infrastructure & Improvements
Category-Sub:	1. Infrastructure & Improvements
Workpaper Group:	006530 - Infrastructure & Improvements
Workpaper Detail:	006530.005 - RAMP - Physical Security Infrastructure Enhancements - General Plant

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-Risk-5 Incident Involving an Employee

RAMP Line Item ID: C10

RAMP Line Item Name: Workplace Violence Prevention Programs

Tranche(s): Tranche1: Non-vehicle

GRC Forecast Cost Estim	<u>ates (\$000)</u>					2022 to	2024
	2021 Historical Embedded Costs	2022 Forecast	2023 Forecast	2024 Forecast	2022 to 2024 Forecast	RAMP	
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	23	300	300	300	900	3,327	4,068

Cost Estimate Changes from RAMP:

This mitigation is split among two workpapers within this witness area (see also 00653C.001), and the GRC forecast is outside the RAMP range due to forecast updates.

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2022 to 2024 Forecast		Range vities
Measure	Activities	Activities	Activities	Activities	Activities	Low	High
Tranche 1 # of sites	2.00	1.00	1.00	1.00	3.00	6.00	6.00
Work Unit Changes from Updated unit description.							

	GRC RSE	RAMP RSE
Tranche 1	594.000	498.000

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

Area:FACILITIES/OTHERWitness:Brenton K. GuyCategory:B. Safety & ComplianceWorkpaper:006540

Summary for Category: B. Safety & Compliance

		In 2021\$ (0	00)			
	Adjusted-Recorded	Adjusted-Forecast				
	2021	2022	2023	2024		
Labor	64	64	64	64		
Non-Labor	2,324	2,324	2,324	2,324		
NSE	0	0	0	0		
Total	2,388	2,388	2,388	2,388		
FTE	0.5	0.5	0.5	0.5		

006540 Safety and Compliance

Labor	64	64	64	64
Non-Labor	2,324	2,324	2,324	2,324
NSE	0	0	0	0
Total	2,388	2,388	2,388	2,388
FTE	0.5	0.5	0.5	0.5

Beginning of Workpaper Group 006540 - Safety and Compliance

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00654.0
Category:	B. Safety & Compliance
Category-Sub:	1. Safety & Compliance
Workpaper Group:	006540 - Safety and Compliance

Summary of Results (Constant 2021 \$ in 000s):

Forecast	Method	Adjusted Recorded Adjusted F				sted Forec	ast		
Years	s	2017	2018	2019	2020	2021	2022	2023	2024
Labor	Base YR Rec	72	95	51	119	64	64	64	64
Non-Labor	Base YR Rec	8,021	5,114	1,434	3,854	2,324	2,324	2,324	2,324
NSE	Base YR Rec	0	0	0	0	0	0	0	0
Tota	al	8,093	5,209	1,485	3,973	2,388	2,388	2,388	2,388
FTE	Base YR Rec	0.3	0.7	0.4	0.7	0.5	0.5	0.5	0.5

Business Purpose:

The Safety and Compliance projects include American with Disabilities ("ADA") improvements to improve customer access and accessibility to the branch offices, upgrades to fire systems, as well as to seismic retrofits at various facilities throughout the service territory. ADA improvement projects include adding or modifying access ramps, automatic doors, accessible restrooms, parking lot access and signage. Seismic retrofits projects modify existing structures to make them more resistant to seismic activity, ground motion, or soil failure due to earthquakes.

Physical Description:

ADA improvements at Alhambra, Central Avenue, Covina, Daly Street, El Centro, El Monte, Fontana, Indio, Inglewood, Ontario, Oxnard, Pomona, San Bernardino, South Gate, Van Nuys, and Wilmington branch offices. Seismic upgrades at 182nd St base and other facilities in the Los Angeles area to be determined.

Project Justification:

The ADA improvements, fire system upgrades and seismic retrofits contribute toward maintaining compliance with federal, state, and local laws and mandates as the regulations evolve.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00654.0
Category:	B. Safety & Compliance
Category-Sub:	1. Safety & Compliance
Workpaper Group:	006540 - Safety and Compliance

Forecast Methodology:

Labor - Base YR Rec

The calculations support 0.5 FTE that have their labor costs spread over multiple projects for each annual budget. The labor forecast is based on the base year historical labor cost.

Non-Labor - Base YR Rec

The forecast method developed in this cost category is base year. This method is most appropriate because of the on-going projects to install automatic doors at branch offices which will continue into 2022 and the upcoming projects for seismic retrofits which will increase in 2023 and 2024.

NSE - Base YR Rec

Not applicable.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00654.0
Category:	B. Safety & Compliance
Category-Sub:	1. Safety & Compliance
Workpaper Group:	006540 - Safety and Compliance

Summary of Adjustments to Forecast

				In 202	1 \$ (000)					
Forecast	Method	Base Forecast			For	ecast Adjı	ustments	Adjusted-Forecast		
Years	5	2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	64	64	64	0	0	0	64	64	64
Non-Labor	Base YR Rec	2,324	2,324	2,324	0	0	0	2,324	2,324	2,324
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Tota	I	2,388	2,388	2,388	0	0	0	2,388	2,388	2,388
FTE	Base YR Rec	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.5	0.5

Forecast Adjustment Details

<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	
2022 Total	0	0	0	0	0.0	
2023 Total	0	0	0	0	0.0	
2024 Total	0	0	0	0	0.0	

FACILITIES/OTHER
Brenton K. Guy
00654.0
B. Safety & Compliance
1. Safety & Compliance
006540 - Safety and Compliance

Determination of Adjusted-Recorded:

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	46	65	57	29	78
Non-Labor	6,693	3,689	2,221	3,512	6,625
NSE	0	0	0	0	0
Total	6,739	3,754	2,278	3,541	6,703
FTE	0.4	0.6	0.5	0.2	0.6
Adjustments (Nominal \$) **					
Labor	0	-1	-21	59	-24
Non-Labor	-708	353	-1,034	-162	-4,301
NSE	0	0	0	0	0
Total	-708	352	-1,055	-103	-4,325
FTE	-0.2	0.0	-0.1	0.4	-0.2
Recorded-Adjusted (Nominal	\$)				
Labor	46	64	35	88	54
Non-Labor	5,985	4,042	1,188	3,350	2,324
NSE	0	0	0	0	0
Total	6,031	4,106	1,223	3,438	2,378
FTE	0.2	0.6	0.4	0.6	0.4
Vacation & Sick (Nominal \$)					
Labor	8	11	7	15	10
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	8	11	7	15	10
FTE	0.1	0.1	0.0	0.1	0.1
Escalation to 2021\$					
Labor	18	20	9	16	0
Non-Labor	2,036	1,072	247	504	0
NSE	0	0	0	0	0
Total	2,054	1,092	255	519	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant	2021\$)				
Labor	72	95	51	119	64
Non-Labor	8,021	5,114	1,434	3,854	2,324
NSE	0	0	0	0	0
Total	8,093	5,209	1,485	3,973	2,388
FTE	0.3	0.7	0.4	0.7	0.5

* After company-wide exclusions of Non-GRC costs

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

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00654.0
Category:	B. Safety & Compliance
Category-Sub:	1. Safety & Compliance
Workpaper Group:	006540 - Safety and Compliance

Summary of Adjustments to Recorded:

			In Nominal \$(0	00)		
	Years	2017	2018	2019	2020	2021
Labor		0	-1	-21	59	-24
Non-Labor		-708	353	-1,034	-162	-4,301
NSE		0	0	0	0	0
	Total	-708	352	-1,055	-103	-4,325
FTE		-0.2	0.0	-0.1	0.4	-0.2

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	<u>NLbr</u>	NSE	Total	FTE
2017	-5	-782	0	-787	-0.1
Explanation:	To transfer infrastructure impro	ovement project costs	from 654 Safety to 65	3 Infrastructure improv	ements.
2017	5	74	0	79	-0.1
Explanation:	To transfer ADA automatic doo Safety.	r improvement project	costs from 653 Infras	tructure improvements	s to 654
2017 Total	0.182	-708	0	-708	-0.2
2018	-10	-275	0	-285	-0.1
Explanation:	To transfer infrastructure impro	ovement project costs	from 654 Safety to 65	3 Infrastructure Improv	ements.
2018	10	628	0	637	0.1
Explanation:	To transfer safety related proje	ct costs from 653 Infra	astructure improvemen	nt to 654 Safety.	
2018 Total	-0.742	353	0	352	0.0
2019	3	325	0	328	0.1
Explanation:	To transfer safety related proje	ct costs from 655 Sus	tainability to 654 Safe	ty.	
2019	-50	-1,827	0	-1,876	-0.4
Explanation:	To transfer infrastructure impro	vement project costs	from 654 Safety to 65	3 Infrastructure Improv	ements.
2019	25	468	0	493	0.2
Explanation:	To transfer safety related proje	ct costs from 653 Infra	astructure improvemen	nt to 654 Safety.	
2019 Total	-21	-1,034	0	-1,055	-0.1
2020	-9	-693	0	-702	-0.1
Explanation:	To transfer xeriscape and LED	project costs from 654	4 Safety to 655 Sustai	nability.	
2020	16	212	0	228	0.1
Explanation:	To transfer water treatment pro	pject costs from 655 S	ustainability to 654 Sa	fety.	
2020	-12	-1,769	0	-1,781	-0.1

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00654.0
Category:	B. Safety & Compliance
Category-Sub:	1. Safety & Compliance
Workpaper Group:	006540 - Safety and Compliance

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	NSE	Total	<u>FTE</u>
Explanation:	To transfer infrastructure impro	vement project costs f	rom 654 Safety to 653	3 Infrastructure Improv	ements.
2020	65	2,088	0	2,153	0.5
Explanation:	To transfer safety related project	ct costs from 653 Infra	structure improvemen	t to 654 Safety.	
2020 Total	59	-162	0	-103	0.4
2021	-15	-1,097	0	-1,112	-0.1
Explanation:	To transfer xeriscape and LED	project costs from 654	Safety to 655 Sustai	nability.	
2021	0	5	0	5	0.0
Explanation:	To transfer safety related project	ct costs from 655 Sust	ainability to 654 Safet	у.	
2021	-23	-3,619	0	-3,643	-0.2
Explanation:	To transfer security project cost	ts from 654 Safety to 6	53 Infrastructure Imp	rovements.	
2021	14	411	0	424	0.1
Explanation:	To transfer safety related project	ct costs from 653 Infra	structure improvemen	t to 654 Safety.	
2021 Total	-24	-4,301	0	-4,325	-0.2

Beginning of Workpaper Sub Details for Workpaper Group 006540

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00654.0
Category:	B. Safety & Compliance
Category-Sub:	1. Safety & Compliance
Workpaper Group:	006540 - Safety and Compliance
Workpaper Detail:	006540.001 - Safety & Environmental - Distribution

In-Service Date: Not Applicable

Description:

ADA (Americans with Disabilities Act) improvements at branch offices, fire system upgrades and seismic retrofits at facilities.

Forecast In 2021 \$(000)							
	Years 2022 2023 2024						
Labor		58	58	58			
Non-Labor		2,092	2,092	2,092			
NSE		0	0	0			
	Total	2,150	2,150	2,150			
FTE		0.4	0.4	0.4			

FACILITIES/OTHER
Brenton K. Guy
00654.0
B. Safety & Compliance
1. Safety & Compliance
006540 - Safety and Compliance
006540.002 - Safety & Environmental - General Plant

In-Service Date: Not Applicable

Description:

ADA (Americans with Disabilities Act) improvements at branch offices, fire system upgrades and seismic retrofits at facilities.

Forecast In 2021 \$(000)						
Years 2022 2023 2024						
Labor		6	6	6		
Non-Labor		232	232	232		
NSE		0	0	0		
	Total	238	238	238		
FTE		0.1	0.1	0.1		

Area:FACILITIES/OTHERWitness:Brenton K. GuyCategory:C. Sustainability and ConservationWorkpaper:006550

Summary for Category: C. Sustainability and Conservation

	In 2021\$ (000)					
	Adjusted-Recorded		Adjusted-Forecast			
	2021	2022	2023	2024		
Labor	69	250	156	156		
Non-Labor	5,039	13,635	9,156	9,156		
NSE	0	0	0	0		
Total	5,108	13,885	9,312	9,312		
FTE	0.6	2.4	1.5	1.5		

006550 Sustainability and Energy Conservation

Labor	69	250	156	156
Non-Labor	5,039	13,635	9,156	9,156
NSE	0	0	0	0
Total	5,108	13,885	9,312	9,312
FTE	0.6	2.4	1.5	1.5

Beginning of Workpaper Group 006550 - Sustainability and Energy Conservation

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00655.0
Category:	C. Sustainability and Conservation
Category-Sub:	1. Sustainability and Conservation
Workpaper Group:	006550 - Sustainability and Energy Conservation

Summary of Results (Constant 2021 \$ in 000s):

Forecast	Method		Adjusted Forecast						
Years		2017	2018	2019	2020	2021	2022	2023	2024
Labor	Base YR Rec	25	31	93	194	69	250	156	156
Non-Labor	Base YR Rec	3,729	2,179	7,263	6,255	5,039	13,635	9,156	9,156
NSE	Base YR Rec	0	0	0	0	0	0	0	0
Tota	d	3,754	2,210	7,357	6,449	5,108	13,885	9,312	9,312
FTE	Base YR Rec	0.2	0.1	0.5	1.4	0.6	2.4	1.5	1.5

Business Purpose:

Energy and water conservation projects, such as LED lighting and xeriscape conversions, contribute toward net zero goals. Additionally, renewable energy solutions such as solar rooftop panels, solar carports and battery storage, can contribute toward net zero energy usage.

Physical Description:

Projects include interior and exterior lighting upgrades to LED lighting, installation of solar panels, replacing landscaping with xeriscape (drought tolerant landscaping) and construction of the [H2] Hydrogen Home project which will demonstrate the capabilities of hydrogen and produce excess power that can feed into the ERC building.

Project Justification:

The sustainability projects support SoCalGas's values and mission to be the cleanest, safest, most innovative energy company in America. Real Estate and Facility Operations contributes toward the Aspire 2045 Climate Commitment and the sustainability strategy of accelerating the energy transition and increasing clean energy access.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00655.0
Category:	C. Sustainability and Conservation
Category-Sub:	1. Sustainability and Conservation
Workpaper Group:	006550 - Sustainability and Energy Conservation

Forecast Methodology:

Labor - Base YR Rec

The calculations support that 1.5 - 2.4 FTE will be devoted to the sustainability projects. The labor forecast from the base-year reflects the increase of sustainability projects and the increased support needed. The additional labor adjustment for [H2] Hydrogen Home project is based on project forecasts for the specific scope of the project.

Non-Labor - Base YR Rec

The forecast is base-year for LED and xeriscape projects, with additional adjustments for [H2] Hydrogen Home project and renewable energy solutions, such as solar panels and battery storage. The base-year forecast captures an increase of sustainability projects and the higher cost of headquarter interior LED lighting projects whereas previous years reflect parking lot LED projects with lower spend. The [H2] Hydrogen Home project forecast is based on vendor estimates for the specific scope and the renewable energy solutions estimate is based on estimates for solar panel installation.

NSE - Base YR Rec

Not applicable.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00655.0
Category:	C. Sustainability and Conservation
Category-Sub:	1. Sustainability and Conservation
Workpaper Group:	006550 - Sustainability and Energy Conservation

Summary of Adjustments to Forecast

In 2021 \$ (000)										
Forecast	Method	od Base Forecast Forecast				ecast Adju	stments	Adjusted-Forecast		
Years	5	2022	2023	2024	2022	2023	2024	2022	2023	2024
_abor	Base YR Rec	69	69	69	181	87	87	250	156	156
Non-Labor	Base YR Rec	5,039	5,039	5,039	8,596	4,117	4,117	13,635	9,156	9,156
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Tota	I	5,108	5,108	5,108	8,777	4,204	4,204	13,885	9,312	9,312
FTE	Base YR Rec	0.6	0.6	0.6	1.8	0.9	0.9	2.4	1.5	1.5

Forecast Adjustment Details

Year		Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	
2022		87	4,117	0	4,204	0.9	
Explanation:	Additional forecast f	or renewable er	nergy solutions, such as	solar panel insta	allation and battery stor	rage.	
2022		94	4,479	0	4,573	0.9	
Explanation:	Incremental forecas	t for [H2] Hydro	gen Home project.				
2022 To	otal	181	8,596	0	8,777	1.8	
2023		87	4,117	0	4,204	0.9	
Explanation:	on: Additional forecast for renewable energy solutions, such as solar panel installation and battery storage.						
2023 To	otal	87	4,117	0	4,204	0.9	
2024		87	4,117	0	4,204	0.9	
Explanation: Additional forecast for renewable energy solutions, such as solar panel installation and battery storage.							
2024 To	otal	87	4,117	0	4,204	0.9	

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00655.0
Category:	C. Sustainability and Conservation
Category-Sub:	1. Sustainability and Conservation
Workpaper Group:	006550 - Sustainability and Energy Conservation

Determination of Adjusted-Recorded:

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	56	17	37	108	44
Non-Labor	2,801	1,477	5,522	4,272	6,076
NSE	0	0	0	0	0
Total	2,857	1,493	5,560	4,380	6,120
FTE	0.5	0.1	0.3	0.8	0.4
Adjustments (Nominal \$) **					
Labor	-40	4	28	35	15
Non-Labor	-18	245	492	1,166	-1,037
NSE	0	0	0	0	0
Total	-58	250	519	1,201	-1,022
FTE	-0.3	0.0	0.1	0.3	0.1
Recorded-Adjusted (Nomina	al \$)				
Labor	16	21	65	143	59
Non-Labor	2,783	1,722	6,014	5,437	5,039
NSE	0	0	0	0	0
Total	2,799	1,743	6,079	5,581	5,098
FTE	0.2	0.1	0.4	1.1	0.5
Vacation & Sick (Nominal \$)					
Labor	3	4	12	25	10
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	3	4	12	25	10
FTE	0.0	0.0	0.1	0.3	0.1
Escalation to 2021\$					
Labor	6	7	16	25	0
Non-Labor	946	457	1,249	817	0
NSE	0	0	0	0	0
Total	953	463	1,265	843	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Consta	nt 2021\$)				
Labor	25	31	93	194	69
Non-Labor	3,729	2,179	7,263	6,255	5,039
NSE	0	0	0	0	0
Total	3,754	2,210	7,357	6,449	5,108
FTE	0.2	0.1	0.5	1.4	0.6

* After company-wide exclusions of Non-GRC costs

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

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00655.0
Category:	C. Sustainability and Conservation
Category-Sub:	1. Sustainability and Conservation
Workpaper Group:	006550 - Sustainability and Energy Conservation

Summary of Adjustments to Recorded:

			In Nominal \$(00	0)		
	Years	2017	2018	2019	2020	2021
Labor		-40	4	28	35	15
Non-Labor		-18	245	492	1,166	-1,037
NSE		0	0	0	0	0
	Total	-58	250	519	1,201	-1,022
FTE		-0.3	0.0	0.1	0.3	0.1

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	<u>NLbr</u>	NSE	Total	FTE
2017	4	404	0	408	0.1
Explanation:	To transfer xeriscape and susta Sustainability.	ainability project costs	in budget code 653 to	budget code 655	
2017	-44	-422	0	-466	-0.4
Explanation:	To transfer infrastructure impro improvements.	vement project costs f	from 655 Sustainabilit	y to 653 Infrastructure	
2017 Total	-40	-18	0	-58	-0.3
2018	-3	-82	0	-85	-0.1
Explanation:	To transfer infrastructure impro improvements.	vement project costs f	from 655 Sustainabilit	y to 653 Infrastructure	
2018	8	327	0	335	0.1
Explanation:	To transfer xeriscape project co	osts from 653 infrastru	icture to 655 Sustainal	bility.	
2018 Total	4	245	0	250	0.0
2019	-3	-325	0	-328	-0.1
Explanation:	To transfer safety related proje	ct costs from 655 Sust	tainability to 654 Safet	y.	
2019	31	817	0	848	0.2
Explanation:	To transfer xeriscape and LED	project costs from 653	3 Infrastructure to 655	Sustainability.	
2019 Total	28	492	0	519	0.1
2020	9	693	0	702	0.1
Explanation:	To transfer xeriscape and LED	project costs from 654	4 Safety to 655 Sustai	nability.	
2020	-16	-212	0	-228	-0.1
Explanation:	To transfer water treatment pro	ject costs from 655 Su	ustainability to 654 Sa	fety.	
2020	42	684	0	726	0.3
	To transfer xeriscape and LED				

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00655.0
Category:	C. Sustainability and Conservation
Category-Sub:	1. Sustainability and Conservation
Workpaper Group:	006550 - Sustainability and Energy Conservation

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	NSE	<u>Total</u>	<u>FTE</u>
2020 Total	35	1,166	0	1,201	0.3
2021	15	1,097	0	1,112	0.1
Explanation:	To transfer xeriscape and LED p	project costs from 65	4 Safety to 655 Sustain	ability.	
2021	0	-5	0	-5	0.0
Explanation:	To transfer safety related project	t costs from 655 Sus	stainability to 654 Safety	/.	
2021	10	429	0	439	0.1
Explanation:	To transfer xeriscape and LED	project costs from 65	3 Infrastructure to 655	Sustainability.	
2021	-10	-2,559	0	-2,569	-0.1
Explanation:	To remove [H2] Hydrogen Hom incremental forecast.	e project spend from	the historical forecast,	as it will be added as	
2021 Total	15	-1,037	0	-1,022	0.1

Beginning of Workpaper Sub Details for Workpaper Group 006550

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00655.0
Category:	C. Sustainability and Conservation
Category-Sub:	1. Sustainability and Conservation
Workpaper Group:	006550 - Sustainability and Energy Conservation
Workpaper Detail:	006550.001 - Sustainability - Distribution

In-Service Date: Not Applicable

Description:

Sustainability projects such as xeriscape (drought tolerant) conversions and LED lighting.

Forecast In 2021 \$(000)				
	Years	2022	2023	2024
Labor		52	52	52
Non-Labor		3,779	3,779	3,779
NSE		0	0	0
	Total	3,831	3,831	3,831
FTE		0.5	0.5	0.5

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00655.0
Category:	C. Sustainability and Conservation
Category-Sub:	1. Sustainability and Conservation
Workpaper Group:	006550 - Sustainability and Energy Conservation
Workpaper Detail:	006550.002 - Sustainability - General Plant

In-Service Date: Not Applicable

Description:

Sustainability projects such as xeriscape (drought tolerant) conversions and LED lighting.

Forecast In 2021 \$(000)					
	Years 2022 2023 2024				
Labor		17	17	17	
Non-Labor		1,260	1,260	1,260	
NSE		0	0	0	
	Total	1,277	1,277	1,277	
FTE		0.1	0.1	0.1	

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00655.0
Category:	C. Sustainability and Conservation
Category-Sub:	1. Sustainability and Conservation
Workpaper Group:	006550 - Sustainability and Energy Conservation
Workpaper Detail:	006550.003 - Renewable Energy Solutions - RAMP

In-Service Date: Not Applicable

Description:

Installing on-site energy generation technology such as fuel cells and solar panels as sustainable energy alternatives.

Forecast In 2021 \$(000)					
	Years	2022	2023	2024	
Labor		87	87	87	
Non-Labor		4,117	4,117	4,117	
NSE		0	0	0	
	Total	4,204	4,204	4,204	
FTE		0.9	0.9	0.9	

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00655.0
Category:	C. Sustainability and Conservation
Category-Sub:	1. Sustainability and Conservation
Workpaper Group:	006550 - Sustainability and Energy Conservation
Workpaper Detail:	006550.003 - Renewable Energy Solutions - RAMP

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-CFF-2 Energy Resilience

RAMP Line Item ID: New

RAMP Line Item Name: Renewable Energy Solutions

Tranche(s): Tranche1: Non vehicle

GRC Forecast Cost Estim	a <u>tes (\$000)</u> 2021 Historical Embedded Costs	2022 Forecast	2023 Forecast	2024 Forecast	2022 to 2024 Forecast	2022 to RAMP I (2020 Inc	
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	4,204	4,204	4,204	12,612	0	0
Cost Estimate Changes fr Cost estimate not forecaste							

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2022 to 2024 Forecast	RAMP Act	o 2024 Range ivities
Measure	Activities	Activities	Activities	Activities	Activities	Low	High
Tranche 1 # of Projects	0.00	2.00	2.00	2.00	6.00	0.00	0.00
Work Unit Changes from Unit forecast not forecaste							
Risk Spend Efficiency (R	<u>SE)</u>						
		GRC RS	E		RAMP RSE		
Tranche 1		0.0	00		0.000		

RSE Changes from RAMP: N/A.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00655.0
Category:	C. Sustainability and Conservation
Category-Sub:	1. Sustainability and Conservation
Workpaper Group:	006550 - Sustainability and Energy Conservation
Workpaper Detail:	006550.004 - [H2] Hydrogen Home

In-Service Date: 05/31/2022

Description:

Construct [H2] Hydrogen Home project at existing ERC facility.

Forecast In 2021 \$(000)					
	Years	2022	2023	2024	
Labor		94	0	0	
Non-Labor		4,479	0	0	
NSE		0	0	0	
	Total	4,573	0	0	
FTE		0.9	0.0	0.0	

Area:FACILITIES/OTHERWitness:Brenton K. GuyCategory:D. Fleet ProjectsWorkpaper:007160

Summary for Category: D. Fleet Projects

usted-Recorded	2022	Adjusted-Forecast	
2021	2022		
	2022	2023	2024
3	56	3	3
1,446	2,015	553	553
0	0	0	0
1,449	2,071	556	556
0.1	0.5	0.1	0.1
	1,446 0 1,449	1,446 2,015 0 0 1,449 2,071	1,446 2,015 553 0 0 0 1,449 2,071 556

007160 Fleet Equipment

Labor	3	56	3	3
Non-Labor	1,446	2,015	553	553
NSE	0	0	0	0
Total	1,449	2,071	556	556
FTE	0.1	0.5	0.1	0.1

Beginning of Workpaper Group 007160 - Fleet Equipment

FACILITIES/OTHER
Brenton K. Guy
00716.0
D. Fleet Projects
1. Fleet Projects
007160 - Fleet Equipment

Summary of Results (Constant 2021 \$ in 000s):

Forecast	Method		Adjusted Recorded			Adjusted Forecast			
Years	s	2017	2018	2019	2020	2021	2022	2023	2024
Labor	Base YR Rec	24	0	0	0	3	56	3	3
Non-Labor	3-YR Average	482	378	21	193	1,446	2,015	553	553
NSE	3-YR Average	0	0	0	0	0	0	0	0
Tota	al	506	378	21	193	1,448	2,071	556	556
FTE	Base YR Rec	0.1	0.0	0.0	0.0	0.1	0.5	0.1	0.1

Business Purpose:

The purchase of fleet equipment and tools is needed to operate the 46 SoCalGas garages that accommodate fleet vehicle maintenance and repairs. The diagnostic tools and repair equipment are needed to service gasoline, hybrid, electric, and hydrogen vehicles. The increased forecast in 2022 is due to the implementation of fleet telematics, which monitors and records key performance data about vehicles.

Physical Description:

The fleet equipment category includes new or replacement of garage equipment such as tire changing and balancing machines, diagnostic tools, alignment machines, vehicle lifts, air conditioning/freon machines, generators, leak testers and emissions related equipment. Additionally, fleet telematics is being installed on fleet vehicles to monitor vehicle performance.

Project Justification:

With the fleet transition to electric vehicles and as hydrogen fuel cell vehicles are added to the fleet, technology upgrades for diagnostic equipment are required for maintenance. In addition, normal wear and tear on older equipment requires replacement. Also, fleet telematics aims to increase driver efficiency, improve safety, and optimize vehicle performance.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00716.0
Category:	D. Fleet Projects
Category-Sub:	1. Fleet Projects
Workpaper Group:	007160 - Fleet Equipment

Forecast Methodology:

Labor - Base YR Rec

Our calculations support that 0.1 - 0.5 FTE will spend their time on fleet equipment projects annually. The base year labor forecast was used to reflect the labor needed to plan and execute the vehicle lift installations. An incremental labor forecast for the labor to plan and execute telematics installations is reflected in 2022.

Non-Labor - 3-YR Average

The forecast is based upon historical spending with an adjustment for telematics installation on fleet vehicles. The three-year average is most appropriate because fleet tool needs vary each year, but planned purchases are consistent with a three-year average. The telematics forecast is based on vendor quotes.

NSE - 3-YR Average

Not applicable.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00716.0
Category:	D. Fleet Projects
Category-Sub:	1. Fleet Projects
Workpaper Group:	007160 - Fleet Equipment

Summary of Adjustments to Forecast

				In 202	1 \$ (000)					
Forecast	orecast Method Base Forecast				For	Forecast Adjustments			Adjusted-Forecast	
Years	;	2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	3	3	3	53	0	0	56	3	3
Non-Labor	3-YR Average	553	553	553	1,462	0	0	2,015	553	553
NSE	3-YR Average	0	0	0	0	0	0	0	0	0
Tota	l	556	556	556	1,515	0	0	2,071	556	556
FTE	Base YR Rec	0.1	0.1	0.1	0.4	0.0	0.0	0.5	0.1	0.1

Forecast Adjustment Details

Year	Labo	<u>r NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>
2022	53	1,462	0	1,515	0.4
Explanation:	Incremental forecast for insta	allation of telematics to	fleet vehicles.		
2022 To	tal 53	1,462	0	1,515	0.4
2023 To	tal 0	0	0	0	0.0
2024 To	tal 0	0	0	0	0.0

FACILITIES/OTHER
Brenton K. Guy
00716.0
D. Fleet Projects
1. Fleet Projects
007160 - Fleet Equipment

Determination of Adjusted-Recorded:

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	15	9	113	102	-16
Non-Labor	360	2,378	512	372	-708
NSE	0	0	0	0	0
Total	375	2,387	624	473	-724
FTE	0.1	0.1	1.0	0.9	-0.1
Adjustments (Nominal \$) *	:*				
Labor	0	-9	-113	-102	18
Non-Labor	0	-2,080	-494	-204	2,154
NSE	0	0	0	0	0
Total	0	-2,088	-607	-305	2,172
FTE	0.0	-0.1	-1.0	-0.9	0.2
Recorded-Adjusted (Nomi	nal \$)				
Labor	15	0	0	0	3
Non-Labor	360	298	17	168	1,446
NSE	0	0	0	0	0
Total	375	298	17	168	1,448
FTE	0.1	0.0	0.0	0.0	0.1
Vacation & Sick (Nominal	\$)				
Labor	3	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	3	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Escalation to 2021\$					
Labor	6	0	0	0	0
Non-Labor	122	79	4	25	0
NSE	0	0	0	0	0
Total	128	79	4	25	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Const	tant 2021\$)				
Labor	24	0	0	0	3
Non-Labor	482	378	21	193	1,446
NSE	0	0	0	0	0
Total	506	378	21	193	1,448
FTE	0.1	0.0	0.0	0.0	0.1

* After company-wide exclusions of Non-GRC costs

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

FACILITIES/OTHER
Brenton K. Guy
00716.0
D. Fleet Projects
1. Fleet Projects
007160 - Fleet Equipment

Summary of Adjustments to Recorded:

			In Nominal \$(00	00)		
	Years	2017	2018	2019	2020	2021
Labor		0	-9	-113	-102	18
Non-Labor		0	-2,080	-494	-204	2,154
NSE		0	0	0	0	0
	Total	0	-2,088	-607	-305	2,172
FTE		0.0	-0.1	-1.0	-0.9	0.2

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	<u>NLbr</u>	<u>NSE</u>	Total	FTE
2017 Total	0	0	0	0	0.0
2018 Explanation:	-9 To remove cost of Fleet Fuel N	-2,080 /ehicle Hardware purcł	0 nase which is not an o	-2,088 ngoing purchase for th	-0.1 ne forecast.
2018 Total	-9	-2,080	0	-2,088	-0.1
2019 Explanation:	-113 To remove cost of Fleet Fuel V	-494 /ehicle Hardware purcł	0 nase which is not an o	-607 ngoing purchase for th	-1.0 ne forecast.
2019 Total	-113	-494	0	-607	-1.0
2020 Explanation:	-102 To remove cost of Fleet Fuel \	-204 /ehicle Hardware purcł	0 nase which is not an o	-305 ngoing purchase for th	-0.9 ne forecast.
2020 Total	-102	-204	0	-305	-0.9
2021 Explanation:	16 To remove O&M transfer of FI forecast.	1,256 eet Fuel Vehicle Hardw	0 vare purchase which is	1,272 s not an ongoing trans	0.1 fer for the
2021 Explanation:	3 To transfer fleet vehicle lift rep	898 lacements from 653 In	0 frastructure & Improve	900 ements to 716 Fleet Pr	0.1 ojects.
2021 Total	18	2,154	0	2,172	0.2

Beginning of Workpaper Sub Details for Workpaper Group 007160

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00716.0
Category:	D. Fleet Projects
Category-Sub:	1. Fleet Projects
Workpaper Group:	007160 - Fleet Equipment
Workpaper Detail:	007160.001 - Fleet Capital Tools

In-Service Date: Not Applicable

Description:

Fleet equipment and tools such as generators, leak testers, diagnostic tools, vehicle hoists and emissions-related equipment across 46 SoCalGas garages.

Forecast In 2021 \$(000)				
Years 2022 2023 2024				
Labor		3	3	3
Non-Labor		553	553	553
NSE		0	0	0
	Total	556	556	556
FTE		0.1	0.1	0.1

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00716.0
Category:	D. Fleet Projects
Category-Sub:	1. Fleet Projects
Workpaper Group:	007160 - Fleet Equipment
Workpaper Detail:	007160.002 - Telematics

12/31/2022

In-Service Date:

Description:

Installation of telematics into fleet vehicles to monitor and record key performance data about vehicles.

Forecast In 2021 \$(000)				
Years 2022 2023 2024				
Labor		53	0	0
Non-Labor		1,462	0	0
NSE		0	0	0
	Total	1,515	0	0
FTE		0.4	0.0	0.0

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Category:	E. Fleet Alternative Refueling
Workpaper:	VARIOUS

Summary for Category: E. Fleet Alternative Refueling

	In 2021\$ (000)						
	Adjusted-Recorded		Adjusted-Forecast				
	2021	2022	2023	2024			
Labor	674	267	796	479			
Non-Labor	3,352	8,879	29,177	13,475			
NSE	0	0	0	0			
Total	4,026	9,146	29,973	13,954			
FTE	6.1	2.6	6.2	5.6			
007340 RNG Refueling S	Stations						
Labor	674	147	262	214			
Non-Labor	3,352	3,151	3,843	841			
NSE	0	0	0	0			
Total	4,026	3,298	4,105	1,055			
FTE	6.1	1.4	2.6	2.1			
00734A Hydrogen Refue	eling Stations						
Labor	0	12	428	172			
Non-Labor	0	609	20,311	8,243			
NSE	0	0	0	0			
Total	0	621	20,739	8,415			
FTE	0.0	0.1	2.6	2.6			
00734C Electric Vehicle	Charging						
Labor	0	108	106	93			
Non-Labor	0	5,119	5,023	4,391			
NSE	0	0	0	0			
Total	0	5,227	5,129	4,484			
FTE	0.0	1.1	1.0	0.9			

Beginning of Workpaper Group 007340 - RNG Refueling Stations

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	1. RNG Refueling Stations
Workpaper Group:	007340 - RNG Refueling Stations

Summary of Results (Constant 2021 \$ in 000s):

Forecast	Method	Adjusted Recorded Adjusted Fored				ast			
Years		2017	2018	2019	2020	2021	2022	2023	2024
Labor	Zero-Based	491	647	444	527	674	147	262	214
Non-Labor	Zero-Based	9,981	9,321	3,589	4,976	3,352	3,151	3,843	841
NSE	Zero-Based	0	0	0	0	0	0	0	0
Tota	d	10,472	9,968	4,032	5,503	4,026	3,298	4,105	1,055
FTE	Zero-Based	3.4	4.5	3.3	4.1	6.1	1.4	2.6	2.1

Business Purpose:

SoCalGas is making necessary upgrades at SoCalGas renewable natural gas (RNG) refueling stations to enhance the refueling reliability, capacity, and response time for SoCalGas fleet. There are 31 RNG refueling facilities at SoCalGas locations (27 RNG stations and five time fill systems). The RNG refueling station upgrade projects will add fueling capacity and replace deteriorating RNG fueling equipment. Two additional RNG refueling stations will be constructed to meet fleet demands.

Physical Description:

Perform RNG refueling station upgrade projects at Anaheim, 182nd Street, Chino and Garden Grove. Install RNG refueling stations at Santa Maria and Visalia bases.

Project Justification:

Many of the existing stations were commissioned over 18 years ago, when vehicle fueling profiles were different and station use was not as impacted by larger capacity vehicles and fleet sizes. Routine aging has impacted station reliability and operation capabilities in recent years. Upgrading the station operating and storage pressure and installing new priority panels and incorporating direct fill features will enable more RNGV fleet vehicles to fuel at the RNG refueling stations.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	1. RNG Refueling Stations
Workpaper Group:	007340 - RNG Refueling Stations

Forecast Methodology:

Labor - Zero-Based

Our calculations support that 1.4 - 2.6 FTE will support RNG refueling station projects. The direct labor costs are based on SoCalGas labor requirements experienced on historical RNG refueling station projects of similar scope and complexity. Associated costs include company labor for project management, engineering, planning, quality assurance and field commissioning of newly installed assets. Historically, the number and scope of RNG refueling station projects has varied, therefore other forecast methods do not reflect the labor forecast.

Non-Labor - Zero-Based

The forecast method developed for this cost category is zero-based. This method is most appropriate because each project has been estimated based on unique and specific scope and budgetary considerations. The estimates reflect SoCalGas encountered cost and vendor estimates for projects with similar scope and complexity completed over the prior three-year period. Since historical projects vary in scope and the number RNG refueling stations vary per year, the historical forecast methods do not apply.

NSE - Zero-Based

Not applicable.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	1. RNG Refueling Stations
Workpaper Group:	007340 - RNG Refueling Stations

Summary of Adjustments to Forecast

In 2021 \$ (000)										
Forecast	Method	Base Forecast Forecast Adjustments Adjusted			ljusted-Fo	ed-Forecast				
Years	5	2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Zero-Based	147	262	214	0	0	0	147	262	214
Non-Labor	Zero-Based	3,151	3,843	841	0	0	0	3,151	3,843	841
NSE	Zero-Based	0	0	0	0	0	0	0	0	0
Tota	I	3,298	4,105	1,055	0	0	0	3,298	4,105	1,055
FTE	Zero-Based	1.4	2.6	2.1	0.0	0.0	0.0	1.4	2.6	2.1

Forecast Adjustment Details

<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	
2022 Total	0	0	0	0	0.0	
2023 Total	0	0	0	0	0.0	
2024 Total	0	0	0	0	0.0	

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	1. RNG Refueling Stations
Workpaper Group:	007340 - RNG Refueling Stations

Determination of Adjusted-Recorded:

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	313	436	309	389	573
Non-Labor	7,448	7,366	2,971	4,306	3,352
NSE	0	0	0	0	0
Total	7,761	7,802	3,280	4,695	3,925
FTE	2.9	3.8	2.8	3.4	5.1
Adjustments (Nominal \$) *	**				
Labor	0	0	0	0	0
Non-Labor	0	0	0	20	0
NSE	0	0	0	0	0
Total	0	0	0	20	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nomi	inal \$)				
Labor	313	436	309	389	573
Non-Labor	7,448	7,366	2,971	4,326	3,352
NSE	0	0	0	0	0
Total	7,761	7,802	3,280	4,715	3,925
FTE	2.9	3.8	2.8	3.4	5.1
Vacation & Sick (Nominal	\$)				
Labor	53	75	59	69	101
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	53	75	59	69	101
FTE	0.5	0.7	0.5	0.7	1.0
Escalation to 2021\$					
Labor	125	136	76	69	0
Non-Labor	2,533	1,955	617	650	0
NSE	0	0	0	0	0
Total	2,658	2,090	694	719	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Cons	stant 2021\$)				
Labor	491	647	444	527	674
Non-Labor	9,981	9,321	3,589	4,976	3,352
NSE	0	0	0	0	0
Total	10,472	9,968	4,032	5,503	4,026
FTE	3.4	4.5	3.3	4.1	6.1

* After company-wide exclusions of Non-GRC costs

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

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	1. RNG Refueling Stations
Workpaper Group:	007340 - RNG Refueling Stations

Summary of Adjustments to Recorded:

In Nominal \$(000)						
	Years	2017	2018	2019	2020	2021
Labor		0	0	0	0	0
Non-Labor		0	0	0	20	0
NSE		0	0	0	0	0
	Total	0	0	0	20	0
FTE		0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	FTE
2017 Total	0	0	0	0	0.0
2018 Total	0	0	0	0	0.0
2019 Total	0	0	0	0	0.0
2020	0	20	0	20	0.0
Explanation:	To reclassify 6215567, 6215568	material costs from i	ndirect to direct.		
2020 Total	0	20	0	20	0.0
2021 Total	0	0	0	0	0.0

Beginning of Workpaper Sub Details for Workpaper Group 007340

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	1. RNG Refueling Stations
Workpaper Group:	007340 - RNG Refueling Stations
Workpaper Detail:	007340.001 - RNG Timefill System Upgrade - Anaheim Base
Budget Code: Category: Category-Sub: Workpaper Group:	00734.0 E. Fleet Alternative Refueling 1. RNG Refueling Stations 007340 - RNG Refueling Stations

In-Service Date: 10/31/2022

Description:

The RNG timefill system upgrade at Anaheim Base includes replacing the existing posts and installing additional filling posts for medium size RNGV distribution trucks. There will be 75 time fill hoses that are replaced due to the deteriorating equipment.

Forecast In 2021 \$(000)					
	Years 2022 2023 2024				
Labor		25	0	0	
Non-Labor		786	0	0	
NSE		0	0	0	
	Total	811	0	0	
FTE		0.2	0.0	0.0	

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	1. RNG Refueling Stations
Workpaper Group:	007340 - RNG Refueling Stations
Workpaper Detail:	007340.002 - RNG Refueling Station Upgrade - 182nd Street Base

In-Service Date: 08/31/2022

Description:

The RNG refueling station upgrade at 182nd Street Base includes the installation of ten additional filling posts for medium duty RNGV trucks. The existing RNG refueling infrastructure was built for customer service RNGV vehicles and the logistics of filling the medium duty RNGV trucks with the existing infrastructure is not efficient.

Forecast In 2021 \$(000)				
Years 2022 2023 2024				
Labor		12	0	0
Non-Labor		355	0	0
NSE		0	0	0
	Total	367	0	0
FTE		0.1	0.0	0.0

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	1. RNG Refueling Stations
Workpaper Group:	007340 - RNG Refueling Stations
Workpaper Detail:	007340.003 - RNG Refueling Station Upgrade - Chino Base

In-Service Date: 08/31/2023

Description:

The RNG refueling station upgrade at Chino Base includes replacing the existing posts and installing ten additional filling posts for medium size RNGV distribution trucks. There will be ten existing RNG fueling posts and 40 existing filling hoses being replaced due to the deteriorating condition.

Forecast In 2021 \$(000)				
Years 2022 2023 2024				
Labor		73	28	0
Non-Labor		971	490	0
NSE		0	0	0
	Total	1,044	518	0
FTE		0.7	0.3	0.0

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	1. RNG Refueling Stations
Workpaper Group:	007340 - RNG Refueling Stations
Workpaper Detail:	007340.004 - RNG Refueling Station Upgrade - Garden Grove

In-Service Date: 12/31/2024

Description:

The RNG refueling station upgrade at Garden Grove Base includes replacing the existing posts. There will be ten existing RNG refueling posts and 40 existing time fill hoses that are replaced due to the deteriorating equipment.

Forecast In 2021 \$(000)				
	Years	2022	2023	2024
Labor		0	65	71
Non-Labor		0	168	436
NSE		0	0	0
	Total	0	233	507
FTE		0.0	0.6	0.7

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	1. RNG Refueling Stations
Workpaper Group:	007340 - RNG Refueling Stations
Workpaper Detail:	007340.005 - RNG Refueling Station Installation - Santa Maria

In-Service Date: 03/31/2024

Description:

Installation of new RNG refueling station at Santa Maria to support the SoCalGas RNGV fleet. There are 25 vehicles assigned to Santa Maria that are eligible for replacement with an RNGV vehicle in the short term.

Forecast In 2021 \$(000)				
Years 2022 2023 2024				
Labor		25	81	0
Non-Labor		904	1,072	5
NSE		0	0	0
	Total	929	1,153	5
FTE		0.3	0.8	0.0

FACILITIES/OTHER
Brenton K. Guy
00734.0
E. Fleet Alternative Refueling
1. RNG Refueling Stations
007340 - RNG Refueling Stations
007340.006 - RNG Refueling Station Installation - Visalia

In-Service Date: 07/31/2024

Description:

Installation of new RNG refueling station at Visalia Base to support the SoCalGas RNGV fleet. There are 31vehicles assigned to Visalia that are eligible for replacement with an RNGV vehicle in the short term.

Forecast In 2021 \$(000)				
	Years	2022	2023	2024
Labor		0	76	131
Non-Labor		0	1,978	265
NSE		0	0	0
	Total	0	2,054	396
FTE		0.0	0.8	1.3

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	1. RNG Refueling Stations
Workpaper Group:	007340 - RNG Refueling Stations
Workpaper Detail:	007340.007 - RNG Refueling Station Pressure Vessels Upgrade and Compressor Betterment Rebuilds
In-Service Date:	Not Applicable

Description:

Upgrading and replacing pressure vessels, pressure relief valves, isolation valves and auxiliary equipment of RNG refueling stations. Removing and replacing CNG compressor control panels.

Forecast In 2021 \$(000)								
	Years	2022	2023	2024				
Labor		12	12	12				
Non-Labor		135	135	135				
NSE		0	0	0				
	Total	147	147	147				
FTE		0.1	0.1	0.1				

Beginning of Workpaper Group 00734A - Hydrogen Refueling Stations

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	2. Hydrogen Refueling Stations
Workpaper Group:	00734A - Hydrogen Refueling Stations

Summary of Results (Constant 2021 \$ in 000s):

Forecast Method		Adjusted Recorded				Adjusted Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024
Labor	Zero-Based	0	0	0	0	0	12	428	172
Non-Labor	Zero-Based	0	0	0	0	0	609	20,311	8,243
NSE	Zero-Based	0	0	0	0	0	0	0	0
Total		0	0	0	0	0	621	20,739	8,415
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.1	2.6	2.6

Business Purpose:

As SoCalGas moves towards decarbonizing our fleet, over-the-road vehicles will be replaced with electric and hydrogen fuel cell electric vehicles (HFCEV). To support the fleet of hydrogen powered vehicles, SoCalGas will construct a reliable hydrogen fueling infrastructure.

Physical Description:

Install hydrogen refueling station at Pico Rivera. Pico Rivera has a large fleet assigned to the facility and the Bloom Energy fuel cells could convert available hydrogen into electricity without combustion and power Pico Rivera.

Project Justification:

The transition to HFCEVs supports the sustainability strategy of accelerating the transition to clean energy and protecting the climate. SoCalGas is committed to operating and maintaining a reliable and effective fueling infrastructure to fuel its own hydrogen powered fleet to support the use of zero emission vehicles in its operation.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	2. Hydrogen Refueling Stations
Workpaper Group:	00734A - Hydrogen Refueling Stations

Forecast Methodology:

Labor - Zero-Based

The calculations support 0.1 - 2.6 FTEs that have their labor costs spread over multiple projects for each annual budget. There have not been any hydrogen refueling stations installed historically, so a forecast based on historical trends is not available.

Non-Labor - Zero-Based

The forecast method developed in this cost category is zero-based and was estimated for the specific scope of the hydrogen refueling station. There have not been any hydrogen refueling stations installed historically, so a forecast based on historical trends is not available.

NSE - Zero-Based

N/A.

Beginning of Workpaper Sub Details for Workpaper Group 00734A

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	2. Hydrogen Refueling Stations
Workpaper Group:	00734A - Hydrogen Refueling Stations
Workpaper Detail:	00734A.001 - Hydrogen Refueling Station - Pico Rivera - RAMP

In-Service Date:

Description:

Installation of new hydrogen refueling station at Pico Rivera.

04/30/2024

Forecast In 2021 \$(000)							
	Years 2022 2023 2024						
Labor		12	428	172			
Non-Labor		609	20,311	8,243			
NSE		0	0	0			
	Total	621	20,739	8,415			
FTE		0.1	2.6	2.6			

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	2. Hydrogen Refueling Stations
Workpaper Group:	00734A - Hydrogen Refueling Stations
Workpaper Detail:	00734A.001 - Hydrogen Refueling Station - Pico Rivera - RAMP

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-CFF-2 Energy Resilience

RAMP Line Item ID: New

RAMP Line Item Name: Hydrogen Refueling Stations

Tranche(s): Tranche1: Non-Vehicle

GRC Forecast Cost Estim	ates (\$000) 2021 Historical	2022	2023	2024	2022 to 2024	2022 to RAMP I	
	Embedded Costs (2021 \$)	Forecast (2021 \$)	Forecast (2021 \$)	Forecast (2021 \$)	Forecast (2021 \$)	(2020 Inc Low	curred \$) High
Tranche 1 Cost Estimate	0	621	20,739	8,415	29,775	0	0
Cost Estimate Changes fr Cost estimate not forecaste							

Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2022 to 2024 Forecast	RAMP	o 2024 Range vities
Measure	Activities	Activities	Activities	Activities	Activities	Low	High
Tranche 1 # of Projects	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Work Unit Changes from Unit forecast not forecaste							
Risk Spend Efficiency (R	<u>SE)</u>						
		GRC RS	E		RAMP RSE		

RSE Changes from RAMP: N/A.

Beginning of Workpaper Group 00734C - Electric Vehicle Charging

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	3. EV Charging
Workpaper Group:	00734C - Electric Vehicle Charging

Summary of Results (Constant 2021 \$ in 000s):

Forecast	Method		Adjusted Recorded			Adjusted Forecast			
Years	s	2017	2018	2019	2020	2021	2022	2023	2024
Labor	Zero-Based	0	0	0	0	0	108	106	93
Non-Labor	Zero-Based	0	0	0	0	0	5,119	5,023	4,391
NSE	Zero-Based	0	0	0	0	0	0	0	0
Tota	al	0	0	0	0	0	5,227	5,129	4,484
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	1.1	1.0	0.9

Business Purpose:

As SoCalGas moves towards decarbonizing our fleet, existing light duty vehicles will be replaced with battery electric vehicles. By installing EV charging ports at facilities, the Company employees using BEVs will have access to a well-spaced network to charge vehicles when working at facilities within SoCalGas's diverse service territory.

Physical Description:

Install electric vehicle charging ports and upgrade the electric infrastructure at facilities to accommodate the EV charging equipment at facilities owned by SoCalGas.

Project Justification:

To support the State of California's goals established by Assembly Bill (AB) 32 and accelerated in SB 32, SoCalGas will replace existing light duty fleet vehicles with electric vehicles starting in 2022. To prepare for the electric vehicle fleet, SoCalGas will install approximately 1,200 electric vehicle charging ports at its employee assigned facilities.

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	3. EV Charging
Workpaper Group:	00734C - Electric Vehicle Charging

Forecast Methodology:

Labor - Zero-Based

The calculations support 0.9 - 1.1 FTEs that have their labor costs spread over multiple projects for each annual budget. There have not been any EV charging ports installed at facilities, so a labor forecast based on historical projects is not available.

Non-Labor - Zero-Based

The forecast for this cost category was determined by using vendor cost estimates for equipment, then prorating the infrastructure costs based on another vendor cost estimate. There have not been any EV charging ports installed at facilities, so a forecast based on historical projects is not available.

NSE - Zero-Based

Not applicable.

Beginning of Workpaper Sub Details for Workpaper Group 00734C

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	3. EV Charging
Workpaper Group:	00734C - Electric Vehicle Charging
Workpaper Detail:	00734C.001 - Electric Vehicle Charging 2022

In-Service Date: 12/31/2022

Description:

Upgrade the electrical infrastructure and install charging equipment for electric vehicles at bases and headquarter facilities in 2022.

Forecast In 2021 \$(000)				
	Years	2022	2023	2024
Labor		108	0	0
Non-Labor		5,119	0	0
NSE		0	0	0
	Total	5,227	0	0
FTE		1.1	0.0	0.0

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	3. EV Charging
Workpaper Group:	00734C - Electric Vehicle Charging
Workpaper Detail:	00734C.002 - Electric Vehicle Charging 2023

In-Service Date: 12/31/2023

Description:

Upgrade the electrical infrastructure and install charging equipment for electric vehicles at bases and headquarter facilities in 2023.

Forecast In 2021 \$(000)								
	Years 2022 2023 2024							
Labor		0	106	0				
Non-Labor		0	5,023	0				
NSE	0 0 0							
	Total	0	5,129	0				
FTE		0.0	1.0	0.0				

Area:	FACILITIES/OTHER
Witness:	Brenton K. Guy
Budget Code:	00734.0
Category:	E. Fleet Alternative Refueling
Category-Sub:	3. EV Charging
Workpaper Group:	00734C - Electric Vehicle Charging
Workpaper Detail:	00734C.003 - Electric Vehicle Charging 2024

In-Service Date: 12/31/2024

Description:

Upgrade the electrical infrastructure and install charging equipment for electric vehicles at bases and headquarter facilities in 2024.

Forecast In 2021 \$(000)								
	Years 2022 2023 2024							
Labor		0	0	93				
Non-Labor		0	0	4,391				
NSE	0 0 0							
	Total	0	0	4,484				
FTE		0.0	0.0	0.9				

Supplemental Workpapers for Workpaper Group 00734C

REDACTED

SUPPLEMENTAL CAPITAL WORKPAPERS TO

PREPARED DIRECT TESTIMONY

OF BRENTON K. GUY

Confidential and Protected Materials Pursuant to PUC Section 583 and GO 66-D Rev. 1 SCG-19-ESRE-BKG-653 CCM Building CONFIDENTIAL

Company LaborUnit on the image of an analysis of an an analysis of an			C t				1: .			
Note of the set o			Cont	rol Cente	er Moderniza	tion Build	ling Estin	nate		
Omega baseUnit CestUnit CestUnit CestMarchingYesMarchingMarchingYesMarchingVersionInternational SectorInternational SectorGeneral ConceptorInternational SectorInternational SectorInternational SectorFactor FactorInternational SectorInternational SectorInternational SectorGeneral ConceptorInternational SectorInter	Total Square Feet	68,716				2018-2021	2022	2023	2024	Total 2022-2024
Inversité UséMarching MarchingInversité MarchingInversité 	Company Labor	Unit Cost	Units	Qtv	Prelim Budget					
ValueMarrier <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>										
<table-container>Lake SatialInitialInitialInitialInitialInitialInitialConsultant shoper Sati AnnateInitialInitialInitialInitialInitialInitialSecond Sationary SatisfiesInitialInitialInitialInitialInitialInitialInitialSatisfiesInitial<td>V&S</td><td></td><td>· · · · ·</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></table-container>	V&S		· · · · ·							
Antain All I.S.	Labor Subtotal		,							
AnthodI.G.										
Gamed ConversionLSStandbr RayouMCMCMMCStandbr RayouMCStandbr RayouMCStandbr RayouSStandbr RayouSStandbr RayouSParalline, Lapi and bearanceSParalline, Lapi and bearanceSSS	Consultants and Support Staff		Units							
	Architect		LS		:					
	General Contractor		LS							
Convertionant and Service Lange of the se	Scheduler Support		MO							
	Project Management Support		MO							
<table-container>Signal day and his wards United and his wards United and his wards Para flack and his wards Para flack and his wards Signal day and his wards Signal</table-container>	SWPPM - Monitor		MO							
Considuration and Support Survive Permitting, Logal and resurance Subtraction Solution Solution Permitting, Logal and resurance Subtraction Solution Solution Solution Permitting, Logal and resurance Subtraction Solution Solution Solution Permitting, Logal and resurance Subtraction Solution Solution Solution Solution Solution Solution Solution S	GeoTechnical - Design Assist		LS							
<table-container>SubsetImage: set of the set o</table-container>	Special Inspections		\$/SF				-			
<table-container> Parallel guile di lange Image Image</table-container>										
Subscription Subscription<										
Parniting S/GE S C Parniting, uaj and maurance Subcave S			¢/0F			ć				
Builden Stak S <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>										
Premining, Legal and maximum Subted Image: Subted in the subsect of										
SubolImageImageImageImageSile ProputationS/SFS.Additional ParkingS/SFS.Sine proventrishS/SFS.SignerstructureS/SFS.SignerstructureS/SFS.SignerstructureS/SFS.SignerstructureS/SFS.SignerstructureS/SFS.SignerstructureS/SFS.Entrior Motocrial ErobauresS/SFS.SignerstructureS/SFS.Entrior Motocrial ErobauresS/SFS.PurbangS/SFSPurbangS/SFSEquipment and FurnishingsS/SFS.SignerstructureS/SFSSectical Sim EropeanersS/SFS.Sectical Sim Eropeaners			%		N	ə -				
Site Preparation SisF S Additional Parking US S Bite Improvements S/SF S Fundations and Exavation S/SF S Signeritzuture S/SF S Superitzuture S/SF S Extent Vertical Enclosures S/SF S Mintor Construction S/SF S Interior Construction S/SF S S/SF S ViAC S/SF S Converging S/SF S S/SF S Equipment and Furnishinga S/SF S S/SF S Equipment and Furnishinga S/SF S S/SF S Exelocial										
Additional ParkingI.SS.Sile improvementéS/SFS.SigerstructureS/SFS.SigerstructureS/SFS.SigerstructureS/SFS.Sider Michael EnclosuresS/SFS.Euteric Verbalde EnclosuresS/SFS.Interior ConstructionS/SFS.SigerstructureS/SFS.ComprigS/SFS.PuntahingS/SFS.PuntahingS/SFS.PuntahingS/SFS.PuntahingS/SFS.PuntahingS/SFS.PuntahingS/SFS.PuntahingS/SFS.PuntahingS/SFS.PuntahingS/SFS.SigerstructureS/SFS.Equipment and FurnihingsS/SFS.SigerstructureS/SFSSile communication splatmaS/SFSSile communication splatmaS/SFSSile communication splatmaS/SFSSile communication splatmaS/SFSSile communication splatmaS/SFSSile controll/SileSSRohdber Cable CorrectivityEAS <td>Construction</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Construction									
Site improvementsSis FrS.SystemstutureSis FrS.SystemstutureSis FrS.Stature IndocumesSis FrS.Stature IndocumesSis FrS.Sis FrSSubmit ConstructionSis FrS.Sis FrSSis FrS	Site Preparation		\$/SF			\$-				
SUSF S . Superituriture SISF S . . Superituriture SISF S . . . Superituriture SISF S Superituriture SISF S Superituriture SISF S . <	Additional Parking		LS			\$-				
SkyF S -	Site Improvements		\$/SF			\$-				
SiSFS-Satiric Victorial EnclosuresSiSFS-SiSFSSiSFSSiSFSSiSFSSiSFSSiSFSSiSFSVACSiSFS-SiSFSSiSFSSisFSSisFSSisFSSisFSSisFSSisFSSise commutation systemsSiSF-Sise commutation systemsSise commutation systems<	Foundations and Excavation		\$/SF			\$-				
Eaterior Horizontal Enclosures\$\SF\$\S\$Biterior Construction\$\SF\$\$\$Biterior Finishes\$\SF\$\$\$Converying\$\SF\$\$\$Biterior Finishes\$\SF\$\$\$Pumbing\$\SF\$\$\$Biterior Finishes\$\SF\$\$\$Pumbing\$\SF\$\$\$\$Biterior Finishes\$\SF\$\$\$Biterior Finishes\$\$\$\$Biterior Finishes\$\$\$\$Biterior Finishes\$\$\$\$Biterior Finishes\$\$\$\$Biterior Finishes\$\$\$\$Biterior Finishes <td< td=""><td>Superstructure</td><td></td><td>\$/SF</td><td></td><td></td><td>\$-</td><td></td><td></td><td></td><td></td></td<>	Superstructure		\$/SF			\$-				
htterior Construction \$/SF \$. bitterior Finkles \$/SF \$. Conveying \$/SF \$. Burbing \$/SF \$. By/SF \$. . HVAC \$/SF \$. Bite Protocion \$/SF \$. \$/SF \$. . \$/SF \$. . \$/SF \$. . \$/SF \$. . . <td>Exterior Vertical Enclosures</td> <td></td> <td>\$/SF</td> <td></td> <td></td> <td>\$-</td> <td></td> <td></td> <td></td> <td></td>	Exterior Vertical Enclosures		\$/SF			\$-				
httrider Fhishes \$/SF \$/SF \$ \$/SF	Exterior Horizontal Enclosures		\$/SF			\$-				
Conveying \$ISF \$. Punnbing \$ISF \$. File Protection \$ISF \$. Elactical \$ISF \$. Equipment and Furnishings \$ISF \$. Site Contraction Systems \$ISF \$. Site Contraction Systems \$ISF \$. Site Contraction Systems \$ISF \$. General Requirements \$ISF \$. Construction Subtotal % \$. Horizontal SCCS Implementation \$ \$. Backbone Cable Connectivity EA \$. Phones EA \$. . AV - Conference Requirements EA \$. . VAR FShared Statemas \$ MAR Shared Statemas \$ Mark Room Advertok Requirements EA \$ Mark Room Ad	Interior Construction		\$/SF			\$-				
Plunbing \$/SF \$ - HAC \$/SF \$ - Fire Protection \$/SF \$ - Electrical \$/SF \$ - Electrical solutions \$/SF \$ - Site ommunication systems \$/SF \$ - Bechology Image: solution systems \$ - IteED Platinum Adder \$ - 1 Site Commentation \$ - 1 Becholog Subcolab Comentivity EA \$ - ViDF/MDF Rooms Buid-Out EA \$ - Av - Conference Rooms EA \$ <t< td=""><td>Interior Finishes</td><td></td><td>\$/SF</td><td></td><td></td><td>\$-</td><td></td><td></td><td></td><td></td></t<>	Interior Finishes		\$/SF			\$-				
HVAC \$ISF \$ - Fire Protection \$ISF \$ - Electrical \$ISF \$ - Equipment and Funishings \$ISF \$ - SIde Communication systems \$ISF \$ - Side construction Subtotal \$ISF \$ - Construction Subtotal \$ \$ - Construction Subtotal \$IOUT \$ - Construction Subtotal \$IOUT \$ - Construction Subtotal \$IOUT \$ - Derived SCD Implementation \$IOUT \$ - Backbone Cable Connectivity EA \$ - DPMOP Rooms Build-Out EA \$ - Corporate IT Network Equipment LS \$ - AV - Corference Rooms EA \$ - Var Room and Overlook Room EA \$ - War Room and Overlook Room EA \$ - War Room and Overlook Room \$ - \$ War Room and Overlook Room \$ - \$ War Room and Overlook Room \$ - \$ War Room and Overlook Room \$ - <	Conveying		\$/SF			\$-				
Fire Protection \$/SF \$ - Electrical \$/SF \$ - Equipment and Furnishings \$/SF \$ - Site Contraction Systems \$/SF \$ - Site communication systems \$/SF \$ - General Requirements \$/SF \$ - Site communication systems \$/SF \$ - Construction Subtotal 6 6 6 Microhamber Colls (Commerknik) EA \$ - Backbone Cable Connectivity EA \$ - DiP/MDF Rooms Buid-Out EA \$ - Control Cameras EA \$ - 6 Phones EA \$ - 6 - <td>Plumbing</td> <td></td> <td>\$/SF</td> <td></td> <td></td> <td>\$-</td> <td></td> <td></td> <td></td> <td></td>	Plumbing		\$/SF			\$-				
Electrical \$\SF \$\SF\$ \$\SF\$ <td>HVAC</td> <td></td> <td>\$/SF</td> <td></td> <td></td> <td>\$-</td> <td></td> <td></td> <td></td> <td></td>	HVAC		\$/SF			\$-				
Equipment and Furnishings \$\SF \$\S <	Fire Protection		\$/SF			\$-				
Liquid and Gas Site Utilities \$/SF \$. Electrical Site Improvements \$/SF \$. . Site communication systems \$/SF \$. . . General Requirements \$/SF \$ LEED Platnum Adder % \$.	Electrical		\$/SF			\$-				
Electrical Site Improvements \$/SF \$. Site communication systems \$/SF \$. General Requirements \$/SF \$. LEED Platinum Adder % \$. Construction Subtotal % \$. Technology M M M M Horizontal SCCS Implementation \$/Outlet \$. M Backbone Cable Connectivity EA \$. . IDF/INDF Rooms Build-Out EA \$. . Phones EA \$. . AV - Conference Rooms EA \$. . Var Room and Overlook Room Image: Second	Equipment and Furnishings		\$/SF			\$-				
Site communication systems \$/SF \$ - 4 General Requirements \$/SF \$ - 6 - LEED Platinum Adder % \$ - 6 - <td>Liquid and Gas Site Utilities</td> <td></td> <td>\$/SF</td> <td></td> <td></td> <td>\$-</td> <td></td> <td></td> <td></td> <td></td>	Liquid and Gas Site Utilities		\$/SF			\$-				
General Requirements \$/SF \$	Electrical Site Improvements		\$/SF			\$-				
LEED Plainum Adder%\$\$<Construction SubtodalImage: Construction Subtodal <thi< td=""><td>Site communication systems</td><td></td><td>\$/SF</td><td></td><td></td><td>\$-</td><td></td><td></td><td></td><td></td></thi<>	Site communication systems		\$/SF			\$-				
Construction Subtoal Image: Marcine Subtoal Image: Subtoal <th< td=""><td>General Requirements</td><td></td><td>\$/SF</td><td></td><td></td><td>\$ -</td><td></td><td></td><td></td><td></td></th<>	General Requirements		\$/SF			\$ -				
Technology Image: Second sec	LEED Platinum Adder		%			\$-				
Horizontal SCSS Implementation \$/Outlet Backbone Cable Connectivity EA Backbone Cable Connectivity EA DF/MDF Rooms Build-Out EA Corporate IT Network Equipment LS LS \$ Access Control/Cameras LS Phones EA EA \$ AV - Conference Rooms EA EA \$ Var F Shared systems EA Control Room Image: Control Room Mar Room and Overlook Room Image: Control Room Training Simulator Image: Control Room Outage Coordination Image: Control Room Wark Office Image: Control Room	Construction Subtotal				li –					
Backbone Cable Connectivity EA	Technology									
Backbone Cable Connectivity EA	Horizontal SCCS Implementation		\$/Outlet			\$-	<u> </u>			
DF/MDF Rooms Build-OutEA\$.Corporate IT Network EquipmentLS\$.Access Control/CamerasLS\$.PhonesEA\$.AV - Conference RoomsEA\$.AV - Conference RoomsEA\$.AV F Shared systemsEA\$.Control RoomEA\$.War Room and Overlook RoomImage: Control Room\$.Training SimulatorImage: Control Room\$.Watch OfficeImage: Control Room\$.Image: Control RoomWatch OfficeImage: Control RoomImage: Control Room\$.	Backbone Cable Connectivity		EA							
Corporate IT Network Equipment LS Access Control/Cameras LS Phones EA AV - Conference Rooms EA EA \$ AV R F Shared systems EA Control Room EA Var Room and Overlook Room Image: Control Room Image: Simulator Image: Control Room Image: Simulator Image: Control Room Simulator Image: Control Room Image: Simulator Image: Simulator	DF/MDF Rooms Build-Out		EA							
Access Control/Cameras LS \$ 1 Phones EA \$ - AV - Conference Rooms EA \$ - AV RF Shared systems EA \$ - Var Room and Overlook Room Image: Control Room \$ - Var Room and Overlook Room Image: Control Room \$ - Image: Control Room Image: Control Room \$ - Var Room and Overlook Room Image: Control Room \$ - Image: Control Room Image: Control Room \$ \$ Var Room and Overlook Room Image: Control Room \$ \$ Image: Control Room Image: Control Room \$ <td>Corporate IT Network Equipment</td> <td></td> <td>LS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Corporate IT Network Equipment		LS							
Phones EA \$ - AV - Conference Rooms EA \$ - AV RF Shared systems EA \$ - Control Room EA \$ - Nar Room and Overlook Room Image: Construction of the systems \$ - Training Simulator Image: Construction of the systems \$ - Dutage Coordination Image: Construction of the systems \$ - Watch Office Image: Construction of the systems \$ -	Access Control/Cameras		LS							
AV - Conference Rooms EA AV RF Shared systems EA Control Room \$ Var Room and Overlook Room \$ Irraining Simulator Control Room Dutage Coordination Control Room Watch Office Control Room	Phones		EA							
AV RF Shared systems EA \$ - Control Room Image: Control Room Image: Control Room \$ - War Room and Overlook Room Image: Control Room Image: Control Room \$ - Training Simulator Image: Control Room Image: Control Room \$ - Outage Coordination Image: Control Room Image: Control Room \$ - Watch Office Image: Control Room Image: Control Room \$ -	AV - Conference Rooms		EA							
Sontrol Room \$ - War Room and Overlook Room \$ - Training Simulator \$ - Dutage Coordination \$ - Watch Office \$ -	AV RF Shared systems		EA							
War Room and Overlook Room	Control Room		1							
Training Simulator \$ - Dutage Coordination \$ - Watch Office \$ -	War Room and Overlook Room									
Dutage Coordination \$ - Watch Office \$ -										
Watch Office \$ -										
EOC Ś -										

SCG/FACILITIES/OTHER/Exh No:SCG-19-CWP/Witness: B. Guy Page 84 of 87

Confidential and Protected Materials Pursuant to PUC Section 583 and GO 66-D Rev. 1 SCG-19-ESRE-BKG-653 CCM Building CONFIDENTIAL

		Contr	ol Cente	r Moderniza	tion Build	ling Estin	nate		
Total Square Feet	68,716				2018-2021	2022	2023	2024	Total 2022-2024
Technology Subtotal									
FF&E Costs	-								
Systems Furniture Design		LS							1
Workstations		EA							
Task Chairs		EA							
Private Office Furniture		EA							
Ancillary Furniture		\$/SF							
Conference / Soft Conference		EA							
Console Design		LS							
Consoles - Control Room		\$/console							
Consoles - Simulator		\$/console							
Consoles - Watch Office		\$/console							
Signage - Interior		LS							
Signage - Wayfinding		LS							
Signage - Exterior		LS							
Artwork/Branding		\$/SF							
Moving Costs		\$/SF							
FF&E Subtota									
Escalation							·		·
Contingency									
Project Total						\$ 7,108,715	\$ 29,824,986	\$ 40,281,750	\$ 77,215,4

Southern California Gas Company 2024 GRC - APP

Confidential and Protected Materisiania Warkpaperoc Section 583 and GO 66-D Rev. 1

SCG-19-ESRE-BKG-734A Hydrogen Refueling Stations CONFIDENTIAL

SoCal Gas | Phase 1A Report

4.9 Estimate Summary

4.10 Phase 1 Estimate Summary

Table 4-1 Phase 1 Estimate Summary

Description	Electrolyzer 200 (kUSD)	Electrolyzer 1200 (kUSD)	SMR 1200 (kUSD)	Delivered Gas 200 (kUSD)	Delivered Liquid 200 (kUSD)	Delivered Liquid 1200 (kUSD)
Direct Field Material (Includes Civil, Piling, Concrete, Structural Steel, Mechanical Equipment, Piping, Electrical, Control Systems, Insulation, Painting, and Fireproofing Material)						
Direct Field Labor (Includes the direct labor costs associated with the material referenced above.)						
Subtotal Direct Field Cost (DFC)						
Indirects						
Construction Mgmt.						
Subtotal Indirects						
Freight						
Home Office						
Vendor Reps						
SU/Comm Support						
Bare Total Installed Cost (BTIC)						
Contingency						
Total Installed Cost (TIC)						

Confidential and Protected Materials Pursuant to PUC Section 583 and GO 66-D Rev. 1

SCG-19-ESRE-BKG-734C EV Charging CONFIDENTIAL

SoCalGas EV Charging Plan SUMMARY

2022		2023	3	2024		
Site	Charger Plugs	Site	Charger Plugs	Site	Charger Plug	
SANTA MARIA		GOLETA		OXNARD		
BAKERSFIELD NORTH		SANTA BARBARA		VALENCIA		
SAN LUIS OBISPO		HANFORD		VISALIA		
SATICOY		PORTERVILLE		LANCASTER		
CHATSWORTH		SIMI VALLEY		TAFT		
COMPTON		HONOR RANCHO		TEMPLETON		
PLAYA DEL REY		ALISO CANYON		BRANFORD		
ENERGY RESOURCE CENTER		EL CENTRO		ROMOLAND		
ANAHEIM		HUNTINGTON PARK		BLYTHE		
PASADENA		MONTEBELLO		PALM DESERT		
CANOGA		BELVEDERE		BEAUMONT		
Total		GLENDALE		YUCCA VALLEY		
		JUANITA		CORONA		
		CRENSHAW		MURRIETA		
		SAN PEDRO		REDLANDS		
		GARDEN GROVE		VICTORVILLE		
		la jolla		CHINO		
		WHITTIER		SAN BERNARDINO		
		BREA		NEEDLES		
		SAN DIMAS		RIVERSIDE		
		MONTEREY PARK		FONTANA		
		INDUSTRY		ALHAMBRA		
		Total		AZUSA		
				HOLLYWOOD		
				182ND STREET		
				DOWNEY		
				YUKON		
				SANTA MONICA		
				PICO RIVERA		
				SANTA ANA		
				ALISO VIEJO		
				Total		

EV Charging Estimate				
2022	\$5,119,247			
2023	\$5,023,354			
2024 \$4,391,362				

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

DECLARATION OF JEFFERY L. WALKER REGARDING CONFIDENTIALITY OF CERTAIN DATA/DOCUMENTS PURSUANT TO D.19-01-028

I, Jeffery L. Walker, do declare as follows:

 I am Senior Vice President (SVP) and Chief Administrative and Diversity Officer for Southern California Gas Company (SoCalGas). I have reviewed the confidential information included within Supplemental Workpapers (1) SCG-19-ESRE-BKG-2200-0618.000 GCT Rents;
 SCG-19-ESRE-BKG-653 CCM Building; (3) SCG-19-ESRE-BKG-734C EV Charging; and
 SCG-19-ESRE-BKG-734A Hydrogen Refueling Stations submitted concurrently herewith. I am personally familiar with the facts in this Declaration and, if called upon to testify, I could and would testify to the following based upon my personal knowledge and/or information and belief.

 I hereby provide this Declaration in accordance with Decision (D.) 19-01-028 and General Order (GO) 66-D Revision 1¹ to demonstrate that the confidential information (Protected Information) provided within Supplemental Workpapers (1) SCG-19-ESRE-BKG-2200-0618.000 GCT Rents; (2) SCG-19-ESRE-BKG-653 CCM Building; (3) SCG-19-ESRE-BKG-734C EV Charging; and (4) SCG-19-ESRE-BKG-734A Hydrogen Refueling Stations is within the scope of data protected as confidential under applicable law.

3. In accordance with the narrative justification described in Attachment A, the Protected Information should be protected from public disclosure.

¹ GO 66-D was modified by D.19-01-028 to create GO 66-D Revision 1 which became effective February 1, 2019.

I declare under penalty of perjury under the laws of the State of California that the

foregoing is true and correct to the best of my knowledge.

Executed this 16th day of May, 2022, at Los Angeles, California.

/s/ Jeffery Walker

Jeffery Walker Senior Vice President – Chief Administrative and Diversity Officer Southern California Gas Company

ATTACHMENT A

SoCalGas Request for Confidentiality on the following information in its Supplemental Workpapers

Location of Protected Information	Legal Citations	Narrative Justification
The information shaded in yellow for the following Supplemental Workpapers is confidential: (1) SCG-19-ESRE- BKG-2200- 0618.000 GCT Rents	 CPRA Exemption, Gov't Code § 6254(k). Cal. Evid. Code § 1060 Cal. Civil Code § 3426 et seq. CPRA Exemption, Gov't Code § 6254.7(d) (trade secrets). 	<u>Market-sensitive lease cost and term</u> <u>information.</u> if disclosed could provide market participants and SoCalGas's competitors with insight into SoCalGas's real estate and facilities activities, plans, and strategies, which would place SoCalGas at an unfair business disadvantage. This could ultimately result in increased costs to core ratepayers. If disclosed, SoCalGas's competitors and market participants could also derive economic value from this information.
 (2) SCG-19-ESRE- BKG-653 CCM Building; (3) SCG-19-ESRE- BKG-734C EV Charging; (4) SCG-19-ESRE- BKG-734A Hydrogen Refueling Stations 	CPRA Exemption, Gov't Code § 6254.7(d) (Trade Secrets). ² CPRA Exemption, Gov't Code § 6254.15 (disclosure not required for "corporate financial records, corporate proprietary information"). CPRA Exemption, Gov't Code § 6254(k) ("Records, the disclosure of which is exempted or prohibited pursuant to federal or state law").	Detailed Project Descriptions: This information could include discussion of building expansions and upgrades and other data that might disclose market-sensitive information, providing a competitive advantage to other businesses. If this information was released it could pose negative financial impacts which could be detrimental to the customer, or pose a security threat by revealing utilities' strategies and plans to recover from a disaster.

² "Trade secrets . . . may include, but are not limited to, any formula, plan, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information which is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce, or compound an article of trade or a service having commercial value and which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it."

 Cal. Evid. Code § 1060 Cal. Civil Code § 3426 et seq. (relating to trade secrets)³ 5 U.S.C. § 552(b)(4) (Exemption 4 of FOIA protecting "trade secrets and commercial or financial information obtained from a person and privileged or confidential") 	3
---	---

³ Civil Code Section 3426.1 defines "trade secret" as "information, including a formula, pattern, compilation, program, device, method, technique, or process, that:
 (1) Derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and

(2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy."