Application of SOUTHERN CALIFORNIA GAS	
COMPANY for authority to update its gas)
revenue requirement and base rates)
effective January 1, 2024 (U 904-G)	

Application No. 22-05-015

Exhibit No.: (SCG-12-WP-R-E)

REVISED WORKPAPERS TO PREPARED DIRECT TESTIMONY OF ARMANDO INFANZON ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

ERRATA

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

MAY 2023



2024 General Rate Case - REVISED ERRATA INDEX OF WORKPAPERS

Exhibit SCG-12-WP-R-E - CLEAN ENERGY INNOVATIONS

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Southern California Gas Company 2024 GRC - REVISED ERRATA

Overall Summary For Exhibit No. SCG-12-WP-R-E

Area: Clean Energy Innovations

Witness: Armando Infanzon

Description
Non-Shared Services
Shared Services
Total

In 2021 \$ (000) Incurred Costs							
Adjusted-Recorded Adjusted-Forecast							
2021	2022	2023	2024				
28,461	29,555	30,598	47,223				
0	0	0	0				
28,461	29,555	30,598	47,223				

Area: Clean Energy Innovations

Witness: Armando Infanzon

Summary of Non-Shared Services Workpapers:

Description

A. Sustainability

B. Clean Fuels Infrastructure Development

C. Clean Energy Innovations Project

Management Office

D. Research Development and Demonstration

Total

In 2021 \$ (000) Incurred Costs									
Adjusted- Recorded	Adjusted-Forecast								
2021	2022	2022 2023 2024							
1,930	1,672	1,882	1,982						
8,195	10,528	11,016	20,400						
297	704	826	1,592						
18,039	16,651	16,874	23,249						
28,461	29,555	30,598	47,223						

Area: Clean Energy Innovations

Witness: Armando Infanzon
Category: A. Sustainability
Workpaper: 2RD003.000

Summary for Category: A. Sustainability

	In 2021\$ (000) Incurred Costs							
	Adjusted-Recorded		Adjusted-Forecast					
	2021	2022	2023	2024				
Labor	994	1,272	1,382	1,382				
Non-Labor	936	400	500	600				
NSE	0	0	0	0				
Total	1,930	1,672	1,882	1,982				
FTE	5.9	7.9	8.9	8.9				

Workpapers belonging to this Category:

2RD	003	000	Sust	aina	bility

Labor	994	1,272	1,382	1,382
Non-Labor	936	400	500	600
NSE	0	0	0	0
Total	1,930	1,672	1,882	1,982
FTE	5.9	7.9	8.9	8.9

Beginning of Workpaper 2RD003.000 - Sustainability

Area: Clean Energy Innovations

Witness: Armando Infanzon
Category: A. Sustainability
Category-Sub 1. Sustainability

Workpaper: 2RD003.000 - Sustainability

Activity Description:

The Sustainability function is responsible for long term strategy development and sustainability planning. It works across the organization to facilitate strategic road mapping, development of governance structures, and utilizes technology to efficiently and effectively track and report on sustainability initiatives and programs. The company's sustainability strategy, referred to as ASPIRE 2045, is an important driver of our operations, setting sustainable business priorities, goals to achieve its vision, and key performance indicators to track progress.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category for labor expenses is the base year method. Incremental adjustments to the base year were included to represent the expense requirements anticipated in TY 2024. This method is most appropriate because no historic costs exist for sustainability as the group was formed in January 2021. The only full year of cost data available is for calendar year 2021.

Non-Labor - Base YR Rec

The forecast method developed for this cost category for non-labor expenses is the base year method. Incremental adjustments to the base year were included to represent the expense requirements anticipated in TY 2024. This method is most appropriate because no historic costs exist for sustainability as the group was formed in January 2021. The only full year of cost data available is for calendar year 2021.

NSE - Base YR Rec

NA

Summary of Results:

		In 2021\$ (000) Incurred Costs							
		Adju	ısted-Recor	ded		Ad	justed-Fored	cast	
Years	2017	2018	2019	2020	2021	2022	2023	2024	
Labor	0	0	0	25	994	1,272	1,382	1,382	
Non-Labor	0	0	0	1	936	400	500	600	
NSE	0	0	0	0	0	0	0	0	
Total	0	0	0	26	1,930	1,672	1,882	1,982	
FTE	0.0	0.0	0.0	0.1	5.9	7.9	8.9	8.9	

Area: Clean Energy Innovations

Witness: Armando Infanzon
Category: A. Sustainability
Category-Sub: 1. Sustainability

Workpaper: 2RD003.000 - Sustainability

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs										
Forecas	Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years	s	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Labor	Base YR Rec	994	994	994	278	388	388	1,272	1,382	1,382	
Non-Labor	Base YR Rec	936	936	936	-536	-436	-336	400	500	600	
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0	
Tota	ıl	1,930	1,930	1,930	-258	-48	52	1,672	1,882	1,982	
FTE	Base YR Rec	5.9	5.9	5.9	2.0	3.0	3.0	7.9	8.9	8.9	

Forecast Adjustr	ment Details:						
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type	
2022	175	0	0	175	1.0	1-Sided Adj	
Explanation:	1 Sustainability Manage sustainability strategy th governance, and coordinates	rough develop	ment of proce	edures, contro	ols, internal con	nmunications,	
2022	0	-536	0	-536	0.0	1-Sided Adj	
Explanation:	This downward adjustme years, given a 2021 bas				21 that will not b	pe seen in the future	
2022	103	0	0	103	1.0	1-Sided Adj	
Explanation:	This is the full year effect expenses are 2 X \$103h	-	-	who were hi	red mid year in	2021. Estimated	
2022 Total	278	-536	0	-258	2.0		
2023	285	0	0	285	2.0	1-Sided Adj	
Explanation:	1 Sustainability Manage the ASPIRE 2045 sustai communications, govern \$175K = \$175K and 1 X	nability strateonance, and coo	gy through devordination acro	velopment of oss business	procedures, co	ntrols, internal	
2023	0	-436	0	-436	0.0	1-Sided Adj	
Explanation:	This downward adjustme years, given a 2021 bas				21 that will not b	pe seen in the future	
2023	103	0	0	103	1.0	1-Sided Adj	
Explanation:	This is the full year effect of the 2 Program Manager who were hired mid year in 2021. Estimated expenses are 2 X \$103K X 0.5 = \$103K.						
2023 Total	388	-436	0	-48	3.0		
2024	285	0	0	285	2.0	1-Sided Adj	
Explanation:	1 Sustainability Manage the ASPIRE 2045 sustai	•	_		• •		

\$175K = \$175K and 1 X \$110K = \$110K.

Note: Totals may include rounding differences.

SCG/Clean Energy Innovations/Exh No:SCG-12-WP-R-E/Witness: A. Infanzon

communications, governance, and coordination across business units. Estimated expenses are 1 X

Area: Clean Energy Innovations

Witness: Armando Infanzon
Category: A. Sustainability
Category-Sub: 1. Sustainability

Workpaper: 2RD003.000 - Sustainability

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj_Type			
2024	0	-336	0	-336	0.0	1-Sided Adj			
Explanation:	This downward adjustme years, given a 2021 bas				1 that will not b	pe seen in the future			
2024	103	0	0	103	1.0	1-Sided Adj			
Explanation:	Explanation: This is the full year effect of the 2 Program Manager who were hired mid year in 2021. Estimated expenses are 2 X \$103 X 0.5 = \$103K.								
2024 Total	388	-336	0	52	3.0				

Area: Clean Energy Innovations

Witness: Armando Infanzon
Category: A. Sustainability
Category-Sub: 1. Sustainability

Workpaper: 2RD003.000 - Sustainability

Determination of Adjusted-Recorded (Incurred Costs):

retermination of Aujusteu-i	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	21	845
Non-Labor	0	0	0	1	937
NSE	0	0	0	0	0
Total	0	0	0	22	1,783
FTE	0.0	0.0	0.0	0.1	5.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	-2
NSE	0	0	0	0	0
Total	0	0	0	0	-2
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nomina	nl \$)				
Labor	0	0	0	21	845
Non-Labor	0	0	0	1	936
NSE	0	0	0	0	0
Total	0	0	0	22	1,781
FTE	0.0	0.0	0.0	0.1	5.0
/acation & Sick (Nominal \$)					
Labor	0	0	0	4	149
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	4	149
FTE	0.0	0.0	0.0	0.0	0.9
Escalation to 2021\$					
Labor	0	0	0	1	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	1	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constar	nt 2021\$)				
Labor	0	0	0	25	994
Non-Labor	0	0	0	1	936
NSE	0	0	0	0	0
Total	0	0	0	26	1,930
FTE	0.0	0.0	0.0	0.1	5.9

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

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

Area: Clean Energy Innovations

Witness: Armando Infanzon
Category: A. Sustainability
Category-Sub: 1. Sustainability

Workpaper: 2RD003.000 - Sustainability

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs									
	Years	2017	2018	2019	2020	2021			
Labor		-0.130	-0.130	-0.130	-0.130	-0.130			
Non-Labor		0	0	0	-0.025	-2			
NSE		0	0	0	0	0			
	Total	-0.130	-0.130	-0.130	-0.155	-2			
FTE		0.0	0.0	0.0	0.0	0.0			

Detail of Adjustments to Recorded:

<u>Year</u>	Labo	<u>r NLb</u>	r <u>NSE</u>	<u>FTE</u>	Adj Type			
2017	0	0	0	0.0	1-Sided Adj			
Explanation:	Exclude labor expenses as other costs that have alread			•	e.4). This adjustment is in addition to bunting attributes.			
2017 Total	0	0	0	0.0				
2018	0	0	0	0.0	1-Sided Adj			
Explanation:	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.							
2018 Total	0	0	0	0.0				
2019	0	0	0	0.0	1-Sided Adj			
Explanation:	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.							
				•	3			
2019 Total	0	0	0	0.0	5			
2019 Total 2020	0	•		•	1-Sided Adj			
	0	0 d costs that are ar	0 nticipated to be	0.0				
2020	0 Incremental COVID-related	0 d costs that are ar randum Account (0 nticipated to be CEMA).	0.0	1-Sided Adj			
2020 Explanation:	0 Incremental COVID-related Catastrophic Event Memor	0 d costs that are ar randum Account (0 ssociated with lobb	0 nticipated to be CEMA). 0 bying activities	0.0 0.0 requested 0.0 (FERC 426	1-Sided Adj for recovery through a non-GRC 1-Sided Adj 6.4). This adjustment is in addition to			
2020 Explanation: 2020	Incremental COVID-relater Catastrophic Event Memor	0 d costs that are ar randum Account (0 ssociated with lobb dy been excluded	0 nticipated to be CEMA). 0 bying activities I based other s	0.0 0.0 requested 0.0 (FERC 426	1-Sided Adj for recovery through a non-GRC 1-Sided Adj 6.4). This adjustment is in addition to			
2020 Explanation: 2020 Explanation:	Incremental COVID-related Catastrophic Event Memor 0 Exclude labor expenses as other costs that have alread	0 d costs that are ar randum Account (0 ssociated with lobb dy been excluded	0 nticipated to be CEMA). 0 bying activities I based other s	0.0 0.0 requested 0.0 (FERC 426	1-Sided Adj for recovery through a non-GRC 1-Sided Adj 6.4). This adjustment is in addition to			
2020 Explanation: 2020 Explanation: 2020 Total	Incremental COVID-relater Catastrophic Event Memori Exclude labor expenses as other costs that have alrea	0 0 d costs that are arrandum Account (0 0 ssociated with lobble dy been excluded 0 0 -1 d costs that are ar	0 nticipated to be CEMA). 0 bying activities that based others 0 0 nticipated to be	0.0 0.0 requested 0.0 (FERC 426 pecific acco	1-Sided Adj for recovery through a non-GRC 1-Sided Adj i.4). This adjustment is in addition to bunting attributes.			

Area: Clean Energy Innovations

Witness: Armando Infanzon
Category: A. Sustainability
Category-Sub: 1. Sustainability

Workpaper: 2RD003.000 - Sustainability

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	NSE	<u>FTE</u>	Adj Type				
Explanation:	tion: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).								
	Catastrophic Event Memorandum Ac	Count (OLIVI	<i>^</i>).						
2021	0	0	0	0.0	1-Sided Adj				
Explanation:	Exclude labor expenses associated v		•	•	•				
	other costs that have already been excluded based other specific accounting attributes.								
2021 Total	0	-2	0	0.0					

In 2021\$ (000) Incurred Costs

2022

Adjusted-Forecast

2024

2023

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development

Workpaper: VARIOUS

Summary for Category: B. Clean Fuels Infrastructure Development

Adjusted-Recorded

2021

Labor	3,975	4,308	4,622	4,832
Non-Labor	4,220	6,220	6,394	15,568
NSE	0	0	0	0
Total	8,195	10,528	11,016	20,400
FTE	29.4	31.4	34.2	36.4
Workpapers belonging	to this Category:			
2RD000.000 Clean Fu	iels Infrastructure Developi	ment		
Labor	3,975	4,308	4,622	4,832
Non-Labor	4,220	6,220	6,394	6,413
NSE	0	0	0	0
Total	8,195	10,528	11,016	11,245
FTE	29.4	31.4	34.2	36.4
2RD000.001 Clean Fu	iels Infrastructure Developi	ment - RAMP		
Labor	0	0	0	0
Non-Labor	0	0	0	9,155
NSE	0	0	0	0
Total				9,155
FTE	0.0	0.0	0.0	0.0

Beginning of Workpaper 2RD000.000 - Clean Fuels Infrastructure Development

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.000 - Clean Fuels Infrastructure Development

Activity Description:

Clean Fuels Infrastructure Development supports the company's sustainability goals of developing a clean fuels infrastructure. Focus areas for various activities under the clean fuels' infrastructure development include Business Development, Clean Fuels Transportation Program, Clean Fuels Power Generation, RNG Infrastructure Development, Distributed Energy Resources, Market Research, Financial and Business Analytics.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category for labor expenses is the base year method. This method is most appropriate because trends, multi-year averages or other methods would not reflect the fact that Clean Energy Innovations is a newly formed organization that consolidates several pre-existing functions but also adds new functions not included in the predecessor organizations.

Non-Labor - Base YR Rec

The forecast method developed for this cost category for non-labor expenses is the base year method. This method is most appropriate because trends, multi-year averages or other methods would not reflect the fact that Clean Energy Innovations is a newly formed organization that consolidates several pre-existing functions but also adds new functions not included in the predecessor organizations.

NSE - Base YR Rec

NΑ

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adju	sted-Recor	Adjusted-Forecast						
Years	2017	2018	2019	2020	2021	2022	2023	2024		
Labor	2,309	2,515	2,659	3,705	3,975	4,308	4,622	4,832		
Non-Labor	1,342	1,224	1,287	7,151	4,220	6,220	6,394	6,413		
NSE	0	0	0	0	0	0	0	0		
Total	3,651	3,739	3,946	10,855	8,195	10,528	11,016	11,245		
FTE	17.2	18.0	18.7	26.5	29.4	31.4	34.2	36.4		

Clean Energy Innovations Area:

Witness: Armando Infanzon

B. Clean Fuels Infrastructure Development Category: Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.000 - Clean Fuels Infrastructure Development

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs									
Forecas	t Method	Base Forecast		Forec	ast Adjust	ments	Adjus	Adjusted-Forecast		
Years	s	2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	3,975	3,975	3,975	333	647	857	4,308	4,622	4,832
Non-Labor	Base YR Rec	4,220	4,220	4,220	2,000	2,174	2,193	6,220	6,394	6,413
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Tota	al .	8,195	8,195	8,195	2,333	2,821	3,050	10,528	11,016	11,245
FTE	Base YR Rec	29.4	29.4	29.4	2.0	4.8	7.0	31.4	34.2	36.4

				20		1.0 7.0	01.1			
orecast Adjustr	ment Details:									
<u>Year</u>	Labo	<u>r</u>	<u>NLbr</u>	NSE	<u>Total</u>	<u>FTE</u>	Adj Type			
2022	33	3	0	0	333	2.0	1-Sided Adj			
Explanation:	Development H	This is the full year effect of backfills for Commercial Development CCUS Manager, Commercial Development Hydrogen Manager, and Federal Accounts Manager. Estimated expenses are 2 X \$165K (0.90 = \$297K in 2022 and 1 X \$160K X 0.23 = \$36K in TY2024 and thereafter.								
2022		0	2,000	0	2,000	0.0	1-Sided Adj			
Explanation:	chain for the cle consulting servi energy resource opportunities in	This request is to continue with the assessment of the feasibility of addition component to the value chain for the clean fuel infrastructure and implementation of our strategy. This cost will support consulting services for market and technology assessment in the areas of hydrogen, distributed energy resources and RNG. The request is also a result of increased activities to capture funding opportunities in both state and federal levels; specifically, on the infrastructure build area. This estimate is based on historical data.								
2022 Total	33	3	2,000	0	2,333	2.0				
2023	9	0	11	0	101	0.8	1-Sided Adj			
Explanation:	externally. Offe fuels. All in sup and SB1339. N and/or education	1 Project Manager labor and non-labor to support clean fuels power generation projects internally and externally. Offer feasibility analysis of clean fuels power generation with intent to transition to clean fuels. All in support of SoCalGas ASPIRE goals and in direct alignment with SB 100, AB32, SB 1440 and SB 1339. Non-labor cost is to support administrative travel to customer visits, regulatory meetings, and/or educational forums. Estimated expenses are 1 X \$120K X 0.75 = \$90K. Non-Labor expenses are estimated to be \$15K X 0.75 = \$11K.								
2023		0	30	0	30	0.0	1-Sided Adj			
Explanation:	-						Fuels Power Generation ansitioning to clean			
2023	22	4	133	0	357	2.0	1-Sided Adj			
Explanation:	Clean Transpor Estimated expe	Project Managers labor and non-labor costs related to the development and management of new H2 Clean Transportation-related customer information, education and training products and services. Estimated expenses are 2 X \$112K = \$224K. Non-Labor is based on historical product and services expenses are estimated to be \$66.5K X 2 = \$133K.								
2023	33	3	0	0	333	2.0	1-Sided Adj			

Clean Energy Innovations

Area:

Witness: Armando Infanzon B. Clean Fuels Infrastructure Development Category: 1. Clean Fuels Infrastructure Development Category-Sub: 2RD000.000 - Clean Fuels Infrastructure Development Workpaper: NLbr **NSE Total FTE** Adj_Type **Year** <u>Labor</u> This is the full year effect of backfills for Commercial Development CCUS Manager, Commercial **Explanation:** Development Hydrogen Manager, and Federal Accounts Manager. Estimated expenses are 2 X \$165K X 0.90 = \$297K in 2022 and 1 X \$160K X 0.23 = \$36K in TY2024 and thereafter. 2023 2.000 2.000 0.0 1-Sided Adj **Explanation:** This request is to continue with the assessment of the feasibility of addition component to the value chain for the clean fuel infrastructure and implementation of our strategy. This cost will support consulting services for market and technology assessment in the areas of hydrogen, distributed energy resources and RNG. The request is also a result of increased activities to capture funding opportunities in both state and federal levels; specifically, on the infrastructure build area. This estimate is based on historical data. 2023 Total 647 2,174 2,821 4.8 2024 240 30 0 270 2.0 1-Sided Adj **Explanation:** 2 Project Managers labor and non-labor to support clean fuels power generation projects internally and externally. Offer feasibility analysis of clean fuels power generation with intent to transition to clean fuels. All in support of SoCalGas ASPIRE goals and in direct alignment with SB100, AB32, SB1440 and SB1339. Non-labor cost are to support administrative travel to customer visits, regulatory meetings, and/or educational forums. Estimated expenses are 2 X \$120 = \$240K. Non-Labor expenses are estimated to be \$15K X 2 = \$30K. 2024 60 0 60 1.0 1-Sided Adj **Explanation:** 1 Administrative support labor will be added beginning of 2024 to provide research, data gathering, financial record, document review, and other administrative support related to clean fuel power generation projects from the DER Strategy and Outreach team. Estimated expenses are 1 X \$60K = \$60K. 2024 30 0 30 0.0 1-Sided Adj **Explanation:** Non-labor request is for the enhancement and ongoing maintenance of Clean Fuels Power Generation feasibility tool, outreach and education to clean power generation customers transitioning to clean fuels. 224 2024 133 357 2.0 1-Sided Adj **Explanation:** 2 Project Managers labor and non-labor costs related to the development and management of new H2 Clean Transportation-related customer information, education and training products and services. Estimated expenses are 2 X \$112K = \$224K. Non-Labor is based on historical product and services

X 0.90 = \$297K in 2022 and 1 X \$160K X 0.23 = \$36K in TY2024 and thereafter.

expenses are estimated to be \$66.5K X 2 = \$133K.

2,000

333

0

Note: Totals may include rounding differences.

2024

2024

Explanation:

This is the full year effect of backfills for Commercial Development CCUS Manager, Commercial Development Hydrogen Manager, and Federal Accounts Manager. Estimated expenses are 2 X \$165K

333

2,000

2.0

0.0

1-Sided Adj

1-Sided Adj

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.000 - Clean Fuels Infrastructure Development

<u>Year</u> **Labor** NLbr **NSE Total FTE** Adj_Type This request is to continue with the assessment of the feasibility of addition component to the value **Explanation:** chain for the clean fuel infrastructure and implementation of our strategy. This cost will support consulting services for market and technology assessment in the areas of hydrogen, distributed energy resources and RNG. The request is also a result of increased activities to capture funding opportunities in both state and federal levels; specifically, on the infrastructure build area. This estimate is based on historical data. 2024 Total 857 2,193 3,050 7.0

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.000 - Clean Fuels Infrastructure Development

Determination of Adjusted-Recorded (Incurred Costs):

Determination of Aujusteu-	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	2,203	2,270	2,303	3,059	3,652
Non-Labor	1,395	1,313	1,293	3,267	6,170
NSE	0	0	0	0	0
Total	3,598	3,583	3,596	6,326	9,822
FTE	18.1	18.1	17.4	22.2	26.2
Adjustments (Nominal \$) **					
Labor	-433	-293	-187	0	-273
Non-Labor	-203	-191	-93	3,376	-1,950
NSE	0	0	0	0	0
Total	-636	-483	-280	3,376	-2,223
FTE	-3.5	-2.8	-1.8	0.0	-1.4
Recorded-Adjusted (Nomina	al \$)				
Labor	1,770	1,977	2,116	3,059	3,379
Non-Labor	1,192	1,123	1,200	6,643	4,220
NSE	0	0	0	0	0
Total	2,963	3,100	3,317	9,702	7,599
FTE	14.6	15.3	15.6	22.2	24.8
/acation & Sick (Nominal \$)					
Labor	300	340	401	539	596
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	300	340	401	539	596
FTE	2.6	2.7	3.1	4.3	4.6
scalation to 2021\$					
Labor	239	198	141	107	0
Non-Labor	149	102	86	508	0
NSE	0	0	0	0	0
Total	388	300	228	615	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Consta	nt 2021\$)				
Labor	2,309	2,515	2,659	3,705	3,975
Non-Labor	1,342	1,224	1,287	7,151	4,220
NSE	0	0	0	0	0
Total	3,651	3,739	3,946	10,855	8,195
FTE	17.2	18.0	18.7	26.5	29.4

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

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

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.000 - Clean Fuels Infrastructure Development

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs									
	Years	2017	2018	2019	2020	2021			
Labor	-	-433	-293	-187	-0.258	-273			
Non-Labor		-203	-191	-93	3,376	-1,950			
NSE		0	0	0	0	0			
	Total –	-636	-483	-280	3,376	-2,223			
FTE		-3.5	-2.8	-1.8	0.0	-1.4			

Detail of Adjustments to Recorded:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type				
2017	0	-40	0	0.0	1-Sided Adj				
Explanation:	•	One-sided adjustment to remove costs, not being requested in the TY 2024 GRC, and being tracked in a separate regulatory account for recovery in a separate regulatory proceeding.							
2017	-198	-22	0	-1.2	CCTR Transf To 2200-2408.000				
Explanation:	Transfer labor and non-labor expense associated with Greenhouse Gas Manager and Project Manager positions from 2200-2559 in work group 2RD000 Business Development to cost center 2200-2408 in work group 2IN004.000 CES Customer Experience in order to align historical costs with workgroup in which the activity will be forecasted.								
2017	0	-10	0	0.0	1-Sided Adj				
Explanation:	Exclude non-labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.								
2017	-235	-117	0	-2.3	CCTR Transf To 2200-0248.000				
Explanation:	Transfer labor and non-labor expe Business Development to cost ce align historical costs with workgro	nter 2200-0248 i	n work grou	p 2IN004.000	Clean Transportation in order to				
2017	0	0	0	0.0	1-Sided Adj				
Explanation:	Pursuant to CPUC decision 12-12	2-037 Compressi	on Service T	Tariff activities	s are excluded from base rates.				
2017	0	-4	0	0.0	1-Sided Adj				
Explanation:	Exclude non-labor expenses assot to other costs that have already b			•	, , , , , , , , , , , , , , , , , , ,				
2017	0	0	0	0.0	1-Sided Adj				
Explanation:	Exclude labor expenses associate other costs that have already bee		•	,	•				
2017	0	0	0	0.0	1-Sided Adj				
Explanation:	Exclude labor expenses associate other costs that have already bee		•	,	•				

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.000 - Clean Fuels Infrastructure Development

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<u>Year</u>	<u>.</u>	<u>abor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type		
2017		0	-10	0	0.0	1-Sided Adj		
Explanation:	Exclude non-labor exto other costs that ha	•	-	-	•). This adjustment is in addition ng attributes.		
2017 Total		-433	-203	0	-3.5			
2018		0	-6	0	0.0	1-Sided Adj		
Explanation:	Exclude non-labor exto other costs that ha	•	-	-	•). This adjustment is in addition ng attributes.		
2018		0	-5	0	0.0	CCTR Transf To 2100-3893.000		
Explanation:	Transfer non-labor expense associated with an industry subscription from 2200-2229 in work group 2RD000.000 Business Development to cost center 2100-3893 in work group 1DD002.000 Advance Technology Integration in order to align historical costs with workgroup in which the activity will be forecasted.							
2018		0	-5	0	0.0	CCTR Transf To 2100-3910.000		
Explanation:	Transfer non-labor expense associated with an industry subscription from 2200-2229 in work group 2RD000.000 Business Development to cost center 2100-3910 in work group 1AG010.000 Strategic Planning in order to align historical costs with workgroup in which the activity will be forecasted.							
2018		-292	-136	0	-2.8	CCTR Transf To 2200-0248.000		
Explanation:		ent to cost center	2200-0248 in	work group	2IN004.000 (n work group 2RD000.000 Clean Transportation in order to		
2018		0	-1	0	0.0	CCTR Transf To 2200-8000.002		
Explanation:	2RD000.000 Busines	ss Development	to cost center	2200-8000	.002 in work g	0-2614 in work group roup 2CP000.001 Human workgroup in which the activity		
2018		0	-38	0	0.0	1-Sided Adj		
Explanation:	Pursuant to CPUC de	ecision 12-12-037	7 Compressio	n Service Ta	ariff activities a	are excluded from base rates.		
2018		0	0	0	0.0	1-Sided Adj		
Explanation:	Exclude labor expensions other costs that have					nis adjustment is in addition to attributes.		
2018		0	0	0	0.0	1-Sided Adj		
Explanation:	Exclude labor expensions other costs that have			•	,	nis adjustment is in addition to attributes.		
2018 Total		-293	-191	0	-2.8			

Note: Totals may include rounding differences.

0

2019

0

0.0

1-Sided Adj

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Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.000 - Clean Fuels Infrastructure Development

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<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	NSE	<u>FTE</u>	Adj Type			
Explanation:	One-sided adjustment to remove co separate regulatory account for reco	_			-			
2019	-187	-57	0	-1.8	CCTR Transf To 2200-0248.000			
Explanation:	Transfer labor and non-labor expense associated with AEs from 2200-2560 in work group 2RD000.000 Business Development to cost center 2200-0248 in work group 2IN004.000 Clean Transportation in order to align historical costs with workgroup in which the activity will be forecasted.							
2019	0	-10	0	0.0	1-Sided Adj			
Explanation:	One-sided adjustment to remove co TY 2024 GRC, and being tracked in proceeding.				- ·			
2019	0	15	0	0.0	CCTR Transf To 2200-8000.002			
Explanation:	Transfer non-labor expense associa 2RD000.000 Business Developmen Resources, Disability, & Workers Cowill be forecasted.	t to cost center	er 2200-8000	.002 in work	group 2CP000.001 Human			
2019	0	-34	0	0.0	CCTR Transf To 2200-0229.000			
Explanation:	Transfer non-labor expense associated 2RD000.000 Business Development Solutions in order to align historical	t to cost center	er 2200-0229	in work gro	up 2IN004.000 Customer Energy			
2019	0	-6	0	0.0	1-Sided Adj			
xplanation:	Pursuant to CPUC decision 12-12-0	37 Compressi	on Service Ta	ariff activities	s are excluded from base rates.			
2019	0	0	0	0.0	1-Sided Adj			
Explanation:	Exclude labor expenses associated other costs that have already been		•	•	-			
2019	0	29	0	0.0	CCTR Transf To 2200-8000.002			
Explanation:	Transfer non-labor expense associa 2RD000.000 Business Developmen Resources, Disability, & Workers Cowill be forecasted.	t to cost cente	er 2200-8000	.002 in work	group 2CP000.001 Human			
2019	0	0	0	0.0	1-Sided Adj			
Explanation:	Exclude labor expenses associated other costs that have already been		•	,	•			
2019 Total	-187	-93	0	-1.8				
2020	0	-2	0	0.0	1-Sided Adj			
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	-	-	uested for re	ecovery through a non-GRC			
2020	0	-1	0	0.0	1-Sided Adj			

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.000 - Clean Fuels Infrastructure Development

workpaper.	2ND000.000 - Clean i dels illi	irastructure De	relopinent		
<u>Year</u>	Labor	NLbr	NSE	<u>FTE</u>	Adj Type
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	ed to be req		
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	covery through a non-GRC
2020	0	0	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	•	uested for re	covery through a non-GRC
2020	0	-3	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	covery through a non-GRC
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	covery through a non-GRC
2020	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	covery through a non-GRC
2020	0	-3	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	covery through a non-GRC
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	covery through a non-GRC
2020	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	covery through a non-GRC
2020	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	•	uested for re	covery through a non-GRC
2020	0	3,400	0	0.0	CCTR Transf From 2200-2318.000
Explanation:	2HR001 to 2RD000. Transfer consi Innovations CC 2200-2614 (\$3.4M)	ulting fees to B	susiness Stra	ategy and De	evelopment-Clean Energy
2020	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related costs th Catastrophic Event Memorandum A	•	-	uested for re	covery through a non-GRC
2020	0	-1	0	0.0	1-Sided Adj

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.000 - Clean Fuels Infrastructure Development

planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2020	<u>Year</u>	Labor	NLbr	NSE	<u>FTE</u>	Adj Type
Catastrophic Event Memorandum Account (CEMA). 2020						
planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2020	Apidilationi		-			oovery amongs a non-on-on-o
Catastrophic Event Memorandum Account (CEMA). 2020	2020	0	-1	0	0.0	1-Sided Adj
planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2020 0 0 0 0 0 1-Sided Adj Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes. 2020 0 -2 0 0.0 1-Sided Adj Exclude labor and non-labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes. 2020 Total 0 3,376 0 0.0 2021 0 -1 0 0.0 1-Sided Adj Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 10 0 0 0 0.0 CCTR Transf From 2200-2318.00 2021 0 10 0 0 0.0 CCTR Transf From 2200-2318.00 2021 0 10 0 0 0.0 CCTR Transf From 2200-2318.00 2021 0 10 0 0 0 0.0 SCTR Transf From 2200-2318.00 2021 0 1 0 0 0 0 0.0 SCTR Transf From 2200-2318.00 2021 0 0 1 0 0.0 SCTR Transf From 2200-2318.00 2021 0 0 1 0 0.0 SCTR Transf From 2200-2318.00 2021 0 0 1 0 0.0 SCTR Transf From 2200-2318.00 2021 0 0 1 0 0.0 SCTR Transf From 2200-2318.00 2021 0 0 1 Sided Adj 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 SCTR Transf From 2200-2318.00 2021 0 0 0 0 0.0 SCTR Transf From 2200-2318.00 2021 0 0 0 0 0.0 SCTR Transf From 2200-2318.00 2021 0 0 SCTR Transf From 2200-2318.00 2021 0 0 SCTR Transf From 2200-2318.00 2021 0 0 SCTR Transf From 2200-2318.00 2021 S	xplanation:		-		uested for re	covery through a non-GRC
Catastrophic Event Memorandum Account (CEMA). 2020 0 0 0 0 0.0 1-Sided Adj Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes. 2020 0 -2 0 0.0 1-Sided Adj Planation: Exclude labor and non-labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes. 2020 Total 0 3,376 0 0.0 2021 0 -1 0 0.0 1-Sided Adj Planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 100 0 0.0 CCTR Transf From 2200-2318.00 planation: Planation	2020	0	-1	0	0.0	1-Sided Adj
planation: Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes. 2020 0 -2 0 0.0 1-Sided Adj Planation: Exclude labor and non-labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes. 2020 Total 0 3,376 0 0.0 2021 0 -1 0 0.0 1-Sided Adj Planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 100 0 0.0 CCTR Transf From 2200-2318.00 Planation: Planation: Planation: Description of the planation: Planation: Planation: Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj 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 0.0 1-Sided Adj 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 0.0 1-Sided Adj Planation: 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 Planation: 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 Planation: 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 Planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).	explanation:		•		uested for re	covery through a non-GRC
other costs that have already been excluded based other specific accounting attributes. 2020 0 0 -2 0 0.0 1-Sided Adj planation: Exclude labor and non-labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes. 2020 Total 0 3,376 0 0.0 2021 0 0 -1 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 100 0 0.0 CCTR Transf From 2200-2318.00 planation: Planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj planation: 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 0.0 1-Sided Adj planation: 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 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 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 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 Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).	2020	0	0	0	0.0	1-Sided Adj
planation: Exclude labor and non-labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes. 2020 Total 0 3,376 0 0.0 2021 0 -1 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 100 0 0.0 CCTR Transf From 2200-2318.00 planation: 2HR001 to 2RD000. Transfer consulting fees to Business Strategy and Development-Clean Energy Innovations CC 2200-2614 (\$100K). 2021 0 -1 0 0.0 1-Sided Adj planation: 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 planation: 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 planation: 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 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).	Explanation:	-		•		-
in addition to other costs that have already been excluded based other specific accounting attributes. 2020 Total 0 3,376 0 0.0 2021 0 -1 0 0.0 1-Sided Adj Planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 100 0 0.0 CCTR Transf From 2200-2318.00 Planation: 2HR001 to 2RD000. Transfer consulting fees to Business Strategy and Development-Clean Energy Innovations CC 2200-2614 (\$100K). 2021 0 -1 0 0.0 1-Sided Adj Planation: 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 0.0 1-Sided Adj Planation: 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 Planation: 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 Planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj Planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj Planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).	2020	0	-2	0	0.0	1-Sided Adj
planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 100 0 0.0 CCTR Transf From 2200-2318.00 planation: 2HR001 to 2RD000. Transfer consulting fees to Business Strategy and Development-Clean Energy Innovations CC 2200-2614 (\$100K). 2021 0 -1 0 0.0 1-Sided Adj planation: 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 0.0 1-Sided Adj planation: 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 planation: 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 planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).	Explanation:	·		,	•	, ,
planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 100 0 0.0 CCTR Transf From 2200-2318.00 planation: 2HR001 to 2RD000. Transfer consulting fees to Business Strategy and Development-Clean Energy Innovations CC 2200-2614 (\$100K). 2021 0 -1 0 0.0 1-Sided Adj planation: 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 planation: 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 0.0 1-Sided Adj planation: 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 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).	2020 Total	0	3,376	0	0.0	
Catastrophic Event Memorandum Account (CEMA). 2021 0 100 0 0.0 CCTR Transf From 2200-2318.00 planation: 2HR001 to 2RD000. Transfer consulting fees to Business Strategy and Development-Clean Energy Innovations CC 2200-2614 (\$100K). 2021 0 -1 0 0.0 1-Sided Adj planation: 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 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 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 1-Sided Adj Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).	2021	0	-1	0	0.0	1-Sided Adj
Planation: 2HR001 to 2RD000. Transfer consulting fees to Business Strategy and Development-Clean Energy Innovations CC 2200-2614 (\$100K). 2021 0 -1 0 0.0 1-Sided Adj Planation: 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 Planation: 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 Planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj Planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj Planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj Planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).	Explanation:		•	-	uested for re	covery through a non-GRC
Innovations CC 2200-2614 (\$100K). 2021 0 -1 0 0.0 1-Sided Adj planation: 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 planation: 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 planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).	2021	0	100	0	0.0	CCTR Transf From 2200-2318.000
planation: 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 planation: 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 planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).	xplanation:		-	Business Stra	ategy and De	evelopment-Clean Energy
Catastrophic Event Memorandum Account (CEMA). 2021 0 0 0 0 0.0 1-Sided Adj planation: 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 planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).	2021	0	-1	0	0.0	1-Sided Adj
planation: 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 planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC	Explanation:		-		uested for re	covery through a non-GRC
Catastrophic Event Memorandum Account (CEMA). 2021 0 0 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC	2021	0	0	0	0.0	1-Sided Adj
planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC	Explanation:		•	-	uested for re	covery through a non-GRC
Catastrophic Event Memorandum Account (CEMA). 2021 0 -2 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC	2021	0	0	0	0.0	1-Sided Adj
planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC	Explanation:		•		uested for re	covery through a non-GRC
Catastrophic Event Memorandum Account (CEMA). 2021 0 -1 0 0.0 1-Sided Adj planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC	2021	0	-2	0	0.0	1-Sided Adj
planation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC	xplanation:				uested for re	covery through a non-GRC
	2021	0	-1	0	0.0	1-Sided Adj
Catastrophic Event Memorandum Account (CEMA).	Explanation:				uested for re	covery through a non-GRC

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.000 - Clean Fuels Infrastructure Development

Vorkpaper:	2RD000.000 - Clean Fu	els Infrastructure De	evelopment		
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type
2021	0	-1	0	0.0	1-Sided Adj
xplanation:	Incremental COVID-related co Catastrophic Event Memorano	•		uested for re	covery through a non-GRC
2021	0	-3	0	0.0	1-Sided Adj
explanation:	Incremental COVID-related co Catastrophic Event Memorano	· ·		uested for re	covery through a non-GRC
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related co Catastrophic Event Memorano	•		uested for re	covery through a non-GRC
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related co Catastrophic Event Memorano	•		uested for re	covery through a non-GRC
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related co Catastrophic Event Memorano	•		uested for re	covery through a non-GRC
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related co Catastrophic Event Memorano	•		uested for re	covery through a non-GRC
2021	0	-1	0	0.0	1-Sided Adj
xplanation:	Incremental COVID-related co Catastrophic Event Memorano	•		uested for re	covery through a non-GRC
2021	0	-1	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related co Catastrophic Event Memorano	•		uested for re	covery through a non-GRC
2021	0	-2	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-related co Catastrophic Event Memorano	· ·		uested for re	covery through a non-GRC
2021	0	-28	0	0.0	1-Sided Adj
Explanation:	Exclusion - Refundable Energ	y Efficiency progran	n (Emerging	Technologies), which has its own proceedings
2021	0	-2	0	0.0	1-Sided Adj
xplanation:	Biogas Conditioning Service T	ariff activities are ex	cluded from	base rates.	
2021	-147	0	0	-0.8	1-Sided Adj
Explanation:	Transfer labor (FTE) costs ass Development workpaper to 2F paper to align functions where	RD002.000 Clean E	nergy Innova	tions Project	000 Clean Fuels Infrastructure Management Office (PMO)work
2021	-97	0	0	-0.8	1-Sided Adj
	av include rounding differences				•

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.000 - Clean Fuels Infrastructure Development

Year	Labor NL	br NSE	FTE	Adj Type				
Explanation:	Transfer labor (FTE) costs associated with the project manager role from 2RD000.000 Clean Fuels Infrastructure Development workpaper to 2RD002.000 Clean Energy Innovations Project Management Office (PMO)work paper to align functions where they reside and will be forecast.							
2021	-5	-4 0	0.1 1-	-Sided Adj				
Explanation:	Fuels Infrastructure Development workpa	Transfer labor (FTE) and non-labor costs associated with the project manager role from 2RD000.000 Clean Fuels Infrastructure Development workpaper to 2RD002.000 Clean Energy Innovations Project Management Office (PMO)work paper to align functions where they reside and will be forecast.						
2021	0 -2,0	00 0	0.0 1-	-Sided Adj				
Explanation:	Excluding below the line expense.							
2021	0	0 0	0.0 1-	-Sided Adj				
Explanation:	Exclude labor expenses associated with lead the costs that have already been exclude	• • •	,	•				
2021	-24	0 0	0.1 1-	-Sided Adj				
Explanation:	Exclude labor / non-labor expenses associated with lobbying activities (FERC 426.4) and other advocacy related activities. This adjustment is in addition to other costs that have already been excluded based on other specific accounting attributes.							
2021 Total	l -273 -1,9	50 0	-1.4					

Beginning of Workpaper 2RD000.001 - Clean Fuels Infrastructure Development - RAMP

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.001 - Clean Fuels Infrastructure Development - RAMP

Activity Description:

Clean Fuels Infrastructure Development supports the company's sustainability goals of developing a clean fuels infrastructure. Focus areas for various activities under the clean fuels' infrastructure development include Carbon Management Front End Engineering and Design Study, and Clean Fuels Operational Readiness Program.

The RAMP activities include CO2 pipeline FEED study evaluation to explore the development of CO2 pipeline transport infrastructure necessary to enable the deployment of carbon capture, utilization, and storage technologies in Southern California. Includes development of a final scope, design, and technical specifications for the CO2 pipeline as a precursor to the evaluation of the project's capital investment estimates. The RAMP activities also include assessment of the current infrastructure for operational readiness, identifying gaps in technological, material, operational, safety, workforce, and training standards. Includes identification of risk drivers and mitigation strategies to address clean fuels system resiliency.

Forecast Explanations:

Labor - Base YR Rec

No request for labor.

Non-Labor - Base YR Rec

The forecast method developed for this cost category for non-labor expenses is the base year method. This method is most appropriate because trends, multi-year averages or other methods would not reflect the fact that Clean Energy Innovations is a newly formed organization that consolidates several pre-existing functions but also adds new functions not included in the predecessor organizations.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adju	ısted-Recor	Adjusted-Forecast						
Years	2017	2018	2019	2020	2021	2022	2023	2024		
Labor	0	0	0	0	0	0	0	0		
Non-Labor	0	0	0	0	0	0	0	9,155		
NSE	0	0	0	0	0	0	0	0		
Total	0	0	0	0	0	0	0	9,155		
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.001 - Clean Fuels Infrastructure Development - RAMP

Summary of Adjustments to Forecast:

	In 2021 \$(000) Incurred Costs									
Forecast	Method	Bas	se Foreca	st	Forec	ast Adjust	ments	Adjusted-Forecast		
Years	3	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	0	0	0	0	0	9,155	0	0	9,155
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Tota	I	0	0	0	0	0	9,155	0	0	9,155
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:

Forecast Adjustment Details:									
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type			
2022 Total	0	0	0	0	0.0				
2023 Total	0	0	0	0	0.0				
2024	0	6,655	0	6,655	0.0	1-Sided Adj			
Explanation:	The request of \$6.6M is for Carbon Management System and the cost drivers are related to the FEED study are primarily dependent on two aspects: 1) the level of engineering and design involved in this initial stage, and 2) the overall scope of the project considered.								
2024	0	2,500	0	2,500	0.0	1-Sided Adj			
Explanation:	The request of \$2.5 million is to support the activities related to Clean Fuels Operational Readiness Program. Which include assessment of the current infrastructure for operational readiness, identifying gaps in technological, material, operational, safety, workforce, and training standards, etc.								
2024 Total	0	9,155	0	9,155	0.0				

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.001 - Clean Fuels Infrastructure Development - RAMP

Determination of Adjusted-Recorded (Incurred Costs):

retermination of Aujusteu-Re	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal S	\$)				
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
/acation & Sick (Nominal \$)					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Escalation to 2021\$					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant	2021\$)				
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0

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

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

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.001 - Clean Fuels Infrastructure Development - RAMP

Summary of Adjustments to Recorded:

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

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

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.001 - Clean Fuels Infrastructure Development - RAMP

RAMP Item # 1

RAMP Activity

RAMP Chapter: SCG-CFF-2 Energy Resilience

RAMP Line Item ID: NEW

RAMP Line Item Name: Operational Readiness and Carbon Management Feed Study

Tranche(/s): Tranche1: N/A; Tranche2: N/A

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inc	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	0	0	2,500	0	0
Tranche 2 Cost Estimate	0	0	0	6,655	0	0
Cost Estimate Changes fro A forecast for this activity wa		P.				

GRC Work Unit/Activity Level Estimates										
Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RA Range Act Low					
Tranche 1 # of Program	0.00	0.00	0.00	1.00	0.00	0.00				
Tranche 2 # of Study	0.00	0.00	0.00	1.00	0.00	0.00				
Work Unit Changes from RAMP: A forecast for this activity was not provided in RAMP.										

isk Spend Efficiency (RSE)		
	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000
Tranche 2	0.000	0.000

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: B. Clean Fuels Infrastructure Development
Category-Sub: 1. Clean Fuels Infrastructure Development

Workpaper: 2RD000.001 - Clean Fuels Infrastructure Development - RAMP

RAMP Item # 2

RAMP Activity

RAMP Chapter: SCG-CFF-2 Energy Resilience

RAMP Line Item ID: NEW

RAMP Line Item Name: Operational Readiness and Carbon Management Feed Study

Tranche(/s): Tranche1: N/A; Tranche2: N/A

GRC Forecast Cost Estimates (\$000)

	2021 Historical Embedded Cost	2022 Forecast	2023 Forecast	2024 Forecast	2024 RAMP R (2020 Inci	ange
	(2021 \$)	(2021 \$)	(2021 \$)	(2021 \$)	Low	High
Tranche 1 Cost Estimate	0	0	0	2,500	0	0
Tranche 2 Cost Estimate	0	0	0	6,655	0	0
Cost Estimate Changes fro A forecast for this activity wa		P				

GRC Work Unit/Activity Lev	rel Estimates					
Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RA Range Act Low	
Tranche 1 # of Program	0.00	0.00	0.00	1.00	0.00	0.00
Tranche 2 # of Study	0.00	0.00	0.00	1.00	0.00	0.00
Work Unit Changes from RA	AMP:					

A forecast for this activity was not provided in RAMP.

Risk Spend Efficiency (RSE)			
	GRC RSE	RAMP RSE	
Tranche 1	0.000	0.000	
Tranche 2	0.000	0.000	
RSE Changes from RAMP: N/A			

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: C. Clean Energy Innovations Project Management Office

Workpaper: 2RD002.000

Summary for Category: C. Clean Energy Innovations Project Management Office

		In 2021\$ (000) Incurred Costs								
	Adjusted-Recorded		Adjusted-Forecast							
	2021	2022	2023	2024						
Labor	293	548	662	1,523						
Non-Labor	4	156	164	69						
NSE	0	0	0	0						
Total	297	704	826	1,592						
FTE	2.1	4.0	5.0	12.0						

Workpapers belonging to this Category:

2RD002.000 Clean Energy Innovations Project Management Office (PMO)

Labor	293	548	662	1,523
Non-Labor	4	156	164	69
NSE	0	0	0	0
Total	297	704	826	1,592
FTE	2.1	4.0	5.0	12.0

Beginning of Workpaper 2RD002.000 - Clean Energy Innovations Project Management Office (PMO)

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: C. Clean Energy Innovations Project Management Off
Category-Sub 1. Clean Energy Innovations Project Management Office

Workpaper: 2RD002.000 - Clean Energy Innovations Project Management Office (PMO)

Activity Description:

The Clean Energy Innovations (CEI) Project Management Office (PMO) is responsible for the definition and establishment of project management best practices, processes, and reporting to promote successful project execution and risk reduction in support of CEI's project portfolio.

Forecast Explanations:

Labor - Base YR Rec

The forecast method developed for this cost category for labor expenses is the base year method. Incremental adjustments represent the anticipated expense requirements in TY 2024. This method is most appropriate because the CEI PMO group was formed in January 2021 and no historic cost information exists prior to this date.

Non-Labor - Base YR Rec

The forecast method developed for this cost category for non-labor expenses is the base year method. Incremental adjustments represent the anticipated expense requirements in TY 2024. This method is most appropriate because the CEI PMO group was formed in January 2021 and no historic cost information exists prior to this date.

NSE - Base YR Rec

NΑ

Summary of Results:

		In 2021\$ (000) Incurred Costs									
		Adju	ısted-Recor	ded		Ad	justed-Fore	cast			
Years	2017	2018	2019	2020	2021	2022	2023	2024			
Labor	0	0	0	0	293	548	662	1,523			
Non-Labor	0	0	0	0	4	156	164	69			
NSE	0	0	0	0	0	0	0	0			
Total	0	0	0	0	297	704	826	1,592			
FTE	0.0	0.0	0.0	0.0	2.1	4.0	5.0	12.0			

Clean Energy Innovations Area:

Armando Infanzon Witness:

Category: C. Clean Energy Innovations Project Management Off Category-Sub: 1. Clean Energy Innovations Project Management Office

Workpaper: 2RD002.000 - Clean Energy Innovations Project Management Office (PMO)

Summary of Adjustments to Forecast:

			In 202	1 \$(000) lı	ncurred Co	sts				
Forecast Method Base Forecast			st	Forec	ast Adjust	tments	Adjus	ted-Forec	ast	
Years	5	2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	293	293	293	255	369	1,230	548	662	1,523
Non-Labor	Base YR Rec	4	4	4	152	160	65	156	164	69
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Tota	I	297	297	297	407	529	1,295	704	826	1,592
FTE	Base YR Rec	2.1	2.1	2.1	1.9	2.9	9.9	4.0	5.0	12.0

	I						
Forecast Adjust	ment Details:						
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type	
2022	141	0	0	141	0.9	1-Sided Adj	
Explanation:	This is the full year effect responsible for strategy roadmap/schedule, risk Estimated expenses are	and implemen	tation of proje and change r	ect management p	ent standards	definition, portfolio	
2022	0	152	0	152	0.0	1-Sided Adj	
Explanation:	The non-labor costs are customization (requirem and financial reporting a subsequent years. Projechange management, reexpenses.	ients, dashboa ipplications) du ect manageme	rd design and uring year ond ent training ar	d developmen e and year two nd certification	t, integration v o; licensing and courses inclu	vith other SharePoint d maintenance in ding PMI standards,	
2022	114	0	0	114	1.0	1-Sided Adj	
Explanation:	2 Project advisor labor r roadmap/schedule mana	•		•	•		
2022 Total	255	152	0	407	1.9		
2023	228	0	0	228	2.0	1-Sided Adj	
Explanation:	2 Project advisor labor r roadmap/schedule mana	•		•	•	•	
2023	141	0	0	141	0.9	1-Sided Adj	
Explanation:	This is the full year effect responsible for strategy roadmap/schedule, risk Estimated expenses are	and implemen	tation of proje and change r	ect manageme	ent standards	definition, portfolio	
2023	0	160	0	160	0.0	1-Sided Adj	

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: C. Clean Energy Innovations Project Management Off
Category-Sub: 1. Clean Energy Innovations Project Management Office

Workpaper:	2RD002.000 - Clean Energy Innovations Project Management Office (PMO)								
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj_Type			
Explanation:	The non-labor costs are customization (requirement and financial reporting assubsequent years. Projechange management, reexpenses.	ents, dashboar oplications) dur ect managemer	d design and ing year one nt training and	development and year two d certification	, integration wit ; licensing and courses includi	th other SharePoint maintenance in ng PMI standards,			
2023 Total	369	160	0	529	2.9				
2024	1,089	0	0	1,089	9.0	1-Sided Adj			
Explanation:	4 Project advisors labor roadmap/schedule mana Project Managers labor Fleadership, development Management, organization activities resulting from C\$435K. 2 Project Special management governance activities. Administrative	gement. Project Responsibilities and implement anal impact, rectification ist labor respondences controls in acceptances.	ct advisor lab s include orga station on stra adiness asse vities. Project nsibilities incl ccordance wit	oor estimated on izational characteristics and steep related to essment, and steep manager estude execution in CEI PMO s	expenses are 4 ange and readi o Organization stakeholder ma imated expens of initiative-spatandards and/o	X \$ 114 = \$456K. 3 ness workstream al Change nagement related to es are 3 X \$145K = ecific project			
2024	141	0	0	141	0.9	1-Sided Adj			
Explanation:	This is the full year effect responsible for strategy a roadmap/schedule, risk r Estimated expenses are	and implementa nanagement a	ation of proje nd change m	ct manageme anagement p	nt standards de	efinition, portfolio			
2024	0	65	0	65	0.0	1-Sided Adj			
Explanation:	The non-labor costs are customization (requirement and financial reporting assubsequent years. Projection management, resexpenses.	ents, dashboar oplications) dur ect managemer	d design and ing year one nt training and	development and year two d certification	, integration wit ; licensing and courses includi	th other SharePoint maintenance in ng PMI standards,			
2024 Total	1,230	65	0	1,295					

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: C. Clean Energy Innovations Project Management Off
Category-Sub: 1. Clean Energy Innovations Project Management Office

Workpaper: 2RD002.000 - Clean Energy Innovations Project Management Office (PMO)

Determination of Adjusted-Recorded (Incurred Costs):

retermination of Aujusteu-r	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	249
Non-Labor	0	0	0	0	4
NSE	0	0	0	0	0
Total	0	0	0	0	253
FTE	0.0	0.0	0.0	0.0	1.7
Recorded-Adjusted (Nomina	l \$)				
Labor	0	0	0	0	249
Non-Labor	0	0	0	0	4
NSE	0	0	0	0	0
Total	0	0	0	0	253
FTE	0.0	0.0	0.0	0.0	1.7
/acation & Sick (Nominal \$)					
Labor	0	0	0	0	44
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	44
FTE	0.0	0.0	0.0	0.0	0.4
Escalation to 2021\$					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constar	nt 2021\$)				
Labor	0	0	0	0	293
Non-Labor	0	0	0	0	4
NSE	0	0	0	0	0
Total		0	0	0	297
FTE	0.0	0.0	0.0	0.0	2.1

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

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

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: C. Clean Energy Innovations Project Management Off
Category-Sub: 1. Clean Energy Innovations Project Management Office

Workpaper: 2RD002.000 - Clean Energy Innovations Project Management Office (PMO)

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs						
	Years	2017	2018	2019	2020	2021
Labor		0	0	0	0	249
Non-Labor		0	0	0	0	4
NSE		0	0	0	0	0
	Total		0	0 -	0	253
FTE		0.0	0.0	0.0	0.0	1.7

Detail of Adjustments to Recorded:

Vaar	Labore	All by	NCE	ETE	Adi Tuna		
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type		
2017 Total	0	0	0	0.0			
2018 Total	0	0	0	0.0			
2019 Total	0	0	0	0.0			
2020 Total	0	0	0	0.0			
2021	147	0	0	0.8	1-Sided Adj		
Explanation:	Transfer labor (FTE) costs associated with the manager role from 2RD000.000 Clean Fuels Infrastructure Development workpaper to 2RD002.000 Clean Energy Innovations Project Management Office (PMO)work paper to align functions where they reside and will be forecast.						
2021	97	0	0	0.8	1-Sided Adj		
Explanation:		workpaper to 2RD	0002.000 Cle	an Energy I	om 2RD000.000 Clean Fuels nnovations Project Management Office cast.		
2021	5	4	0	0.1	1-Sided Adj		
Explanation:	Transfer labor (FTE) and non-labor costs associated with the project manager role from 2RD000.000 Clean Fuels Infrastructure Development workpaper to 2RD002.000 Clean Energy Innovations Project Management Office (PMO)work paper to align functions where they reside and will be forecast.						
2021 Total	249	4	0	1.7			

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: D. Research Development and Demonstration

Workpaper: 2RD001.001

Summary for Category: D. Research Development and Demonstration

		In 2021\$ (000) Inc	urred Costs				
	Adjusted-Recorded	Adjusted-Forecast					
	2021	2022	2023	2024			
Labor	2,111	2,435	2,608	2,608			
Non-Labor	15,929	14,216	14,266	20,641			
NSE	0	0	0	0			
Total	18,040	16,651	16,874	23,249			
FTE	17.3	18.0	20.0	20.0			

Workpapers belonging to this Category:

2RD001.001 R-Research Development and Demonstration

Labor	2,111	2,435	2,608	2,608
Non-Labor	15,929	14,216	14,266	20,641
NSE	0	0	0	0
Total	18,040	16,651	16,874	23,249
FTE	17.3	18.0	20.0	20.0

Beginning of Workpaper 2RD001.001 - R-Research Development and Demonstration

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: D. Research Development and Demonstration
Category-Sub 1. Research Development and Demonstration

Workpaper: 2RD001.001 - R-Research Development and Demonstration

Activity Description:

The Research Development & Demonstration (RD&D) organization is focused on identifying, assessing, developing, demonstrating, and deploying new technologies of significant potential value to customers and utility operations. RD&D staff identify promising projects and evaluate them for potential funding, taking a comprehensive yet flexible approach that enables them to 1) identify potential projects most in alignment with RD&D Program goals, state and federal environmental policy, and industry demand; 2) accurately assess the likelihood of potential projects to succeed; 3) work with proven partners and technologies over time; and 4) respond nimbly to changing market, technology, and policy drivers. RD&D expenses are tracked in a one-way balancing account.

Forecast Explanations:

Labor - Zero-Based

The RD&D program staffing requirements and related costs were forecasted using a zero-based methodology. A technology needs assessment was performed to determine activity levels needed in the various RD&D areas employing historical project activity and labor costs to determine staffing and costs necessary for the project and technology assessment activity planned for the forecast period.

Non-Labor - Zero-Based

Non-labor, which is predominantly RD&D project expense, was forecasted on a zero-based method using a technology needs assessment to develop planned project activity as described in direct testimony and using historical averages to estimate projects costs. This approach allows for evolving RD&D needs based on technology progress, changes in public policies and goals, and changes in customer needs. RD&D activities fall under five main areas: Low Carbon Resources, Gas Operation, Clean Transportation, Clean Power Generation, and Customer End-Use Applications. The present forecast reflects increased activity in the operations area as well as a number of areas related to criteria pollutions reduction and carbon reduction.

NSE - Zero-Based

NΑ

Summary of Results:

		In 2021\$ (000) Incurred Costs						
		Adjι	sted-Recor	ded		Adjusted-Forecast		
Years	2017	2018	2019	2020	2021	2022	2023	2024
Labor	2,479	2,163	1,861	1,741	2,111	2,435	2,608	2,608
Non-Labor	12,681	11,262	12,201	15,451	15,929	14,216	14,266	20,641
NSE	0	0	0	0	0	0	0	0
Total	15,160	13,425	14,062	17,192	18,039	16,651	16,874	23,249
FTE	21.4	18.4	15.8	14.4	17.3	18.0	20.0	20.0

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: D. Research Development and Demonstration
Category-Sub: 1. Research Development and Demonstration

Workpaper: 2RD001.001 - R-Research Development and Demonstration

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	Zero-Based	0	0	0	2,435	2,608	2,608	2,435	2,608	2,608	
Non-Labor	Zero-Based	0	0	0	14,216	14,266	20,641	14,216	14,266	20,641	
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	
Tota	ıl	0	0	0	16,651	16,874	23,249	16,651	16,874	23,249	
FTE	Zero-Based	0.0	0.0	0.0	18.0	20.0	20.0	18.0	20.0	20.0	

Forecast Adjustment Details:

i Orecast Aujusti	none Botano.						
<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj Type	
2022	2,435	14,216	0	16,651	18.0	1-Sided Adj	
Explanation:	Forecasted using GRC	Authorized bas	sed on D.19-0	9-051.			
2022 Total	2,435	14,216	0	16,651	18.0		
2023	2,608	14,266	0	16,874	20.0	1-Sided Adj	
Explanation:	Forecasted using GRC	Authorized bas	sed on D.19-0	9-051.			
2023 Total	2,608	14,266	0	16,874	20.0		
2024	2,608	20,641	0	23,249	20.0	1-Sided Adj	
Explanation:	Based on Technology N	leeds Assessm	nent Summary	conducted by	by the portfolio n	nanagers.	
2024 Total	2,608	20,641	0	23,249	20.0		

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: D. Research Development and Demonstration
Category-Sub: 1. Research Development and Demonstration

Workpaper: 2RD001.001 - R-Research Development and Demonstration

Determination of Adjusted-Recorded (Incurred Costs):

retermination of Aujusteu-i	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	1,901	1,701	1,481	1,437	1,794
Non-Labor	11,168	10,325	11,381	14,354	15,929
NSE	0	0	0	0	0
Total	13,069	12,026	12,862	15,792	17,723
FTE	18.2	15.6	13.2	12.0	14.6
djustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	100	0	0	0	0
NSE	0	0	0	0	0
Total	100	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
ecorded-Adjusted (Nomina	I \$)				
Labor	1,901	1,701	1,481	1,437	1,794
Non-Labor	11,268	10,325	11,381	14,354	15,929
NSE	0	0	0	0	0
Total	13,169	12,026	12,862	15,792	17,723
FTE	18.2	15.6	13.2	12.0	14.6
facation & Sick (Nominal \$)					
Labor	322	293	281	253	317
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	322	293	281	253	317
FTE	3.2	2.8	2.6	2.4	2.7
scalation to 2021\$					
Labor	256	170	99	50	0
Non-Labor	1,413	937	820	1,097	0
NSE	0	0	0	0	0
Total	1,669	1,107	919	1,147	0
FTE	0.0	0.0	0.0	0.0	0.0
ecorded-Adjusted (Constar	nt 2021\$)				
Labor	2,479	2,163	1,861	1,741	2,111
Non-Labor	12,681	11,262	12,201	15,451	15,929
NSE	0	0	0	0	0
Total	15,160	13,425	14,062	17,192	18,039
FTE	21.4	18.4	15.8	14.4	17.3

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

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

Area: Clean Energy Innovations

Witness: Armando Infanzon

Category: D. Research Development and Demonstration
Category-Sub: 1. Research Development and Demonstration

Workpaper: 2RD001.001 - R-Research Development and Demonstration

Summary of Adjustments to Recorded:

	In Nominal \$ (000) Incurred Costs						
	Years	2017	2018	2019	2020	2021	
Labor		0	0	0	0	0	
Non-Labor		100	0	0	0	0	
NSE		0	0	0	0	0	
	Total	100	0	0 -	0	0	
FTE		0.0	0.0	0.0	0.0	0.0	

Detail of Adjustments to Recorded:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	
2017	0	100	0	0.0	1-Sided Adj	
Explanation:	Adjustment for Kore Biosolic	ls Pyrolyzer Field	Test project.			
2017 Total	0	100	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 Total	0	0	0	0.0		

Area: Clean Energy Innovations

Witness: Armando Infanzon

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	<u>Description</u>
2200-0234	000	NGV PROGRAM
2200-0236	000	FEDERAL TURNKEY PROGRAM
2200-0261	000	VP STRAT& SUSTAINABILITY CHF ENVIRO OFC
2200-0833	000	DIRECTOR OF SUSTAINABILITY
2200-0843	000	NSS - FEDERAL PROJ CUST SERVICE MGR.
2200-1022	000	VP CLEAN ENERGY INNOVATIONS
2200-2059	000	CUSTOMER SOLUTIONS RD&D
2200-2117	000	CLEAN INNOVATIONS
2200-2229	000	BUSINESS ANALYSIS AND GROWTH INITIATIVE
2200-2286	000	BIOFUELS MARKET DEVELOPMENT
2200-2516	000	DIRECTOR TECHNOLOGY SOLUTIONS
2200-2524	000	LOW CARBON RESOURCES RDD
2200-2525	000	BUSINESS & TECHNOLOGY INNOVATION
2200-2559	000	RESEARCH & DEVELOPMENT
2200-2560	000	CLEAN TRANSPORTATION - BUS DEV
2200-2561	000	NEW TECHNOLOGY SOLUTIONS
2200-2614	000	BUSINESS STRATEGY AND DEVELOPMENT
2200-2628	000	DER POLICY STRATEGY MANAGER
2200-2632	000	PRODUCT DEVELOPMENT & STRATEGY