

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-24-WP)

WORKPAPERS TO
PREPARED DIRECT TESTIMONY
OF BRITTANY A. SYZ
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-24-WP - SDG&E ENVIRONMENTAL SERVICES AND SONGS

DOCUMENT	PAGE
Overall Summary For Exhibit No. SDG&E-24-WP	1
<i>Summary of Non-Shared Services Workpapers</i>	2
Category: A. Environmental Services	3
..1EV000.000 - ENVIRONMENTAL SDGE NSS COST CENTER	4
Category: B. NERBA	23
..1EV001.001 - RNERBA-PCB PHASE OUT	25
..1EV001.002 - RNERBA-AB32 FEES-ELECTRIC	30
..1EV001.003 - RNERBA-MS4-ELECTRIC	37
..1EV002.001 - RNERBA-SUBPART W	42
..1EV002.002 - RNERBA-AB32 FEES-GAS	47
..1EV002.003 - RNERBA-LDAR	52
..1EV002.004 - RNERBA-MS4-GAS	57
Category: C. SONGS	62
..1EV003.000 - EG -SONGS WKP_GRP_1	63
<i>Appendix A: List of Non-Shared Cost Centers</i>	74

Overall Summary For Exhibit No. SDG&E-24-WP

Area:	SDG&E ENVIRONMENTAL SERVICES AND SONGS
Witness:	Brittany A. Syz

Description	In 2021 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Non-Shared Services	8,504	9,607	9,875	9,975
Shared Services	0	0	0	0
Total	8,504	9,607	9,875	9,975

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
 2024 GRC - APP
 Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz

Summary of Non-Shared Services Workpapers:

Description	In 2021 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
A. Environmental Services	5,847	6,699	6,908	7,033
B. NERBA	1,441	1,422	1,454	1,402
C. SONGS	1,216	1,486	1,513	1,540
Total	8,504	9,607	9,875	9,975

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: A. Environmental Services
 Workpaper: 1EV000.000

Summary for Category: A. Environmental Services

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	3,796	4,262	4,382	4,382
Non-Labor	2,051	2,437	2,526	2,651
NSE	0	0	0	0
Total	5,847	6,699	6,908	7,033
FTE	35.3	39.1	39.2	40.1

Workpapers belonging to this Category:

1EV000.000 ENVIRONMENTAL SDGE NSS Cost Center

Labor	3,796	4,262	4,382	4,382
Non-Labor	2,051	2,437	2,526	2,651
NSE	0	0	0	0
Total	5,847	6,699	6,908	7,033
FTE	35.3	39.1	39.2	40.1

Note: Totals may include rounding differences.

Beginning of Workpaper
1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: A. Environmental Services
 Category-Sub: 1. Environmental Services
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

Activity Description:

The Environmental Services department includes subject matter experts in air and water quality, biological resources, cultural resources, land planning, field operations, hazardous materials and environmental lab operations. The department supports ongoing environmental compliance, including obtaining environmental permits and approvals, developing environmental plans, hazardous waste operations, lab testing and conducting specialized environmental inspections, assessments and training. The department also screens proposed facilities, field and real property projects and transactions that have the potential for environmental impacts. The environmental screening involves a thorough review and analysis of potential environmental impacts, permits and compliance requirements for all environmental disciplines as appropriate for the project scope. The department also assumes the responsibility for the development and management of environmental training and compliance procedures.

Forecast Explanations:

Labor - Base YR Rec

The base year forecast methodology was utilized to best represent the financial structure of the organization, while accounting for the incremental mandatory and compliance driven programs supported by the department moving forward. Historical averaging or trending of costs would not accurately reflect the future needs for the department given the evolving and expanding nature of the activities supported by the department. In summary, a base year forecast method is used because the most recent year of recorded costs is the most representative of the current departmental activity and structure. This method, which was used in SDG&E's TY 2016 and TY 2019 GRCs, is again the most appropriate in this GRC.

Non-Labor - Base YR Rec

The base year forecast methodology was utilized to best represent the financial structure of the organization, while accounting for the incremental mandatory and compliance driven programs supported by the department moving forward. Historical averaging or trending of costs would not accurately reflect the future needs for the department given the evolving and expanding nature of the activities supported by the department. In summary, a base year forecast method is used because the most recent year of recorded costs is the most representative of the current departmental activity and structure. This method, which was used in SDG&E's TY 2016 and TY 2019 GRCs, is again the most appropriate in this GRC.

NSE - Base YR Rec

There were no non standard escalation costs for this workpaper group.

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		3,735	2,973	3,201	3,619	3,796	4,262	4,382	4,382	
Non-Labor		2,400	2,066	1,867	1,921	2,051	2,437	2,526	2,651	
NSE		0	0	0	0	0	0	0	0	
Total		6,135	5,040	5,068	5,540	5,847	6,699	6,908	7,033	
FTE		35.0	28.4	30.5	33.3	35.3	39.1	39.2	40.1	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: A. Environmental Services
 Category-Sub: 1. Environmental Services
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	3,796	3,796	3,796	466	586	586	4,262	4,382	4,382
Non-Labor	Base YR Rec	2,051	2,051	2,051	386	475	600	2,437	2,526	2,651
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		5,847	5,847	5,847	852	1,061	1,186	6,699	6,908	7,033
FTE	Base YR Rec	35.3	35.3	35.3	3.8	3.9	4.8	39.1	39.2	40.1

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	56	0	0	56	0.1	1-Sided Adj
Explanation:	Annualization of off-cycle pay increases granted during the fourth quarter of the base year 2021. Labor annualization required because the base year does not reflect the full year effect of the wage increases for the effected employees.					
2022	100	0	0	100	0.1	1-Sided Adj
Explanation:	Annualization of wages for four new full-time employees hired during the fourth quarter of base year 2021. Labor annualization required as the base year does not reflect a full year of wages for the effected employees.					
2022	0	26	0	26	0.0	1-Sided Adj
Explanation:	Added cost for the mandatory permit renewal of the hazardous materials treatment storage and disposal facility. Total permit renewal cost is \$260,000 amortized over the 10 year life of permit results in annual expense of \$26,000.					
2022	85	0	0	85	1.0	1-Sided Adj
Explanation:	Addition of one full time Chemist in the Environmental Lab to support new initiatives including State lab certification, compliance with new standards from The NELAC Institute, metals testing and eliminate the need for third party outsourcing. Position to be added in 2022.					
2022	0	27	0	27	0.0	1-Sided Adj
Explanation:	Added costs for environmental lab equipment service contracts to ensure reliability and accuracy of lab testing equipment.					
2022	0	72	0	72	0.0	1-Sided Adj
Explanation:	Added cost for the implementation of the mandatory Cleveland National Forest O&M plan. The annual O&M estimate to implement the plan is based upon the total project cost of \$900,440 allocated over 5 years or \$180,088 per year beginning in 2022. The O&M portion of the total project cost is estimated to be 40%, therefore, SDG&E requests \$72,000 in TY 2024					
2022	105	0	0	105	1.0	1-Sided Adj
Explanation:	Addition of one full time position in the field operations department to mitigate the risk of non-compliance with facility inspections and assessments. Position to be added in 2022.					
2022	0	132	0	132	0.0	1-Sided Adj

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: A. Environmental Services
 Category-Sub: 1. Environmental Services
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>
Explanation:	Added costs to develop and implement the Environmental Management System (EMS) needed to develop efficiencies in the collection of all metrics and promote the digitization framework underpinning sustainability goals.					
2022	70	0	0	70	0.8	1-Sided Adj
Explanation:	Addition of one full time Hazardous Substance Specialist in the Hazardous Materials Operations department to support overall department workload. Total annual compensation of \$87,500 for this position is allocated 80% O&M and 20% Capital. The O&M cost increase is \$70,000. Position to be added in 2022.					
2022	50	0	0	50	0.8	1-Sided Adj
Explanation:	Addition of one full time Hazardous Materials Assistant in the Hazardous Materials Operations department. Total annual compensation is \$62,500 is allocated 80% O&M and 20% Capital. Cost increase of \$50,000 represents the 80% O&M component of annual compensation. Position to be added in 2022.					
2022	0	10	0	10	0.0	1-Sided Adj
Explanation:	Added costs for the new Environmental Lab The NELAC Institute (TNI) standards.					
2022	0	40	0	40	0.0	1-Sided Adj
Explanation:	Added cost for the mandatory construction stormwater general permit.					
2022	0	5	0	5	0.0	1-Sided Adj
Explanation:	Added costs for mandatory natural gas pipeline discharge programmatic permit.					
2022	0	6	0	6	0.0	1-Sided Adj
Explanation:	Added cost for consultant fees to increase scope of emissions data for sustainability reporting.					
2022	0	58	0	58	0.0	1-Sided Adj
Explanation:	Added costs to support the implementation of enhancement program. The enhancement program initiative ensures that all post construction site restoration activities have support to obtain the necessary customer and landowner approvals and awareness of SDG&E restoration activities on their property.					
2022	0	10	0	10	0.0	1-Sided Adj
Explanation:	Cost increase for administrative and general costs for four new employees in addition to contingency for employee turnover, equipment replacement and upgrade and facility costs. Typical administrative and general costs include cell phone, computer and facility fees. Estimated costs are \$10,000.					
2022 Total	466	386	0	852	3.8	
2023	56	0	0	56	0.1	1-Sided Adj
Explanation:	Annualization of off-cycle pay increases granted during the fourth quarter of the base year 2021. Labor annualization required because the base year does not reflect the full year effect of the wage increase .					
2023	100	0	0	100	0.1	1-Sided Adj
Explanation:	Annualization of wages for four newly hired full time employees during the fourth quarter of the base year 2021. Labor annualization required as the base year does not reflect a full year of wages for the effected employees.					
2023	85	0	0	85	1.0	1-Sided Adj

Note: Totals may include rounding differences.

SDG&E/SDG&E ENVIRONMENTAL SVCS. AND SONGS/Exh No:SDG&E-24-WP/Witness: B. Syz

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: A. Environmental Services
 Category-Sub: 1. Environmental Services
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>
Explanation:	Addition of one full time Chemist in the Environmental Lab to support new initiatives including State lab certification, compliance with new standards from The NELAC Institute (TNI), metals testing and eliminate the need for third party outsourcing. Position to be added in 2022.					
2023	0	26	0	26	0.0	1-Sided Adj
Explanation:	Added cost for the hazardous material treatment storage and disposal facility mandatory permit renewal. The total permit renewal cost of \$260,000 will be amortized over the 10 year useful life of the permit at \$26,000 per year.					
2023	105	0	0	105	0.1	1-Sided Adj
Explanation:	Addition of one full time position in the Field Operations department to mitigation the risk of non compliance with facility inspections and assessments. Position to be added in 2022.					
2023	0	20	0	20	0.0	1-Sided Adj
Explanation:	Added cost for consultant support needed to update the pollution prevention plan, development and implement new best management practices for the mandatory vault dewatering permit.					
2023	0	10	0	10	0.0	1-Sided Adj
Explanation:	Added cost for the mandatory construction stormwater general permit.					
2023	90	0	0	90	0.8	1-Sided Adj
Explanation:	Addition of one full time Sr Environmental Specialist in the Air/Water department to support increased project demands, sustainability reporting and compliance requirements. Total annual compensation for this position of \$112,500 is allocated 80% O&M and 20% Capital. The O&M cost increase is \$90,000. Position to be added in 2023.					
2023	30	0	0	30	0.2	1-Sided Adj
Explanation:	Addition of one full time Sr Environmental Specialist in the Cultural Resources department to support increased project demands and compliance requirements. The total annual compensation for this position of \$112,500 is allocated 27% O&M and 73% Capital. O&M cost increase is \$30,000. Position to be added in 2023.					
2023	70	0	0	70	0.8	1-Sided Adj
Explanation:	Addition of one full time Hazardous Substance Specialist in the Hazardous Materials Operations department to support overall department workload. Total annual compensation of \$87,500 for this position is allocated 80% O&M and 20% Capital. The O&M cost increase is \$70,000. Position to be added in 2022.					
2023	50	0	0	50	0.8	1-Sided Adj
Explanation:	Addition of one full time Hazardous Materials Handler in the Hazardous Materials Operations department. Total annual compensation is \$62,500. Cost increase of \$50,000 represents the 80% O&M component of annual compensation. Position to be added in 2022.					
2023	0	5	0	5	0.0	1-Sided Adj
Explanation:	Added cost for the mandatory natural gas pipeline discharge programmatic permit.					
2023	0	6	0	6	0.0	1-Sided Adj
Explanation:	Added consultant costs to increase scope of emissions data for sustainability reporting.					
2023	0	10	0	10	0.0	1-Sided Adj
Explanation:	Added cost for the new Environmental Lab The NELAC Institute (TNI) standards.					

Note: Totals may include rounding differences.

SDG&E/SDG&E ENVIRONMENTAL SVCS. AND SONGS/Exh No:SDG&E-24-WP/Witness: B. Syz

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

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 Category: A. Environmental Services
 Category-Sub: 1. Environmental Services
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>
2023	0	58	0	58	0.0	1-Sided Adj
Explanation:	Added costs to support the implementation of enhancement program. The enhancement program initiative ensures that all post construction site restoration activities have support to obtain the necessary customer and landowner approvals and awareness of SDG&E restoration activities on their property.					
2023	0	7	0	7	0.0	1-Sided Adj
Explanation:	Cost increase for administrative and general costs for two new employees in addition to contingency for employee turnover, equipment replacement and upgrade and facility costs. Typical administrative and general costs include cell phone, computer and facility fees. Estimated costs are \$7,000.					
2023	0	120	0	120	0.0	1-Sided Adj
Explanation:	Added costs to develop and implement the Environmental Management System (EMS) needed to develop efficiencies in the collection of all metrics and promote the digitization framework underpinning sustainability goals.					
2023	0	27	0	27	0.0	1-Sided Adj
Explanation:	Added costs for environmental lab equipment service contracts to ensure reliability and accuracy of lab testing equipment.					
2023	0	72	0	72	0.0	1-Sided Adj
Explanation:	Added cost for the implementation of the mandatory Cleveland National Forest O&M plan. The annual O&M estimate to implement the plan is based upon the total project cost of \$900,440 allocated over 5 years or \$180,088 per year beginning in 2022. The O&M portion of the total project cost is estimated to be 40%, therefore, SDG&E requests \$72,000 in TY 2024					
2023	0	114	0	114	0.0	1-Sided Adj
Explanation:	Added cost for the mandatory Bureau of Land Management O&M plan. The total consultant cost estimate for implementation of the Plan is \$325,000 of which \$227,000 represents O&M. We anticipate that the O&M plan will be developed and implemented during the two-year period ending 2024 and we expect the timing of the O&M expense to be \$ 114,000 in 2023 and \$ 113,000 in 2024,					
2023 Total	586	475	0	1,061	3.9	
2024	56	0	0	56	0.1	1-Sided Adj
Explanation:	Annualization of off-cycle pay increases granted during the fourth quarter of the base year 2021. Labor annualization required because the base year does not reflect the full year effect of the wage increase for the effected employees.					
2024	100	0	0	100	0.1	1-Sided Adj
Explanation:	Annualization of wages for four newly hired full time employees during the fourth quarter of the base year 2021. Labor annualization required as the base year does not reflect a full year of wages for the effected employees.					
2024	85	0	0	85	1.0	1-Sided Adj
Explanation:	Addition of one full time Chemist in the Environmental Lab to support new initiatives including State lab certification, compliance with new standrads from The NELAC Institute (TNI), metals testing and eliminate the need for third party outsourcing. Position to be added in 2022.					
2024	0	27	0	27	0.0	1-Sided Adj

Note: Totals may include rounding differences.

SDG&E/SDG&E ENVIRONMENTAL SVCS. AND SONGS/Exh No:SDG&E-24-WP/Witness: B. Syz

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Non-Shared Service Workpapers

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 Witness: Brittany A. Syz
 Category: A. Environmental Services
 Category-Sub: 1. Environmental Services
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>
Explanation:	Added costs for environmental lab equipment service contracts to ensure reliability and accuracy of lab testing equipment.					
2024	0	26	0	26	0.0	1-Sided Adj
Explanation:	Added cost for the mandatory permit renewal for the hazardous waste treatment storage and disposal facility. Total permit renewal cost is \$260,000 amortized over the 10-year life of the permit resulting in annual expense of \$26,000.					
2024	0	72	0	72	0.0	1-Sided Adj
Explanation:	Added cost for the mandatory Cleveland National Forest O&M plan.					
2024	0	113	0	113	0.0	1-Sided Adj
Explanation:	Management O&M plan. The total consultant cost estimate for implementation of the Plan is \$325,000 of which \$227,000 represents O&M. We anticipate that the O&M plan will be developed and implemented during the two-year period ending 2024 and we expect the timing of the O&M expense to be \$114,000 in 2023 and \$113,000 in 2024,					
2024	0	150	0	150	0.0	1-Sided Adj
Explanation:	Added costs for sustainability education, outreach and communication.					
2024	90	0	0	90	0.8	1-Sided Adj
Explanation:	Addition of one full time Sr Environmental Specialist in the Air/Water department to support increased project demands, sustainability reporting and compliance requirements. Total annual compensation for this position of \$112,500 is allocated 80% O&M and 20% Capital. The O&M cost increase is \$90,000. Position to be added in 2023.					
2024	30	0	0	30	0.2	1-Sided Adj
Explanation:	Addition of one full time Sr Environmental Specialist in the Cultural Resources department to support increased project demands and compliance requirements. The total annual compensation for this position of \$112,500 is allocated 27% O&M and 73% Capital. O&M cost increase is \$30,000. Position to be added in 2023.					
2024	70	0	0	70	0.8	1-Sided Adj
Explanation:	Addition of one full time Hazardous Substance Specialist in the Hazardous Materials Operations department to support overall department workload. Total annual compensation of \$87,500 for this position is allocated 80% O&M and 20% Capital. The O&M cost increase is \$70,000. Position to be added in 2022.					
2024	50	0	0	50	0.8	1-Sided Adj
Explanation:	Addition of one full time Hazardous Materials Assistant in the Hazardous Materials Operations department. Total annual compensation is \$62,500 is allocated 80% O&M and 20% Capital. Cost increase of \$50,000 represents the 80% O&M component of annual compensation. Position to be added in 2022.					
2024	105	0	0	105	1.0	1-Sided Adj
Explanation:	Addition of one full time position in the Field Operations department to mitigate the risk of non-compliance with facility inspections and assessments. Position to be added in 2022.					
2024	0	5	0	5	0.0	1-Sided Adj
Explanation:	Added cost for the mandatory natural gas pipeline discharge programmatic permit.					

Note: Totals may include rounding differences.

SDG&E/SDG&E ENVIRONMENTAL SVCS. AND SONGS/Exh No:SDG&E-24-WP/Witness: B. Syz

San Diego Gas & Electric Company
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Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
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 Category: A. Environmental Services
 Category-Sub: 1. Environmental Services
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2024	0	6	0	6	0.0	1-Sided Adj
Explanation:	Added cost for consultant to increase scope of emissions data for sustainability reporting.					
2024	0	10	0	10	0.0	1-Sided Adj
Explanation:	Added cost for consultant support needed to update pollution prevention plan, develop and implement new best management practices for the mandatory vault dewatering permit.					
2024	0	58	0	58	0.0	1-Sided Adj
Explanation:	Added costs to support the implementation of enhancement program. The enhancement program initiative ensures that all post construction site restoration activities have support to obtain the necessary customer and landowner approvals and awareness of SDG&E restoration activities on their property.					
2024	0	120	0	120	0.0	1-Sided Adj
Explanation:	Added costs to develop and implement the Environmental Management System (EMS) needed to develop efficiencies in the collection of metrics and promote the digitization framework underpinning sustainability goals.					
2024	0	10	0	10	0.0	1-Sided Adj
Explanation:	Added cost for the mandatory construction stormwater general permit.					
2024	0	3	0	3	0.0	1-Sided Adj
Explanation:	Cost increase for administrative and general costs for equipment replacement and upgrade costs for existing employees and/or potential employee turnover costs. Typical administrative costs include cell phone, computer and facility fees. Estimated costs are \$3,000.					
2024 Total	586	600	0	1,186	4.8	

Note: Totals may include rounding differences.

SDG&E/SDG&E ENVIRONMENTAL SVCS. AND SONGS/Exh No:SDG&E-24-WP/Witness: B. Syz

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Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
Witness: Brittany A. Syz
Category: A. Environmental Services
Category-Sub: 1. Environmental Services
Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	2,917	2,376	2,647	3,083	3,301
Non-Labor	2,111	1,862	1,737	1,811	2,084
NSE	0	0	0	0	0
Total	5,028	4,239	4,383	4,893	5,384
FTE	30.1	24.2	26.5	29.0	30.3
Adjustments (Nominal \$) **					
Labor	-3	1	0	-11	0
Non-Labor	0	15	0	-28	-33
NSE	0	0	0	0	0
Total	-3	16	-1	-39	-33
FTE	-0.2	0.0	-0.1	-0.3	-0.1
Recorded-Adjusted (Nominal \$)					
Labor	2,914	2,378	2,646	3,071	3,300
Non-Labor	2,111	1,877	1,736	1,783	2,051
NSE	0	0	0	0	0
Total	5,025	4,255	4,383	4,854	5,351
FTE	29.9	24.2	26.3	28.7	30.2
Vacation & Sick (Nominal \$)					
Labor	432	360	379	435	496
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	432	360	379	435	496
FTE	5.1	4.2	4.2	4.6	5.1
Escalation to 2021\$					
Labor	389	235	176	112	0
Non-Labor	289	189	130	138	0
NSE	0	0	0	0	0
Total	678	425	307	251	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	3,735	2,973	3,201	3,619	3,796
Non-Labor	2,400	2,066	1,867	1,921	2,051
NSE	0	0	0	0	0
Total	6,135	5,040	5,068	5,540	5,847
FTE	35.0	28.4	30.5	33.3	35.3

* 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.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: A. Environmental Services
 Category-Sub: 1. Environmental Services
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	-3	1	-0.302	-11	-0.302
Non-Labor	-0.001	15	-0.289	-28	-33
NSE	0	0	0	0	0
Total	-3	16	-0.591	-39	-33
FTE	-0.2	0.0	-0.1	-0.3	-0.1

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	-2	0	0	-0.1	1-Sided Adj
Explanation:	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2017	0	0	0	0.0	1-Sided Adj
Explanation:	Adjustment to remove lobbying costs paid to Utilities Solid Waste Activities Group (USWAG).				
2017	0	0	0	-0.1	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.				
2017 Total	-3	0	0	-0.2	
2018	2	0	0	0.1	1-Sided Adj
Explanation:	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2018	0	-9	0	0.0	1-Sided Adj
Explanation:	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2018	0	24	0	0.0	1-Sided Adj
Explanation:	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2018	0	0	0	0.0	1-Sided Adj
Explanation:	Adjustment to remove lobbying costs paid to Utility Solid Waste Activities Group (USWAG).				
2018	0	0	0	-0.1	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	1	15	0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: A. Environmental Services
 Category-Sub: 1. Environmental Services
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
2019	0	0	0	0.0	1-Sided Adj
Explanation:	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2019	0	0	0	0.0	1-Sided Adj
Explanation:	Adjustment to remove lobbying costs paid to Utility Solid Waste Activities Group (USWAG)				
2019	0	0	0	-0.1	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.				
2019 Total	0	0	0	-0.1	
2020	-10	0	0	-0.1	1-Sided Adj
Explanation:	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	-1	0	0	-0.1	1-Sided Adj
Explanation:	Incremental 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
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-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-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
Explanation:	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
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-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 that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: A. Environmental Services
 Category-Sub: 1. Environmental Services
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
2020	0	-2	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	-9	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	-2	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-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	-3	0	0.0	1-Sided Adj
Explanation:	Incremental COVID-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
Explanation:	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	-0.1	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.				
2020 Total	-11	-28	0	-0.3	
2021	0	0	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).				
2021	0	0	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).				
2021	0	-1	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).				
2021	0	-1	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).				
2021	0	-3	0	0.0	1-Sided Adj

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: A. Environmental Services
 Category-Sub: 1. Environmental Services
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
Explanation:	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
Explanation:	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	0	-5	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).				
2021	0	-1	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).				
2021	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).				
2021	0	-4	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).				
2021	0	-2	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).				
2021	0	-1	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).				
2021	0	-10	0	0.0	1-Sided Adj
Explanation:	Adjustment to remove lobbying costs paid to California Council for Environmental and Economic Balance (CCEEB).				
2021	0	0	0	-0.1	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.				
2021 Total	0	-33	0	-0.1	

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 1EV000.000

Supplemental Workpaper: Support to and From Other Witnesses: 1EV000.001

Sulfur Hexafluoride (SF6)/Regulation for Reducing Greenhouse Gas Emissions from Gas-Insulated Equipment

SDG&E is required to prepare and submit an annual report for SF6 emissions in accordance with Subpart DD of the US EPA's GHG Mandatory Reporting Rule (MRR). Additionally, SDG&E has to comply with CARB's Regulation for Reducing Greenhouse Gas (GHG) Emissions from Gas Insulated Equipment (GIE) (as part of the AB32 requirements) and the CO₂e emission limit and annual reporting requirements therein.

SF6 is a potent GHG with a global warming potential (GWP) 22,800 times that of carbon dioxide (CO₂). Although SF6 is emitted in smaller quantities than many other greenhouse gases, its atmospheric lifetime of 3,200 years causes it to accumulate in the earth's atmosphere for centuries. Because of its unique dielectric properties, electric utilities rely on SF6 in electric power systems for voltage electrical insulation, current interruption, and arc quenching in the distribution of electricity. While SF6 should theoretically remain contained within equipment, in reality, the gas may be emitted into the atmosphere inadvertently if leaks should develop during various stages of the equipment's lifecycle.

Under US EPA's Subpart DD, owners, or operators of electric power system facilities with a total nameplate capacity that exceeds 17,280 pounds of SF6 must report emissions of SF6 from the use of electrical distribution equipment. Electric power system facilities include electric power distribution systems that operate gas-insulated substations, circuit breakers, switchgear, gas-insulated lines or power transformers. Pursuant to Subpart DD, SDG&E has to calculate entity-wide SF6 losses from its system (using a mass-balance approach of SF6 purchases made, amounts sent to be recycled, and increase in nameplate capacity of equipment), and follow the specified procedures for quality assurance, recordkeeping, and reporting. Reports are due annually by March 31st for data collected in the previous calendar year. Subpart DD was enforced starting January 2011, with the first SF6 report submitted in September 2012 (for the 2011 emissions year).

On December 30, 2021, the California Office of Administrative Law approved the amended Regulation for Reducing Greenhouse Gas Emissions from Gas- Insulated Equipment; the amendments became effective on January 1, 2022. The amended regulation requires an acquisition phase-out schedule (take effect in stages between 2025 and 2033) of the use of SF6 in gas-insulated equipment based upon

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

configuration (aboveground or underground), voltage capacity, and short-circuit current rating; adds a phase-out exemption; changes from an annual emission rate ($\leq 1.0\%$) to an annual emission limit in metric ton CO_{2e}. The amended regulation establishes methods to minimize the growth of the emissions limit over time. Reports are due annually by June 1st for data collected in the previous calendar year.

In order to maintain continued compliance with EPA's Subpart DD and CARB's Regulation for Reducing Greenhouse Gas Emissions from Gas-Insulated Equipment, SDG&E has to track closely the usage and disbursement of SF₆ and covered insulating gas that has a GWP > 1 (installation and removal of gas-insulated distribution switchgear equipment) in its system. This process is labor intensive and requires retrieval of information from various internal databases and coordination with field personnel.

In order to achieve higher efficiencies, implement a more robust quality assurance program, reduce the risk of errors, and make progress toward achieving and sustaining the CARB mandated CO_{2e} emission limit, additional software Tools and staffing resources will be needed. In addition, field surveys will be needed to maintain an updated inventory of gas insulated equipment. SDG&E's Electric Distribution Engineering group has identified the incremental costs associated with the additional resources and measures that will be needed to maintain continued compliance with the US EPA's Subpart DD and CARB's Regulation for Reducing Greenhouse Gas Emissions from Gas-Insulated Equipment. The Electric Distribution Engineering group has also developed a program, to proactively replace SF₆ distribution gas-insulated equipment with non-SF₆ alternatives.

SITE: DTSC400636-78 FACILITY: San Diego Gas and Electric, Kearny PCB Storage Facility PERMIT: Standardized HWTS Permit Renewal - Series C PROJECT MANAGER: Michael Zamudio DATE: December 2020		EXHIBIT A Department of Toxic Substances Control PERMITTING APPLICATION PROCESSING COST ESTIMATE ¹																		
	Project Manager	Cost Estimating Engineer	Supervisor	Branch Chief	Engineering Special Projects Unit	Enforcement	Corrective Action Specialist	Geologic Services Unit	Human and Ecological Risk Office	Industrial Hygienist	Public Participation	Office of Legal Counsel	California Environmental Quality Act Unit	Financial Assurance Unit	Clerical	Travel	Contracts/ Other Expenses	Total Hours	Cost	
Estimation Rates	\$252	\$317	\$333	\$350	\$269	\$220	\$269	\$271	\$259	\$220	\$167	\$315	\$217	\$167	\$102					
TASK 1: INITIAL COMPLETENESS REVIEW (ADMINISTRATIVE COMPLETENESS)																				
HOURS	26		5								4			4	1			40	\$ 10,509	
SUBTOTAL ESTIMATED COST	\$6,552		\$1,499								\$668			\$1,336	\$102		\$353			
TASK 2: TECHNICAL REVIEW OF PERMIT APPLICATION																				
2A: TECHNICAL REVIEW THRU ISSUANCE OF 1ST NOD																				
HOURS	280		12		40	14						2			1			369	\$ 94,019	
SUBTOTAL ESTIMATED COST	\$71,568		\$3,996		\$8,070	\$3,080						\$630			\$306	\$949				
2B: REVIEW OF 1ST NOD RESPONSE AND ISSUANCE OF 2ND NOD OR TECHNICAL COMPLETE DETERMINATION																				
HOURS	70		20		14	7						4			1			116	\$ 33,989	
SUBTOTAL ESTIMATED COST	\$21,672	\$3,170	\$999		\$3,766	\$1,760						\$2,520			\$102					
2C: REVIEW OF RESPONSE TO 2ND NOD AND TECHNICAL COMPLETE DETERMINATION																				
HOURS																			\$ -	
SUBTOTAL ESTIMATED COST																				
TASK 3: DRAFT PERMIT DECISION																				
SUBTOTAL HOURS	46		10	4		8	2					22						92	\$ 25,892	
SUBTOTAL ESTIMATED COST	\$11,592		\$3,330	\$1,400		\$2,640						\$6,930								
TASK 4: CEQA COMPLIANCE																				
SUBTOTAL HOURS	28		5									6	22					61	\$ 15,385	
SUBTOTAL ESTIMATED COST	\$7,056		\$1,665									\$1,890	\$4,774							
TASK 5: PUBLIC PARTICIPATION																				
SUBTOTAL HOURS	24		8								104	11	6		28			181	\$ 38,096	
SUBTOTAL ESTIMATED COST	\$6,048		\$2,664								\$17,368	\$3,465	\$1,302		\$2,856	\$1,868	\$2,525			
TASK 6: FINAL PERMIT																				
SUBTOTAL HOURS	34		6	2		2					13	5			18			80	\$ 17,641	
SUBTOTAL ESTIMATED COST	\$8,568		\$1,998	\$700		\$440					\$2,171	\$1,575			\$1,836		\$353			
TASK 7: PROJECT MANAGEMENT																				
HOURS	93																	93	\$ 23,553	
ESTIMATED COST	\$23,553																			
TOTAL ESTIMATED PERMIT PROCESSING COST																			\$ 259,083	

1. See attached Task Description and Cost Assumptions for a description of the type of work included for each task and assumptions used to generate the costs.
2. Additional costs may be incurred depending upon the quality of the application received and the facility responsiveness to NODs.

Supplemental Workpaper: Environmental Management System (EMS) 1EV000.003

The Environmental Services O&M planned costs for the Environmental Management System are shown below.

Environmental Services - SDG&E	Funding Type	2022	2023	2024	2025	2026
	O&M	\$132K	\$120K	\$120K	\$120K	120K

San Diego Gas & Electric Company
2024 GRC - APP
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Supplemental Work Paper: Sustainability Program Cost Estimates 1EV000.004

The following are cost estimates provided by SDG&E Corporate Communications and Marketing group for the following activities. The estimates are based on similar previous campaigns.

Activities	Estimated Cost	Documentation of Costs
Production of SDG&E Sustainability Report to share transparent progress on sustainability goals with network of stakeholders.	\$75,000	<ul style="list-style-type: none">• Copy of report available at sdge.com/sustainability
Production of digital media Content and campaign to support ongoing engagement On sustainability topics, Including third-party studies Demonstrating paths to Decarbonize the energy sector.	\$75,000	<ul style="list-style-type: none">• Copy of report available at sdge.com/sustainability

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
Witness: Brittany A. Syz
Category: B. NERBA
Workpaper: VARIOUS

Summary for Category: B. NERBA

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	0	0	0	0
Non-Labor	1,442	1,423	1,455	1,403
NSE	0	0	0	0
Total	1,442	1,423	1,455	1,403
FTE	0.0	0.0	0.0	0.0

Workpapers belonging to this Category:

1EV001.001 RNERBA-PCB Phase Out

Labor	0	0	0	0
Non-Labor	0	0	0	0
NSE	0	0	0	0
Total	0	0	0	0
FTE	0.0	0.0	0.0	0.0

1EV001.002 RNERBA-AB32 Fees-Electric

Labor	0	0	0	0
Non-Labor	313	414	414	414
NSE	0	0	0	0
Total	313	414	414	414
FTE	0.0	0.0	0.0	0.0

1EV001.003 RNERBA-MS4-Electric

Labor	0	0	0	0
Non-Labor	0	15	31	5
NSE	0	0	0	0
Total	0	15	31	5
FTE	0.0	0.0	0.0	0.0

1EV002.001 RNERBA-Subpart W

Labor	0	0	0	0
Non-Labor	2	2	2	2
NSE	0	0	0	0
Total	2	2	2	2
FTE	0.0	0.0	0.0	0.0

1EV002.002 RNERBA-AB32 Fees-Gas

Labor	0	0	0	0
Non-Labor	961	917	917	917
NSE	0	0	0	0
Total	961	917	917	917
FTE	0.0	0.0	0.0	0.0

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Workpaper: VARIOUS

In 2021\$ (000) Incurred Costs			
Adjusted-Recorded	Adjusted-Forecast		
2021	2022	2023	2024

1EV002.003 RNERBA-LDAR

Labor	0	0	0	0
Non-Labor	166	60	60	60
NSE	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	166	60	60	60
FTE	0.0	0.0	0.0	0.0

1EV002.004 RNERBA-MS4-Gas

Labor	0	0	0	0
Non-Labor	0	15	31	5
NSE	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	15	31	5
FTE	0.0	0.0	0.0	0.0

Note: Totals may include rounding differences.

Beginning of Workpaper
1EV001.001 - RNERBA-PCB Phase Out

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV001.001 - RNERBA-PCB Phase Out

Activity Description:

The Polychlorinated Biphenyls (PCB) Phase Out account was created to track the costs associated with identifying and removing PCBs from SDG&E's electrical and non-electrical equipment system. The PCB Phase Out account is a separate subaccount to the New Environmental Regulation Balancing Account (NERBA), SDG&E is not forecasting any costs related to this activity during the GRC period.

Forecast Explanations:

Labor - Base YR Rec

There are no labor costs included in the forecast for this activity.

Non-Labor - Base YR Rec

There are no non labor costs included in the forecast for this activity.

NSE - Base YR Rec

The are no costs subject to non-standard escalation (NSE) included in the forecast for this activity.

Summary of Results:

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

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV001.001 - RNERBA-PCB Phase Out

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		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	0	0	0	0
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		0	0	0	0	0	0	0	0	0
FTE	Base YR Rec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
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Note: Totals may include rounding differences.

SDG&E/SDG&E ENVIRONMENTAL SVCS. AND SONGS/Exh No:SDG&E-24-WP/Witness: B. Syz

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
Witness: Brittany A. Syz
Category: B. NERBA
Category-Sub: 1. NERBA
Workpaper: 1EV001.001 - RNERBA-PCB Phase Out

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (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
Vacation & 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

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV001.001 - RNERBA-PCB Phase Out

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>	<u>Adj Type</u>
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Note: Totals may include rounding differences.

Beginning of Workpaper
1EV001.002 - RNERBA-AB32 Fees-Electric

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV001.002 - RNERBA-AB32 Fees-Electric

Activity Description:

SDG&E is required to pay annual administrative fees as required by the California Global Warming Solutions Act of 2006, referred to as AB32. The fees are paid to the California Air Resources Board for each megawatt hour of net power generated by the combustion of natural gas. The AB32 Fees-Electric are included in a separate subaccount to the New Environmental Regulation Balancing Account (NERBA).

Forecast Explanations:

Labor - Base YR Rec

There are no labor costs included in the forecast.

Non-Labor - Base YR Rec

A base year forecast methodology was used to determine cost requirements for NERBA as a cost category. This method is most appropriate because it identifies specific environmental regulatory requirements and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a the most recent base year spend and would not be captured by traditional averaging or trending which may not be reflective of more recent spending patterns. Further, as NERBA costs are not readily predictable given the attributes described earlier, traditional average of historical costs may not be a representative or accurate forecasting methodology. A base year forecast methodology was used because it is an effective way to forecast AB32-Electric fees which are dependent on the volume of covered emissions as well as the common carbon cost factor. The volume of covered emissions varies based upon weather conditions, maintenance outages and market conditions including California Independent System Operator (CAISO) dispatch frequencies and power imports from non-SDGE power plants. The common carbon cost factor is set by the State of California each year based upon their administrative costs and staffing and overall statewide GHG emissions. Since these factors are variable and uncertain in nature, using the most recent base year represents a conservative and realistic baseline since it utilizes our most recent experience with the covered emissions volumes and the common cost factor variables.

NSE - Base YR Rec

There are no non standard escalation (NSE) costs included in the forecast.

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		0	0	0	0	0	0	0	0	
Non-Labor		441	453	464	543	313	414	414	414	
NSE		0	0	0	0	0	0	0	0	
Total		441	453	464	543	313	414	414	414	
FTE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV001.002 - RNERBA-AB32 Fees-Electric

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		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	313	313	313	101	101	101	414	414	414
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		313	313	313	101	101	101	414	414	414
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:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	101	0	101	0.0	1-Sided Adj
Explanation:	Added costs based upon higher projected emissions levels for the electric generating facilities compared to the base year which were comparatively lower than prior years.					
2022 Total	0	101	0	101	0.0	
2023	0	101	0	101	0.0	1-Sided Adj
Explanation:	Added costs based upon higher projected emissions levels for the electric generating facilities compared to the base year which were comparatively lower than prior years.					
2023 Total	0	101	0	101	0.0	
2024	0	101	0	101	0.0	1-Sided Adj
Explanation:	Added costs based upon higher projected emissions levels for the electric generating facilities compared to the base year which were comparatively lower than prior years.					
2024 Total	0	101	0	101	0.0	

Note: Totals may include rounding differences.

SDG&E/SDG&E ENVIRONMENTAL SVCS. AND SONGS/Exh No:SDG&E-24-WP/Witness: B. Syz

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
Witness: Brittany A. Syz
Category: B. NERBA
Category-Sub: 1. NERBA
Workpaper: 1EV001.002 - RNERBA-AB32 Fees-Electric

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	388	412	431	503	313
NSE	0	0	0	0	0
Total	388	412	431	503	313
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 \$)					
Labor	0	0	0	0	0
Non-Labor	388	412	431	503	313
NSE	0	0	0	0	0
Total	388	412	431	503	313
FTE	0.0	0.0	0.0	0.0	0.0
Vacation & 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	53	41	32	39	0
NSE	0	0	0	0	0
Total	53	41	32	39	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	0	0	0	0	0
Non-Labor	441	453	464	543	313
NSE	0	0	0	0	0
Total	441	453	464	543	313
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

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV001.002 - RNERBA-AB32 Fees-Electric

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>	<u>Adj Type</u>
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Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 1EV001.002

Supplemental Workpaper: NERBA AB 32 1EV001.001

SDG&E AB 32 COI Fees - CARB Billing Summary										
		Billed in 2013	Billed in 2014	Billed in 2015	Billed in 2016	Billed in 2017	Billed in 2018	Billed in 2019	Billed in 2020	Billed in 2021
		(For 2011 Emission Year)	(For 2012 Emission Year)	(For 2013 Emission Year)	(For 2014 Emission Year)	(For 2015 Emission Year)	(For 2016 Emission Year)	(For 2017 Emission Year)	(For 2018 Emission Year)	(For 2019 Emission Year)
Facility	ARB ID #	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
Electric Power Entity	3004	\$87,924	\$77,538	\$225,868	\$130,935	\$151,149	\$169,861	\$161,111	\$264,251	\$177,358
Miramar Energy Facility	101401	\$10,849	\$11,471	\$11,444	\$7,013	\$8,789	\$16,862	\$15,796	\$15,022	\$10,746
Palomar Energy Facility	100362	\$122,391	\$128,809	\$216,154	\$146,769	\$228,380	\$224,855	\$254,272	\$224,215	\$124,707
Cuyamaca Peak Energy Plant ¹	101663	\$0	\$3,341	\$3,596	\$2,051	\$0	\$0	\$0	\$0	\$0
NERBA -Electric		\$221,164	\$221,159	\$457,062	\$286,768	\$388,318	\$411,578	\$431,179	\$503,488	\$312,811
Total Covered Emissions (CO2e) MT		1,541,344	1,844,379	3,263,596	1,935,739	1,964,416	1,632,042	1,664,918	1,690,851	1,165,844
Common Carbon Cost (\$/MT CO2e) ²		0.145	0.121	0.151	0.148	0.198	0.252	0.259	0.298	0.268
Natural Gas - Local Distribution	104087	\$559,954	\$470,605	\$587,385	\$517,201	\$733,511	\$922,127	\$965,034	\$984,799	\$960,513
NERBA - Gas		\$559,954	\$470,605	\$587,385	\$517,201	\$733,511	\$922,127	\$965,034	\$984,799	\$960,513
Total Covered Emissions (CO2e) MT		3,841,725	3,878,411	3,885,262	3,487,626	3,701,789	3,656,504	3,726,285	3,307,221	3,580,198
Common Carbon Cost (\$/MT CO2e) ²		0.145	0.121	0.151	0.148	0.198	0.252	0.259	0.298	0.268
Total		\$781,118	\$691,764	\$1,044,447	\$803,969	\$1,121,829	\$1,333,705	\$1,396,213	\$1,488,287	\$1,273,324

¹Cuyamaca was not part of SDGE's portfolio during 2011 (it was owned/operated by CalPeak). Cuyamaca has not billed since 2017 since its emissions have been below the required threshold for AB32 reporting/verification.

² Common Carbon Cost is calculated by CARB based on total required revenue to administer the program divided by the total statewide emissions covered by the AB32 Regulation. The CCC fluctuates from year to year based on revenue requirements and statewide emissions for a particular year.

Beginning of Workpaper
1EV001.003 - RNERBA-MS4-Electric

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV001.003 - RNERBA-MS4-Electric

Activity Description:

The Municipal Separate Stormwater Sewer System-Electric (MS4-Electric) permit minimizes the discharge of pollutants in stormwater and protects water resources through the implementation of best management practices for construction activities and the discharge of water from Company facilities. The compliance costs associated with the mandatory MS4 permit are included as a separate subaccount to the New Environmental Regulation Balancing account (NERBA).

Forecast Explanations:

Labor - Base YR Rec

There are no labor charges associated with the MS4-Electric subaccount for the forecast period.

Non-Labor - Base YR Rec

A base year forecast methodology was used to determine cost requirements for NERBA as a cost category. This method is most appropriate because it identifies specific environmental regulatory requirements and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a the most recent base year spend and would not be captured by traditional averaging or trending which may not be reflective of more recent spending patterns. Further, as NERBA costs are not readily predictable given the attributes described earlier, traditional average of historical costs may not be a representative or accurate forecasting methodology. A base year forecast methodology plus in incremental upward pressures for consultant survey costs and best management practices was used because it is an effective way to forecast costs for this particular activity. The base year represents a realistic baseline since it utilizes our most recent experience with the costs required to comply with the MS4 permit.

NSE - Base YR Rec

There are no non standard escalation (NSE) costs to forecast for the MS4-Electric account.

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
		2017	2018	2019	2020	2021	2022	2023	2024	
Years										
Labor		41	0	0	0	0	0	0	0	0
Non-Labor		28	0	0	0	0	15	31	5	
NSE		0	0	0	0	0	0	0	0	
Total		68	0	0	0	0	15	31	5	
FTE		0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV001.003 - RNERBA-MS4-Electric

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		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	15	31	5	15	31	5
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		0	0	0	15	31	5	15	31	5
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:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	15	0	15	0.0	1-Sided Adj
Explanation:	Added costs for the mandatory San Diego Municipal Region 9 and Caltrans permits. The State Water Resources Control Board is updating both permits to regulate discharges from municipal jurisdictions and certain right of way to surface waters.					
2022 Total	0	15	0	15	0.0	
2023	0	31	0	31	0.0	1-Sided Adj
Explanation:	Added costs for the mandatory San Diego Municipal Region 9 and Caltrans permits. The State Water Resources Control Board is updating both permits to regulate discharges from municipal jurisdictions and certain right of way to surface waters.					
2023 Total	0	31	0	31	0.0	
2024	0	5	0	5	0.0	1-Sided Adj
Explanation:	Added costs for the mandatory San Diego Municipal Region 9 and Caltrans permits. The State Water Resources Control Board is updating both permits to regulate discharges from municipal jurisdictions and certain right of way to surface waters.					
2024 Total	0	5	0	5	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
Witness: Brittany A. Syz
Category: B. NERBA
Category-Sub: 1. NERBA
Workpaper: 1EV001.003 - RNERBA-MS4-Electric

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	32	0	0	0	0
Non-Labor	24	0	0	0	0
NSE	0	0	0	0	0
Total	56	0	0	0	0
FTE	0.3	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 \$)					
Labor	32	0	0	0	0
Non-Labor	24	0	0	0	0
NSE	0	0	0	0	0
Total	56	0	0	0	0
FTE	0.3	0.0	0.0	0.0	0.0
Vacation & Sick (Nominal \$)					
Labor	5	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	5	0	0	0	0
FTE	0.1	0.0	0.0	0.0	0.0
Escalation to 2021\$					
Labor	4	0	0	0	0
Non-Labor	3	0	0	0	0
NSE	0	0	0	0	0
Total	8	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	41	0	0	0	0
Non-Labor	28	0	0	0	0
NSE	0	0	0	0	0
Total	68	0	0	0	0
FTE	0.4	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

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
 2024 GRC - APP
 Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV001.003 - RNERBA-MS4-Electric

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>	<u>Adj Type</u>
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Note: Totals may include rounding differences.

Beginning of Workpaper
1EV002.001 - RNERBA-Subpart W

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV002.001 - RNERBA-Subpart W

Activity Description:

Environmental Protection Agency Subpart W Petroleum and Natural Gas system of Part 98 of Title 40 of the Code of Federal Regulations (Subpart W) is a separate subaccount to the New Environmental Regulation Balancing Account (NERBA). The Subpart W subaccount is used to track the costs of conducting natural gas leak surveys on meter and regulation stations in the SDG&E service territory in addition to costs related to monitoring and reporting requirements for the Green House Gas (GHG) Mandatory Reporting Rule issued by the Environmental Protection Agency.

Forecast Explanations:

Labor - Base YR Rec

There are no labor costs forecasted for this activity,

Non-Labor - Base YR Rec

A base year forecast methodology was used to determine cost requirements for NERBA as a cost category. This method is most appropriate because it identifies specific environmental regulatory requirements and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a the most recent base year spend and would not be captured by traditional averaging or trending which may not be reflective of more recent spending patterns. Further, as NERBA costs are not readily predictable given the attributes described earlier, traditional average of historical costs may not be a representative or accurate forecasting methodology. A base year forecasting methodology plus incremental upward pressures minus incremental downward pressures including testing, survey, reporting and consultant costs was used to because it is the most effective way to forecast Subpart W expenses. Using the most recent base year represents a conservative and realistic baseline upon which to apply forecasted incremental cost pressures or cost reductions for this activity.

NSE - Base YR Rec

There are no non standard escalation (NSE) costs forecasted for this activity.

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		0	0	0	0	0	0	0	0	
Non-Labor		3	2	8	4	2	2	2	2	
NSE		0	0	0	0	0	0	0	0	
Total		3	2	8	4	2	2	2	2	
FTE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV002.001 - RNERBA-Subpart W

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		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	2	2	2	0	0	0	2	2	2
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		2	2	2	0	0	0	2	2	2
FTE	Base YR Rec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
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Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
Witness: Brittany A. Syz
Category: B. NERBA
Category-Sub: 1. NERBA
Workpaper: 1EV002.001 - RNERBA-Subpart W

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	3	2	8	4	2
NSE	0	0	0	0	0
Total	3	2	8	4	2
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 \$)					
Labor	0	0	0	0	0
Non-Labor	3	2	8	4	2
NSE	0	0	0	0	0
Total	3	2	8	4	2
FTE	0.0	0.0	0.0	0.0	0.0
Vacation & 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	1	0	0
NSE	0	0	0	0	0
Total	0	0	1	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	3	2	8	4	2
NSE	0	0	0	0	0
Total	3	2	8	4	2
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

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV002.001 - RNERBA-Subpart W

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>	<u>Adj Type</u>
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Note: Totals may include rounding differences.

Beginning of Workpaper
1EV002.002 - RNERBA-AB32 Fees-Gas

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV002.002 - RNERBA-AB32 Fees-Gas

Activity Description:

SDG&E is required to pay annual administrative fees as required by the California Global Warming Solutions Act of 2006, referred to as AB32. The fees are paid to the California Air Resources Board for each therm of natural gas delivered to any customer in California. The AB32-Gas fees are included as a separate subaccount to the New Environmental Regulation Balancing Account (NERBA)

Forecast Explanations:

Labor - Base YR Rec

There are no labor charges forecasted in the AB32 subaccount.

Non-Labor - Base YR Rec

A base year forecast methodology was used to determine cost requirements for NERBA as a cost category. This method is most appropriate because it identifies specific environmental regulatory requirements and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a the most recent base year spend and would not be captured by traditional averaging or trending which may not be reflective of more recent spending patterns. Further, as NERBA costs are not readily predictable given the attributes described earlier, traditional average of historical costs may not be a representative or accurate forecasting methodology. A base year forecast methodology was used because it is an effective way to forecast AB32-Electric fees which are dependent on the volume of covered emissions as well as the common carbon cost factor. The volume of covered emissions varies based upon weather conditions, maintenance outages and market conditions including California Independent System Operator (CAISO) dispatch frequencies and power imports from non-SDGE power plants. The common carbon cost factor is set by the State of California each year based upon their administrative costs and staffing and overall statewide GHG emissions. Since these factors are variable and uncertain in nature, using the most recent base year represents a conservative and realistic baseline since it utilizes our most recent experience with the covered emissions volumes and the common cost factor variables.

NSE - Base YR Rec

There are no non-standard escalation (NSE) costs to forecast for this activity.

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		0	0	0	0	0	0	0	0	
Non-Labor		834	1,019	1,033	1,061	961	917	917	917	
NSE		0	0	0	0	0	0	0	0	
Total		834	1,019	1,033	1,061	961	917	917	917	
FTE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV002.002 - RNERBA-AB32 Fees-Gas

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		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	961	961	961	-44	-44	-44	917	917	917
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		961	961	961	-44	-44	-44	917	917	917
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:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	-44	0	-44	0.0	1-Sided Adj
Explanation:	Adjustment to reduce forecasted costs compared to base year costs based upon lower common carbon costs.					
2022 Total	0	-44	0	-44	0.0	
2023	0	-44	0	-44	0.0	1-Sided Adj
Explanation:	Adjustment to reduce forecasted costs compared to base year costs based upon lower common carbon costs.					
2023 Total	0	-44	0	-44	0.0	
2024	0	-44	0	-44	0.0	1-Sided Adj
Explanation:	Adjustment to reduce forecasted costs compared to base year costs based upon lower common carbon costs.					
2024 Total	0	-44	0	-44	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
Witness: Brittany A. Syz
Category: B. NERBA
Category-Sub: 1. NERBA
Workpaper: 1EV002.002 - RNERBA-AB32 Fees-Gas

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	734	926	961	985	961
NSE	0	0	0	0	0
Total	734	926	961	985	961
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 \$)					
Labor	0	0	0	0	0
Non-Labor	734	926	961	985	961
NSE	0	0	0	0	0
Total	734	926	961	985	961
FTE	0.0	0.0	0.0	0.0	0.0
Vacation & 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	100	93	72	76	0
NSE	0	0	0	0	0
Total	100	93	72	76	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	0	0	0	0	0
Non-Labor	834	1,019	1,033	1,061	961
NSE	0	0	0	0	0
Total	834	1,019	1,033	1,061	961
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

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV002.002 - RNERBA-AB32 Fees-Gas

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>	<u>Adj Type</u>
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Note: Totals may include rounding differences.

Beginning of Workpaper
1EV002.003 - RNERBA-LDAR

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV002.003 - RNERBA-LDAR

Activity Description:

The Leak Detection Abatement and Repair (LDAR) subaccount was created to track and record compliance costs associated with the rules and procedures under Senate Bill 1371 for Commission regulated gas pipelines in order to reduce emissions of natural gas pursuant to the California Global Warming Solutions Act of 2006. The LDAR is a separate subaccount to the New Environmental Regulation Balancing Account (NERBA)

Forecast Explanations:

Labor - Base YR Rec

There are no labor costs forecasted for this subaccount.

Non-Labor - Base YR Rec

A base year forecast methodology was used to determine cost requirements for NERBA as a cost category. This method is most appropriate because it identifies specific environmental regulatory requirements and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a the most recent base year spend and would not be captured by traditional averaging or trending which may not be reflective of more recent spending patterns. Further, as NERBA costs are not readily predictable given the attributes described earlier, traditional average of historical costs may not be a representative or accurate forecasting methodology. A base year forecasting methodology is used since it is a reliable way to estimate the costs associated with complying with LDAR activities on the SDG&E system. Using the most recent base year represents a realistic baseline of costs since it utilizes our most recent experience with the the specific gas facilities and related survey and maintenance requirements needed to comply with the LDAR rules and procedures under Senate Bill 1371.

NSE - Base YR Rec

There are no non-standard escalation expenses (NSE) to forecast in this subaccount.

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		0	0	0	0	0	0	0	0	
Non-Labor		0	0	28	286	166	60	60	60	
NSE		0	0	0	0	0	0	0	0	
Total		0	0	28	286	166	60	60	60	
FTE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV002.003 - RNERBA-LDAR

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		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	166	166	166	-106	-106	-106	60	60	60
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		166	166	166	-106	-106	-106	60	60	60
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:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	-106	0	-106	0.0	1-Sided Adj
Explanation:	Reduced estimated costs compared to the base year for estimated annual leak detection abatement and repair expenses. The base year costs were considered not representative of costs in the forecast years.					
2022 Total	0	-106	0	-106	0.0	
2023	0	-106	0	-106	0.0	1-Sided Adj
Explanation:	Reduced estimated costs compared to the base year for estimated annual leak detection abatement and repair expenses. The base year costs were considered not representative of costs in the forecast years.					
2023 Total	0	-106	0	-106	0.0	
2024	0	-106	0	-106	0.0	1-Sided Adj
Explanation:	Reduced estimated costs compared to the base year for estimated annual leak detection abatement and repair expenses. The base year costs were considered not representative of costs in the forecast years.					
2024 Total	0	-106	0	-106	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
Witness: Brittany A. Syz
Category: B. NERBA
Category-Sub: 1. NERBA
Workpaper: 1EV002.003 - RNERBA-LDAR

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	0	0	26	266	166
NSE	0	0	0	0	0
Total	0	0	26	266	166
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 \$)					
Labor	0	0	0	0	0
Non-Labor	0	0	26	266	166
NSE	0	0	0	0	0
Total	0	0	26	266	166
FTE	0.0	0.0	0.0	0.0	0.0
Vacation & 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	2	21	0
NSE	0	0	0	0	0
Total	0	0	2	21	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	28	286	166
NSE	0	0	0	0	0
Total	0	0	28	286	166
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

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV002.003 - RNERBA-LDAR

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>	<u>Adj Type</u>
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Note: Totals may include rounding differences.

Beginning of Workpaper
1EV002.004 - RNERBA-MS4-Gas

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV002.004 - RNERBA-MS4-Gas

Activity Description:

The municipal separate stormwater sewer system (MS4-Gas) permit minimizes the discharge of pollutants in stormwater and protects water resources through the implementation of best management practices for construction activities and the discharge of water from Company facilities. The compliance costs associated with the MS4 permit are included in a separate subaccount to the New Environmental Regulation Balancing Account (NERBA).

Forecast Explanations:

Labor - Base YR Rec

There are no labor costs forecasted for this subaccount.

Non-Labor - Base YR Rec

A base year forecast methodology was used to determine cost requirements for NERBA as a cost category. This method is most appropriate because it identifies specific environmental regulatory requirements and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a the most recent base year spend and would not be captured by traditional averaging or trending which may not be reflective of more recent spending patterns. Further, as NERBA costs are not readily predictable given the attributes described earlier, traditional average of historical costs may not be a representative or accurate forecasting methodology. A base year forecast methodology plus in incremental upward pressures for consultant survey costs and best management practices was used because it is an effective way to forecast costs for this particular activity. The base year represents a realistic baseline since it utilizes our most recent experience with the costs required to comply with the MS4 permit.

NSE - Base YR Rec

There are no non-standard escalation (NSE) costs forecasted for this subaccount.

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		41	0	0	0	0	0	0	0	
Non-Labor		28	0	0	0	0	15	31	5	
NSE		0	0	0	0	0	0	0	0	
Total		68	0	0	0	0	15	31	5	
FTE		0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV002.004 - RNERBA-MS4-Gas

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		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	15	31	5	15	31	5
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		0	0	0	15	31	5	15	31	5
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:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	15	0	15	0.0	1-Sided Adj
Explanation:	Added costs for the mandatory San Diego Municipal Region 9 and Caltrans permits. The State Water Resources Control Board is updating both permits to regulate discharges from municipal jurisdictions and certain right of way to surface waters.					
2022 Total	0	15	0	15	0.0	
2023	0	31	0	31	0.0	1-Sided Adj
Explanation:	Added costs for the mandatory San Diego Municipal Region 9 and Caltrans permits. The State Water Resources Control Board is updating both permits to regulate discharges from municipal jurisdictions and certain right of way to surface waters.					
2023 Total	0	31	0	31	0.0	
2024	0	5	0	5	0.0	1-Sided Adj
Explanation:	Added costs for the mandatory San Diego Municipal Region 9 and Caltrans permits. The State Water Resources Control Board is updating both permits to regulate discharges from municipal jurisdictions and certain right of way to surface waters.					
2024 Total	0	5	0	5	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
Witness: Brittany A. Syz
Category: B. NERBA
Category-Sub: 1. NERBA
Workpaper: 1EV002.004 - RNERBA-MS4-Gas

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	32	0	0	0	0
Non-Labor	24	0	0	0	0
NSE	0	0	0	0	0
Total	56	0	0	0	0
FTE	0.3	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 \$)					
Labor	32	0	0	0	0
Non-Labor	24	0	0	0	0
NSE	0	0	0	0	0
Total	56	0	0	0	0
FTE	0.3	0.0	0.0	0.0	0.0
Vacation & Sick (Nominal \$)					
Labor	5	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	5	0	0	0	0
FTE	0.1	0.0	0.0	0.0	0.0
Escalation to 2021\$					
Labor	4	0	0	0	0
Non-Labor	3	0	0	0	0
NSE	0	0	0	0	0
Total	8	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	41	0	0	0	0
Non-Labor	28	0	0	0	0
NSE	0	0	0	0	0
Total	68	0	0	0	0
FTE	0.4	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

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: B. NERBA
 Category-Sub: 1. NERBA
 Workpaper: 1EV002.004 - RNERBA-MS4-Gas

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>	<u>Adj Type</u>
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Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: C. SONGS
 Workpaper: 1EV003.000

Summary for Category: C. SONGS

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	0	0	0	0
Non-Labor	1,216	0	0	0
NSE	0	1,486	1,513	1,540
Total	1,216	1,486	1,513	1,540
FTE	0.0	0.0	0.0	0.0

Workpapers belonging to this Category:

1EV003.000 EG -SONGS Wkp_Grp_1

Labor	0	0	0	0
Non-Labor	1,216	0	0	0
NSE	0	1,486	1,513	1,540
Total	1,216	1,486	1,513	1,540
FTE	0.0	0.0	0.0	0.0

Note: Totals may include rounding differences.

Beginning of Workpaper
1EV003.000 - EG -SONGS Wkp_Grp_1

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: C. SONGS
 Category-Sub: 1. SONGS
 Workpaper: 1EV003.000 - EG -SONGS Wkp_Grp_1

Activity Description:

SDG&E incurs O&M expenses for marine mitigation and worker's compensation costs related to the San Onofre Nuclear Generating Facility (SONGS). SDG&E is obligated to these O&M costs because they are not related to the decommissioning of the SONGS and are not recoverable from the decommissioning trust. Under the current cost recovery mechanism, Southern California Edison (SCE) includes the full amount of these costs in their GRC testimony and bills SDG&E for it's 20% ownership share of these costs plus overheads.

Marine mitigation costs are related to ongoing projects designed to mitigate the turbidity effects caused by the movement of ocean water used to cool SONGS. Worker's compensation costs are related to the master insurance program from 1972-1999 in addition to the self-insured program maintained by SCE for worker's compensation expense incurred after 1999.

Forecast Explanations:

Labor - Zero-Based

Non-standard escalation (NSE) is the appropriate forecasting methodology as SCE applies labor overhead rates to direct labor charges to recover administrative and general, pension and benefits and payroll taxes. SCE applies labor overhead rates to direct labor charges to recover administrative and general, pension and benefits and payroll taxes. SCE bills SDG&E based upon SDG&E's 20% ownership of SONGS. This is an existing commission approved methodology.

Non-Labor - Zero-Based

Non-standard escalation (NSE) is the appropriate forecasting methodology as SCE applies non-labor overhead rates to direct non-labor charges to recover administrative and general expenses. SCE bills SDG&E based upon SDG&E's 20% ownership of SONGS. This is an existing commission approved methodology.

NSE - Zero-Based

Non-standard escalation (NSE) is the most appropriate forecasting methodology as SCE incurs costs and bills SDG&E for SDG&E's 20% ownership of SONGS. These amounts are escalated using rates approved in SCE's TY21 GRC. This is an existing commission approved methodology.

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		14	6	0	0	0	0	0	0	
Non-Labor		-152	1,231	3,971	2,154	1,216	0	0	0	
NSE		0	0	0	0	0	1,486	1,513	1,540	
Total		-138	1,237	3,971	2,154	1,216	1,486	1,513	1,540	
FTE		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
 Witness: Brittany A. Syz
 Category: C. SONGS
 Category-Sub: 1. SONGS
 Workpaper: 1EV003.000 - EG -SONGS Wkp_Grp_1

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Zero-Based	0	0	0	0	0	0	0	0	0
Non-Labor	Zero-Based	0	0	0	0	0	0	0	0	0
NSE	Zero-Based	0	0	0	1,486	1,513	1,540	1,486	1,513	1,540
Total		0	0	0	1,486	1,513	1,540	1,486	1,513	1,540
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	0	1,307	1,307	0.0	1-Sided Adj
Explanation:	Zero based forecast with non standard escalation for marine mitigation costs.					
2022	0	0	179	179	0.0	1-Sided Adj
Explanation:	Zero based forecast with non standard escalation for workers compensation costs.					
2022 Total	0	0	1,486	1,486	0.0	
2023	0	0	1,330	1,330	0.0	1-Sided Adj
Explanation:	Zero based forecast with non standard escalation for marine mitigation costs.					
2023	0	0	183	183	0.0	1-Sided Adj
Explanation:	Zero based forecast with non standard escalation for workers compensation costs.					
2023 Total	0	0	1,513	1,513	0.0	
2024	0	0	1,354	1,354	0.0	1-Sided Adj
Explanation:	Zero based forecast with non standard escalation for marine mitigation costs.					
2024	0	0	186	186	0.0	1-Sided Adj
Explanation:	Zero based forecast with non standard escalation for workers compensation costs.					
2024 Total	0	0	1,540	1,540	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

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Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	11	4	0	0	0
Non-Labor	-134	1,118	3,694	2,001	1,232
NSE	0	0	0	0	0
Total	-123	1,123	3,694	2,001	1,232
FTE	0.1	0.0	0.0	0.0	0.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	-2	-16
NSE	0	0	0	0	0
Total	0	0	0	-2	-16
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	11	4	0	0	0
Non-Labor	-134	1,118	3,694	1,999	1,216
NSE	0	0	0	0	0
Total	-123	1,123	3,694	1,999	1,216
FTE	0.1	0.0	0.0	0.0	0.0
Vacation & Sick (Nominal \$)					
Labor	2	1	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	2	1	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Escalation to 2021\$					
Labor	1	0	0	0	0
Non-Labor	-18	113	278	155	0
NSE	0	0	0	0	0
Total	-17	113	278	155	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	14	6	0	0	0
Non-Labor	-152	1,231	3,971	2,154	1,216
NSE	0	0	0	0	0
Total	-138	1,237	3,971	2,154	1,216
FTE	0.1	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

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

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 Category: C. SONGS
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 Workpaper: 1EV003.000 - EG -SONGS Wkp_Grp_1

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	-2	-16
NSE	0	0	0	0	0
Total	0	0	0	-2	-16
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017 Total	0	0	0	0.0	
2018 Total	0	0	0	0.0	
2019 Total	0	0	0	0.0	
2020	0	-2	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 Total	0	-2	0	0.0	
2021	0	-2	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).				
2021	0	-12	0	0.0	1-Sided Adj
Explanation:	Adjustment to remove WNRMA costs.				
2021	0	-2	0	0.0	1-Sided Adj
Explanation:	Adjustment to remove costs from SONGS.				
2021 Total	0	-16	0	0.0	

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 1EV003.000

Test Year 2024 Summary of SONGS O&M

Environmental Services - SONGS				
Categories of Management	2021 Forecast (2021\$)	2022 Forecast (2022\$)	2023 Forecast (2023\$)	TY2024 Estimated (2024\$)
Marine Mitigation	\$1,285	\$1,307	\$1,330	\$1,354
SONGS Worker's Compensation	\$177	\$179	\$183	\$186
Total	\$1,461	\$1,486	\$1,513	\$1,540

(Refer to Marine Mitigation Supporting Calculation)

(Refer to Worker's Comp Supporting Calculation)

Revised escalation rate updated on October 29, 2021
Source: Susan Tran, SCE

**SONGS Marine Mitigation Supporting Calculations
Wheeler North Reef and San Dieguito Wetlands
Test Year 2024**

LINE			<u>2021</u> (Nominal \$)	<u>2022</u> (Nominal \$)	<u>2023</u> (Nominal \$)	<u>2024</u> (Nominal \$)		
1	SCE Labor Escalation ¹			1.031	1.057	1.086		
2	SCE Non Labor Escalation ²			1.017	1.035	1.054		
3	SCE 78.21 % Incurred - Direct Costs Calculation Support							
4	Marine Mitigation Labor	(A)	44,368	45,727	46,899	48,170	Calculation: Line 1 x (A)	
5	Marine Mitigation Non-Labor	(B)	<u>4,918,908</u>	<u>5,002,247</u>	<u>5,092,289</u>	<u>5,182,871</u>	Calculation: Line 2 x (B)	
6	Total Direct Costs SCE 78.21%		<u>4,963,276</u>	<u>5,047,974</u>	<u>5,139,188</u>	<u>5,231,041</u>	Calculation: Add Line 4 plus Line 5	
7	SCE Overhead Costs		<u>Rates</u>					
8	SCE A&G Labor OH	(C)	26.48%	11,749	12,109	12,419	12,755	Calculation: Line 4 x (C)
9	SCE A&G Non-Labor OH	(D)	1.00%	<u>49,189</u>	<u>50,022</u>	<u>50,923</u>	<u>51,829</u>	Calculation: Line 5 x (D)
10	SCE Total Overhead Costs		<u>60,938</u>	<u>62,131</u>	<u>63,342</u>	<u>64,584</u>	Calculation: Add Line 8 plus Line 9	
11	Total SCE Share at 78.21% with Overheads		<u><u>5,024,214</u></u>	<u><u>5,110,105</u></u>	<u><u>5,202,530</u></u>	<u><u>5,295,625</u></u>	Calculation: Add Line 6 plus Line 10	
12	100% Incurred Costs with Overheads		6,424,005	6,533,826	6,652,001	6,771,033	Calculation: Line 11 x 78.21%	
			20%	20%	20%	20%		
13	SDG&E 20% Share with Billed Overheads		<u>1,284,801</u>	<u>1,306,765</u>	<u>1,330,400</u>	<u>1,354,207</u>	Calculation: Line 12 x 20%	
				Forecast	Forecast	Forecast		

Note:

¹Updated to reflect SCE's escalation rates provided by Susan Tran, SCE on October 29, 2021. (Refer to O&M Labor Price Indexes And Escalation Rates Support Provided)

²Updated to reflect SCE's escalation rates provided by Susan Tran, SCE on October 29, 2021. (Refer to O&M Non-labor Price Indexes And Escalation Rates Support Provided)

San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

**SONGS Worker's Compensation
Master Insurance Program (MIP) and Industrial Accident
Test Year 2024**

	<u>2021</u> <u>(Nominal \$)</u>	<u>2022</u> <u>(Nominal \$)</u>	<u>2023</u> <u>(Nominal \$)</u>	<u>2024</u> <u>(Nominal \$)</u>
SCE Non Labor Escalation ¹		(B) 1.017	(C) 1.035	(D) 1.054
SDGE's 20% Share	(A) 176,555	179,546	182,778	186,029
Calculation Support		(A) x (B) Forecast	(A) x (C) Forecast	(A) x (D) Forecast

Note:

¹Updated to reflect SCE's escalation rates provided by Susan Tran, SCE on October 29, 2021.
(Refer to O&M Non-labor Price Indexes And Escalation Rates Support Provided)

O&M Labor Price Indexes And Escalation Rates

Labor Escalation Rates

Mnemonic	Short Label	Weight		2021	2022	2023	2024	
ECIPWPARN.S.A.FOP2	United States, Wages and Salaries, Private, Professional and Related, Units: (2005:4=100)	33.3%	(A)	2.56%	3.14%	2.56%	2.52%	(B)
ECIPWMBFNS.A.FOP2	United States, Wages and Salaries, Private, Management, Business, Financial, Units: (2005:4=100)	18.4%	(C)	2.49%	3.40%	2.87%	2.92%	(D)
CEU4422110008.A.FOP2	United States, Average Hourly Earnings, Electric Power Generation Transmission and Distribution, Units: \$/Hr	48.2%	(E)	3.00%	2.88%	2.45%	2.76%	(F)
SCE Collective Bargaining Agreement (2021 only)		48.2%		3.00%				

Labor O&M Escalation	Weight		2021	2022	2023	2024
SCE Labor Escalation Inflation Index 2021\$			1.0000	1.031	1.057	1.086
					(G)	
Deflation Index 2021\$			1.0000	0.9703	0.9460	0.9211
Percent Change	100.0%		2.76%	3.06%	2.56%	2.71%

Calculation: (G) x (H)

Calculation: [(A) x (B) + (C) x (D) + (E) x (F)]

(H)

IHS Markit Forecast
 2019-2021 2021 GRC Update (May 2020)
 2022- 2031 IHS Power Planner (October 2021)
 © 2021 IHS Markit



O&M Non-labor Price Indexes And Escalation Rates

Mnemonic	Label	Weight	2021 GRC Update			Escalation Rates -		
			2019	2020	2021	2022	2023	2024
JEFOMMS.A.FOP2	Total Steam Production Operation and Maintenance Cost Index (MS),		1.014	1.006	1.000	1.040	1.032	1.036
	Deflation Index		0.986	0.994	1.000	0.961	0.969	0.965
	Percent Change	0.08%	2.46%	-0.82%	-0.55%	4.02%	-0.76%	0.35%
JEHOMMS.A.FOP2	Total Hydro Production Operation and Maintenance Cost Index (MS),		1.036	1.007	1.000	1.043	1.038	1.039
	Deflation Index		0.965	0.993	1.000	0.959	0.963	0.963
	Percent Change	2.37%	2.20%	-2.84%	-0.69%	4.29%	-0.43%	0.03%
JEOMMS.A.FOP2	Total Other Production Operation and Maintenance Cost Index (MS),		1.017	1.006	1.000	1.044	1.044	1.047
	Deflation Index		0.983	0.994	1.000	0.958	0.958	0.955
	Percent Change	4.10%	2.50%	-1.08%	-0.63%	4.43%	-0.01%	0.23%
JETOMMS.A.FOP2	Total Transmission Plant Operation and Maintenance Cost Index (MS),		1.010	1.004	1.000	1.027	1.023	1.023
	Deflation Index		0.990	0.996	1.000	0.973	0.977	0.977
	Percent Change	12.94%	2.25%	-0.61%	-0.40%	2.72%	-0.41%	0.02%
JEDOMMS.A.FOP2	Total Distribution Plant Operation and Maintenance Cost Index (MS),		1.021	1.004	1.000	1.036	1.019	1.012
	Deflation Index		0.979	0.996	1.000	0.965	0.981	0.988
	Percent Change	33.37%	2.41%	-1.70%	-0.36%	3.61%	-1.63%	-0.67%
JECAOMS.A.FOP2	Customer Accounts - Operation Cost Index (MS),		0.994	0.983	1.000	1.035	1.054	1.072
	Deflation Index		1.006	1.017	1.000	0.966	0.949	0.933
	Percent Change	5.16%	2.93%	-1.04%	1.70%	3.51%	1.83%	1.73%
JECSIOMS.A.FOP2	Customer Service and Information Operation Cost Index (MS),		1.009	0.987	1.000	1.037	1.046	1.058
	Deflation Index		0.991	1.013	1.000	0.965	0.956	0.945
	Percent Change	1.29%	2.81%	-2.19%	1.31%	3.67%	0.86%	1.18%
JEADGOMMS@H.A.FOP2	Total Administration and General Operation and Maintenance Cost Index Without Healthcare (LMS),		0.975	0.985	1.000	1.017	1.035	1.054
	Deflation Index		1.025	1.015	1.000	0.983	0.966	0.949
	Percent Change	40.69%	2.16%	1.02%	1.49%	1.69%	1.80%	1.78%
JENOMMS.A.FOP2	Total Nuclear Production Operation and Maintenance Cost Index (MS),		1.011	0.998	1.000	1.037	1.035	1.041
	Deflation Index		0.989	1.002	1.000	0.964	0.966	0.960
	Percent Change	100.00%	2.33%	-1.24%	0.18%	3.69%	-0.21%	0.64%
Blended Nonlabor O&M 2021\$			2019	2020	2021	2022	2023	2024
Inflation Index			0.999	0.995	1.000	1.028	1.030	1.036
Deflation Index			1.001	1.005	1.000	0.973	0.971	0.965
Percent Change			2.32%	-0.43%	0.50%	2.76%	0.23%	0.62%

2019-2021 2021 GRC Update (May 2020)
 2022- 2031 IHS Power Planner (October 2021)

Source: IHS Markit Power Planner
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San Diego Gas & Electric Company
2024 GRC - APP
Non-Shared Service Workpapers

Area: SDG&E ENVIRONMENTAL SERVICES AND SONGS
Witness: Brittany A. Syz

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2100-0190	000	HAZARDOUS MATERIAL MANAGEMENT
2100-0206	000	HAZMAT & HAZ WASTE OPS MANAGER
2100-0298	000	SAN ONOFRE UNIT 1
2100-0299	000	SAN ONOFRE UNIT 2
2100-0300	000	SAN ONOFRE COMMON FACILITIES
2100-0302	000	SAN ONOFRE UNIT 2&3 C&O
2100-0303	000	SONGS INSURANCE COVERAGE
2100-0305	000	NUCLEAR FUEL
2100-0323	000	GENERATION DIVESTURE
2100-0398	000	HAZARDOUS MATERIAL - SDGE
2100-0632	000	ENVIRONMENTAL LAB OPERATIONS
2100-3022	000	SDGE ENVIRONMENTAL PROGRAMS
2100-3035	000	SITE ASSESSMENT & MITIGATION
2100-3282	000	ENVIRONMENTAL STRATEGY & SUSTAINABILITY
2100-3304	000	SILVERGATE SITE ASSESSMENT & MITIGATION
2100-3416	000	SONGS
2100-3589	000	ENVIRONMENTAL SERVICES DIRECTOR
2100-3685	000	ENVIRONMENTAL FIELD OPERATIONS
2100-3851	000	SUNRISE ENVIRONMENTAL
2100-3858	000	ENVIRONMENTAL CAPITAL PROGRAMS
2100-3965	000	ENVIRONMENTAL MITIGATION MANAGEMENT
2100-3967	000	ENVIRONMENTAL PLANNING
2100-3968	000	ENVIRONMENTAL AIR QUALITY GHG
2100-3969	000	ENVIRONMENTAL WATER RESOURCES
2100-3970	000	ENVIRONMENTAL NATURAL RESOURCES
2100-3971	000	ENVIRONMENTAL CULTURAL RESOURCES
2100-3985	000	ENVIROMENTAL COMMUNICATIONS
2100-3987	000	ENV ENHANCEMENT PROGRAM
2100-4138	000	ENVIRONMENTAL GIS