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

Application No. 22-05-___ Exhibit No.: (SDG&E-25-WP)

WORKPAPERS TO PREPARED DIRECT TESTIMONY OF TIA L. BALLARD

ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

May 2022



2024 General Rate Case - APP INDEX OF WORKPAPERS

Exhibit SDG&E-25-WP - INFORMATION TECHNOLOGY

DOCUMENT	PAGE
Overall Summary For Exhibit No. SDG&E-25-WP	1
Summary of Non-Shared Services Workpapers	2
Category: A. Applications	3
1IT002.000 - NON-SHARED OPERATIONAL APPLICATIONS	4
Category: B. Infrastructure	14
1IT004.000 - NON-SHARED OPERATIONAL INFRASTRUCTURE	15
Summary of Shared Services Workpapers	22
Category: A. Applications	23
2100-3071.000 - SHARED APPLICATIONS	24
2100-3073.000 - SHARED OPERATIONAL APPLICATIONS	34
Category: B. Infrastructure	45
2100-0207.000 - SHARED OPERATIONAL INFRASTRUCTURE	46
2100-3097.000 - SHARED INFRASTRUCTURE	59
Category: C. Support	67
2100-0460.000 - SHARED OPERATIONAL SUPPORT	68
2100-3172.000 - SHARED SUPPORT	79

Appendix A: List of Non-Shared Cost Centers

88

San Diego Gas & Electric Company 2024 GRC - APP

Overall Summary For Exhibit No. SDG&E-25-WP

	Area: INFORMA	Area: INFORMATION TECHNOLOGY							
	Witness: Tia L. Bal	lard							
		In 2021 \$ (000) Incurred Costs							
	Adjusted-Recorded		Adjusted-Forecast						
Description	2021	2022	2023	2024					
Non-Shared Services	19,808	25,910	28,079	27,113					
Shared Services	78,187	75,986	79,607	83,305					
Total	97,995	101,896	107,686	110,418					

Area: INFORMATION TECHNOLOGY

Witness:

Tia L. Ballard

Summary of Non-Shared Services Workpapers:

	In 2021 \$ (000) Incurred Costs					
	Adjusted- Recorded	:				
Description	2021	2022	2023	2024		
A. Applications	10,678	19,287	21,045	20,382		
B. Infrastructure	9,130	6,623	7,034	6,731		
Total	19,808	25,910	28,079	27,113		

Area:INFORMATION TECHNOLOGYWitness:Tia L. BallardCategory:A. ApplicationsWorkpaper:1IT002.000

Summary for Category: A. Applications

	In 2021\$ (000) Incurred Costs							
	Adjusted-Recorded		Adjusted-Forecast					
	2021	2022	2023	2024				
Labor	2,916	5,329	5,598	5,787				
Non-Labor	7,762	13,958	15,447	14,595				
NSE	0	0	0	0				
Total	10,678	19,287	21,045	20,382				
FTE	22.0	42.1	44.3	45.9				

Workpapers belonging to this Category:

1IT002.000 Non-shared Operational Applications

Non-Labor 7,762 13,958 15,447 14,59 NSE 0 0 0 0 0	FTE	22.0	42.1	44.3	45.9
Non-Labor7,76213,95815,44714,59	Total	10,678	19,287	21,045	20,382
2,010 0,020 0,000 0,70	NSE	0	0	0	0
Labor 2,916 5,329 5,598 5,78	Non-Labor	7,762	13,958	15,447	14,595
	Labor	2,916	5,329	5,598	5,787

Beginning of Workpaper 1IT002.000 - Non-shared Operational Applications

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub	1. Applications
Workpaper:	1IT002.000 - Non-shared Operational Applications

Activity Description:

The non-shared SDG&E IT applications costs represent labor and non-labor for technology systems where 100% of the activities directly support the objectives of operating and maintaining SDG&E infrastructure systems safely and reliably. The types of functions supported in this area include customer billing and revenue management, smart grid and electric operations, meter data services, smart grid and electric operations portfolio management office, applications and utility operations maintenance agreements, and customer information systems (CIS) operations. Customer information systems includes ongoing costs related to the CIS replacement.

Forecast Explanations:

Labor - Base YR Rec

Historical costs have fluctuated between various workgroups as a result of either internal organizational changes, transfers of responsibilities, or shifting of cost drivers from one area of the IT department to another. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

Non-Labor - Base YR Rec

Historical costs, such as contractor services and cost of software and/or hardware, have fluctuated as a result of shifting cost drivers in the IT department. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

NSE - Base YR Rec

N/A

Summary of Results:

[In 2021\$ (000) Incurred Costs							
		Adju	isted-Recor	ded		Ad	justed-Fore	cast
Years	2017	2018	2019	2020	2021	2022	2023	2024
Labor	4,462	4,367	3,656	2,749	2,916	5,329	5,598	5,787
Non-Labor	7,048	7,153	8,682	8,439	7,762	13,958	15,447	14,595
NSE	0	0	0	0	0	0	0	0
Total	11,509	11,521	12,339	11,188	10,678	19,287	21,045	20,382
FTE	34.8	32.7	29.9	22.2	22.0	42.1	44.3	45.9

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Workpaper:	1IT002.000 - Non-shared Operational Applications

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs										
Forecas	t Method	Bas	se Foreca	st	Forec	ast Adjust	ments	Adjus	ted-Forec	ast	
Years	s	2022	2 2023 2024 2022 2023 2024		2022	2023	2024				
Labor	Base YR Rec	2,916	2,916	2,916	2,413	2,682	2,871	5,329	5,598	5,787	
Non-Labor	Base YR Rec	7,762	7,762	7,762	6,196	7,685	6,833	13,958	15,447	14,595	
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0	
Tota	al	10,678	10,678	10,678	8,609	10,367	9,704	19,287	21,045	20,382	
FTE	Base YR Rec	22.0	22.0	22.0	20.1	22.3	23.9	42.1	44.3	45.9	

Forecast Adjustment Details:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>		
2022	-348	-485	0	-833	-2.9	1-Sided Adj		
Explanation:	Benefit 502.1: Retire C legacy CISCO system	ISCO; CIS Rep	lacement Be	nefit reduction	related to not	requiring support for		
2022	168	0	0	168	1.4	1-Sided Adj		
Explanation:	Adding 2 internal Emple	oyees to suppo	rt growing IT	initiatives at 7	0% O&M			
2022	2,668	7,505	0	10,173	22.2	1-Sided Adj		
Explanation:	Adding CIS replacement Maintenance) on top of		•		tract labor, and	d ongoing SW		
2022	-39	-37	0	-76	-0.3	1-Sided Adj		
Explanation:	Benefit 504.1: Retire M for legacy CISCO syste	-	Replacement	t Benefit reduc	ction related to	not requiring support		
2022	-36	-85	0	-121	-0.3	1-Sided Adj		
Explanation:	Benefit 506.1: Retire S legacy CISCO system	EAD; CIS Repl	acement Ben	efit reduction	related to not r	equiring support for		
2022	0	-70	0	-70	0.0	1-Sided Adj		
Explanation:	Benefit New 6: Retire F Maintenance	Proquire; Envisi	on Benefit ree	duction related	d to no longer r	needing Proquire		
2022	0	-280	0	-280	0.0	1-Sided Adj		
Explanation:	Benefit New 7: Retire Red Clay; Envision Benefit reduction related to no longer needing monthly legacy support from Red Clay							
2022	0	-352	0	-352	0.0	1-Sided Adj		
Explanation:	Reduced Consulting Se	ervices related	to managed s	service service	es that are no l	onger needed		
2022 Total	2,413	6,196	0	8,609	20.1			
2023	-348	-485	0	-833	-2.9	1-Sided Adj		
Explanation:	Explanation: Benefit 502.1: Retire CISCO; CIS Replacement Benefit reduction related to not requiring support for legacy CISCO system							

Note: Totals may include rounding differences. SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard Page 6 of 88

Area: Witness: Category:	INFORMATION TE Tia L. Ballard A. Applications	CHNOLOGY				
Category-Sub: Workpaper:	1. Applications 1IT002.000 - Non-s	hared Operation	onal Applicat	ions		
<u>Year</u>	Labor	<u>NLbr</u>	NSE	Total	<u>FTE</u>	Adj_Type
2023	336	0	0	336	2.8	1-Sided Adj
Explanation:	Adding 2 additional inte	rnal Employee	s (on top of 2	2022) to suppo	rt growing IT in	itiatives at 70% O&M
2023	2,769	8,994	0	11,763	23.0	1-Sided Adj
Explanation:	Adding CIS replacemen Maintenance) on top of		•	• •	tract labor, and	l ongoing SW
2023	-39	-37	0	-76	-0.3	1-Sided Adj
Explanation:	Benefit 504.1: Retire My for legacy CISCO syste		Replacemen	t Benefit reduc	tion related to	not requiring support
2023	-36	-85	0	-121	-0.3	1-Sided Adj
Explanation:	Benefit 506.1: Retire SE legacy CISCO system	AD; CIS Repla	acement Ber	efit reduction r	elated to not re	equiring support for
2023	0	-70	0	-70	0.0	1-Sided Adj
Explanation:	Benefit New 6: Retire P Maintenance	roquire; Envisi	on Benefit re	duction related	l to no longer n	eeding Proquire
2023	0	-280	0	-280	0.0	1-Sided Adj
Explanation:	Benefit New 7: Retire R legacy support from Rec	-	ion Benefit re	eduction relate	d to no longer i	needing monthly
2023	0	-352	0	-352	0.0	1-Sided Adj
Explanation:	Reduced Consulting Se	rvices related	to managed :	service service	s that are no lo	onger needed
2023 Total	2,682	7,685	0	10,367	22.3	
2024	0	-352	0	-352	0.0	1-Sided Adj
Explanation:	Reduced Consulting Se	rvices related	to managed :	service service	s that are no lo	onger needed
2024	420	0	0	420	3.5	1-Sided Adj
Explanation:	Adding 1 additional inte	rnal Employee	(on top of 20	023) to support	growing IT init	tiatives at 70% O&M
2024	2,874	8,142	0	11,016	23.9	1-Sided Adj
Explanation:	Adding CIS replacemen Maintenance) on top of	0 0	•		tract labor, and	l ongoing SW
2024	-348	-485	0	-833	-2.9	1-Sided Adj
Explanation:	Benefit 502.1: Retire Cl legacy CISCO system	SCO; CIS Rep	lacement Be	nefit reduction	related to not	requiring support for
2024	-39	-37	0	-76	-0.3	1-Sided Adj
Explanation:	Benefit 504.1: Retire My for legacy CISCO syste		Replacemen	t Benefit reduc	tion related to	not requiring support
2024	-36	-85	0	-121	-0.3	1-Sided Adj
Explanation:	Benefit 506.1: Retire SE legacy CISCO system	AD; CIS Repla	acement Ber	efit reduction r	elated to not re	equiring support for
2024	0	-70	0	-70	0.0	1-Sided Adj
Note: Totals may	include rounding differe	nces.				

SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard

Area:	INFORMATION TE	CHNOLOGY				
Witness:	Tia L. Ballard					
Category:	A. Applications					
Category-Sub:	1. Applications					
Workpaper:	1IT002.000 - Non-s	shared Operatio	nal Applicatio	ons		
Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj_Type
Explanation:	Benefit New 6: Retire P Maintenance	roquire; Envisic	n Benefit red	luction related	to no longer n	eeding Proquire
2024	0	-280	0	-280	0.0	1-Sided Adj
Explanation: Benefit New 7: Retire Red Clay; Envision Benefit reduction related to no longer needing monthly legacy support from Red Clay						
2024 Total	2.871	6.833	0	9.704	23.9	

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Workpaper:	1IT002.000 - Non-shared Operational Applications

Determination of Adjusted-Recorded (Incurred Costs):

···· · · · · · · · · · · · · · · · · ·	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	3,425	3,513	3,012	2,331	1,821
Non-Labor	6,194	6,482	8,057	4,852	6,790
NSE	0	0	0	0	0
Total	9,619	9,995	11,069	7,183	8,611
FTE	29.4	29.0	25.7	19.0	14.1
djustments (Nominal \$) **	*				
Labor	56	-21	11	2	714
Non-Labor	6	17	19	2,979	972
NSE	0	0	0	0	0
Total	61	-4	29	2,981	1,686
FTE	0.4	-1.1	0.1	0.1	4.8
Recorded-Adjusted (Nomir	nal \$)				
Labor	3,481	3,492	3,022	2,333	2,535
Non-Labor	6,200	6,499	8,076	7,832	7,762
NSE	0	0	0	0	0
Total	9,680	9,991	11,098	10,165	10,297
FTE	29.8	27.9	25.8	19.1	18.8
acation & Sick (Nominal \$	\$)				
Labor	517	529	433	331	381
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	517	529	433	331	381
FTE	5.0	4.8	4.1	3.1	3.2
scalation to 2021\$					
Labor	464	346	201	85	0
Non-Labor	848	655	607	608	0
NSE	0	0	0	0	0
Total	1,312	1,001	808	693	0
FTE	0.0	0.0	0.0	0.0	0.0
ecorded-Adjusted (Const	ant 2021\$)				
Labor	4,462	4,367	3,656	2,749	2,916
Non-Labor	7,048	7,153	8,682	8,439	7,762
NSE	0	0	0	0	0
Total	11,509	11,521	12,339	11,188	10,678
FTE	34.8	32.7	29.9	22.2	22.0

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments *Note: Totals may include rounding differences.*

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Workpaper:	1IT002.000 - Non-shared Operational Applications

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs								
Years 2017 2018 2019 2020 2021								
Labor		56	-21	11	2	714		
Non-Labor		6	17	19	2,979	972		
NSE		0	0	0	0	0		
	Total –	61	-4	29	2,981	1,686		
FTE		0.4	-1.1	0.1	0.1	4.8		

Detail of Adjustments to Recorded:

Year	La	bor <u>N</u>	ILbr NS	<u>3E</u>	<u>FTE</u>	Adj Type			
2017		56	6	0	0.4	CCTR Transf From 2100-3992.000			
Explanation:	Transfer labor, non-labor and FTE associated with CIS Team from cost center 2100-3992 in work paper group 100006 Cust Ops Support & Projects to cost center 2100-3084 in workpaper group 1IT002 to align costs where activity/function resides.								
2017 Total		56	6	0	0.4				
2018		0	-7	0	-0.9	1-Sided Adj			
Explanation:	One sided transfer out o	f affiliate (non-Oa	&M) costs to al	ign with ac	tuals and for	ecast			
2018	-	21	24	0	-0.2	CCTR Transf From 2100-3992.000			
Explanation:	Transfer labor, non-labor and FTE associated with CIS Team from cost center 2100-3992 in work paper group 100006 Cust Ops Support & Projects to cost center 2100-3084 in workpaper group 1IT002 to align costs where activity/function resides.								
2018 Total	-	21	17	0	-1.1				
2019		11	19	0	0.1	CCTR Transf From 2100-3992.000			
Explanation:		oort & Projects to				2100-3992 in work paper group group 1IT002 to align costs			
2019 Total		11	19	0	0.1				
2020		0	-3	0	0.0	1-Sided Adj			
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).								
2020		0	-1	0	0.0	1-Sided Adj			
Explanation:	Incremental COVID-rela Catastrophic Event Men		•	be reques	sted for recov	very through a non-GRC			
2020		0	-9	0	0.0	1-Sided Adj			

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Workpaper:	1IT002.000 - Non-shared Operational Applications

Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type				
Explanation:		Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).							
2020	0	-4	0	0.0	1-Sided Adj				
Explanation:	Incremental COVID-related costs the Catastrophic Event Memorandum A	-	-	uested for r	ecovery through a non-GRC				
2020	0	-2	0	0.0	1-Sided Adj				
Explanation:	Incremental COVID-related costs the Catastrophic Event Memorandum A	-	-	uested for re	ecovery through a non-GRC				
2020	0	0	0	0.0	1-Sided Adj				
Explanation:	Incremental COVID-related costs the Catastrophic Event Memorandum A	-	-	uested for re	ecovery through a non-GRC				
2020	0	-1	0	0.0	1-Sided Adj				
Explanation:	Incremental COVID-related costs the Catastrophic Event Memorandum A	-	-	uested for r	ecovery through a non-GRC				
2020	2	12	0	0.1	CCTR Transf From 2100-3992.000				
Explanation:	Transfer labor, non-labor and FTE associated with CIS Team from cost center 2100-3992 in work paper group 100006 Cust Ops Support & Projects to cost center 2100-3084 in workpaper group 1IT002 to align costs where activity/function resides.								
2020	0	-13	0	0.0	1-Sided Adj				
Explanation:	One sided transfer out of affiliate (n	on-O&M) cos	ts to align with	actuals and	d forecast				
2020	0	3,000	0	0.0	1-Sided Adj				
Explanation:	Historical Adjustment for one-time of	redit related	to ADM O&M fo	or new agre	ement				
2020 Total	2	2,979	0	0.1					
2021	0	-2	0	0.0	1-Sided Adj				
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A		-	uested for r	ecovery through a non-GRC				
2021	0	0	0	0.0	1-Sided Adj				
Explanation:	Incremental COVID-related costs the Catastrophic Event Memorandum A	•		uested for r	ecovery through a non-GRC				
2021	0	-6	0	0.0	1-Sided Adj				
Explanation:	Incremental COVID-related costs the Catastrophic Event Memorandum A			uested for r	ecovery through a non-GRC				
2021	0	-3	0	0.0	1-Sided Adj				
Explanation:	Incremental COVID-related costs the Catastrophic Event Memorandum A			uested for r	ecovery through a non-GRC				
2021	0	-1	0	0.0	1-Sided Adj				
Note [.] Totals m	av include rounding differences.								

Area:	INFORMATIC	ON TECHNOL	DGY				
Witness:	Tia L. Ballard						
Category:	A. Applicatior	าร					
Category-Sub:	1. Application	IS					
Workpaper:	1IT002.000 -	Non-shared O	perational Applic	ations			
Year		<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	
Explanation:	Incremental COVID	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC					
	Catastrophic Event	Memorandum	Account (CEMA).			
2021		0	0	0	0.0	1-Sided Adj	

2021		Ū	0	0	0.0	i olaba / laj
Explanation:	Incremental COVID- Catastrophic Event I			to be requ	ested for reco	overy through a non-GRC
2021		0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID- Catastrophic Event I			to be reque	ested for reco	overy through a non-GRC
2021		714	1,161	0	4.8	CCTR Transf From 2100-3992.000
Explanation:	Transfer labor, non-labor and FTE associated with CIS Team from cost center 2100-3992 in work paper group 1OO006 Customer Operations Compliance & Strategy to cost center 2100-3084 in workpaper group 1IT002 to align costs where activity/function resides.					
2021		0	-177	0	0.0	1-Sided Adj
Explanation:	One sided transfer o	ut of affiliate (nor	n-O&M) costs to a	align with a	actuals and fo	precast
2021 Total		714	972	0	4.8	

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Workpaper:	1IT002.000 - Non-shared Operational Applications

RAMP Item # 1

RAMP Activity

RAMP Chapter: SDG&E-CFF-4 Foundational Technology Systems

RAMP Line Item ID: CFF 1 - CFF 9

RAMP Line Item Name: All Mitigations

Tranche(/s): Tranche1: N/A

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	2,579	2,581	2,606	2,619	18,890	24,138

Cost Estimate Changes from RAMP:

Notable change in forecast estimate from RAMP: Modeling all five RAMP mitigations (1 - 9) in eight workpapers; The RAMP range is the sum of ranges for all nine mitigations; The forecast reflects pre-allocation values while RAMP ranges reflect post-allocation values between SoCalGas and SDG&E.

GRC Work Unit/Activity Level Estimates								
Unit of	2021 Historical 2022 2023 2024 2024 RA Unit of Embedded Forecast Forecast Forecast Range Acti							
Measure	Activities	Activities	Activities	Activities	Low	High		
Tranche 1 FTE & no-single unit	22.00	42.10	44.30	45.90	0.00	0.00		

Work Unit Changes from RAMP:

Units were not defined during RAMP filing. Labor can be identified with FTE units, and for non-labor there is no single unit defined. Numerical units in the boxes represent FTEs identified.

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	
RSE Changes from RAMP: Not Applicable			

Area:INFORMATION TECHNOLOGYWitness:Tia L. BallardCategory:B. InfrastructureWorkpaper:1IT004.000

Summary for Category: B. Infrastructure

	In 2021\$ (000) Incurred Costs					
	Adjusted-Recorded		Adjusted-Forecast			
	2021	2022	2023	2024		
Labor	0	0	0	0		
Non-Labor	9,130	6,623	7,034	6,731		
NSE	0	0	0	0		
Total	9,130	6,623	7,034	6,731		
FTE	0.0	0.0	0.0	0.0		

Workpapers belonging to this Category:

1IT004.000 Non-shared Operational Infrastructure

Labor	0	0	0	0
Non-Labor	9,130	6,623	7,034	6,731
NSE	0	0	0	0
Total	9,130	6,623	7,034	6,731
FTE	0.0	0.0	0.0	0.0

Beginning of Workpaper 1IT004.000 - Non-shared Operational Infrastructure

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub	1. Infrastructure
Workpaper:	1IT004.000 - Non-shared Operational Infrastructure

Activity Description:

This activity includes non-shared Information Technology (IT) infrastructure costs that represent non-labor for technology systems where 100% of the activities directly support the objectives of operating and maintaining SDG&E infrastructure systems safely and reliably. The types of functions in this area include IT operations outsourced services and hardware and/or software maintenance agreements supporting non-shared SDG&E infrastructure.

Forecast Explanations:

Labor - Base YR Rec

N/A

Non-Labor - Base YR Rec

Historical costs, such as contractor services and cost of software and/or hardware, have fluctuated as a result of shifting cost drivers in the IT department. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

NSE - Base YR Rec

N/A

Summary of Results:

				ln 2021\$ (00	0) Incurred (Costs		
		Adju	isted-Recor	ded		Adjusted-Forecast		
Years	2017	2018	2019	2020	2021	2022	2023	2024
Labor	1,688	342	0	0	0	0	0	0
Non-Labor	7,073	5,436	8,624	8,205	9,130	6,623	7,034	6,731
NSE	0	0	0	0	0	0	0	0
Total	8,761	5,778	8,624	8,205	9,130	6,623	7,034	6,731
FTE	14.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Workpaper:	1IT004.000 - Non-shared Operational Infrastructure

Summary of Adjustments to Forecast:

			In 202	1 \$(000) Ir	ncurred Co	sts				
Forecas	t Method	Ba	se Foreca	st	Forec	ast Adjust	ments	Adjusted-Forecast		
Years	s	2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	0	0	0	0	0	0	0	0	0
Non-Labor	Base YR Rec	9,130	9,130	9,130	-2,507	-2,096	-2,399	6,623	7,034	6,731
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Tota	al	9,130	9,130	9,130	-2,507	-2,096	-2,399	6,623	7,034	6,731
FTE	Base YR Rec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Forecast Adjustment Details:

<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2022	0	-1,883	0	-1,883	0.0	1-Sided Adj
Explanation:	Benefit 512.1: CIS Re	placement Bene	fit related to	elimination of	Mainframe cos	ts.
2022	0	932	0	932	0.0	1-Sided Adj
Explanation:	Increases to HCL Con amortization of Service			•		22 expected increase,
2022	0	-1,556	0	-1,556	0.0	1-Sided Adj
Explanation:	Reduction to account included in the Capital			hat occured in	2021. Any futu	ire maintenance is
2022 Total	0	-2,507	0	-2,507	0.0	
2023	0	-1,883	0	-1,883	0.0	1-Sided Adj
Explanation:	Benefit 512.1: CIS Re	placement Bene	fit related to	elimination of	Mainframe cos	ts.
2023	0	1,343	0	1,343	0.0	1-Sided Adj
Explanation:	Increases to HCL Con amortization of Service			•		22 expected increase,
2023	0	-1,556	0	-1,556	0.0	1-Sided Adj
Explanation:	Reduction to account included in the Capital			hat occured in	2021. Any futu	ire maintenance is
2023 Total	0	-2,096	0	-2,096	0.0	
2024	0	-1,883	0	-1,883	0.0	1-Sided Adj
xplanation:	Benefit 512.1: CIS Re	placement Bene	fit related to	elimination of	Mainframe cos	ts.
2024	0	1,040	0	1,040	0.0	1-Sided Adj
Explanation:	Increases to HCL Contract [SDGE portion only] for renegotiated contract mid-2022 expected increase, amortization of ServiceNow costs, and expanded SAP environment.					
2024	0	-1,556	0	-1,556	0.0	1-Sided Adj
Explanation:	Reduction to account for unbundled maintenance that occured in 2021. Any future maintenance is included in the Capital chapter of GRC.					

Note: Totals may include rounding differences. SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard

Area:	INFORMATION TE	CHNOLOGY				
Witness:	Tia L. Ballard					
Category:	B. Infrastructure					
Category-Sub:	1. Infrastructure					
Workpaper:	1IT004.000 - Non-s	hared Operat	ional Infrastr	ucture		
Year	Labor	<u>NLbr</u>	NSE	<u>Total</u>	FTE	Adj_Type

0

-2,399

0.0

-2,399

0

2024 Total

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Workpaper:	1IT004.000 - Non-shared Operational Infrastructure

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					· · ·
Labor	1,317	274	0	0	0
Non-Labor	6,222	4,938	8,021	7,614	9,266
NSE	0	0	0	0	0
Total	7,539	5,212	8,021	7,614	9,266
FTE	12.1	2.2	0.0	0.0	0.0
djustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	-137
NSE	0	0	0	0	0
Total	0	0	0	0	-137
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nomina	al \$)				
Labor	1,317	274	0	0	0
Non-Labor	6,222	4,938	8,021	7,614	9,130
NSE	0	0	0	0	0
Total	7,539	5,212	8,021	7,614	9,130
FTE	12.2	2.2	0.0	0.0	0.0
acation & Sick (Nominal \$))				
Labor	195	41	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	195	41	0	0	0
FTE	2.0	0.4	0.0	0.0	0.0
scalation to 2021\$					
Labor	176	27	0	0	0
Non-Labor	851	498	603	591	0
NSE	0	0	0	0	0
Total	1,027	525	603	591	0
FTE	0.0	0.0	0.0	0.0	0.0
ecorded-Adjusted (Consta	·				
Labor	1,688	342	0	0	0
Non-Labor	7,073	5,436	8,624	8,205	9,130
NSE	0	0	0	0	0
Total	8,761	5,778	8,624	8,205	9,130
FTE	14.2	2.6	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:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Workpaper:	1IT004.000 - Non-shared Operational Infrastructure

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	-137
NSE		0	0	0	0	0
	Total	0	0	0	0	-137
FTE		0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

<u>Year</u>	Labor	<u>NLbr</u>	NSE	<u>FTE</u>	<u>Adj Type</u>	
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	-137	0	0.0	1-Sided Adj	
Explanation:	One sided transfer out of af	filiate (non-O&M)	costs to align	with actuals	and forecast	
2021 Total	0	-137	0	0.0		

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Workpaper:	1IT004.000 - Non-shared Operational Infrastructure

RAMP Item # 1

RAMP Activity

RAMP Chapter: SDG&E-CFF-4 Foundational Technology Systems

RAMP Line Item ID: CFF 1 - CFF 9

RAMP Line Item Name: All Mitigations

Tranche(/s): Tranche1: N/A

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	3,195	2,472	2,615	2,509	18,890	24,138

Cost Estimate Changes from RAMP:

Notable change in forecast estimate from RAMP: Modeling all five RAMP mitigations (1 - 9) in eight workpapers; The RAMP range is the sum of ranges for all nine mitigations; The forecast reflects pre-allocation values while RAMP ranges reflect post-allocation values between SoCalGas and SDG&E.

GRC Work Unit/Activity Leve	I 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 FTE & no-single unit	0.00	0.00	0.00	0.00	0.00	0.00

Work Unit Changes from RAMP:

Units were not defined during RAMP filing. Labor can be identified with FTE units, and for non-labor there is no single unit defined. Numerical units in the boxes represent FTEs identified.

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	
RSE Changes from RAMP: Not Applicable			

Area: INFORMATION TECHNOLOGY

Witness:

Tia L. Ballard

Summary of Shared Services Workpapers:

	In 2021 \$ (000) Incurred Costs				
	Adjusted- Recorded	Ad	ljusted-Forecast		
Description	2021	2022	2023	2024	
A. Applications	31,946	32,071	34,069	34,587	
B. Infrastructure	35,845	33,447	34,622	37,634	
C. Support	10,396	10,468	10,916	11,084	
Total	78,187	75,986	79,607	83,305	

Area:INFORMATION TECHNOLOGYWitness:Tia L. BallardCategory:A. ApplicationsCost Center:VARIOUS

Summary for Category: A. Applications

	In 2021\$ (000) Incurred Costs					
	Adjusted-Recorded	Adjusted-Forecast				
	2021	2022	2023	2024		
Labor	12,264	12,516	12,768	13,104		
Non-Labor	19,681	19,554	21,300	21,482		
NSE	0	0	0	0		
Total	31,945	32,070	34,068	34,586		
FTE	92.5	94.6	96.7	99.5		

Cost Centers belonging to this Category:

2100-3071.000 Shared A	pplications			
Labor	4,948	5,032	5,116	5,284
Non-Labor	11,417	12,327	13,817	13,957
NSE	0	0	0	0
Total	16,365	17,359	18,933	19,241
FTE	38.2	38.9	39.6	41.0
2100-3073.000 Shared O	perational Applications			
Labor	7,316	7,484	7,652	7,820
Non-Labor	8,264	7,227	7,483	7,525
NSE	0	0	0	0
Total	15,580	14,711	15,135	15,345
FTE	54.3	55.7	57.1	58.5

Beginning of Workpaper 2100-3071.000 - Shared Applications

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub	1. Applications
Cost Center:	2100-3071.000 - Shared Applications

Activity Description:

The shared SDG&E IT applications costs represent labor and non-labor for technology systems where costs are shared between multiple business units and support all other company-specific activities. The types of activities supported in this area include enterprise services (human resources, benefits, time keeping, compensation, payroll), supply chain, financial, business intelligence, analytics and reporting, and software maintenance agreements.

Units were not previously defined. Labor can be identified with FTE units, and for non-labor there is no single unit defined. Numerical units below represent FTEs identified.

2021 = 38.2 2022 = 38.9 2023 = 39.6 2024 = 41.0

Forecast Explanations:

Labor - Base YR Rec

Historical costs have fluctuated between various workgroups as a result of either internal organizational changes, transfers of responsibilities, or shifting of cost drivers from one area of the IT department to another. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

Non-Labor - Base YR Rec

Historical costs, such as contractor services and cost of software and/or hardware, have fluctuated as a result of shifting cost drivers in the IT department. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

NSE - Base YR Rec

N/A

Summary of Results:

	In 2021\$ (000) Incurred Costs							
		Adjusted-Recorded				Ad	justed-Fore	cast
Years	2017	2018	2019	2020	2021	2022	2023	2024
Labor	5,306	6,187	5,588	5,553	4,948	5,032	5,116	5,284
Non-Labor	7,842	8,689	11,907	11,216	11,417	12,328	13,818	13,958
NSE	0	0	0	0	0	0	0	0
Total	13,148	14,876	17,495	16,769	16,365	17,360	18,934	19,242
FTE	42.0	48.4	43.3	42.4	38.2	38.9	39.6	41.0

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Cost Center:	2100-3071.000 - Shared Applications

Cost Center Allocations (Incurred Costs):

	2021 Adjusted-Recorded						2022 Adjı	usted-For	ecast	
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	12	1,719	0	1,731	0.0	12	1,719	0	1,731	0.0
Directly Allocated	0	4	0	4	0.0	0	4	0	4	0.0
Subj. To % Alloc.	4,936	9,695	0	14,631	38.2	5,020	10,605	0	15,625	38.9
Total Incurred	4,948	11,418	0	16,366	38.2	5,032	12,328	0	17,360	38.9
% Allocation										
Retained	38.30%	38.30%				38.52%	38.52%			
SEU	58.65%	58.65%				58.40%	58.40%			
CORP	0.92%	0.92%				1.04%	1.04%			
Unreg	2.13%	2.13%				2.04%	2.04%			

	2023 Adjusted-Forecast						2024 Adju	sted-For	ecast	
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	12	1,719	0	1,731	0.0	12	1,719	0	1,731	0.0
Directly Allocated	0	4	0	4	0.0	0	4	0	4	0.0
Subj. To % Alloc.	5,104	12,095	0	17,199	39.6	5,272	12,235	0	17,507	41.0
Total Incurred	5,116	13,818	0	18,934	39.6	5,284	13,958	0	19,242	41.0
% Allocation										
Retained	38.47%	38.47%				38.44%	38.44%			
SEU	58.44%	58.44%				58.47%	58.47%			
CORP	1.04%	1.04%				1.03%	1.03%			
Unreg	2.05%	2.05%				2.06%	2.06%			

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2021

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2022

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2023

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2024

Allocations are based on a weighted average of all cost centers within the workpaper.

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Cost Center:	2100-3071.000 - Shared Applications

Summary of Adjustments to Forecast:

			In 202	1 \$(000) Ir	ncurred Co	sts					
Forecas	t Method	Bas	se Foreca	st	Forec	Forecast Adjustments			Adjusted-Forecast		
Years	s	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Labor	Base YR Rec	4,948	4,948	4,948	84	168	336	5,032	5,116	5,284	
Non-Labor	Base YR Rec	11,417	11,417	11,417	910	2,400	2,540	12,327	13,817	13,957	
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0	
Tota	al	16,365	16,365	16,365	994	2,568	2,876	17,359	18,933	19,241	
FTE	Base YR Rec	38.2	38.2	38.2	0.7	1.4	2.8	38.9	39.6	41.0	

Forecast Adjustment Details:

<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2022	84	0	0	84	0.7	1-Sided Adj
Explanation:	Adding 1 internal Emplo	oyee to suppor	t growing IT in	itiatives at 70	0% O&M	
2022	0	-167	0	-167	0.0	1-Sided Adj
Explanation:	To account for prepaid	laaS in 2021 a	nd is forecaste	ed in Capital	chapter in 2022	onward.
2022	0	631	0	631	0.0	1-Sided Adj
Explanation:	Increased ADP contract	t charges for M	lyInfo Suite Pr	oducts and E	Enhancements	
2022	0	446	0	446	0.0	1-Sided Adj
Explanation:		Increased Cloud Consumption costs (platform as a service and infrastructure as a service) for cloud space and Cloud Platform Operations				
2022 Total	84	910	0	994	0.7	
2023	168	0	0	168	1.4	1-Sided Adj
Explanation:	Adding 1 additional inte	rnal Employee	(on top of 202	22) to suppor	t growing IT ini	tiatives at 70% O&M
2023	0	454	0	454	0.0	1-Sided Adj
Explanation:	Increased costs related	to SAP Analyt	ics Cloud			
2023	0	1,002	0	1,002	0.0	1-Sided Adj
Explanation:	Increased ADP contract	t charges for M	lyInfo Suite Pr	oducts and E	Enhancements	
2023	0	1,111	0	1,111	0.0	1-Sided Adj
Explanation:	Increased Cloud Consu space and Cloud Platfo	• •	•	service and i	nfrastructure as	a service) for cloud
2023	0	-167	0	-167	0.0	1-Sided Adj
Explanation:	To account for prepaid	laaS in 2021 a	nd is forecaste	ed in Capital	chapter in 2022	onward.
2023 Total	168	2,400	0	2,568	1.4	
2024	336	0	0	336	2.8	1-Sided Adj
Explanation:	Adding 2 additional inte	rnal Employee	s (on top of 20)23) to suppo	ort growing IT ir	itiatives at 70% O&M
2024	0	454	0	454	0.0	1-Sided Adj

Note: Totals may include rounding differences.

SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard

Area:	INFORMATION TE	CHNOLOGY				
Witness:	Tia L. Ballard					
Category:	A. Applications					
Category-Sub:	1. Applications					
Cost Center:	2100-3071.000 - Sh	ared Applicat	ions			
Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj_Type
Explanation:	Increased costs related	to SAP Analyt	ics Cloud			
2024	0	1,002	0	1,002	0.0	1-Sided Adj
Explanation:	Increased ADP contract	charges for M	lyInfo Suite P	roducts and E	nhancements	
2024	0	-167	0	-167	0.0	1-Sided Adj
Explanation:	To account for prepaid la	aaS in 2021 a	nd is forecast	ed in Capital c	hapter in 2022	onward.
2024	0	1,251	0	1,251	0.0	1-Sided Adj
Explanation:	Increased Cloud Consu space and Cloud Platfor	•	•	service and in	frastructure as	a service) for cloud
2024 Total	336	2,540	0	2,876	2.8	

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Cost Center:	2100-3071.000 - Shared Applications

Determination of Adjusted-Recorded (Incurred Costs):

·····,····	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	2,760	2,886	1,928	2,218	4,310
Non-Labor	1,859	2,386	1,825	2,279	11,874
NSE	0	0	0	0	0
Total	4,619	5,272	3,753	4,498	16,184
FTE	24.1	23.9	14.9	16.2	32.7
djustments (Nominal \$) **	*				
Labor	1,432	2,087	2,703	2,451	-8
Non-Labor	5,255	5,656	9,454	8,489	-456
NSE	0	0	0	0	0
Total	6,687	7,743	12,157	10,940	-464
FTE	11.9	17.4	22.4	20.3	-0.1
Recorded-Adjusted (Nomin	nal \$)				
Labor	4,192	4,973	4,631	4,669	4,302
Non-Labor	7,114	8,043	11,279	10,769	11,417
NSE	0	0	0	0	0
Total	11,306	13,016	15,910	15,438	15,719
FTE	36.0	41.4	37.3	36.5	32.6
acation & Sick (Nominal \$	5)				
Labor	622	753	663	662	646
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	622	753	663	662	646
FTE	6.0	7.0	6.0	5.9	5.6
scalation to 2021\$					
Labor	492	460	295	222	0
Non-Labor	728	646	627	448	0
NSE	0	0	0	0	0
Total	1,220	1,107	922	669	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant	ant 2021\$)				
Labor	5,306	6,187	5,588	5,553	4,948
Non-Labor	7,842	8,689	11,907	11,216	11,417
NSE	0	0	0	0	0
Total	13,148	14,876	17,495	16,769	16,365
FTE	42.0	48.4	43.3	42.4	38.2

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments *Note: Totals may include rounding differences.*

SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard Page 29 of 88

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Cost Center:	2100-3071.000 - Shared Applications

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs						
	Years	2017	2018	2019	2020	2021
Labor		1,432	2,087	2,703	2,451	-8
Non-Labor		5,255	5,656	9,454	8,489	-456
NSE		0	0	0	0	0
	Total	6,687	7,743	12,157	10,940	-464
FTE		11.9	17.4	22.4	20.3	-0.1

Detail of Adjustments to Recorded:

Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type	
2017	0	-136	0	0.0	1-Sided Adj	
Explanation:	One sided transfer out of affi	liate (non-O&M) o	osts to align	with actuals	and forecast	
2017	1,432	5,391	0	11.9	1-Sided Adj	
Explanation:	Historical Adjustment for Myl	nfo team previous	sly at Corpora	ate		
2017 Total	1,432	5,255	0	11.9		
2018	-47	-136	0	-0.4	1-Sided Adj	
Explanation:	One sided transfer out of affi	liate (non-O&M) o	osts to align	with actuals	and forecast	
2018	32	0	0	0.3	1-Sided Adj	
Explanation:	Historical Adjustment for VM	O team temporari	ly at Corpora	ite		
2018	2,102	5,792	0	17.5	1-Sided Adj	
Explanation:	Historical Adjustment for Myl	nfo team previous	sly at Corpora	ate		
2018 Total	2,087	5,656	0	17.4		
2019	0	-105	0	0.0	1-Sided Adj	
Explanation:	One sided transfer out of affi	liate (non-O&M) o	osts to align	with actuals	and forecast	
2019	2,703	9,559	0	22.4	1-Sided Adj	
Explanation:	Historical Adjustment for Myl	Historical Adjustment for MyInfo team previously at Corporate				
2019 Total	2,703	9,454	0	22.4		
2019 Total 2020	2,703 0	9,454 -12	0 0	22.4 0.0	1-Sided Adj	
	,	-12 costs that are anti	0 cipated to be	0.0	,	RC
2020	0 Incremental COVID-related of	-12 costs that are anti	0 cipated to be	0.0	,	RC

Note: Totals may include rounding differences.

SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard Page 30 of 88

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Cost Center:	2100-3071.000 - Shared Applications

<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type	
2020	2,456	8,625	0	20.4	1-Sided Adj	
Explanation:	Historical Adjustment for Myl	nfo team previous	sly at Corpora	te		
2020 Total	2,451	8,489	0	20.3		
2021	0	-123	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related of Catastrophic Event Memorar		•	requested fo	or recovery through a non-GRC	
2021	0	-12	0	0.0	CCTR Transf To 2100-0364.001	
Explanation:	Transfer spot cash awards to	AGCP team				
2021	-8	-321	0	-0.1	1-Sided Adj	
Explanation:	One sided transfer out of affi	liate (non-O&M) c	costs to align	with actuals	and forecast	
2021 Total	-8	-456	0	-0.1		

Supplemental Workpapers for Workpaper 2100-3071.000

							2021				
Workpaper	Cost Center	2021 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-3071.000	2100-3071	\$ 1,092,369	43%	53%	4%	0%	473,979	578,191	40,199	-	Weighted ratio of SAP and Misc Application support
	2100-3072	\$ 696,465	43%	53%	4%	0%	300,107	370,519	25,839	-	LAN ID w/o unreg
	2100-3089	\$ 1,680,279	43%	53%	4%	0%	724,032	893,909	62,338	-	Weighted Average of cost centers under Director
	2100-3885	\$ 87,435	22%	78%	0%	0%	19,341	68,094	-	-	Call center volume
	2100-3926	\$ 1,679,963	50%	49%	1%	0%	843,677	824,862	11,424	-	P/Y Dept. Activity Study
	2100-4085	\$ 294,892	43%	53%	4%	0%	127,069	156,883	10,940	-	LAN ID w/o unreg
	2100-4134	\$ 10,833,986	35%	61%	0%	3%	3,828,731	6,656,401	16,251	332,603	My Info User Accounts
Grand Total		16,365,388					6,316,935	9,548,858	166,992	332,603	
							38.60%	58.35%	1.02%	2.03%	2021 Weighted Average of 2100-3071.000

							2022				
Workpaper	Cost Center	2022 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-3071.000	2100-3071	\$ 1,092,369	43%	53%	4%	0%	473,979	578,191	40,199	-	Weighted ratio of SAP and Misc Application support
	2100-3072	\$ 696,465	43%	53%	4%	0%	300,107	370,519	25,839	-	LAN ID w/o unreg
	2100-3089	\$ 1,982,394	43%	53%	4%	0%	854,214	1,054,634	73,547	-	Weighted Average of cost centers under Director
	2100-3885	\$ 87,435	22%	78%	0%	0%	19,341	68,094	-	-	Call center volume
	2100-3926	\$ 1,679,963	50%	49%	1%	0%	843,677	824,862	11,424	-	P/Y Dept. Activity Study
	2100-4085	\$ 294,892	43%	53%	4%	0%	127,069	156,883	10,940	-	LAN ID w/o unreg
	2100-4134	\$ 11,548,544	35%	61%	0%	3%	4,081,255	7,095,425	17,323	354,540	My Info User Accounts
Grand Total		17,382,061					6,699,641	10,148,608	179,272	354,540	
							38.54%	58.39%	1.03%	2.04%	2022 Weighted Average of 2100-3071.000

							2023				
Workpaper	Cost Center	2023 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-3071.000	2100-3071	\$ 1,092,369	43%	53%	4%	0%	473,979	578,191	40,199	-	Weighted ratio of SAP and Misc Application support
	2100-3072	\$ 696,465	43%	53%	4%	0%	300,107	370,519	25,839	-	LAN ID w/o unreg
	2100-3089	\$ 2,583,673	43%	53%	4%	0%	1,113,305	1,374,514	95,854	-	Weighted Average of cost centers under Director
	2100-3885	\$ 87,435	22%	78%	0%	0%	19,341	68,094	-	-	Call center volume
	2100-3926	\$ 2,191,151	50%	49%	1%	0%	1,100,396	1,075,855	14,900	-	P/Y Dept. Activity Study
	2100-4085	\$ 294,892	43%	53%	4%	0%	127,069	156,883	10,940	-	LAN ID w/o unreg
	2100-4134	\$ 12,003,623	35%	61%	0%	3%	4,242,080	7,375,026	18,005	368,511	My Info User Accounts
Grand Total		18,949,607					7,376,276	10,999,082	205,738	368,511	
							38.93%	58.04%	1.09%	1.94%	2023 Weighted Average of 2100-3071.000

							2024				
Workpaper	Cost Center	2024 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-3071.000	2100-3071	\$ 1,092,369	43%	53%	4%	0%	473,979	578,191	40,199	-	Weighted ratio of SAP and Misc Application support
	2100-3072	\$ 696,465	43%	53%	4%	0%	300,107	370,519	25,839	-	LAN ID w/o unreg
	2100-3089	\$ 2,723,673	43%	53%	4%	0%	1,173,631	1,448,994	101,048	-	Weighted Average of cost centers under Director
	2100-3885	\$ 87,435	22%	78%	0%	0%	19,341	68,094	-	-	Call center volume
	2100-3926	\$ 2,191,151	50%	49%	1%	0%	1,100,396	1,075,855	14,900	-	P/Y Dept. Activity Study
	2100-4085	\$ 294,892	43%	53%	4%	0%	127,069	156,883	10,940	-	LAN ID w/o unreg
	2100-4134	\$ 12,171,623	35%	61%	0%	3%	4,301,451	7,478,245	18,257	373,669	My Info User Accounts
Grand Total		19,257,607					7,495,973	11,176,781	211,184	373,669	
							38.92%	58.04%	1.10%	1.94%	2024 Weighted Average of 2100-3071.000

Beginning of Workpaper 2100-3073.000 - Shared Operational Applications
Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub	1. Applications
Cost Center:	2100-3073.000 - Shared Operational Applications

Activity Description:

The shared SDG&E IT applications costs represent labor and non-labor for technology systems where costs are shared between multiple business units and support the objectives of operating and maintaining the company infrastructure systems safely and reliably. The types of systems supported in this area include utility operations, work management, business intelligence, analytics and reporting, and emergency operations. The types of functions supported in this area include systems engineering, systems architecture and integration, portfolio management services, applications outsourced services, and software maintenance agreements.

Forecast Explanations:

Labor - Base YR Rec

Historical costs have fluctuated between various workgroups as a result of either internal organizational changes, transfers of responsibilities, or shifting of cost drivers from one area of the IT department to another. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

Non-Labor - Base YR Rec

Historical costs, such as contractor services and cost of software and/or hardware, have fluctuated as a result of shifting cost drivers in the IT department. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

NSE - Base YR Rec

N/A

Summary of Results:

				ln 2021\$ (00	0) Incurred (Costs		
		Adju	isted-Recor	ded		Ad	justed-Fore	cast
Years	2017	2018	2019	2020	2021	2022	2023	2024
Labor	5,025	5,700	6,685	7,131	7,316	7,484	7,652	7,820
Non-Labor	7,088	5,919	8,662	9,500	8,264	7,227	7,483	7,525
NSE	0	0	0	0	0	0	0	0
Total	12,112	11,619	15,348	16,631	15,580	14,711	15,135	15,345
FTE	37.0	42.7	51.8	55.0	54.3	55.7	57.1	58.5

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Cost Center:	2100-3073.000 - Shared Operational Applications

Cost Center Allocations (Incurred Costs):

		2021 Adju:	sted-Reco	orded		2022 Adjı	usted-For	ecast		
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	33	0	33	0.0	0	33	0	33	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	7,316	8,231	0	15,547	54.5	7,484	7,194	0	14,678	55.9
Total Incurred	7,316	8,264	0	15,580	54.3	7,484	7,227	0	14,711	55.7
% Allocation										
Retained	51.94%	51.94%				50.60%	50.60%			
SEU	46.31%	46.31%				47.46%	47.46%			
CORP	1.75%	1.75%				1.94%	1.94%			
Unreg	0.00%	0.00%				0.00%	0.00%			

		2023 Adju	sted-Fore	ecast		2024 Adju	sted-For	ecast		
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	33	0	33	0.0	0	33	0	33	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	7,652	7,450	0	15,102	57.3	7,820	7,492	0	15,312	58.7
Total Incurred	7,652	7,483	0	15,135	57.1	7,820	7,525	0	15,345	58.5
% Allocation										
Retained	49.84%	49.84%				49.77%	49.77%			
SEU	48.33%	48.33%				48.38%	48.38%			
CORP	1.83%	1.83%				1.85%	1.85%			
Unreg	0.00%	0.00%				0.00%	0.00%			

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2021

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2022

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2023

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2024

Allocations are based on a weighted average of all cost centers within the workpaper.

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Cost Center:	2100-3073.000 - Shared Operational Applications

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs										
Forecast	t Method	Bas	Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years	6	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Labor	Base YR Rec	7,316	7,316	7,316	168	336	504	7,484	7,652	7,820	
Non-Labor	Base YR Rec	8,264	8,264	8,264	-1,037	-781	-739	7,227	7,483	7,525	
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0	
Tota	I	15,580	15,580	15,580	-869	-445	-235	14,711	15,135	15,345	
FTE	Base YR Rec	54.3	54.3	54.3	1.4	2.8	4.2	55.7	57.1	58.5	

Forecast Adjustment Details:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2022	168	0	0	168	1.4	1-Sided Adj
Explanation:	Adding 2 internal Em	ployees to suppo	ort growing IT	initiatives at 7	0% O&M	
2022	0	806	0	806	0.0	1-Sided Adj
Explanation:	Increased Purchased Platform support.	I Services for Dat	a Governanc	e support, Ope	en text system	s, and PowerBl
2022	0	-1,843	0	-1,843	0.0	1-Sided Adj
Explanation:	Decreased Software maintenance	Maintenance in 2	2022 for ESR	I GIS System a	and Street Leve	el Routing system
2022 Total	168	-1,037	0	-869	1.4	
2023	336	0	0	336	2.8	1-Sided Adj
Explanation:	Adding 2 additional ir	nternal Employee	s (on top of 2	022) to suppo	rt growing IT in	itiatives at 70% O&M
2023	0	812	0	812	0.0	1-Sided Adj
Explanation:	Increased Purchased Platform support.	I Services for Dat	a Governanc	e support, Ope	en text system	s, and PowerBl
2023	0	-1,593	0	-1,593	0.0	1-Sided Adj
Explanation:	Decreased Software maintenance	Maintenance in 2	2022 for ESR	I GIS System a	and Street Leve	el Routing system
2023 Total	336	-781	0	-445	2.8	
2024	504	0	0	504	4.2	1-Sided Adj
Explanation:	Adding 2 additional ir	nternal Employee	s (on top of 2	023) to suppo	rt growing IT in	itiatives at 70% O&M
2024	0	824	0	824	0.0	1-Sided Adj
Explanation:	Increased Purchasec Platform support.	I Services for Dat	a Governanc	e support, Ope	en text system	s, and PowerBl
2024	0	-1,563	0	-1,563	0.0	1-Sided Adj
Explanation:	Decreased Software maintenance	Maintenance in 2	2022 for ESR	l GIS System a	and Street Leve	el Routing system

Note: Totals may include rounding differences. SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard

Area:	INFORMATION TE	CHNOLOGY					
Witness:	Tia L. Ballard	līa L. Ballard					
Category:	A. Applications						
Category-Sub:	1. Applications						
Cost Center:	2100-3073.000 - Sh	2100-3073.000 - Shared Operational Applications					
Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	FTE	Adj_Type	

0

-235

4.2

-739

504

2024 Total

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Cost Center:	2100-3073.000 - Shared Operational Applications

Determination of Adjusted-Recorded (Incurred Costs):

etermination of Adjusted-Re	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	3,969	4,582	5,551	6,140	6,454
Non-Labor	6,441	5,584	8,224	9,709	8,320
NSE	0	0	0	0	0
Total	10,410	10,166	13,775	15,849	14,774
FTE	31.8	36.6	44.7	48.3	47.2
djustments (Nominal \$) **					
Labor	0	0	-11	-144	-93
Non-Labor	-11	-105	-18	-588	-56
NSE	0	0	0	0	0
Total	-11	-106	-30	-732	-149
FTE	0.0	-0.1	-0.1	-1.2	-0.7
ecorded-Adjusted (Nominal \$	\$)				
Labor	3,969	4,582	5,540	5,996	6,361
Non-Labor	6,430	5,478	8,206	9,121	8,264
NSE	0	0	0	0	0
Total	10,399	10,060	13,746	15,117	14,625
FTE	31.7	36.5	44.6	47.2	46.5
acation & Sick (Nominal \$)					
Labor	589	694	793	850	955
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	589	694	793	850	955
FTE	5.3	6.2	7.2	7.8	7.8
scalation to 2021\$					
Labor	466	424	352	285	0
Non-Labor	658	440	457	379	0
NSE	0	0	0	0	0
Total	1,124	864	809	664	0
FTE	0.0	0.0	0.0	0.0	0.0
ecorded-Adjusted (Constant	2021\$)				
Labor	5,025	5,700	6,685	7,131	7,316
Non-Labor	7,088	5,919	8,662	9,500	8,264
NSE	0	0	0	0	0
Total	12,112	11,619	15,348	16,631	15,580
FTE	37.0	42.7	51.8	55.0	54.3

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments *Note: Totals may include rounding differences.*

SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard Page 39 of 88

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Cost Center:	2100-3073.000 - Shared Operational Applications

Summary of Adjustments to Recorded:

	In Nominal \$ (000) Incurred Costs											
	Years	2017	2018	2019	2020	2021						
Labor		0	-0.301	-11	-144	-93						
Non-Labor		-11	-105	-18	-588	-56						
NSE		0	0	0	0	0						
	Total	-11	-106	-30	-732	-149						
FTE		0.0	-0.1	-0.1	-1.2	-0.7						

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adi Type						
2017	0	-11	0	0.0	1-Sided Adj						
Explanation:	One sided transfer out of affiliate				,						
2017 Total	0	-11	0	0.0							
2018	0	-105	0	-0.1	1-Sided Adj						
Explanation:	One sided transfer out of affiliate	e (non-O&M) costs	s to align with	n actuals and	forecast						
2018 Total	0	-105	0	-0.1							
2019	-11	-18	0	-0.1	1-Sided Adj						
Explanation:	One sided transfer out of affiliate	e (non-O&M) costs	s to align with	n actuals and	forecast						
2019 Total	-11	-18	0	-0.1							
2020	0	-514	0	0.0	1-Sided Adj						
Explanation:	Incremental COVID-related cos Catastrophic Event Memorandu			uested for re	ecovery through a non-GRC						
2020	-116	-50	0	-0.9	1-Sided Adj						
Explanation:	One sided transfer out of affiliate	e (non-O&M) costs	s to align with	n actuals and	forecast						
2020	-29	-24	0	-0.3	CCTR Transf To 2100-4048.000						
Explanation:	Transfer historical Noggin 2.0 co	osts from IT chapte	er to Emerge	ncy Planning	g & Preparedness chapter						
2020 Total	-144	-588	0	-1.2							
2021	0	-40	0	0.0	1-Sided Adj						
Explanation:	Incremental COVID-related cos Catastrophic Event Memorandu	· ·		uested for re	ecovery through a non-GRC						
2021	-36	0	0	-0.3	1-Sided Adj						
Explanation:	Adjustment to remove non-GRC costs related to the SB1371 Emissions Strategy Program that are being recovered through a separate regulatory process.										

Note: Totals may include rounding differences.

SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard Page 40 of 88

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Cost Center:	2100-3073.000 - Shared Operational Applications

<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2021	0	-15	0	0.0	CCTR Transf To 2100-0364.001
Explanation:	Transfer spot cash awards to	o AGCP team			
2021	-56	-1	0	-0.4	1-Sided Adj
Explanation:	One sided transfer out of aff	iliate (non-O&M)	costs to align	with actuals	and forecast
2021 Total	-93	-56	0	-0.7	

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	A. Applications
Category-Sub:	1. Applications
Cost Center:	2100-3073.000 - Shared Operational Applications

RAMP Item # 1

RAMP Activity

RAMP Chapter: SDG&E-CFF-4 Foundational Technology Systems

RAMP Line Item ID: CFF 1 - CFF 9

RAMP Line Item Name: All Mitigations

Tranche(/s): Tranche1: N/A

GRC Forecast Cost Estimates (\$000)

	2021 Historical	2022	2023	2024	202 RAMP F	
	Embedded Cost	Forecast	Forecast	Forecast	(2020 Inc	urred \$)
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	3,290	2,448	2,562	2,576	18,890	24,138

Cost Estimate Changes from RAMP:

Notable change in forecast estimate from RAMP: Modeling all five RAMP mitigations (1 - 9) in eight workpapers; The RAMP range is the sum of ranges for all nine mitigations; The forecast reflects pre-allocation values while RAMP ranges reflect post-allocation values between SoCalGas and SDG&E.

GRC Work Unit/Activity Leve	I Estimates					
Unit of	2021 Historical Embedded	2022 Forecast	2023 Forecast	2024 Forecast	2024 RA Range Act	ivities
Measure	Activities	Activities	Activities	Activities	Low	High
Tranche 1 FTE & no-single unit	54.30	55.70	57.10	58.50	0.00	0.00

Work Unit Changes from RAMP:

Units were not defined during RAMP filing. Labor can be identified with FTE units, and for non-labor there is no single unit defined. Numerical units in the boxes represent FTEs identified.

Risk Spend Efficiency (RSE)											
	GRC RSE	RAMP RSE									
Tranche 1	0.000	0.000									
RSE Changes from RAMP: Not Applicable											

Supplemental Workpapers for Workpaper 2100-3073.000

							2021				
Workpaper	Cost Center	2021 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-3097.000	2100-3097	\$ 1,367,494	43%	53%	4%	0%	589,253	727,507	50,734	-	LAN ID w/o unreg
	2100-3684	\$ 1,861,202	43%	53%	4%	0%	801,992	990,159	69,051	-	LAN ID w/o unreg
	2100-4095	\$ 814,600	43%	53%	4%	0%	351,011	433,367	30,222	-	LAN ID w/o unreg
Grand Total		4,043,295					1,742,256	2,151,033	150,006	-	
							43.09%	53.20%	3.71%	0.00%	6 2021 Weighted Average of 2100-3097.000

							2022				
Workpaper	Cost Center	2022 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-3097.000	2100-3097	\$ 1,367,494	43%	53%	4%	0%	589,253	727,507	50,734	-	LAN ID w/o unreg
	2100-3684	\$ 1,700,202	43%	53%	4%	0%	732,617	904,507	63,077	-	LAN ID w/o unreg
	2100-4095	\$ 814,600	43%	53%	4%	0%	351,011	433,367	30,222	-	LAN ID w/o unreg
Grand Total		3,882,295					1,672,881	2,065,381	144,033	-	
							43.09%	53.20%	3.71%	0.00%	2022 Weighted Average of 2100-3097.000

							2023				
Cost Center		2023 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-3097	\$	1,367,494	43%	53%	4%	0%	589,253	727,507	50,734	-	LAN ID w/o unreg
2100-3684	\$	1,700,202	43%	53%	4%	0%	732,617	904,507	63,077	-	LAN ID w/o unreg
2100-4095	\$	814,600	43%	53%	4%	0%	351,011	433,367	30,222	-	LAN ID w/o unreg
		3,882,295					1,672,881	2,065,381	144,033	-	
							43.09%	53.20%	3.71%	0.00%	2023 Weighted Average of 2100-3097.000
	2100-3097 2100-3684	2100-3097 \$ 2100-3684 \$	2100-3097 \$ 1,367,494 2100-3684 \$ 1,700,202 2100-4095 \$ 814,600	2100-3097 \$ 1,367,494 43% 2100-3684 \$ 1,700,202 43% 2100-4095 \$ 814,600 43%	2100-3097 \$ 1,367,494 43% 53% 2100-3684 \$ 1,700,202 43% 53% 2100-4095 \$ 814,600 43% 53%	2100-3097 \$ 1,367,494 43% 53% 4% 2100-3684 \$ 1,700,202 43% 53% 4% 2100-4095 \$ 814,600 43% 53% 4%	2100-3097 \$ 1,367,494 43% 53% 4% 0% 2100-3684 \$ 1,700,202 43% 53% 4% 0% 2100-4095 \$ 814,600 43% 53% 4% 0%	2100-3097 \$ 1,367,494 43% 53% 4% 0% 589,253 2100-3684 \$ 1,700,202 43% 53% 4% 0% 732,617 2100-4095 \$ 814,600 43% 53% 4% 0% 351,011 3,882,295 1,672,881	2100-3097 \$ 1,367,494 43% 53% 4% 0% 589,253 727,507 2100-3684 \$ 1,700,202 43% 53% 4% 0% 732,617 904,507 2100-4095 \$ 814,600 43% 53% 4% 0% 351,011 433,367 3,882,295 1,672,881 2,065,381	2100-3097 \$ 1,367,494 43% 53% 4% 0% 589,253 727,507 50,734 2100-3684 \$ 1,700,202 43% 53% 4% 0% 732,617 904,507 63,077 2100-4095 \$ 814,600 43% 53% 4% 0% 351,011 433,367 30,222 3,882,295 1,672,881 2,065,381 144,033	2100-3097 \$ 1,367,494 43% 53% 4% 0% 589,253 727,507 50,734 - 2100-3684 \$ 1,700,202 43% 53% 4% 0% 732,617 904,507 63,077 - 2100-4095 \$ 814,600 43% 53% 4% 0% 351,011 433,367 30,222 - 3,882,295 1,672,881 2,065,381 144,033 -

	2024													
Workpaper	Cost Center		2024 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology		
2100-3097.000	2100-3097	\$	1,367,494	43%	53%	4%	0%	589,253	727,507	50,734	-	LAN ID w/o unreg		
	2100-3684	\$	1,700,202	43%	53%	4%	0%	732,617	904,507	63,077	-	LAN ID w/o unreg		
	2100-4095	\$	898,600	43%	53%	4%	0%	387,207	478,055	33,338	-	LAN ID w/o unreg		
Grand Total			3,966,295					1,709,077	2,110,069	147,150	-			
								43.09%	53.20%	3.71%	0.00%	2024 Weighted Average of 2100-3097.000		

Area:INFORMATION TECHNOLOGYWitness:Tia L. BallardCategory:B. InfrastructureCost Center:VARIOUS

Summary for Category: B. Infrastructure

		In 2021\$ (000) Incu	urred Costs			
	Adjusted-Recorded	Adjusted-Forecast				
	2021	2022	2023	2024		
Labor	7,192	7,276	7,360	7,612		
Non-Labor	28,653	26,171	27,262	30,022		
NSE	0	0	0	0		
Total	35,845	33,447	34,622	37,634		
FTE	52.8	53.5	54.2	56.3		

Cost Centers belonging to this Category:

2100-0207.000 Shared Op	erational Infrastructure	•		
Labor	5,364	5,448	5,532	5,700
Non-Labor	26,438	24,117	25,208	27,968
NSE	0	0	0	0
Total	31,802	29,565	30,740	33,668
FTE	39.0	39.7	40.4	41.8
2100-3097.000 Shared Inf	rastructure			
Labor	1,828	1,828	1,828	1,912
Non-Labor	2,215	2,054	2,054	2,054
NSE	0	0	0	0
Total	4,043	3,882	3,882	3,966
FTE	13.8	13.8	13.8	14.5

Beginning of Workpaper 2100-0207.000 - Shared Operational Infrastructure

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub	1. Infrastructure
Cost Center:	2100-0207.000 - Shared Operational Infrastructure

Activity Description:

This activity includes shared Information Technology (IT) infrastructure costs that represent labor and non-labor for technology systems where costs are shared between multiple business units and support the objectives of operating and maintaining the company infrastructure systems safely and reliably. The types of systems supported in this area include data center computing, cloud computing, storage, network, telecom, and operations technology. The types of functions supported in this area include network operations, field support services, portfolio management services, and hardware and/or software maintenance agreements.

Forecast Explanations:

Labor - Base YR Rec

Historical costs have fluctuated between various workgroups as a result of either internal organizational changes, transfers of responsibilities, or shifting of cost drivers from one area of the IT department to another. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

Non-Labor - Base YR Rec

Historical costs, such as contractor services and cost of software and/or hardware, have fluctuated as a result of shifting cost drivers in the IT department. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

NSE - Base YR Rec

N/A

Summary of Results:

				ln 2021\$ (00	0) Incurred (Costs		
		Adju	isted-Recor	Ad	justed-Fore	cast		
Years	2017	2018	2019	2020	2021	2022	2023	2024
Labor	8,919	9,110	5,757	5,514	5,364	5,447	5,531	5,699
Non-Labor	23,954	26,370	22,615	25,716	26,438	24,116	25,207	27,967
NSE	0	0	0	0	0	0	0	0
Total	32,872	35,480	28,372	31,230	31,802	29,563	30,738	33,666
FTE	70.0	72.2	44.5	37.9	39.0	39.7	40.4	41.8

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Cost Center:	2100-0207.000 - Shared Operational Infrastructure

Cost Center Allocations (Incurred Costs):

	2021 Adjusted-Recorded						2022 Adju	usted-For	recast	
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	38	31	0	69	0.2	38	31	0	69	0.2
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	5,325	26,406	0	31,731	38.8	5,409	24,085	0	29,494	39.5
Total Incurred	5,363	26,437	0	31,800	39.0	5,447	24,116	0	29,563	39.7
% Allocation										
Retained	46.47%	46.47%				46.87%	46.87%			
SEU	50.99%	50.99%				50.73%	50.73%			
CORP	2.54%	2.54%				2.40%	2.40%			
Unreg	0.00%	0.00%				0.00%	0.00%			

	2023 Adjusted-Forecast						2024 Adju	sted-For	ecast	
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	38	31	0	69	0.2	38	31	0	69	0.2
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	5,493	25,176	0	30,669	40.2	5,661	27,936	0	33,597	41.6
Total Incurred	5,531	25,207	0	30,738	40.4	5,699	27,967	0	33,666	41.8
% Allocation										
Retained	46.74%	46.74%				46.90%	46.90%			
SEU	50.83%	50.83%				50.75%	50.75%			
CORP	2.43%	2.43%				2.35%	2.35%			
Unreg	0.00%	0.00%				0.00%	0.00%			

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2021

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2022

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2023

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2024

Allocations are based on a weighted average of all cost centers within the workpaper.

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Cost Center:	2100-0207.000 - Shared Operational Infrastructure

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs										
Forecas	t Method	Bas	Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years	s	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Labor	Base YR Rec	5,364	5,364	5,364	84	168	336	5,448	5,532	5,700	
Non-Labor	Base YR Rec	26,438	26,438	26,438	-2,321	-1,230	1,530	24,117	25,208	27,968	
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0	
Tota	al	31,802	31,802	31,802	-2,237	-1,062	1,866	29,565	30,740	33,668	
FTE	Base YR Rec	39.0	39.0	39.0	0.7	1.4	2.8	39.7	40.4	41.8	

Forecast Adjustment Details:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type
2022	84	0	0	84	0.7	1-Sided Adj
Explanation:	Adding 1 internal Empl	oyee to suppor	t growing IT ii	nitiatives at 70	0% O&M	
2022	0	-674	0	-674	0.0	1-Sided Adj
Explanation:	Benefit 512.1: CIS Rep	lacement Bene	fit related to	elimination of	Mainframe cost	ts.
2022	0	-364	0	-364	0.0	1-Sided Adj
Explanation:	Benefit New 5: Retire C Maintenance for Oracle	•	blacement Be	nefit reductior	n related to not	requiring annual
2022	0	359	0	359	0.0	1-Sided Adj
Explanation:	Increased Cloud Const space and Cloud Platfo			service and i	nfrastructure as	a service) for cloud
2022	0	-2,631	0	-2,631	0.0	1-Sided Adj
Explanation:	Decreased Hardware a infrastructure platform	and Software M	aintenance in	1 2022 for vari	ous services ar	nd vendors across the
2022	0	290	0	290	0.0	1-Sided Adj
Explanation:	To account for unbundl to amortization schedu		e that starts i	n 2021 and co	ontinues in fore	cast years. Higher due
2022	0	699	0	699	0.0	1-Sided Adj
Explanation:	Increased Telecom cos	sts starting in 20)22; includes	funds for the	secondary data	center expansion
2022 Total	84	-2,321	0	-2,237	0.7	
2023	168	0	0	168	1.4	1-Sided Adj
Explanation:	Adding 1 additional inte	ernal Employee	(on top of 20	22) to suppor	t growing IT init	iatives at 70% O&M
2023	0	-674	0	-674	0.0	1-Sided Adj
Explanation:	Benefit 512.1: CIS Rep	lacement Bene	fit related to	elimination of	Mainframe cost	ts.
2023	0	35	0	35	0.0	1-Sided Adj
Explanation:	Added costs for Smart	Meter 2.0 Teleo	com Data Pla	n costs startir	ig in 2023	
2023	0	786	0	786	0.0	1-Sided Adj
Note: Totals may	/ include rounding differe SDG&E/INFORMAT		DLOGY/Exh	No:SDG&E	-25-WP/Witne	ess: T. Ballard

Witness:	INFORMATION TE Tia L. Ballard	CHNOLOGY				
Category:	B. Infrastructure					
Category-Sub:	1. Infrastructure					
Cost Center:	2100-0207.000 - S	hared Operation	nal Infrastruc	ture		
Year	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj_Type
Explanation:	Increased Cloud Consu space and Cloud Platfo		latform as a	service and inf	frastructure as	a service) for cloud
2023	0	-397	0	-397	0.0	1-Sided Adj
Explanation:	Benefit New 5: Retire C Maintenance for Oracle	-	acement Be	nefit reduction	related to not	requiring annual
2023	0	1,184	0	1,184	0.0	1-Sided Adj
Explanation:	Increased Telecom cos	ts including fund	ds for the sec	condary data c	enter expansio	n
2023	0	-2,453	0	-2,453	0.0	1-Sided Adj
Explanation:	Decreased Hardware a infrastructure platform	nd Software Ma	iintenance in	2023 for vario	us services ar	d vendors across the
2023	0	289	0	289	0.0	1-Sided Adj
Explanation:	To account for unbundle to amortization schedul		that starts ir	1 2021 and cor	ntinues in fore	cast years. Higher due
2023 Total	168	-1,230	0	-1,062	1.4	
2024	0	-674	0	-674	0.0	1-Sided Adj
Explanation:	Benefit 512.1: CIS Rep	lacement Benef	it related to e	elimination of N	lainframe cost	S.
2024	336	0	0	336	2.8	1-Sided Adj
Explanation:	Adding 2 additional inte	rnal Employees	(on top of 2	023) to suppor	t growing IT in	itiatives at 70% O&M
2024	0	2,176	0	2,176	0.0	1-Sided Adj
2024 Explanation:	0 Added costs for Smart prior. The 2024 costs a workpaper	Meter 2.0 Telec	om Data Pla	n costs starting	g in 2023 and o	continuing in years
	Added costs for Smart prior. The 2024 costs a	Meter 2.0 Telec	om Data Pla	n costs starting	g in 2023 and o	continuing in years
Explanation:	Added costs for Smart prior. The 2024 costs a workpaper	Meter 2.0 Telec re normalized fo 1,075 Imption costs (p	om Data Plat or post test yo 0	n costs starting ear increases a 1,075	y in 2023 and o and described 0.0	continuing in years in supplemental 1-Sided Adj
Explanation: 2024	Added costs for Smart prior. The 2024 costs a workpaper 0 Increased Cloud Consu	Meter 2.0 Telec re normalized fo 1,075 Imption costs (p	om Data Plat or post test yo 0	n costs starting ear increases a 1,075	y in 2023 and o and described 0.0	continuing in years in supplemental 1-Sided Adj
Explanation: 2024 Explanation:	Added costs for Smart prior. The 2024 costs a workpaper 0 Increased Cloud Consu space and Cloud Platfo	Meter 2.0 Telec re normalized fo 1,075 Imption costs (p rm Operations -397 Dracle; CIS Rep	om Data Plat or post test ye 0 latform as a 0	n costs starting ear increases a 1,075 service and inf -397	g in 2023 and d and described 0.0 frastructure as 0.0	continuing in years in supplemental 1-Sided Adj a service) for cloud 1-Sided Adj
Explanation: 2024 Explanation: 2024	Added costs for Smart prior. The 2024 costs a workpaper 0 Increased Cloud Consu space and Cloud Platfor 0 Benefit New 5: Retire C	Meter 2.0 Telec re normalized fo 1,075 Imption costs (p rm Operations -397 Dracle; CIS Rep	om Data Plat or post test ye 0 latform as a 0	n costs starting ear increases a 1,075 service and inf -397	g in 2023 and d and described 0.0 frastructure as 0.0	continuing in years in supplemental 1-Sided Adj a service) for cloud 1-Sided Adj
Explanation: 2024 Explanation: 2024 Explanation:	Added costs for Smart prior. The 2024 costs a workpaper 0 Increased Cloud Consu space and Cloud Platfo 0 Benefit New 5: Retire C Maintenance for Oracle	Meter 2.0 Telec re normalized fo 1,075 Imption costs (p rm Operations -397 Dracle; CIS Repl software 1,546	om Data Plai or post test ye latform as a 0 lacement Be	n costs starting ear increases a 1,075 service and int -397 nefit reduction 1,546	g in 2023 and d and described 0.0 frastructure as 0.0 related to not 0.0	continuing in years in supplemental 1-Sided Adj a service) for cloud 1-Sided Adj requiring annual 1-Sided Adj
Explanation: 2024 Explanation: 2024 Explanation: 2024	Added costs for Smart prior. The 2024 costs a workpaper 0 Increased Cloud Consu space and Cloud Platfo 0 Benefit New 5: Retire C Maintenance for Oracle 0	Meter 2.0 Telec re normalized fo 1,075 Imption costs (p rm Operations -397 Dracle; CIS Repl software 1,546	om Data Plai or post test ye latform as a 0 lacement Be	n costs starting ear increases a 1,075 service and int -397 nefit reduction 1,546	g in 2023 and d and described 0.0 frastructure as 0.0 related to not 0.0	continuing in years in supplemental 1-Sided Adj a service) for cloud 1-Sided Adj requiring annual 1-Sided Adj
Explanation: 2024 Explanation: 2024 Explanation: 2024 Explanation:	Added costs for Smart prior. The 2024 costs a workpaper 0 Increased Cloud Consu- space and Cloud Platfor 0 Benefit New 5: Retire C Maintenance for Oracle 0 Increased Telecom cos	Meter 2.0 Telec re normalized for 1,075 imption costs (p rm Operations -397 Dracle; CIS Reples software 1,546 ts including func -2,447	om Data Plai or post test ye latform as a 0 lacement Bel 0 ds for the sec 0	n costs starting ear increases a 1,075 service and int -397 nefit reduction 1,546 condary data co -2,447	g in 2023 and d and described 0.0 frastructure as 0.0 related to not 0.0 enter expansio 0.0	continuing in years in supplemental 1-Sided Adj a service) for cloud 1-Sided Adj requiring annual 1-Sided Adj n 1-Sided Adj
Explanation: 2024 Explanation: 2024 Explanation: 2024 Explanation: 2024	Added costs for Smart prior. The 2024 costs a workpaper 0 Increased Cloud Consu- space and Cloud Platfor 0 Benefit New 5: Retire O Maintenance for Oracle 0 Increased Telecom cost 0 Decreased Hardware a	Meter 2.0 Telec re normalized for 1,075 imption costs (p rm Operations -397 Dracle; CIS Reples software 1,546 ts including func -2,447	om Data Plai or post test ye latform as a 0 lacement Bel 0 ds for the sec 0	n costs starting ear increases a 1,075 service and int -397 nefit reduction 1,546 condary data co -2,447	g in 2023 and d and described 0.0 frastructure as 0.0 related to not 0.0 enter expansio 0.0	continuing in years in supplemental 1-Sided Adj a service) for cloud 1-Sided Adj requiring annual 1-Sided Adj n 1-Sided Adj
Explanation: 2024 Explanation: 2024 Explanation: 2024 Explanation: 2024 Explanation:	Added costs for Smart prior. The 2024 costs a workpaper 0 Increased Cloud Consu- space and Cloud Platfor 0 Benefit New 5: Retire O Maintenance for Oracle 0 Increased Telecom cos 0 Decreased Hardware a infrastructure platform	Meter 2.0 Telec re normalized fo 1,075 Imption costs (p rm Operations -397 Dracle; CIS Repl software 1,546 ts including fund -2,447 nd Software Ma 251 ed maintenance	om Data Plai or post test ye 0 latform as a 0 acement Be 0 ds for the sec 0 intenance in 0	n costs starting ear increases a 1,075 service and int -397 nefit reduction 1,546 condary data co -2,447 2024 for vario 251	and described 0.0 frastructure as 0.0 related to not 0.0 enter expansio 0.0 us services an 0.0	continuing in years in supplemental 1-Sided Adj a service) for cloud 1-Sided Adj requiring annual 1-Sided Adj on 1-Sided Adj on 1-Sided Adj on 1-Sided Adj on 1-Sided Adj

Note: Totals may include rounding differences. SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard Page 50 of 88

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Cost Center:	2100-0207.000 - Shared Operational Infrastructure

Determination of Adjusted-Recorded (Incurred Costs):

stormation of stajuotou i	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
ecorded (Nominal \$)*					
Labor	7,087	7,313	4,771	4,640	4,663
Non-Labor	21,732	24,407	22,110	30,951	26,748
NSE	0	0	0	0	0
Total	28,818	31,720	26,881	35,591	31,411
FTE	60.1	61.8	38.4	32.8	33.3
djustments (Nominal \$) **					
Labor	-41	10	0	-4	0
Non-Labor	-1	1	-687	-6,262	-310
NSE	0	0	0	0	0
Total	-42	10	-687	-6,265	-310
FTE	-0.2	0.0	0.0	-0.2	0.0
ecorded-Adjusted (Nominal	l \$)				
Labor	7,046	7,323	4,771	4,636	4,663
Non-Labor	21,731	24,408	21,423	24,690	26,438
NSE	0	0	0	0	0
Total	28,776	31,731	26,194	29,326	31,101
FTE	60.0	61.8	38.3	32.6	33.3
acation & Sick (Nominal \$)					
Labor	1,046	1,109	683	657	700
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	1,046	1,109	683	657	700
FTE	10.0	10.4	6.2	5.3	5.7
scalation to 2021\$					
Labor	828	678	303	220	0
Non-Labor	2,223	1,962	1,192	1,026	0
NSE	0	0	0	0	0
Total	3,051	2,640	1,495	1,246	0
FTE	0.0	0.0	0.0	0.0	0.0
ecorded-Adjusted (Constar	nt 2021\$)				
Labor	8,919	9,110	5,757	5,514	5,364
Non-Labor	23,954	26,370	22,615	25,716	26,438
NSE	0	0	0	0	0
Total	32,872	35,480	28,372	31,230	31,802
FTE	70.0	72.2	44.5	37.9	39.0

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments *Note: Totals may include rounding differences.*

SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard Page 51 of 88

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Cost Center:	2100-0207.000 - Shared Operational Infrastructure

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs										
	Years	2017	2018	2019	2020	2021				
Labor		-41	10	0	-4	0				
Non-Labor		-0.914	0.553	-687	-6,262	-310				
NSE		0	0	0	0	0				
	Total	-42	10	-687	-6,265	-310				
FTE		-0.2	0.0	0.0	-0.2	0.0				

Detail of Adjustments to Recorded:

<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2017	-41	-1	0	-0.2	1-Sided Adj
Explanation:	Incremental costs that are antion Memorandum Account (CEMA		sted for reco	overy through	a non-GRC Catastrophic Event
2017 Total	-41	-1	0	-0.2	
2018	13	1	0	0.1	1-Sided Adj
Explanation:	Incremental costs that are antion Memorandum Account (CEMA		sted for reco	overy through	a non-GRC Catastrophic Event
2018	-4	0	0	-0.1	1-Sided Adj
Explanation:	One sided transfer out of affilia	te (non-O&M) costs	s to align witl	h actuals and	forecast
2018 Total	10	1	0	0.0	
2019	0	-907	0	0.0	1-Sided Adj
Explanation:	Historical Adjustment for one-ti	me costs related to	Organizatio	nal Change l	Mgmt
2019	0	220	0	0.0	CCTR Transf From 2100-3172.000
Explanation:	Move Flexera maintenance to a	appropriate workpa	per (2100-02	207)	
2019 Total	0	-687	0	0.0	
2020	-1	0	0	-0.1	1-Sided Adj
Explanation:	Incremental costs that are antion Memorandum Account (CEMA		sted for reco	overy through	a non-GRC Catastrophic Event
2020	-2	-130	0	-0.1	1-Sided Adj
Explanation:	Incremental COVID-related cos Catastrophic Event Memorand	•		quested for re	ecovery through a non-GRC
2020	0	-135	0	0.0	1-Sided Adj
Explanation:	One sided transfer out of affilia	te (non-O&M) costs	s to align witl	h actuals and	forecast

Note: Totals may include rounding differences.

SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard Page 52 of 88

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Cost Center:	2100-0207.000 - Shared Operational Infrastructure

Year	Labor	<u>N</u>	Lbr <u>NS</u>	<u>E</u>	<u>FTE</u>	Adj Type
2020	C	-2,	567	0	0.0	1-Sided Adj
Explanation:	Historical Adjustment for o	ne-time costs	related to Orgar	nizational (Change Mgm	nt
2020	C	-3,	430	0	0.0	1-Sided Adj
Explanation:	Historical Adjustment for o	ne-time costs	related to progra	am Armor		
2020 Total	-4	-6,	262	0	-0.2	
2021	C) –	174	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-relate Catastrophic Event Memo		-	be reques	sted for recov	ery through a non-GRC
2021	C)	-40	0	0.0	CCTR Transf To 2100-0364.001
Explanation:	Transfer spot cash awards	to AGCP tear	n			
2021	C)	-95	0	0.0	1-Sided Adj
Explanation:	One sided transfer out of a	affiliate (non-O	&M) costs to ali	gn with ac	tuals and for	ecast
2021 Total	C		310	0	0.0	

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Cost Center:	2100-0207.000 - Shared Operational Infrastructure

RAMP Item # 1

RAMP Activity

RAMP Chapter: SDG&E-CFF-4 Foundational Technology Systems

RAMP Line Item ID: CFF 1 - CFF 9

RAMP Line Item Name: All Mitigations

Tranche(/s): Tranche1: N/A

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	19,226	18,412	19,144	21,777	18,890	24,138	

Cost Estimate Changes from RAMP:

Notable change in forecast estimate from RAMP: Modeling all five RAMP mitigations (1 - 9) in eight workpapers; The RAMP range is the sum of ranges for all nine mitigations; The forecast reflects pre-allocation values while RAMP ranges reflect post-allocation values between SoCalGas and SDG&E.

GRC Work Unit/Activity Leve	I 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 FTE & no-single unit	39.00	39.70	40.40	41.80	0.00	0.00

Work Unit Changes from RAMP:

Units were not defined during RAMP filing. Labor can be identified with FTE units, and for non-labor there is no single unit defined. Numerical units in the boxes represent FTEs identified.

Risk Spend Efficiency (RSE)									
	GRC RSE	RAMP RSE							
Tranche 1	0.000	0.000							
RSE Changes from RAMP: Not Applicable									

Supplemental Workpapers for Workpaper 2100-0207.000

Workpaper	Cost Center		2021 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-0207.000	2100-0207	Ś	1,302,843	43%	53%	4%	0%	561,395	693,112	48,335	-	LAN ID w/o unreg
	2100-3091	\$	319,893	43%	53%	4%	0%	137,842	170,183	11,868	-	LAN ID w/o unreg
	2100-3095	\$	1,091,536	45%	53%	2%	0%	493,924	579,465	18,147	-	Weighted Average of cost centers under Director
	2100-3100	\$	1,719,447	43%	53%	4%	0%	740,910	914,746	63,791	-	LAN ID w/o unreg
	2100-3106	\$	9,481,615	50%	49%	1%	0%	4,777,786	4,630,821	73,008	-	Number of Network Sites
	2100-3107	\$	1,863,672	43%	53%	4%	0%	803,056	991,473	69,142	-	LAN ID w/o unreg
	2100-3498	\$	14,052	43%	53%	4%	0%	6,055	7,476	521	-	LAN ID w/o unreg
	2100-3682	\$	838,022	73%	27%	0%	0%	612,175	225,847	-	-	P/Y Dept. Activity Study
	2100-3763	\$	287,354	46%	51%	3%	0%	132,318	147,355	7,681	-	Weighted Average of cost centers under Director
	2100-3916	\$	5,650,887	43%	53%	4%	0%	2,434,967	3,006,272	209,648	-	LAN ID w/o unreg
	2100-3921	\$	7,060,321	43%	53%	4%	0%	3,042,292	3,756,091	261,938	-	LAN ID w/o unreg
	2100-3954	\$	44,232	43%	53%	4%	0%	19,060	23,531	1,641	-	LAN ID w/o unreg
	2100-3975	\$	755,737	50%	49%	1%	0%	380,816	369,102	5,819	-	Number of Network Sites
	2100-4094	\$	125,261	43%	53%	4%	0%	53,975	66,639	4,647	-	LAN ID w/o unreg
	2100-4124	\$	225,383	43%	53%	4%	0%	97,117	119,904	8,362	-	LAN ID w/o unreg
	2100-4174	\$	1,021,261	43%	53%	4%	0%	440,061	543,311	37,889	-	LAN ID w/o unreg
Grand Total			31,801,516					14,733,750	16,245,327	822,439	-	
								46.33%	51.08%	2.59%	0.00%	2021 Weighted Average of 2100-0207.000

2022 Workpaper 2022 Forecast SDGE % SCG % Corp % Unreg % SDGE \$ SCG \$ CORP \$ UNREG \$ Methodology Cost Center 2100-0207.000 2100-0207 \$ 1,302,843 43% 53% 4% 693,112 0% 561,395 48,335 LAN ID w/o unreg 2100-3091 319,893 43% 53% 137,842 170,183 11,868 \$ 4% 0% LAN ID w/o unreg 2100-3095 579,465 \$ 1,091,536 45% 53% 2% 0% 493,924 18,147 -Weighted Average of cost centers under Director 2100-3100 \$ 2,014,843 43% 53% 4% 0% 868,196 1,071,897 74,751 LAN ID w/o unreg 2100-3106 10,180,472 49% 5,129,940 4,972,143 78,390 Ś 50% 1% 0% Number of Network Sites 2100-3107 1,947,672 43% 53% 4% 0% 839,252 1,036,161 72,259 LAN ID w/o unreg Ś 2100-3498 14,052 43% 53% 4% 0% 6,055 7,476 521 LAN ID w/o unreg \$ 2100-3682 838,022 225,847 73% 27% 0% 0% 612,175 P/Y Dept. Activity Study \$ -2100-3763 287,354 51% 0% 132,318 147,355 7,681 Weighted Average of cost centers under Director \$ 46% 3% 2100-3916 4,505,903 43% 53% 4% 0% 1,941,593 2,397,140 167,169 LAN ID w/o unreg \$ 2,083,447 2100-3921 \$ 4,835,105 43% 53% 4% 0% 2,572,276 179,382 LAN ID w/o unreg 2100-3954 \$ 44,232 43% 53% 4% 0% 19,060 23,531 1,641 LAN ID w/o unreg 2100-3975 755,737 49% 380,816 369,102 5,819 Number of Network Sites Ś 50% 1% 0% 2100-4094 125,261 43% 53% 4% 0% 53,975 66,639 4,647 LAN ID w/o unreg Ś 2100-4124 \$ 225,383 43% 53% 4% 0% 97,117 119,904 8,362 LAN ID w/o unreg 2100-4174 \$ 1,077,313 43% 53% 4% 0% 464,214 573,131 39,968 LAN ID w/o unreg Grand Total 29,565,621 13,821,320 15,025,361 718,941 0.00% 2022 Weighted Average of 2100-0207.000 46.75% 50.82% 2.43%

Note: Totals may include rounding differences.

Page 56 of 88

Workpaper	Cost Center	2023 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-0207.000	2100-0207	\$ 1,302,843	43%	53%	4%	0%	561,395	693,112	48,335	-	LAN ID w/o unreg
	2100-3091	\$ 319,893	43%	53%	4%	0%	137,842	170,183	11,868	-	LAN ID w/o unreg
	2100-3095	\$ 1,091,536	45%	53%	2%	0%	493,924	579,465	18,147	-	Weighted Average of cost centers under Director
	2100-3100	\$ 2,394,334	43%	53%	4%	0%	1,031,719	1,273,786	88,830	-	LAN ID w/o unreg
	2100-3106	\$ 10,700,497	50%	49%	1%	0%	5,391,981	5,226,123	82,394	-	Number of Network Sites
	2100-3107	\$ 2,031,672	43%	53%	4%	0%	875,447	1,080,849	75,375	-	LAN ID w/o unreg
	2100-3498	\$ 14,052	43%	53%	4%	0%	6,055	7,476	521	-	LAN ID w/o unreg
	2100-3682	\$ 838,022	73%	27%	0%	0%	612,175	225,847	-	-	P/Y Dept. Activity Study
	2100-3763	\$ 287,354	46%	51%	3%	0%	132,318	147,355	7,681	-	Weighted Average of cost centers under Director
	2100-3916	\$ 4,480,720	43%	53%	4%	0%	1,930,742	2,383,743	166,235	-	LAN ID w/o unreg
	2100-3921	\$ 5,051,728	43%	53%	4%	0%	2,176,789	2,687,519	187,419	-	LAN ID w/o unreg
	2100-3954	\$ 44,232	43%	53%	4%	0%	19,060	23,531	1,641	-	LAN ID w/o unreg
	2100-3975	\$ 755,737	50%	49%	1%	0%	380,816	369,102	5,819	-	Number of Network Sites
	2100-4094	\$ 125,261	43%	53%	4%	0%	53,975	66,639	4,647	-	LAN ID w/o unreg
	2100-4124	\$ 225,383	43%	53%	4%	0%	97,117	119,904	8,362	-	LAN ID w/o unreg
	2100-4174	\$ 1,077,313	43%	53%	4%	0%	464,214	573,131	39,968	-	LAN ID w/o unreg
Grand Total		30,740,577					14,365,570	15,627,764	747,243	-	

Workpaper	Cost Center	2024 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
100-0207.000	2100-0207	\$ 1,302,843	43%	53%	4%	0%	561,395	693,112	48,335	-	LAN ID w/o unreg
	2100-3091	\$ 319,893	43%	53%	4%	0%	137,842	170,183	11,868	-	LAN ID w/o unreg
	2100-3095	\$ 1,091,536	45%	53%	2%	0%	493,924	579,465	18,147	-	Weighted Average of cost centers under Director
	2100-3100	\$ 2,708,893	43%	53%	4%	0%	1,167,262	1,441,131	100,500	-	LAN ID w/o unreg
	2100-3106	\$ 13,204,038	50%	49%	1%	0%	6,653,515	6,448,852	101,671	-	Number of Network Sites
	2100-3107	\$ 2,199,672	43%	53%	4%	0%	947,839	1,170,225	81,608	-	LAN ID w/o unreg
	2100-3498	\$ 14,052	43%	53%	4%	0%	6,055	7,476	521	-	LAN ID w/o unreg
	2100-3682	\$ 838,022	73%	27%	0%	0%	612,175	225,847	-	-	P/Y Dept. Activity Study
	2100-3763	\$ 287,354	46%	51%	3%	0%	132,318	147,355	7,681	-	Weighted Average of cost centers under Director
	2100-3916	\$ 4,489,063	43%	53%	4%	0%	1,934,337	2,388,181	166,544	-	LAN ID w/o unreg
	2100-3921	\$ 5,023,428	43%	53%	4%	0%	2,164,595	2,672,464	186,369	-	LAN ID w/o unreg
	2100-3954	\$ 44,232	43%	53%	4%	0%	19,060	23,531	1,641	-	LAN ID w/o unreg
	2100-3975	\$ 755,737	50%	49%	1%	0%	380,816	369,102	5,819	-	Number of Network Sites
	2100-4094	\$ 125,261	43%	53%	4%	0%	53,975	66,639	4,647	-	LAN ID w/o unreg
	2100-4124	\$ 225,383	43%	53%	4%	0%	97,117	119,904	8,362	-	LAN ID w/o unreg
	2100-4174	\$ 1,039,945	43%	53%	4%	0%	448,112	553,251	38,582	-	LAN ID w/o unreg
irand Total		33,669,352					15,810,338	17,076,718	782,296	-	
irand Total		33,669,352									
							46.96%	50.72%	2.32%	0.00%	6 2024 Weighted Average of 2100-0207.000

SM 2.0 Capital Project Impacts: Contract non-labor cumulative annual amortization of SM 2.0 10 yr. data plan expense normalized over TY2024 GRC Cycle. Reference Exhibit SDG&E -25 Information Technology Witness (William J. Exon) SM 2.0 Capital Project CWP 218810.

Year	SM2.0 10 yr Data Plan Non-Labor Costs	Annual Amortization (1/10th)	Cumulative Annual Amortization Expense for SM 2.0 10 Yr. Data Plan	10 yr data plan coverage years
2023 ¹	695,247	69,525	69,525	July 2023-July 2033
2024	7,307,405	730,741	800,266	2024-2033
2025	7,301,127	730,113	1,530,378	2025-2034
2026	11,229,450	1,122,945	2,653,323	2026-2035
2027	10,683,910	1,068,391	3,721,714	2027-2036
Total	37,217,139	3,721,714	8,705,681	
			2024 Forecast - Cumulative Annual Amortization Expense Normalized over TY2024 GRC Cycle (2024-2027) Sum Rows (D5:D8)/4	
			2,176,420	
notes:				

Beginning of Workpaper 2100-3097.000 - Shared Infrastructure

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub	1. Infrastructure
Cost Center:	2100-3097.000 - Shared Infrastructure

Activity Description:

The shared SDG&E IT infrastructure costs represent labor and non-labor for technology systems where costs are shared between multiple business units and support all other company-specific activities. The activities supported in this area include end user computing, IT service management, and office productivity tools.

Units were not previously defined. Labor can be identified with FTE units, and for non-labor there is no single unit defined. Numerical units below represent FTEs identified.

2021 = 13.8 2022 = 13.8 2023 = 13.8 2024 = 14.5

Forecast Explanations:

Labor - Base YR Rec

Historical costs have fluctuated between various workgroups as a result of either internal organizational changes, transfers of responsibilities, or shifting of cost drivers from one area of the IT department to another. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

Non-Labor - Base YR Rec

Historical costs, such as contractor services and cost of software and/or hardware, have fluctuated as a result of shifting cost drivers in the IT department. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

NSE - Base YR Rec

N/A

Summary of Results:

Γ	In 2021\$ (000) Incurred Costs											
		Adju	isted-Recor	Adjusted-Forecast								
Years	2017	2018	2019	2020	2021	2022	2023	2024				
Labor	2,002	1,453	1,402	1,686	1,828	1,828	1,828	1,912				
Non-Labor	987	791	795	1,799	2,215	2,055	2,055	2,055				
NSE	0	0	0	0	0	0	0	0				
Total	2,988	2,244	2,197	3,485	4,043	3,883	3,883	3,967				
FTE	17.9	11.7	11.7	13.1	13.8	13.8	13.8	14.5				

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Cost Center:	2100-3097.000 - Shared Infrastructure

Cost Center Allocations (Incurred Costs):

		2021 Adjusted-Recorded					2022 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE	
Directly Retained	0	1	0	1	0.0	0	1	0	1	0.0	
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0	
Subj. To % Alloc.	1,828	2,215	0	4,043	14.0	1,828	2,054	0	3,882	14.0	
Total Incurred	1,828	2,216	0	4,044	13.8	1,828	2,055	0	3,883	13.8	
% Allocation											
Retained	43.09%	43.09%				43.09%	43.09%				
SEU	53.20%	53.20%				53.20%	53.20%				
CORP	3.71%	3.71%				3.71%	3.71%				
Unreg	0.00%	0.00%				0.00%	0.00%				

	2023 Adjusted-Forecast					2024 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	1	0	1	0.0	0	1	0	1	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	1,828	2,054	0	3,882	14.0	1,912	2,054	0	3,966	14.7
Total Incurred	1,828	2,055	0	3,883	13.8	1,912	2,055	0	3,967	14.5
% Allocation										
Retained	43.09%	43.09%				43.09%	43.09%			
SEU	53.20%	53.20%				53.20%	53.20%			
CORP	3.71%	3.71%				3.71%	3.71%			
Unreg	0.00%	0.00%				0.00%	0.00%			

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2021

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2022

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2023

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2024

Allocations are based on a weighted average of all cost centers within the workpaper.

FORMATION TECHNOLOGY
a L. Ballard
Infrastructure
Infrastructure
100-3097.000 - Shared Infrastructure

Summary of Adjustments to Forecast:

			In 202	1 \$(000) li	ncurred Co	sts				
Forecast Method Base Forecast			st	Forec	ast Adjust	ments	Adjusted-Forecast			
Years	8	2022	2022 2023 2024 2022		2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	1,828	1,828	1,828	0	0	84	1,828	1,828	1,912
Non-Labor	Base YR Rec	2,215	2,215	2,215	-161	-161	-161	2,054	2,054	2,054
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Tota	I	4,043	4,043	4,043	-161	-161	-77	3,882	3,882	3,966
FTE	Base YR Rec	13.8	13.8	13.8	0.0	0.0	0.7	13.8	13.8	14.5

Forecast Adjustment Details:

Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>				
2022	0	-161	0	-161	0.0	1-Sided Adj				
Explanation:	To account for unbundled maintenance that occurred in 2021. Any future maintenance is included in the Capital chapter of GRC.									
2022 Total	0	-161	0	-161	0.0					
2023	0	-161	0	-161	0.0	1-Sided Adj				
Explanation:	To account for unbundled maintenance that occurred in 2021. Any future maintenance is included in the Capital chapter of GRC.									
2023 Total	0	-161	0	-161	0.0					
2024	84	0	0	84	0.7	1-Sided Adj				
Explanation:	Adding 1 internal Emplo	oyee to support	t growing IT in	itiatives at 70	0% O&M					
2024	0	-161	0	-161	0.0	1-Sided Adj				
Explanation:	To account for unbundle the Capital chapter of G		e that occurre	d in 2021. Ar	ny future mainte	nance is included in				
2024 Total	84	-161	0	-77	0.7					

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Cost Center:	2100-3097.000 - Shared Infrastructure

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	1,581	1,176	1,170	1,419	1,591
Non-Labor	895	732	753	1,733	2,220
NSE	0	0	0	0	0
Total	2,476	1,908	1,923	3,152	3,811
FTE	15.3	10.0	10.2	11.5	12.0
djustments (Nominal \$) **	*				
Labor	0	-8	-8	-2	-2
Non-Labor	0	0	0	-5	-5
NSE	0	0	0	0	0
Total	0	-8	-8	<u> </u>	-6
FTE	0.0	-0.1	-0.1	-0.1	-0.2
Recorded-Adjusted (Nomir	nal \$)				
Labor	1,581	1,168	1,162	1,418	1,589
Non-Labor	895	732	753	1,727	2,215
NSE	0	0	0	0	0
Total	2,476	1,900	1,915	3,145	3,805
FTE	15.3	10.0	10.1	11.3	11.8
acation & Sick (Nominal \$	5)				
Labor	235	177	166	201	239
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	235	177	166	201	239
FTE	2.6	1.7	1.6	1.8	2.0
scalation to 2021\$					
Labor	186	108	74	67	0
Non-Labor	92	59	42	72	0
NSE	0	0	0	0	0
Total	277	167	116	139	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant	ant 2021\$)				
Labor	2,002	1,453	1,402	1,686	1,828
Non-Labor	987	791	795	1,799	2,215
NSE	0	0	0	0	0
Total	2,988	2,244	2,197	3,485	4,043
FTE	17.9	11.7	11.7	13.1	13.8

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments *Note: Totals may include rounding differences.*

SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard Page 63 of 88

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	B. Infrastructure
Category-Sub:	1. Infrastructure
Cost Center:	2100-3097.000 - Shared Infrastructure

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs										
	Years	2017	2018	2019	2020	2021				
Labor		0	-8	-8	-2	-2				
Non-Labor		0	0	0	-5	-5				
NSE		0	0	0	0	0				
	Total	0	-8	-8	-7	-6				
FTE		0.0	-0.1	-0.1	-0.1	-0.2				

Detail of Adjustments to Recorded:

Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2017 Total	0	0	0	0.0	
2018	-8	0	0	-0.1	1-Sided Adj
Explanation:	One sided transfer out of affil	iate (non-O&M) o	costs to align	with actuals	and forecast
2018 Total	-8	0	0	-0.1	
2019	-8	0	0	-0.1	1-Sided Adj
Explanation:	One sided transfer out of affil	iate (non-O&M) o	costs to align	with actuals	and forecast
2019 Total	-8	0	0	-0.1	
2020	0	-5	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related c Catastrophic Event Memorar		•	requested f	or recovery through a non-GRC
2020	-2	0	0	-0.1	1-Sided Adj
Explanation:	One sided transfer out of affil	iate (non-O&M) o	costs to align	with actuals	and forecast
2020 Total	-2	-5	0	-0.1	
2021	0	-5	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related c Catastrophic Event Memorar		-	requested f	or recovery through a non-GRC
2021	-1	0	0	-0.1	1-Sided Adj
Explanation:	Adjustment to remove non-G recovered through a separate			71 Emission	s Strategy Program that are being
2021	0	0	0	-0.1	1-Sided Adj
Explanation:	One sided transfer out of affil	iate (non-O&M) o	costs to align	with actuals	and forecast
2021 Total	-2	-5	0	-0.2	

Supplemental Workpapers for Workpaper 2100-3097.000

								2021				
Workpaper	Cost Center		2021 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-3097.000	2100-3097	\$	1,367,494	43%	53%	4%	0%	589,253	727,507	50,734	-	LAN ID w/o unreg
	2100-3684	\$	1,861,202	43%	53%	4%	0%	801,992	990,159	69,051	-	LAN ID w/o unreg
	2100-4095	\$	814,600	43%	53%	4%	0%	351,011	433,367	30,222	-	LAN ID w/o unreg
Grand Total			4,043,295					1,742,256	2,151,033	150,006	-	
S												
ő								43.09%	53.20%	3.71%	0.00%	2021 Weighted Average of 2100-3097.000
SDG&E												
<u> </u>												
Ž.						• • • • • •		2022				
T Workpaper	Cost Center		2022 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
£0-3097.000	2100-3097	\$	1,367,494	43%	53%	4%	0%	589,253	727,507	50,734	-	LAN ID w/o unreg
\leq	2100-3684	\$	1,700,202	43%	53%	4%	0%	732,617	904,507	63,077	-	LAN ID w/o unreg
	2100-4095	\$	814,600	43%	53%	4%	0%	351,011	433,367	30,222	-	LAN ID w/o unreg
			3,882,295					1,672,881	2,065,381	144,033	-	
RMA mand Total								10.000/	== ===	0 7444		
-								43.09%	53.20%	3.71%	0.00%	2022 Weighted Average of 2100-3097.000
Щ П												
9								2022				
-	Cost Center		2023 Forecast	SDGE %	SCG %	Corp %	Linne e 9/	2023 SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
Workpaper 200-3097.000	2100-3097	\$	1,367,494	43%	53%	4%	Unreg % 0%	589,253	727,507	50,734	UNKEG Ş	LAN ID w/o unreg
	2100-3684	ş Ş		43%	53%						-	LAN ID w/o unreg
O G	2100-3684 2100-4095		1,700,202 814,600	43% 43%	53% 53%	4% 4%	0%	732,617 351,011	904,507 433,367	63,077 30,222	-	LAN ID w/o unreg
	2100-4095	\$	·	43%	55%	4%	0%			· · · · · · · · · · · · · · · · · · ·		LAN ID w/o unreg
			3,882,295					1,672,881	2,065,381	144,033	-	
<u>×</u>								43.09%	53.20%	3.71%	0.00%	2023 Weighted Average of 2100-3097.000
_								43.09%	55.20%	5.71%	0.007	2023 Weighted Average of 2100-3037.000
7												
No:												
S								2024				
Z O O O Workpaper	Cost Center		2024 Forecast	SDGE %	SCG %	Corp %	Unreg %	2024 SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
O O O Workpaper 2€00-3097.000	Cost Center 2100-3097	\$	2024 Forecast 1,367,494	SDGE % 43%	SCG % 53%	Corp %	Unreg % 0%		SCG \$ 727,507	CORP \$ 50,734	UNREG \$	Methodology LAN ID w/o unreg
Workpaper 2 00-3097.000		\$ \$						SDGE \$		•	UNREG \$ - -	
Workpaper 2 00-3097.000	2100-3097		1,367,494	43%	53%	4%	0%	SDGE \$ 589,253	727,507	50,734	UNREG \$ - -	LAN ID w/o unreg
Workpaper 2 00-3097.000	2100-3097 2100-3684	\$	1,367,494 1,700,202	43% 43%	53% 53%	4% 4%	0% 0%	SDGE \$ 589,253 732,617	727,507 904,507	50,734 63,077	-	LAN ID w/o unreg LAN ID w/o unreg
O O O Workpaper 2€00-3097.000	2100-3097 2100-3684	\$	1,367,494 1,700,202 898,600	43% 43%	53% 53%	4% 4%	0% 0%	SDGE \$ 589,253 732,617 387,207	727,507 904,507 478,055	50,734 63,077 33,338	-	LAN ID w/o unreg LAN ID w/o unreg

San Diego Gas & Electric Company 2024 GRC - APP

S: Note: Totals may include rounding differences.

Area:INFORMATION TECHNOLOGYWitness:Tia L. BallardCategory:C. SupportCost Center:VARIOUS

Summary for Category: C. Support

		In 2021\$ (000) Inc	urred Costs						
	Adjusted-Recorded	Adjusted-Forecast							
	2021	2022	2023	2024					
Labor	7,014	7,182	7,350	7,518					
Non-Labor	3,382	3,286	3,566	3,566					
NSE	0	0	0	0					
Total	10,396	10,468	10,916	11,084					
FTE	65.7	67.1	68.5	69.9					

Cost Centers belonging to this Category:

2100-0460.000 Shared O	perational Support			
Labor	2,886	2,970	3,054	3,138
Non-Labor	1,626	1,310	1,310	1,310
NSE	0	0	0	0
Total	4,512	4,280	4,364	4,448
FTE	19.8	20.5	21.2	21.9
2100-3172.000 Shared S	upport			
Labor	4,128	4,212	4,296	4,380
Non-Labor	1,756	1,976	2,256	2,256
NSE	0	0	0	0
Total	5,884	6,188	6,552	6,636
FTE	45.9	46.6	47.3	48.0

Beginning of Workpaper 2100-0460.000 - Shared Operational Support

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	C. Support
Category-Sub	1. Support
Cost Center:	2100-0460.000 - Shared Operational Support

Activity Description:

The shared SDG&E IT support costs represent labor and non-labor for technology systems where costs are shared between multiple business units and support the objectives of operating and maintaining the company infrastructure systems safely and reliably. The types of services supported in this area include quality assurance, release and environment management, enterprise monitoring, and solutions architecture.

Forecast Explanations:

Labor - Base YR Rec

Historical costs have fluctuated between various workgroups as a result of either internal organizational changes, transfers of responsibilities, or shifting of cost drivers from one area of the IT department to another. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

Non-Labor - Base YR Rec

Historical costs, such as contractor services and cost of software and/or hardware, have fluctuated as a result of shifting cost drivers in the IT department. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

NSE - Base YR Rec

N/A

Summary of Results:

Γ	In 2021\$ (000) Incurred Costs											
		Adju	isted-Recor	Ad	Adjusted-Forecast							
Years	2017	2018	2019	2020	2021	2022	2023	2024				
Labor	2,096	2,514	2,077	3,064	2,886	2,970	3,054	3,138				
Non-Labor	1,412	2,080	2,565	2,312	1,626	1,310	1,310	1,310				
NSE	0	0	0	0	0	0	0	0				
Total	3,509	4,594	4,642	5,376	4,512	4,280	4,364	4,448				
FTE	15.3	19.3	13.5	21.2	19.8	20.5	21.2	21.9				

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	C. Support
Category-Sub:	1. Support
Cost Center:	2100-0460.000 - Shared Operational Support

Cost Center Allocations (Incurred Costs):

	2021 Adjusted-Recorded						2022 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE	
Directly Retained	6	11	0	17	-0.1	6	11	0	17	-0.1	
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0	
Subj. To % Alloc.	2,880	1,615	0	4,495	19.9	2,964	1,299	0	4,263	20.6	
Total Incurred	2,886	1,626	0	4,512	19.8	2,970	1,310	0	4,280	20.5	
% Allocation											
Retained	50.14%	50.14%				50.64%	50.64%				
SEU	47.94%	47.94%				47.60%	47.60%				
CORP	1.89%	1.89%				1.73%	1.73%				
Unreg	0.03%	0.03%				0.03%	0.03%				

	2023 Adjusted-Forecast						2024 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE	
Directly Retained	6	11	0	17	-0.1	6	11	0	17	-0.1	
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0	
Subj. To % Alloc.	3,048	1,299	0	4,347	21.3	3,132	1,299	0	4,431	22.0	
Total Incurred	3,054	1,310	0	4,364	21.2	3,138	1,310	0	4,448	21.9	
% Allocation											
Retained	50.64%	50.64%				50.72%	50.72%				
SEU	47.60%	47.60%				47.54%	47.54%				
CORP	1.73%	1.73%				1.71%	1.71%				
Unreg	0.03%	0.03%				0.03%	0.03%				

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2021

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2022

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2023

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2024

Allocations are based on a weighted average of all cost centers within the workpaper.
Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	C. Support
Category-Sub:	1. Support
Cost Center:	2100-0460.000 - Shared Operational Support

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecas	t Method	Bas	se Foreca	st	Forecast Adjustments			Adjusted-Forecast		
Years	s	2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	2,886	2,886	2,886	84	168	252	2,970	3,054	3,138
Non-Labor	Base YR Rec	1,626	1,626	1,626	-316	-316	-316	1,310	1,310	1,310
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Tota	ıl	4,512	4,512	4,512	-232	-148	-64	4,280	4,364	4,448
FTE	Base YR Rec	19.8	19.8	19.8	0.7	1.4	2.1	20.5	21.2	21.9

Forecast Adjustment Details:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
2022	84	0	0	84	0.7	1-Sided Adj
Explanation:	Adding 1 internal Emp	loyee to support	growing IT ir	itiatives at 70	% O&M	
2022	0	-316	0	-316	0.0	1-Sided Adj
Explanation:	Decreased ITQA Serv	ces needed over	r Base Year			
2022 Total	84	-316	0	-232	0.7	
2023	168	0	0	168	1.4	1-Sided Adj
Explanation:	Adding 1 additional internal Employee (on top of 2022) to support growing IT initiatives at 70% O&M					
2023	0	-316	0	-316	0.0	1-Sided Adj
Explanation:	Decreased ITQA Serv	ces needed over	r Base Year			
2023 Total	168	-316	0	-148	1.4	
2024	252	0	0	252	2.1	1-Sided Adj
Explanation:	Adding 1 additional int	ernal Employee	(on top of 20	23) to support	t growing IT ini	tiatives at 70% O&M
2024	0	-316	0	-316	0.0	1-Sided Adj
Explanation:	Decreased ITQA Serv	ces needed over	r Base Year			
2024 Total	252	-316	0	-64	2.1	

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	C. Support
Category-Sub:	1. Support
Cost Center:	2100-0460.000 - Shared Operational Support

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*		. ,			
Labor	2,011	1,946	2,904	2,582	2,512
Non-Labor	1,537	1,481	2,556	2,412	2,099
NSE	0	0	0	0	0
Total	3,547	3,427	5,460	4,994	4,611
FTE	14.3	13.2	11.7	18.4	17.0
djustments (Nominal \$) **					
Labor	-355	75	-1,183	-5	-3
Non-Labor	-256	444	-126	-193	-473
NSE	0	0	0	0	0
Total	-610	519	-1,309	-198	-477
FTE	-1.1	3.4	-0.1	-0.1	-0.1
Recorded-Adjusted (Nomina	al \$)				
Labor	1,656	2,021	1,721	2,576	2,509
Non-Labor	1,281	1,925	2,430	2,220	1,626
NSE	0	0	0	0	0
Total	2,937	3,946	4,151	4,796	4,135
FTE	13.2	16.6	11.6	18.2	16.9
acation & Sick (Nominal \$))				
Labor	246	306	246	365	377
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	246	306	246	365	377
FTE	2.1	2.7	1.9	3.0	2.9
scalation to 2021\$					
Labor	195	187	109	122	0
Non-Labor	131	155	135	92	0
NSE	0	0	0	0	0
Total	326	342	245	214	0
FTE	0.0	0.0	0.0	0.0	0.0
ecorded-Adjusted (Consta	ant 2021\$)				
Labor	2,096	2,514	2,077	3,064	2,886
Non-Labor	1,412	2,080	2,565	2,312	1,626
NSE	0	0	0	0	0
Total	3,509	4,594	4,642	5,376	4,512
FTE	15.3	19.3	13.5	21.2	19.8

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments *Note: Totals may include rounding differences.*

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	C. Support
Category-Sub:	1. Support
Cost Center:	2100-0460.000 - Shared Operational Support

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs						
	Years 2017 2018 2019 2020 2021					
Labor	-	-355	75	-1,183	-5	-3
Non-Labor		-256	444	-126	-193	-473
NSE		0	0	0	0	0
	Total	-610	519	-1,309	-198	-477
FTE		-1.1	3.4	-0.1	-0.1	-0.1

Detail of Adjustments to Recorded:

Year		<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2017		0	0	0	-0.1	1-Sided Adj
Explanation:	Incremental costs tha Memorandum Accour	•	to be request	ed for recov	ery through a	a non-GRC Catastrophic Event
2017		-354	0	0	-1.0	1-Sided Adj
Explanation:	Section 706, as enac	ted by Senate Bi	I (SB) 901, w	hich prohibit	s [SDG&E or	ant to Public Utilities Code SoCalGas], from recovering f any value (compensation and
2017		0	-6	0	0.0	1-Sided Adj
Explanation:	Section 706, as enac	ted by Senate Bi	I (SB) 901, w	hich prohibit	s [SDG&E or	ant to Public Utilities Code SoCalGas], from recovering f any value (compensation and
2017		0	-250	0	0.0	1-Sided Adj
Explanation:	One sided transfer ou	it of affiliate (non	-O&M) costs t	o align with	actuals and	forecast
2017 Total		-355	-256	0	-1.1	
2018		0	0	0	0.1	1-Sided Adj
Explanation:	Incremental costs tha Memorandum Accour	-	to be request	ed for recov	ery through a	a non-GRC Catastrophic Event
2018		-442	0	0	-1.0	1-Sided Adj
Explanation:	Section 706, as enact	ted by Senate Bi	I (SB) 901, w	hich prohibit	s [SDG&E or	ant to Public Utilities Code SoCalGas], from recovering f any value (compensation and
2018		0	-4	0	0.0	1-Sided Adj

Area: Witness:	INFORMATION TECHNO Tia L. Ballard	DLOGY			
Category:	C. Support				
Category-Sub:	1. Support	Operational Support			
Cost Center:	2100-0460.000 - Shared	Operational Support	L		
Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
Explanation:	Removing executive officer cos Section 706, as enacted by Ser from ratepayers any annual sal benefits).	nate Bill (SB) 901, w	hich prohibi	ts [SDG&E o	
2018	517	448	0	4.3	1-Sided Adj
Explanation:	Historical Adjustment for VMO	team temporarily at (Corporate		
2018 Total	75	444	0	3.4	
2010	20	0	0	0.1	1 Sided Adi
2019 Explanation:	20 Removing executive officer cos	0 ts as defined under	0 Resolution	0.1	1-Sided Adj
	Section 706, as enacted by Ser	nate Bill (SB) 901, w	hich prohibi	ts [SDG&E o	
2019	-1,203	-4	0	-0.2	1-Sided Adj
Explanation:	Removing executive officer cos Section 706, as enacted by Ser from ratepayers any annual sal benefits).	nate Bill (SB) 901, w	hich prohibi	ts [SDG&E o	
2019	0	-123	0	0.0	1-Sided Adj
Explanation:	One sided transfer out of affiliat	te (non-O&M) costs	to align with	actuals and	forecast
2019 Total	-1,183	-126	0	-0.1	
2020	0	-11	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related cos Catastrophic Event Memorandu	-	-		•
2020	-5	0	0	-0.1	1-Sided Adj
Explanation:	One sided transfer out of affiliat	te (non-O&M) costs	to align with	actuals and	forecast
2020	0	-174	0	0.0	CCTR Transf To 2100-4048.000
Explanation:	Transfer historical Noggin 2.0 c	osts from IT chapter	to Emerger		
2020	0	-8	0	0.0	1-Sided Adj
Explanation:	Removing executive officer cos Section 706, as enacted by Ser any annual salary, bonus, bene	ts as defined under nate Bill (SB) 901, w	Resolution I	E-4963 purs ts SDG&E, f	uant to Public Utilities Code rom recovering from ratepayers
2020 Total	-5	-193	0	-0.1	
2021	0	-8	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related cos Catastrophic Event Memorandu	ts that are anticipate	ed to be requ		•
2021	-3	0	0	-0.1	1-Sided Adj

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	C. Support
Category-Sub:	1. Support
Cost Center:	2100-0460.000 - Shared Operational Support

Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type	
Explanation:	Adjustment to remove non- recovered through a separa			71 Emissions	Strategy Program that are being	
2021	0	-2	0	0.0	1-Sided Adj	
Explanation:	Section 706, as enacted by	Senate Bill (SB)	901, which pro	hibits SDG8	oursuant to Public Utilities Code E, from recovering from ratepayers (compensation and benefits).	
2021	0	-89	0	0.0	CCTR Transf To 2100-0364.001	
Explanation:	Transfer spot cash awards	to AGCP team				
2021	0	-25	0	0.0	1-Sided Adj	
Explanation:	Removing Bill Debt OIR cos Account	sts that are anticip	ated to be rec	quested for re	ecovery through a non-GRC Memo	
2021	0	-349	0	0.0	1-Sided Adj	
Explanation:	Transfer Gartner from 2100	-0460.000 to 2100	0-3172.000 to	o align with o	rg structure beginning in 2022	
2021 Total	-3	-473	0	-0.1		

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	C. Support
Category-Sub:	1. Support
Cost Center:	2100-0460.000 - Shared Operational Support

RAMP Item # 1

RAMP Activity

RAMP Chapter: SDG&E-CFF-4 Foundational Technology Systems

RAMP Line Item ID: CFF 1 - CFF 9

RAMP Line Item Name: All Mitigations

Tranche(/s): Tranche1: N/A

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	828	828	828	828	18,890	24,138

Cost Estimate Changes from RAMP:

Notable change in forecast estimate from RAMP: Modeling all five RAMP mitigations (1 - 9) in eight workpapers; The RAMP range is the sum of ranges for all nine mitigations; The forecast reflects pre-allocation values while RAMP ranges reflect post-allocation values between SoCalGas and SDG&E.

GRC Work Unit/Activity Leve	I 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 FTE & no-single unit	19.80	20.50	21.20	21.90	0.00	0.00

Work Unit Changes from RAMP:

Units were not defined during RAMP filing. Labor can be identified with FTE units, and for non-labor there is no single unit defined. Numerical units in the boxes represent FTEs identified.

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	
RSE Changes from RAMP: Not Applicable			

Supplemental Workpapers for Workpaper 2100-0460.000

							2021						
Workpaper	Cost Center	2021 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology		
2100-0460.000	2100-3699	\$ 521,649	43%	53%	4%	0%	224,778	277,517	19,353	-	LAN ID w/o unreg		
	2100-3733	\$ 600,297	48%	50%	2%	0%	287,782	299,488	11,406	1,621	Weighted Average of cost centers under SVP		
	2100-3814	\$ 479,887	48%	49%	3%	0%	231,257	233,993	14,637	-	Weighted Average of cost centers under Director		
	2100-3935	\$ 1,809,369	56%	44%	0%	0%	1,017,770	791,599	-	-	Workload Distribution Study		
	2100-4030	\$ 272,933	73%	28%	0%	0%	197,876	75,057	-	-	Applications used for DevSecOps across both utilities		
	2100-4101	\$ 827,736	43%	53%	4%	0%	356,672	440,356	30,709	-	LAN ID w/o unreg		
Grand Total		4,511,870					2,316,136	2,118,009	76,104	1,621			
							51.33%	46.94%	1.69%	0.04%	2021 Weighted Average of 2100-0460.000		

							2022				
Workpaper	Cost Center	2022 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-0460.000	2100-3699	\$ 521,649	43%	53%	4%	0%	224,778	277,517	19,353	-	LAN ID w/o unreg
	2100-3733	\$ 600,297	48%	50%	2%	0%	287,782	299,488	11,406	1,621	Weighted Average of cost centers under SVP
	2100-3814	\$ 479,887	48%	49%	3%	0%	231,257	233,993	14,637	-	Weighted Average of cost centers under Director
	2100-3935	\$ 1,577,736	56%	44%	0%	0%	887,476	690,259	-	-	Workload Distribution Study
	2100-4030	\$ 272,933	73%	28%	0%	0%	197,876	75,057	-	-	Applications used for DevSecOps across both utilities
	2100-4101	\$ 827,736	43%	53%	4%	0%	356,672	440,356	30,709	-	LAN ID w/o unreg
Grand Total		4,280,237					2,185,842	2,016,670	76,104	1,621	
							51.07%	47.12%	1.78%	0.04%	2022 Weighted Average of 2100-0460.000

							2023				
Workpaper	Cost Center	2023 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-0460.000	2100-3699	\$ 521,649	43%	53%	4%	0%	224,778	277,517	19,353	-	LAN ID w/o unreg
	2100-3733	\$ 600,297	48%	50%	2%	0%	287,782	299,488	11,406	1,621	Weighted Average of cost centers under SVP
	2100-3814	\$ 479,887	48%	49%	3%	0%	231,257	233,993	14,637	-	Weighted Average of cost centers under Director
	2100-3935	\$ 1,661,736	56%	44%	0%	0%	934,726	727,009	-	-	Workload Distribution Study
	2100-4030	\$ 272,933	73%	28%	0%	0%	197,876	75,057	-	-	Applications used for DevSecOps across both utilities
	2100-4101	\$ 827,736	43%	53%	4%	0%	356,672	440,356	30,709	-	LAN ID w/o unreg
Grand Total		4,364,237					2,233,092	2,053,420	76,104	1,621	
							51.17%	47.05%	1.74%	0.04%	2023 Weighted Average of 2100-0460.000

							2024					
Workpaper	Cost Center	2024 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology	
2100-0460.000	2100-3699	\$ 521,649	43%	53%	4%	0%	224,778	277,517	19,353	-	LAN ID w/o unreg	
	2100-3733	\$ 600,297	48%	50%	2%	0%	287,782	299,488	11,406	1,621	Weighted Average of cost centers under SVP	
	2100-3814	\$ 479,887	48%	49%	3%	0%	231,257	233,993	14,637	-	Weighted Average of cost centers under Director	
	2100-3935	\$ 1,745,736	56%	44%	0%	0%	981,976	763,759	-	-	Workload Distribution Study	
	2100-4030	\$ 272,933	73%	28%	0%	0%	197,876	75,057	-	-	Applications used for DevSecOps across both utilities	
	2100-4101	\$ 827,736	43%	53%	4%	0%	356,672	440,356	30,709	-	LAN ID w/o unreg	
Grand Total		4,448,237					2,280,342	2,090,170	76,104	1,621		
							51.26%	46.99%	1.71%	0.04%	2024 Weighted Average of 2100-0460.000	

Beginning of Workpaper 2100-3172.000 - Shared Support

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	C. Support
Category-Sub	1. Support
Cost Center:	2100-3172.000 - Shared Support

Activity Description:

The shared SDG&E IT support costs represent labor and non-labor for technology systems where costs are shared between multiple business units and support all other company-specific activities. The types of services supported in this area include vendor management office, financial investment optimization, organizational change management, associate and intern program, training and development, portfolio management, and cloud transformation office.

Units were not previously defined. Labor can be identified with FTE units, and for non-labor there is no single unit defined. Numerical units below represent FTEs identified.

2021 = 45.9 2022 = 46.6 2023 = 47.3 2024 = 48.0

Forecast Explanations:

Labor - Base YR Rec

Historical costs have fluctuated between various workgroups as a result of either internal organizational changes, transfers of responsibilities, or shifting of cost drivers from one area of the IT department to another. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

Non-Labor - Base YR Rec

Historical costs, such as contractor services and cost of software and/or hardware, have fluctuated as a result of shifting cost drivers in the IT department. Therefore, base-year methodology is most appropriate because the base-year expenditures closely represent the future state of IT forecasts.

NSE - Base YR Rec

N/A

Summary of Results:

				In 2021\$ (00	0) Incurred (Costs					
		Adju	isted-Recor	ded		Ad	Adjusted-Forecast				
Years	2017	2018	2019	2020	2021	2022	2023	2024			
Labor	2,094	2,909	2,979	3,083	4,128	4,212	4,296	4,380			
Non-Labor	675	1,052	1,604	1,303	1,756	1,975	2,255	2,255			
NSE	0	0	0	0	0	0	0	0			
Total	2,769	3,960	4,583	4,386	5,884	6,187	6,551	6,635			
FTE	24.6	31.6	36.6	35.0	45.9	46.6	47.3	48.0			

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	C. Support
Category-Sub:	1. Support
Cost Center:	2100-3172.000 - Shared Support

Cost Center Allocations (Incurred Costs):

		2021 Adju:	sted-Reco	rded			2022 Adju	sted-Fore	ecast	
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	1	3	0	4	0.0	1	3	0	4	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	4,127	1,752	0	5,879	45.9	4,211	1,972	0	6,183	46.6
Total Incurred	4,128	1,755	0	5,883	45.9	4,212	1,975	0	6,187	46.6
% Allocation										
Retained	47.21%	47.21%				47.46%	47.46%			
SEU	49.79%	49.79%				49.58%	49.58%			
CORP	3.00%	3.00%				2.96%	2.96%			
Unreg	0.00%	0.00%				0.00%	0.00%			

		2023 Adju	sted-Fore	cast			2024 Adju	sted-Fore	cast	
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	1	3	0	4	0.0	1	3	0	4	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	4,295	2,252	0	6,547	47.3	4,379	2,252	0	6,631	48.0
Total Incurred	4,296	2,255	0	6,551	47.3	4,380	2,255	0	6,635	48.0
% Allocation										
Retained	47.71%	47.71%				47.95%	47.95%			
SEU	49.38%	49.38%				49.18%	49.18%			
CORP	2.91%	2.91%				2.87%	2.87%			
Unreg	0.00%	0.00%				0.00%	0.00%			

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2021

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2022

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2023

Allocations are based on a weighted average of all cost centers within the workpaper.

Cost Center Allocation Percentage for 2024

Allocations are based on a weighted average of all cost centers within the workpaper.

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	C. Support
Category-Sub:	1. Support
Cost Center:	2100-3172.000 - Shared Support

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs												
Forecas	t Method	Bas	se Foreca	st	Forecast Adjustments Adjusted-Forecast								
Years	S	2022	2023	2024	2022 2023 2024			2022	2023	2024			
Labor	Base YR Rec	4,128	4,128	4,128	84	168	252	4,212	4,296	4,380			
Non-Labor	Base YR Rec	1,756	1,756	1,756	220	500	500	1,976	2,256	2,256			
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0			
Tota	I	5,884	5,884	5,884	304	668	752	6,188	6,552	6,636			
FTE	Base YR Rec	45.9	45.9	45.9	0.7	1.4	2.1	46.6	47.3	48.0			

Forecast Adjustment Details:

<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>				
2022	84	0	0	84	0.7	1-Sided Adj				
Explanation:	Adding 1 internal Employee to support growing IT initiatives at 70% O&M									
2022	0	220	0	220	0.0	1-Sided Adj				
Explanation:	Increased Purchased S consulting, and vendor	•		ng initiatives,	organizational	change management				
2022 Total	84	220	0	304	0.7					
2023	168	0	0	168	1.4	1-Sided Adj				
Explanation:	Adding 1 additional inte	rnal Employee ((on top of 202	22) to suppor	t growing IT init	iatives at 70% O&M				
2023	0	500	0	500	0.0	1-Sided Adj				
Explanation:	Increased Purchased S consulting, and vendor	•		ng initiatives,	organizational	change management				
2023 Total	168	500	0	668	1.4					
2024	252	0	0	252	2.1	1-Sided Adj				
Explanation:	Adding 1 additional inte	rnal Employee ((on top of 202	23) to suppor	t growing IT init	iatives at 70% O&M				
2024	0	500	0	500	0.0	1-Sided Adj				
Explanation:	Increased Purchased S consulting, and vendor	-		ng initiatives,	organizational	change management				
2024 Total	252	500	0	752	2.1					

Note: Totals may include rounding differences. SDG&E/INFORMATION TECHNOLOGY/Exh No:SDG&E-25-WP/Witness: T. Ballard Page 82 of 88

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	C. Support
Category-Sub:	1. Support
Cost Center:	2100-3172.000 - Shared Support

Determination of Adjusted-Recorded (Incurred Costs):

otorinination of Aujuotou	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	1,655	1,660	2,469	2,596	3,589
Non-Labor	613	872	1,755	1,464	1,424
NSE	0	0	0	0	0
Total	2,268	2,532	4,223	4,060	5,013
FTE	21.1	21.4	31.5	30.3	39.2
djustments (Nominal \$) **					
Labor	-1	678	0	-4	0
Non-Labor	0	102	-235	-213	333
NSE	0	0	0	0	0
Total	-1	779	-235	-217	333
FTE	-0.1	5.7	0.0	-0.1	0.0
Recorded-Adjusted (Nomina	al \$)				
Labor	1,654	2,338	2,469	2,592	3,589
Non-Labor	613	973	1,520	1,251	1,756
NSE	0	0	0	0	0
Total	2,267	3,311	3,988	3,843	5,345
FTE	21.0	27.1	31.5	30.1	39.2
acation & Sick (Nominal \$)				
Labor	245	354	353	368	539
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	245	354	353	368	539
FTE	3.6	4.5	5.1	4.9	6.7
scalation to 2021\$					
Labor	194	216	157	123	0
Non-Labor	63	78	85	52	0
NSE	0	0	0	0	0
Total	257	295	242	175	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Consta	ant 2021\$)				
Labor	2,094	2,909	2,979	3,083	4,128
Non-Labor	675	1,052	1,604	1,303	1,756
NSE	0	0	0	0	0
Total	2,769	3,960	4,583	4,386	5,884
FTE	24.6	31.6	36.6	35.0	45.9

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments *Note: Totals may include rounding differences.*

Area:	INFORMATION TECHNOLOGY
Witness:	Tia L. Ballard
Category:	C. Support
Category-Sub:	1. Support
Cost Center:	2100-3172.000 - Shared Support

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs											
	Years	2017	2018	2019	2020	2021					
Labor		-0.943	678	0	-4	0					
Non-Labor		0	102	-235	-213	333					
NSE		0	0	0	0	0					
	Total	-0.943	779	-235	-217	333					
FTE		-0.1	5.7	0.0	-0.1	0.0					

Detail of Adjustments to Recorded:

Year	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2017	-1	0	0	-0.1	1-Sided Adj
Explanation:	Incremental costs that are ant Memorandum Account (CEM/	•	ested for recov	very through	a non-GRC Catastrophic Event
2017 Total	-1	0	0	-0.1	
2018	0	0	0	0.1	1-Sided Adj
Explanation:	Incremental costs that are ant Memorandum Account (CEM		ested for recov	very through	n a non-GRC Catastrophic Event
2018	677	102	0	5.6	1-Sided Adj
Explanation:	Historical Adjustment for VMC	team temporarily a	t Corporate		
2018 Total	678	102	0	5.7	
2019	0	-15	0	0.0	1-Sided Adj
Explanation:	One sided transfer out of affilia	ate (non-O&M) cost	s to align with	actuals and	d forecast
2019	0	-220	0	0.0	CCTR Transf To 2100-0207.000
Explanation:	Move Flexera maintenance to	appropriate workpa	aper (2100-02	07)	
2019 Total	0	-235	0	0.0	
2020	-4	-16	0	-0.1	1-Sided Adj
Explanation:	Incremental COVID-related co Catastrophic Event Memorand	•	•	uested for r	ecovery through a non-GRC
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	One sided transfer out of affilia	ate (non-O&M) cost	s to align with	actuals and	d forecast
2020	0	-196	0	0.0	CCTR Transf To 2100-4048.000
Explanation:	Transfer historical Noggin 2.0	costs from IT chapt	er to Emerge	ncy Plannin	g & Preparedness chapter
2020 Total	-4	-213	0	-0.1	

INFORMATION TECHNOLOGY
Tia L. Ballard
C. Support
1. Support
2100-3172.000 - Shared Support

<u>Year</u>	Labor	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	
2021	0	-17	0	0.0	1-Sided Adj	
Explanation:	Incremental COVID-related Catastrophic Event Memora		•	requested f	or recovery through a non-	GRC
2021	0	349	0	0.0	1-Sided Adj	
Explanation:	Transfer Gartner from 2100-	0460.000 to 2100	0-3172.000 to	o align with c	org structure beginning in 20)22
2021 Total	0	333	0	0.0		

Supplemental Workpapers for Workpaper 2100-3172.000

							2021				
Workpaper	Cost Center	2021 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-3172.000	2100-3317	\$ 988,069	43%	53%	4%	0%	425,759	525,653	36,657	-	LAN ID w/o unreg
	2100-3842	\$ 2,348,059	43%	53%	4%	0%	1,011,779	1,249,168	87,113	-	LAN ID w/o unreg
	2100-4031	\$ 1,405,526	63%	36%	0%	0%	891,559	510,966	3,001	-	Weighted Avg. of Dept. Allocations
	2100-4086	\$ 310,557	43%	53%	4%	0%	133,819	165,216	11,522	-	LAN ID w/o unreg
	2100-4087	\$ 446,538	43%	53%	4%	0%	192,413	237,558	16,567	-	LAN ID w/o unreg
	2100-4156	\$ 151,675	43%	53%	4%	0%	65,357	80,691	5,627	-	LAN ID w/o unreg
	2100-4159	\$ 233,949	43%	53%	4%	0%	100,809	124,461	8,679	-	LAN ID w/o unreg
Grand Total		5,884,373					2,821,494	2,893,713	169,166	-	
							47.95%	49.18%	2.87%	0.00%	2021 Weighted Average of 2100-3172.000

							2022				
Workpaper	Cost Center	2022 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-3172.000	2100-3317	\$ 1,138,069	43%	53%	4%	0%	490,394	605,453	42,222	-	LAN ID w/o unreg
	2100-3842	\$ 2,348,059	43%	53%	4%	0%	1,011,779	1,249,168	87,113	-	LAN ID w/o unreg
	2100-4031	\$ 1,489,526	63%	36%	0%	0%	944,842	541,504	3,180	-	Weighted Avg. of Dept. Allocations
	2100-4086	\$ 310,557	43%	53%	4%	0%	133,819	165,216	11,522	-	LAN ID w/o unreg
	2100-4087	\$ 516,538	43%	53%	4%	0%	222,576	274,798	19,164	-	LAN ID w/o unreg
	2100-4156	\$ 151,675	43%	53%	4%	0%	65,357	80,691	5,627	-	LAN ID w/o unreg
	2100-4159	\$ 233,949	43%	53%	4%	0%	100,809	124,461	8,679	-	LAN ID w/o unreg
Grand Total		6,188,373					2,969,575	3,041,290	177,507	-	
							47.99%	49.15%	2.87%	0.00%	6 2022 Weighted Average of 2100-3172.000

							2023				
Workpaper	Cost Center	2023 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
2100-3172.000	2100-3317	\$ 1,188,069	43%	53%	4%	0%	511,939	632,053	44,077	-	LAN ID w/o unreg
	2100-3842	\$ 2,348,059	43%	53%	4%	0%	1,011,779	1,249,168	87,113	-	LAN ID w/o unreg
	2100-4031	\$ 1,773,140	63%	36%	0%	0%	1,124,745	644,609	3,786	-	Weighted Avg. of Dept. Allocations
	2100-4086	\$ 310,557	43%	53%	4%	0%	133,819	165,216	11,522	-	LAN ID w/o unreg
	2100-4087	\$ 546,538	43%	53%	4%	0%	235,503	290,758	20,277	-	LAN ID w/o unreg
	2100-4156	\$ 151,675	43%	53%	4%	0%	65,357	80,691	5,627	-	LAN ID w/o unreg
	2100-4159	\$ 233,949	43%	53%	4%	0%	100,809	124,461	8,679	-	LAN ID w/o unreg
Grand Total		6,551,987					3,183,950	3,186,956	181,081	-	
							48.60%	48.64%	2.76%	0.00%	2023 Weighted Average of 2100-3172.000

							2024				
Workpaper	Cost Center	2024 Forecast	SDGE %	SCG %	Corp %	Unreg %	SDGE \$	SCG \$	CORP \$	UNREG \$	Methodology
100-3172.000	2100-3317	\$ 1,188,069	43%	53%	4%	0%	511,939	632,053	44,077	-	LAN ID w/o unreg
	2100-3842	\$ 2,348,059	43%	53%	4%	0%	1,011,779	1,249,168	87,113	-	LAN ID w/o unreg
	2100-4031	\$ 1,857,140	63%	36%	0%	0%	1,178,028	675,146	3,965	-	Weighted Avg. of Dept. Allocations
	2100-4086	\$ 310,557	43%	53%	4%	0%	133,819	165,216	11,522	-	LAN ID w/o unreg
	2100-4087	\$ 546,538	43%	53%	4%	0%	235,503	290,758	20,277	-	LAN ID w/o unreg
	2100-4156	\$ 151,675	43%	53%	4%	0%	65,357	80,691	5,627	-	LAN ID w/o unreg
	2100-4159	\$ 233,949	43%	53%	4%	0%	100,809	124,461	8,679	-	LAN ID w/o unreg
rand Total		6,635,987					3,237,234	3,217,493	181,260	-	
							48.78%	48.49%	2.73%	0.00%	2024 Weighted Average of 2100-3172.000

Area: INFORMATION TECHNOLOGY

Witness: Tia L. Ballard

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2100-0027	000	DIRECTOR CUSTOMER SERVICE & STAFF
2100-3078	000	SDG&E CUTOMER OPERATIONS SERVICES
2100-3081	000	SDGE CISCO SERVICE ORDER & FIN SUPPLY
2100-3084	000	CISCO BILLING & REVENUE
2100-3086	000	CUSTOMER ENGAGEMENT SERVICES
2100-3087	000	SDG&E APPLICATION SERVICES - DIR
2100-3094	000	ELECT OPS & SMART GRID
2100-3425	000	GAS MAPPING
2100-3502	000	IT SERVICE OPTIMIZATION
2100-3624	000	SDGE METER DATA SERVICES
2100-3647	000	PROJECT MANAGEMENT OFFICE FOR OPEX 20/20
2100-3697	000	GRID MODERNIZATION - PMO
2100-3772	000	ESS MOBILE APPS
2100-3803	000	SMART PRICING IT SERVICES
2100-3820	000	ESS MOBILE APPS
2100-3821	000	GIS STRATEGY & APP SUPPORT
2100-3823	000	IT APPLICATION SOUTH PMO
2100-3884	000	MANAGED SVC VOICE ENTERPRISE-SDGE
2100-3887	000	SDG&E APPS CONTRACTS
2100-3915	000	UTILITY OPS/FINCL CONTRACTS-SDGE
2100-3917	000	SDGE COMPUCOM CONTRACT SERVICE
2100-3920	000	IT&OTI CONTRACTS NSS
2100-3933	000	GIS & ARCHITECTURE-SDGE
2100-3956	000	MAINFRAME CONTRACTS SDG&E
2100-4079	000	SDGE HCL CONTRACT SERVICE
2100-4127	000	IT SDGE CONTRACTS - NSS
2100-4173	000	DIGITAL & CUSTOMER SW LICENSE
2100-4180	000	DW&A CONTRACTS NSS