

Application of SAN DIEGO GAS & ELECTRIC)
COMPANY for authority to update its gas and)
electric revenue requirement and base rates)
effective January 1, 2028 (U 902-M))

Application No.: A.26-06-XXX

Exhibit No.: (SDGE-14-CWP)

CAPITAL WORKPAPERS TO
PREPARED DIRECT TESTIMONY
OF WILLIAM J. EXON
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

JUNE 2026



**2028 General Rate Case - APPLICATION
INDEX OF WORKPAPERS**

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Overall Summary For Exhibit No. SDGE-14-CWP

Area:	INFORMATION TECHNOLOGY
Witness:	William J. Exon

In 2025 \$ (000)

	Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031
A. IT Infrastructure & Platforms	17,632	42,839	28,195	26,091	28,333	25,518
B. Grid and Pipeline Management	19,175	40,893	40,697	32,712	32,633	28,979
C. Asset & Work Management	45,599	57,973	63,012	27,068	19,423	24,154
D. Customer Applications	44,228	43,176	50,766	43,434	47,510	42,457
E. Enterprise Applications	7,494	5,972	14,274	10,795	9,224	10,609
F. Data, Analytics, and Automation	18,076	24,869	26,186	28,051	27,163	26,372
Total	152,204	215,722	223,130	168,151	164,286	158,089

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: A. IT Infrastructure & Platforms
Workpaper: VARIOUS

Summary for Category: A. IT Infrastructure & Platforms

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
Labor	2,870	2,371	2,491	2,256	2,239	2,021	2,015
Non-Labor	15,664	15,261	40,348	25,939	23,852	26,312	23,503
NSE	0	0	0	0	0	0	0
Total	18,534	17,632	42,839	28,195	26,091	28,333	25,518
FTE	14.3	14.0	14.6	13.2	13.0	11.7	11.7

Workpapers belonging to this Category:

A09080 Data Center & Compute Lifecycle

Labor	0	113	96	0	0	0	0
Non-Labor	0	2,895	487	0	0	0	0
NSE	0	0	0	0	0	0	0
Total	0	3,008	583	0	0	0	0
FTE	0.0	0.7	0.6	0.0	0.0	0.0	0.0

Unit Measure: Projects

Units	0	1	1	0	0	0	0
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A09250 Network Resiliency Platform

Labor	158	334	596	218	515	320	317
Non-Labor	4,910	3,092	28,048	10,785	10,807	10,606	8,822
NSE	0	0	0	0	0	0	0
Total	5,068	3,426	28,644	11,003	11,322	10,926	9,139
FTE	0.0	2.0	3.5	1.3	3.0	1.9	1.8

Unit Measure: Projects

Units	5	3	6	4	3	3	2
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Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: A. IT Infrastructure & Platforms
Workpaper: VARIOUS

In 2025\$ (000) Incurred Costs							
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
B09070 Cloud Enablement and Automation							
Labor	2,243	1,003	1,215	1,165	983	972	993
Non-Labor	4,872	5,235	4,594	5,058	6,057	6,125	6,165
NSE	0	0	0	0	0	0	0
Total	7,115	6,238	5,809	6,223	7,040	7,097	7,158
FTE	12.2	5.9	7.1	6.8	5.7	5.6	5.8
Unit Measure: Projects							
Units	1	1	1	1	1	1	1
B09080 Cloud Platform and Automation							
Labor	422	782	389	375	456	452	461
Non-Labor	4,321	3,186	2,381	4,216	2,224	4,811	3,779
NSE	0	0	0	0	0	0	0
Total	4,743	3,968	2,770	4,591	2,680	5,263	4,240
FTE	1.9	4.6	2.3	2.2	2.6	2.6	2.7
Unit Measure: Projects							
Units	3	2	1	2	1	2	2
B09200 SDGE (non-shared) - Data & Analytics Platforms (SRM)							
Labor	0	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unit Measure: Projects							
Units	0	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: A. IT Infrastructure & Platforms
Workpaper: VARIOUS

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
C09250 Enterprise Monitoring & Observability							
Labor	35	0	0	0	0	0	0
Non-Labor	40	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0
Total	75	0	0	0	0	0	0
FTE	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Unit Measure: Projects							
Units	1	0	0	0	0	0	0
D09080 Workspace Endpoints							
Labor	0	0	195	323	285	277	244
Non-Labor	0	0	4,838	4,732	4,764	4,770	4,737
NSE	0	0	0	0	0	0	0
Total	0	0	5,033	5,055	5,049	5,047	4,981
FTE	0.0	0.0	1.1	1.9	1.7	1.6	1.4
Unit Measure: Projects							
Units	0	0	1	1	1	1	1
E09080 IT Foundational Systems							
Labor	12	139	0	175	0	0	0
Non-Labor	1,521	853	0	1,148	0	0	0
NSE	0	0	0	0	0	0	0
Total	1,533	992	0	1,323	0	0	0
FTE	0.1	0.8	0.0	1.0	0.0	0.0	0.0
Unit Measure: Projects							
Units	2	1	0	1	0	0	0

Note: Totals may include rounding differences.

**Beginning of Workpaper Group
A09080 - Data Center & Compute Lifecycle**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	1,588	795	407	277	0	113	96	0	0	0	0
Non-Labor	Zero-Based	31,780	7,505	1,369	786	0	2,895	487	0	0	0	0
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		33,368	8,299	1,776	1,062	0	3,008	583	0	0	0	0
FTE	Zero-Based	6.8	3.4	2.2	1.5	0.0	0.7	0.6	0.0	0.0	0.0	0.0
Units	Zero-Based	9	7	3	2	0	1	1	0	0	0	0

Business Purpose:

This workpaper supports technology lifecycle replacements within SDG&E's data center environment during its consolidation as applications are transitioning to cloud and colocation solutions. The projects address aging network load balancing and edge switching infrastructure that are approaching end-of-life and no longer supported under modern vendor standards. These investments preserve reliable, secure, and stable data center operations while applications are migrated to their future-state environments, consistent with the Company's broader cloud transition strategy.

Physical Description:

The scope includes two primary lifecycle replacement projects:

Network Load Balancing and Application Delivery Upgrade:

- Replaces end-of-life load balancing hardware and software.
- Supports distribution of application traffic across enterprise systems.
- Provides secure access, traffic management, and application performance stability within the data center.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Unit Measure: Projects

Data Center Edge Network Upgrade:

- Replaces aging edge switching infrastructure.
- Supports traffic routing, redundancy, and high availability at the network edge.
- Aligns switching performance with current reliability and cybersecurity standards.

The investments do not expand system capacity or introduce new functionality but are planned refresh cycle as the data center footprint is being consolidated.

Costs are primarily driven by labor for engineering and project management, and non-labor for hardware procurement and installation.

Project Justification:

These projects are justified as they aim to:

- Replace aging and unsupported infrastructure critical to data center traffic management and application availability .
- Reduce the likelihood of service disruptions, degraded performance, and cybersecurity vulnerabilities during the cloud transition period.
- Avoid higher-cost emergency replacements and reactive remediation associated with deferred lifecycle activity.
- Support stable system uptime and operational continuity as workloads migrate to future-state environments.
- Mitigate long-term operational risk and cost exposure for ratepayers during the transition from on-premises infrastructure.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work.

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	107	90	0	0	0	0	6	6	0	0	0	0	113	96	0	0	0	0
NLbr	2,895	487	0	0	0	0	0	0	0	0	0	0	2,895	487	0	0	0	0
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3,002	577	0	0	0	0	6	6	0	0	0	0	3,008	583	0	0	0	0
FTE	0.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.0	0.0	0.0	0.0
Units	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	6	0	0	6	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	6	0	0	6	0.0	0
2027	6	0	0	6	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	6	0	0	6	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028 Total	0	0	0	0	0.0	0
2029 Total	0	0	0	0	0.0	0
2030 Total	0	0	0	0	0.0	0
2031 Total	0	0	0	0	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	745	175	14	0	0
Non-Labor	14,381	4,251	420	237	0
NSE	0	0	0	0	0
Total	15,126	4,426	434	237	0
FTE	4.5	0.7	0.1	0.0	0.0
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	177	357	308	235	0
Non-Labor	6,848	1,510	813	521	0
NSE	0	0	0	0	0
Total	7,025	1,867	1,121	756	0
FTE	1.3	2.2	1.8	1.3	0.0
Units	9	7	3	2	0
Recorded-Adjusted (Nominal \$)					
Labor	922	532	322	235	0
Non-Labor	21,229	5,761	1,233	758	0
NSE	0	0	0	0	0
Total	22,151	6,294	1,555	992	0
FTE	5.8	2.9	1.9	1.3	0.0
Units	9	7	3	2	0
Vacation & Sick (Nominal \$)					
Labor	139	78	45	32	0

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	139	78	45	32	0
FTE	1.0	0.5	0.3	0.2	0.0
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	527	185	40	10	0
Non-Labor	10,551	1,743	136	28	0
NSE	0	0	0	0	0
Total	11,078	1,928	176	38	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	1,588	795	407	277	0
Non-Labor	31,780	7,505	1,369	786	0
NSE	0	0	0	0	0
Total	33,368	8,299	1,776	1,062	0
FTE	6.8	3.4	2.2	1.5	0.0
Units	9	7	3	2	0

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	177	357	308	235	0
Non-Labor	6,848	1,510	813	521	0
NSE	0	0	0	0	0
Total	7,025	1,867	1,121	756	0
FTE	1.3	2.2	1.8	1.3	0.0
Units	9	7	3	2	0

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	8
Explanation:	Add units for projects: T000038 T000045 T000048 T000059 T000061, T18025, T19017, T19034					
2021	177	6,848	0	7,025	1.3	1
Explanation:	Moving DATA CTR NETWK CORE IMPLEMTN from A09070 to A09080 to align actuals to correct workpaper.					
2021 Total	177	6,848	0	7,025	1.3	9
2022	0	0	0	0	0.0	6

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Add units for projects: T000038 T000045 T000048 T000059 T19017, T18025						
2022	357	1,510	0	1,867	2.2	1
Explanation: Moving DATA CTR NETWK CORE IMPLEMTN from A09070 to A09080 to align actuals to correct workpaper.						
2022 Total	357	1,510	0	1,867	2.2	7
2023	0	0	0	0	0.0	2
Explanation: Add unit for projects: T000048 and T000094						
2023	308	813	0	1,121	1.8	1
Explanation: Moving DATA CTR NETWK CORE IMPLEMTN from A09070 to A09080 to align actuals to correct workpaper.						
2023 Total	308	813	0	1,121	1.8	3
2024	0	0	0	0	0.0	1
Explanation: Add unit for project: T000094						
2024	235	521	0	756	1.3	1
Explanation: Moving DATA CTR NETWK CORE IMPLEMTN from A09070 to A09080 to align actuals to correct workpaper.						
2024 Total	235	521	0	756	1.3	2
2025 Total	0	0	0	0	0.0	0

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group A09080**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Workpaper Detail: A09080.001 - Network Load Balancing and Application Delivery Upgrade 2026 (Lbr, VendSvc, and HW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	113	0	0	0	0	0
Non-Labor	2,895	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	3,008	0	0	0	0	0
FTE	0.7	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Workpaper Detail: A09080.002 - Data Center Edge Network Upgrade 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	120	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	120	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Workpaper Detail: A09080.003 - Data Center Edge Network Upgrade 2027 (HW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	230	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	230	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09080 - Data Center & Compute Lifecycle
Workpaper Detail: A09080.004 - Data Center Edge Network Upgrade 2027 (Lbr & VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	96	0	0	0	0
Non-Labor	0	137	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	233	0	0	0	0
FTE	0.0	0.6	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group A09080

SDGE Information Technology (IT) - Capital Supplemental Workpaper

SDGE IT Capital Workpaper Number **A09080**
SDGE IT Capital Workpaper Name Data Center & Compute Lifecycle
Unit Measure Projects
Number of Units 2

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Network Load Balancing and Application Delivery Upgrade	3,008	-	-	-	-	-
Labor	113	-	-	-	-	-
Non-Labor	2,895	-	-	-	-	-
Data Center Edge Network Upgrade	-	583	-	-	-	-
Labor	-	96	-	-	-	-
Non-Labor	-	487	-	-	-	-
Grand Total	3,008	583	-	-	-	-
Total Labor	113	96	-	-	-	-
Total Non-Labor	2,895	487	-	-	-	-
Grand Total	3,008	583	-	-	-	-

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDGE IT Workpaper Detail:

A09080.001

SDGE IT Project Name:

Network Load Balancing and Application Delivery Upgrade

Forecast in 2025 \$[000] - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total cost (all years)
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	0.7	162	113			0			0			0			0			0	113
Purchased (External) Labor	Blended Rate External (Hourly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services (Milestone based)	Blended Rate (monthly)	Non-Labor	# of contract months	1	1,248	1,248			0			0			0			0			0	1,248
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices	1	1,647	1,647			0			0			0			0			0	1,647
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					113			0			0			0			0			0	113
	Non-Labor					2,895			0			0			0			0			0	2,895
	Total					3,008			0			0			0			0			0	3,008

TY2028 GRC Forecast - Details

SDGE IT Workpaper Detail:

A09080.002-004

SDGE IT Project Name:

Data Center Edge Network Upgrade

Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total cost (all years)
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0	0.6	162	96			0			0			0			0	96
Purchased (External) Labor	Blended Rate External (Hourly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services (Milestone based)	Blended Rate (monthly)	Non-Labor	# of contract months			0	1	137	137			0			0			0			0	137
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0	2	115	230			0			0			0			0	230
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0	1	120	120			0			0			0			0	120
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					0			96			0			0			0			0	96
	Non-Labor					0			487			0			0			0			0	487
	Total					0			583			0			0			0			0	583

**Beginning of Workpaper Group
A09250 - Network Resiliency Platform**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	828	883	639	413	158	334	596	218	515	320	317
Non-Labor	Zero-Based	15,082	11,009	4,482	3,424	4,910	3,092	28,048	10,785	10,807	10,606	8,822
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		15,910	11,892	5,121	3,837	5,068	3,426	28,644	11,003	11,322	10,926	9,139
FTE	Zero-Based	4.2	4.7	3.0	1.1	0.0	2.0	3.5	1.3	3.0	1.9	1.8
Units	Zero-Based	6	5	7	6	5	3	6	4	3	3	2

Business Purpose:

The purpose of this workpaper is to modernize SDG&E's network infrastructure to support reliable service delivery, growing operational and cybersecurity requirements, and enable future technology adoption. This program addresses aging network components, enhances resiliency against outages, and enables compliance with industry and regulatory standards for critical infrastructure.

Physical Description:

This workpaper contains projects that have a mix of utility shared- and non-shared assets. It includes projects spanning 2026–2031 focused on:

- Multi-year network modernization across SDGE facilities to replace aging switches, routers, and firewalls with next-generation equipment.
- Data Center Core Network (DCN) hardware refresh to maintain high-speed connectivity and redundancy for mission-critical systems.
- Network Enterprise Agreement providing hardware, software, and maintenance coverage for core network components, enabling predictable costs and timely updates.
- Network infrastructure renewal for hardware maintenance and lifecycle support for edge and core routing platforms.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Unit Measure: Projects

- Network & Infrastructure Capital Replacement programs addressing incremental network and infrastructure needs, including localized upgrades and minor hardware replacements.

Costs are primarily driven by Internal labor for engineering design, implementation planning, and integration of new hardware into existing network architecture. Non-labor for procurement of network hardware, software licenses, and multi-year maintenance agreements.

Project Justification:

These projects are justified by the following benefits:

- Grouping these projects under a single workpaper drives a consistent modernization strategy, cost efficiency, and streamlined execution across multiple years.
- Replacing aging network infrastructure helps reduce risk of service disruption, improve resiliency, and mitigate cybersecurity vulnerabilities.
- Enterprise agreements with third-party network vendors provide predictable costs, timely updates, and reduce risk of unplanned outages due to unsupported hardware.
- Ratepayers benefit through improved reliability, reduced outage risk, and enhanced support for future technology needs such as advanced grid management and customer-facing digital services.
- Compliance with CPUC directives and industry standards helps preserve secure and reliable operation of critical infrastructure, protecting customer data and maintaining trust.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																			
	Base Forecast						Forecast Adjustments						Adjusted-Forecast						
Years	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	
Labor	316	562	205	485	301	299	18	34	13	30	19	18	334	596	218	515	320	317	
NLbr	3,092	28,048	10,785	10,807	10,606	8,822	0	0	0	0	0	0	3,092	28,048	10,785	10,807	10,606	8,822	
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	3,408	28,610	10,990	11,292	10,907	9,121	18	34	13	30	19	18	3,426	28,644	11,003	11,322	10,926	9,139	
FTE	2.0	3.5	1.3	3.0	1.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0	2.0	3.5	1.3	3.0	1.9	1.8	
Units	3	6	4	3	3	2	0	0	0	0	0	0	3	6	4	3	3	2	

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	18	0	0	18	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	18	0	0	18	0.0	0
2027	34	0	0	34	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	34	0	0	34	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	13	0	0	13	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	13	0	0	13	0.0	0
2029	30	0	0	30	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	30	0	0	30	0.0	0
2030	19	0	0	19	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	19	0	0	19	0.0	0
2031	18	0	0	18	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	18	0	0	18	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	481	592	505	351	138
Non-Labor	10,075	8,452	4,037	3,300	3,554
NSE	0	0	0	0	0
Total	10,555	9,043	4,543	3,651	3,692
FTE	3.6	4.0	2.6	1.0	0.0
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	1,356
NSE	0	0	0	0	0
Total	0	0	0	0	1,356
FTE	0.0	0.0	0.0	0.0	0.0
Units	6	5	7	6	5
Recorded-Adjusted (Nominal \$)					
Labor	481	592	505	351	138
Non-Labor	10,075	8,452	4,037	3,300	4,910
NSE	0	0	0	0	0
Total	10,555	9,043	4,543	3,651	5,048
FTE	3.6	4.0	2.6	1.0	0.0
Units	6	5	7	6	5
Vacation & Sick (Nominal \$)					
Labor	72	86	70	48	20

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	72	86	70	48	20
FTE	0.6	0.7	0.4	0.1	0.0
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	275	205	63	15	0
Non-Labor	5,007	2,557	445	123	0
NSE	0	0	0	0	0
Total	5,282	2,763	508	138	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	828	883	639	413	158
Non-Labor	15,082	11,009	4,482	3,424	4,910
NSE	0	0	0	0	0
Total	15,910	11,892	5,121	3,837	5,068
FTE	4.2	4.7	3.0	1.1	0.0
Units	6	5	7	6	5

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	1,356
NSE	0	0	0	0	0
Total	0	0	0	0	1,356
FTE	0.0	0.0	0.0	0.0	0.0
Units	6	5	7	6	5

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	6
Explanation:	Add unit for projects: T000037 T000043 T000051 T19005 T19027					
2021 Total	0	0	0	0	0.0	6
2022	0	0	0	0	0.0	5
Explanation:	Add unit for projects: T000043 T000051 T000080 T19005 T19027					
2022 Total	0	0	0	0	0.0	5

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2023	0	0	0	0	0.0	7
Explanation:	Add unit for projects: T000043 T000051 T000107 T000108 T000115, T19005, T19027					
2023 Total	0	0	0	0	0.0	7
2024	0	0	0	0	0.0	6
Explanation:	Add unit for projects: T000043 T000051 T000107 T000154 T000158 T000129					
2024 Total	0	0	0	0	0.0	6
2025	0	1,356	0	1,356	0.0	0
Explanation:	Transfer costs from 009250 to A09250 to capture costs in correct workpaper.					
2025	0	0	0	0	0.0	5
Explanation:	Add unit for projects: T000129 T000158 T000175 T000176 T000204					
2025 Total	0	1,356	0	1,356	0.0	5

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group A09250**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.002 - Emergency Response and Network Resilience Mitigations (Lbr HW, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	236	0	0	0	0	0
Non-Labor	2,551	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	2,787	0	0	0	0	0
FTE	1.4	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.003 - Network & Infrastructure Capital Replacement Program
Unit Measure: Projects

In-Service Date: Not Applicable

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	300	300	300	300	300	300
NSE	0	0	0	0	0	0
Total	300	300	300	300	300	300
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	1	1	1	1	1	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.004 - Core Network Services Upgrade 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	2,362	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	2,362	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.005 - Core Network Services Upgrade 2027 (HW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	490	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	490	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.006 - Core Network Services Upgrade 2027 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	169	0	0	0	0
Non-Labor	0	1,205	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>1,374</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	1.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.007 - Data Center Network Refresh 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	3,600	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	3,600	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.008 - Data Center Network Refresh 2027 (HW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	179	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	179	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.009 - Data Center Network Refresh 2027 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	170	0	0	0	0
Non-Labor	0	3,600	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	3,770	0	0	0	0
FTE	0.0	1.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.010 - Network Modernization 2027 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	257	0	0	0	0
Non-Labor	0	7,512	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	7,769	0	0	0	0
FTE	0.0	1.5	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.011 - Network Enterprise Agreement 2027 (VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	7,100	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	7,100	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.013 - Network Hardware Agreement 2027 (HW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 13

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	1,700	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	1,700	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.014 - Network Design and Implementation 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 14

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	100	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	100	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.015 - Network Design and Implementation 2028 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 15

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	85	0	0	0
Non-Labor	0	0	457	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	542	0	0	0
FTE	0.0	0.0	0.5	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.016 - Network Modernization 2028 (HW)
Unit Measure: Projects

In-Service Date: 03/31/2028

Description:

Add sub-workpaper 16

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	7,885	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	7,885	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.017 - Network Modernization 2028 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 17

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	133	0	0	0
Non-Labor	0	0	424	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	557	0	0	0
FTE	0.0	0.0	0.8	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.019 - Network Infrastructure Renewal 2028 (HW)
Unit Measure: Projects

In-Service Date: 03/31/2028

Description:

Add sub-workpaper 19

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	1,619	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	1,619	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.020 - Network Modernization 2029 (Lbr HW VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 20

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	515	0	0
Non-Labor	0	0	0	8,722	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	9,237	0	0
FTE	0.0	0.0	0.0	3.0	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.021 - Network Infrastructure Renewal 2029 (HW)
Unit Measure: Projects

In-Service Date: 07/31/2029

Description:

Add sub-workpaper 21

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	1,785	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	1,785	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.023 - Network Modernization 2030 (Lbr HW VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 23

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	320	0
Non-Labor	0	0	0	0	8,521	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	8,841	0
FTE	0.0	0.0	0.0	0.0	1.9	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.024 - 2030 SDGE Juniper Renewal (HW)
Unit Measure: Projects

In-Service Date: 07/31/2030

Description:

Add sub-workpaper 24

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	1,785	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,785</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.025 - Network Modernization 2031 Hardware Labor & Vendor Services
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 25

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	317
Non-Labor	0	0	0	0	0	8,522
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>8,839</u>
FTE	0.0	0.0	0.0	0.0	0.0	1.8
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0925.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: A09250 - Network Resiliency Platform
Workpaper Detail: A09250.026 - Network Modernization 2026 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 26

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	98	0	0	0	0	0
Non-Labor	241	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	339	0	0	0	0	0
FTE	0.6	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group A09250

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number
SDG&E IT Capital Workpaper Name
Unit Measure
Number of Units

A09250
Network Resiliency Platform
Projects
21

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Emergency Response and Network Resilience Mitigations	2,778	0	0	0	0	0
Labor	227	0	0	0	0	0
Non-Labor	2,551	0	0	0	0	0
Network & Infrastructure Capital Replacement Program (2026-2031)	300	300	300	300	300	300
Labor	0	0	0	0	0	0
Non-Labor	300	300	300	300	300	300
Core Network Services Upgrade 2027	0	4,219	0	0	0	0
Labor	0	162	0	0	0	0
Non-Labor	0	4,057	0	0	0	0
Data Center Network Refresh 2027	0	7,541	0	0	0	0
Labor	0	162	0	0	0	0
Non-Labor	0	7,379	0	0	0	0
Network Modernization (2026-2031)	339	7,755	8,439	9,208	8,829	8,813
Labor	98	243	130	486	308	292
Non-Labor	241	7,512	8,309	8,722	8,521	8,522
Network Enterprise Agreement 2027	0	7,100	0	0	0	0
Labor	0	0	0	0	0	0
Non-Labor	0	7,100	0	0	0	0
Network Hardware Agreement 2027	0	1,700	0	0	0	0
Labor	0	0	0	0	0	0
Non-Labor	0	1,700	0	0	0	0
Network Design and Implementation 2028	0	0	638	0	0	0
Labor	0	0	81	0	0	0
Non-Labor	0	0	557	0	0	0
Network Infrastructure Renewal 2028	0	0	1,619	0	0	0
Labor	0	0	0	0	0	0
Non-Labor	0	0	1,619	0	0	0
Network Infrastructure Renewal 2029	0	0	0	1,785	0	0
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	1,785	0	0
2030 SDGE Juniper Renewal	0	0	0	0	1,785	0
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	1,785	0
Grand Total	3,417	28,615	10,996	11,293	10,914	9,113
Total Labor	325	567	211	486	308	292
Total Non-Labor	3,092	28,048	10,785	10,807	10,606	8,822
Grand Total	98	567	211	486	308	292

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

A09250.002

SDG&E IT Project Name:

Emergency Response and Network Resilience Mitigations

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	1.4	162	227			0			0			0			0			0	227
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	79	943			0			0			0			0			0	943
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices	5	322	1,608			0			0			0			0			0	1,608
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				227			0			0			0			0			0	227
		Non-Labor				2,551			0			0			0			0			0	2,551
		Total				2,778			0			0			0			0			0	2,778

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

A09250.003
Network & Infrastructure Capital Replacement Program
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices	1	300	300	1	300	300	1	300	300	1	300	300	1	300	300	1	300	300	1,800
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0		0		0		0		0		0		0		0	0	0
		Labor				0		0		0		0		0		0		0		0	0	0
		Non-Labor				300		300		300		300		300		300		300		300	300	1,800
		Total				300		300		300		300		300		300		300		300	300	1,800

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

A09250.004 - .006
Core Network Services Upgrade 2027
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0	1.0	162	162			0			0			0			0	162
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0	12	100	1,205			0			0			0			0	1,205
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0	490	1	490			0			0			0			0	490
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0	1	2,362	2,362			0			0			0			0	2,362
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				0		162			0		0		0		0		0		0	162
		Non-Labor				0		4,057			0		0		0		0		0		0	4,057
		Total				0		4,219			0		0		0		0		0		0	4,219

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

A09250.007 - .009

SDG&E IT Project Name:

Data Center Network Refresh 2027

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0	1.0	162	162			0			0			0			0	162
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0	12	300	3,600			0			0			0			0	3,600
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0	2	90	179			0			0			0			0	179
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of platform			0	2	1,800	3,600			0			0			0			0	3,600
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				0		162			0		0		0		0		0		0	162
		Non-Labor				0		7,379			0		0		0		0		0		0	7,379
		Total				0		7,541			0		0		0		0		0		0	7,541

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

A09250.010, .016--017, .020, .023, .025--026
Network Modernization (2026-2031)
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	0.6	162	98	1.5	162	243	0.8	162	130	3.0	162	486	1.9	162	308	1.8	162	292	1,556
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	20	241	12	52	624	12	35	424	12	70	836	12	53	635	12	53	636	3,396
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0	200	34	6,888	177	45	7,885	177	45	7,886	177	45	7,885	177	45	7,886	38,430
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						98		243			130		486		308		292		1,556			
	Labor					241		7,512			8,309		8,722		8,521		8,522		8,813			41,827
	Non-Labor					339		7,755			8,439		9,208		8,829		8,813		8,813			43,383
	Total					339		7,755			8,439		9,208		8,829		8,813		8,813			43,383

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

A09250.011

SDG&E IT Project Name:

Network Enterprise Agreement 2027

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0	12	592	7,100			0			0			0			0	7,100
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0		0	0		0		0		0		0		0		0	0
		Labor				0		0	0		0		0		0		0		0		0	0
		Non-Labor				0		7,100	0		0		0		0		0		0		0	7,100
		Total				0		7,100	0		0		0		0		0		0		0	7,100

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

A09250.013
Network Hardware Agreement 2027
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of routers			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0	1	1,700	1,700			0			0			0			0	1,700
Summary						0		0	0		0		0		0		0		0		0	0
		Labor				0		0	0		0		0		0		0		0		0	0
		Non-Labor				0		1,700	0		0		0		0		0		0		0	1,700
		Total				0		1,700	0		0		0		0		0		0		0	1,700

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

A09250.014--015
Network Design and Implementation 2028
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0	0.5	162	81			0			0			0	81
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0		0			0	0		0	0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0		0	12	38	457			0				0			0	457
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0		0			0	0		0	0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0		0			0	0		0	0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0		0			0	0		0	0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0		0	1	100	100			0	0			0			0	100
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0		0			0	0		0	0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0		0			0	0		0	0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0		0			0	0		0	0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0		0			0	0		0	0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0		0			0	0		0	0			0			0	0
Summary																						
		Labor				0		0			81			0				0			0	81
		Non-Labor				0		0			557			0				0			0	557
		Total				0		0			638			0				0			0	638

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

A09250.019

SDG&E IT Project Name:

Network Infrastructure Renewal 2028

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of routers			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0	1	1,619	1,619			0			0			0	1,619
Summary						0			0			0			0			0			0	0
		Labor				0			0			0			0			0			0	0
		Non-Labor				0			0			1,619			0			0			0	1,619
		Total				0			0			1,619			0			0			0	1,619

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

A09250.021

SDG&E IT Project Name:

Network Infrastructure Renewal 2029

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of switches			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			1	1,785	1,785				0			0	1,785
Summary						0			0			0			0			0			0	0
		Labor				0			0			0			0			0			0	0
		Non-Labor				0			0			0			1,785			0			0	1,785
		Total				0			0			0			1,785			0			0	1,785

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

A09250.024

SDG&E IT Project Name:

2030 SDGE Juniper Renewal

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of switches			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0	1	1,785	1,785			0	1,785
Summary						0			0			0			0			0			0	0
		Labor				0			0			0			0			0			0	0
		Non-Labor				0			0			0			0			1,785			0	1,785
		Total				0			0			0			0			1,785			0	1,785

**Beginning of Workpaper Group
B09070 - Cloud Enablement and Automation**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	1,556	1,352	-40	1,387	2,243	1,003	1,215	1,165	983	972	993
Non-Labor	Zero-Based	18,744	4,130	2	4,229	4,872	5,235	4,594	5,058	6,057	6,125	6,165
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		20,299	5,482	-38	5,616	7,115	6,238	5,809	6,223	7,040	7,097	7,158
FTE	Zero-Based	6.7	6.4	-0.2	7.1	12.2	5.9	7.1	6.8	5.7	5.6	5.8
Units	Zero-Based	1	1	1	1	1	1	1	1	1	1	1

Business Purpose:

The purpose of this workpaper is to establish the foundational cloud platform capabilities required to support enterprise cloud adoption. These projects enable secure, compliant, and automated cloud environments that accelerate migration from traditional data centers and support both newly developed and migration of existing applications. By investing in cloud platform engineering and automation, cloud strategy and enablement, these projects enable future scalability, operational efficiency, and adherence to regulatory and cybersecurity standards.

Physical Description:

This workpaper contains projects that have utility shared assets. This workpaper includes multiple projects scheduled from 2026 through 2031:

- Cloud Enablement & Automation (2026–2028)
- Cloud Enablement and Automation (2029–2031)

These investments focus on building and enhancing the Company's core cloud platform services to support enterprise workloads in a secure and scalable environment. The work includes implementing automation for provisioning, compliance, and governance to reduce manual effort and improve

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Unit Measure: Projects

consistency. It also supports the migration of applications from on-premises data centers to cloud environments while embedding security and compliance controls directly into the platform. Collectively, these efforts enable both new and existing applications to operate securely, reliably, and efficiently in the cloud.

Primary cost drivers include labor and professional services for cloud engineering and automation development, integrations, strategy development, and compliance.

Project Justification:

The projects in this workpaper are justified by the following benefits:

- Grouping these projects under a single workpaper enables alignment of cloud strategy initiatives, reducing duplication and enabling economies of scale.
- Establishing and enhancing a secure and compliant cloud foundation and core services supports regulatory requirements and mitigates cybersecurity risks, protecting customer data and critical infrastructure.
- Automation helps in reducing manual processes, improving operational efficiency and lowering long-term costs, which benefits ratepayers through reduced IT overhead.
- Accelerating cloud adoption enables faster deployment of customer-facing applications and services, improving reliability and responsiveness.
- Migrating workloads from traditional data centers to cloud environments mitigates technology obsolescence, reduces hardware dependency and long-term maintenance costs, minimizing rate impacts.

Impacts of not doing the project:

- No automation or machine-driven accelerators (e.g., architecture and IAC patterns).
- No governance for cost allocation and compliance maturity.
- Manual processes persist, decreasing cloud adoption acceleration.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	949	1,145	1,098	926	915	937	54	70	67	57	57	56	1,003	1,215	1,165	983	972	993
NLbr	5,235	4,594	5,058	6,057	6,125	6,165	0	0	0	0	0	0	5,235	4,594	5,058	6,057	6,125	6,165
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	6,184	5,739	6,156	6,983	7,040	7,102	54	70	67	57	57	56	6,238	5,809	6,223	7,040	7,097	7,158
FTE	5.9	7.1	6.8	5.7	5.6	5.8	0.0	0.0	0.0	0.0	0.0	0.0	5.9	7.1	6.8	5.7	5.6	5.8
Units	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	54	0	0	54	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	54	0	0	54	0.0	0
2027	70	0	0	70	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	70	0	0	70	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	67	0	0	67	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	67	0	0	67	0.0	0
2029	57	0	0	57	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	57	0	0	57	0.0	0
2030	57	0	0	57	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	57	0	0	57	0.0	0
2031	56	0	0	56	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	56	0	0	56	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	903	906	-32	1,177	1,957
Non-Labor	12,521	3,171	2	4,076	4,872
NSE	0	0	0	0	0
Total	13,424	4,077	-30	5,254	6,829
FTE	5.7	5.5	-0.2	6.2	10.5
Units	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
Units	1	1	1	1	1
Recorded-Adjusted (Nominal \$)					
Labor	903	906	-32	1,177	1,957
Non-Labor	12,521	3,171	2	4,076	4,872
NSE	0	0	0	0	0
Total	13,424	4,077	-30	5,254	6,829
FTE	5.7	5.5	-0.2	6.2	10.5
Units	1	1	1	1	1
Vacation & Sick (Nominal \$)					
Labor	136	132	-4	160	286

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	136	132	-4	160	286
FTE	1.0	0.9	0.0	0.9	1.7
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	517	314	-4	50	0
Non-Labor	6,223	959	0	152	0
NSE	0	0	0	0	0
Total	6,739	1,274	-4	202	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	1,556	1,352	-40	1,387	2,243
Non-Labor	18,744	4,130	2	4,229	4,872
NSE	0	0	0	0	0
Total	20,299	5,482	-38	5,616	7,115
FTE	6.7	6.4	-0.2	7.1	12.2
Units	1	1	1	1	1

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
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
Units	1	1	1	1	1

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	1
Explanation:	Add unit for projects: T000004					
2021 Total	0	0	0	0	0.0	1
2022	0	0	0	0	0.0	1
Explanation:	Add unit for project: T000004					
2022 Total	0	0	0	0	0.0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2023	0	0	0	0	0.0	1
Explanation: Add unit						
2023 Total	0	0	0	0	0.0	1
2024	0	0	0	0	0.0	0
Explanation: Add unit for project: T000159						
2024	0	0	0	0	0.0	1
Explanation: Add unit for project: T000159						
2024 Total	0	0	0	0	0.0	1
2025	0	0	0	0	0.0	1
Explanation: Add unit for project: T000159						
2025 Total	0	0	0	0	0.0	1

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group B09070**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Workpaper Detail: B09070.001 - Cloud Enablement & Automation 2026 (Lbr VendSvc PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	1,003	0	0	0	0	0
Non-Labor	5,235	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	6,238	0	0	0	0	0
FTE	5.9	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Workpaper Detail: B09070.002 - Cloud Enablement & Automation 2027 (Lbr VendSvc PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	1,215	0	0	0	0
Non-Labor	0	4,594	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	5,809	0	0	0	0
FTE	0.0	7.1	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Workpaper Detail: B09070.003 - Cloud Enablement & Automation 2028 (Lbr VendSvc PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	1,165	0	0	0
Non-Labor	0	0	5,058	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	6,223	0	0	0
FTE	0.0	0.0	6.8	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Workpaper Detail: B09070.004 - Cloud Enablement and Automation 2029 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	540	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>540</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Workpaper Detail: B09070.005 - Cloud Enablement and Automation 2029 (Lbr VendSvc PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	983	0	0
Non-Labor	0	0	0	5,517	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	6,500	0	0
FTE	0.0	0.0	0.0	5.7	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Workpaper Detail: B09070.006 - Cloud Enablement and Automation 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	540	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>540</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Workpaper Detail: B09070.007 - Cloud Enablement and Automation 2030 (Lbr VendSvc PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add Sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	972	0
Non-Labor	0	0	0	0	5,585	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	6,557	0
FTE	0.0	0.0	0.0	0.0	5.6	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Workpaper Detail: B09070.008 - Cloud Enablement and Automation 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	540
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	540
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0907.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09070 - Cloud Enablement and Automation
Workpaper Detail: B09070.009 - Cloud Enablement and Automation 2031 (Lbr VendSvc PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	993
Non-Labor	0	0	0	0	0	5,625
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	6,618
FTE	0.0	0.0	0.0	0.0	0.0	5.8
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group B09070

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number	B09070
SDG&E IT Capital Workpaper Name	Cloud Enablement and Automation
Unit Measure	Projects
Number of Units	6

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Cloud Enablement & Automation (2026-2031)	6,191	5,744	6,160	6,980	7,032	7,105
Labor	956	1,150	1,102	923	907	940
Non-Labor	5,235	4,594	5,058	6,057	6,125	6,165
Grand Total	6,191	5,744	6,160	6,980	7,032	7,105

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

B09070.001--009
Cloud Enablement & Automation (2026-2031)
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	5.9	162	956	7.1	162	1,150	6.8	162	1,102	5.7	162	923	5.6	162	907	5.8	162	940	5,978
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	12	16	192	12	89	1,073	12	98	1,177	12	110	1,317	12	115	1,385	12	119	1,425	6,569
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	420	5,043	12	293	3,521	12	323	3,881	12	350	4,200	12	350	4,200	12	350	4,200	25,045
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0	178	3	540	178	3	540	178	3	540	1,620
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						956			1,150			1,102			923			907			940	5,978
	Labor					5,235			4,594			5,058			6,057			6,125			6,165	33,234
	Non-Labor																					
	Total					6,191			4,594			5,058			6,057			6,125			6,165	34,189

**Beginning of Workpaper Group
B09080 - Cloud Platform and Automation**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	493	325	284	362	422	782	389	375	456	452	461
Non-Labor	Zero-Based	3,955	2,862	2,552	2,601	4,321	3,186	2,381	4,216	2,224	4,811	3,779
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		4,448	3,187	2,836	2,963	4,743	3,968	2,770	4,591	2,680	5,263	4,240
FTE	Zero-Based	2.5	1.6	1.4	2.0	1.9	4.6	2.3	2.2	2.6	2.6	2.7
Units	Zero-Based	2	3	1	2	3	2	1	2	1	2	2

Business Purpose:

The purpose of this workpaper is to build and enhance a foundational DevOps platform that supports Infrastructure as Code and DevOps automation. These projects collectively enable a reliable, resilient, and secure environment for application deployments, while establishing standardized DevOps practices across the enterprise. This approach reduces manual processes, improves deployment speed, and supports compliance with security and operational standards.

Physical Description:

This workpaper contains projects that have a mix of utility shared- and non-shared assets. This workpaper includes multiple projects scheduled between 2026 and 2031. The scope encompasses two related initiatives: phased automation of application development and release processes, and implementation of Infrastructure as Code tooling to standardize how cloud environments are built and supported. The first initiative expands automation across the software development and release process. This DevOps program replaces manual steps with

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Unit Measure: Projects

automated standardized workflows that include built-in approvals, testing, and security checks. This reduces human error, shortens release timelines, and improves tracking and compliance. The second initiative implements Infrastructure as Code, allowing cloud environments to be created and managed through standardized templates instead of manual configuration. Together, these efforts promote consistency, reduce operational risk, and establish a stable, secure, and scalable foundation for cloud-based operations.

Primary cost drivers include labor for architecture design, automation development, and integration, as well as non-labor costs for software licenses (e.g., GitHub Enterprise), cloud services, and security tooling.

Project Justification:

The projects in this workpaper are justified by the following benefits:

- Grouping these projects under a single workpaper enables alignment of cloud and DevOps initiatives, reducing duplication and enabling consistent governance.
- Compliance with cybersecurity and operational standards is achieved through automated controls and secure configurations, mitigating risks to critical infrastructure.
- Ratepayers benefit from improved reliability and faster deployment of customer-facing applications, reducing downtime and enhancing service quality.
- Automation and Infrastructure as Code help reduce manual intervention, lowering operational costs and improving efficiency over time.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
Years	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	740	367	353	429	425	435	42	22	22	27	27	26	782	389	375	456	452	461
NLbr	3,186	2,381	4,216	2,224	4,811	3,779	0	0	0	0	0	0	3,186	2,381	4,216	2,224	4,811	3,779
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3,926	2,748	4,569	2,653	5,236	4,214	42	22	22	27	27	26	3,968	2,770	4,591	2,680	5,263	4,240
FTE	4.6	2.3	2.2	2.6	2.6	2.7	0.0	0.0	0.0	0.0	0.0	0.0	4.6	2.3	2.2	2.6	2.6	2.7
Units	2	1	2	1	2	2	0	0	0	0	0	0	2	1	2	1	2	2

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	42	0	0	42	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	42	0	0	42	0.0	0
2027	22	0	0	22	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	22	0	0	22	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	22	0	0	22	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	22	0	0	22	0.0	0
2029	27	0	0	27	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	27	0	0	27	0.0	0
2030	27	0	0	27	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	27	0	0	27	0.0	0
2031	26	0	0	26	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	26	0	0	26	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	305	476	356	398	367
Non-Labor	4,288	4,892	3,913	3,874	4,319
NSE	0	0	0	0	0
Total	4,592	5,368	4,269	4,271	4,686
FTE	2.2	3.4	2.2	2.3	1.5
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	-18	-258	-131	-90	1
Non-Labor	-1,646	-2,695	-1,614	-1,367	2
NSE	0	0	0	0	0
Total	-1,664	-2,953	-1,745	-1,457	3
FTE	-0.1	-2.0	-0.9	-0.5	0.1
Units	2	3	1	2	3
Recorded-Adjusted (Nominal \$)					
Labor	286	218	225	307	368
Non-Labor	2,642	2,197	2,299	2,507	4,321
NSE	0	0	0	0	0
Total	2,928	2,415	2,524	2,815	4,690
FTE	2.1	1.4	1.3	1.8	1.6
Units	2	3	1	2	3
Vacation & Sick (Nominal \$)					
Labor	43	32	31	42	54

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	43	32	31	42	54
FTE	0.4	0.2	0.1	0.2	0.3
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	164	75	28	13	0
Non-Labor	1,313	665	253	94	0
NSE	0	0	0	0	0
Total	1,477	740	281	107	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	493	325	284	362	422
Non-Labor	3,955	2,862	2,552	2,601	4,321
NSE	0	0	0	0	0
Total	4,448	3,187	2,836	2,963	4,743
FTE	2.5	1.6	1.4	2.0	1.9
Units	2	3	1	2	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.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	-18	-258	-131	-90	1
Non-Labor	-1,646	-2,695	-1,614	-1,367	2
NSE	0	0	0	0	0
Total	-1,664	-2,953	-1,745	-1,457	3
FTE	-0.1	-2.0	-0.9	-0.5	0.1
Units	2	3	1	2	3

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	3
Explanation:	Add unit for projects: T000054 T19029 T19031					
2021	-18	-1,646	0	-1,664	-0.1	-1
Explanation:	Transfer project OS and Application Test Automation costs from B09080 to I09070 (IO: 200543081)					
2021 Total	-18	-1,646	0	-1,664	-0.1	2
2022	0	0	0	0	0.0	7

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Add unit for projects: T000074 T000082 T000083 T19029 T19031 T000054						
2022	-64	-1,295	0	-1,359	-0.4	-3
Explanation: Transfer project OS and Application Test Automation costs from B09080 to I09070 (IO: 200543081, 200563063, 200563064)						
2022	-194	-1,400	0	-1,594	-1.6	-1
Explanation: Transfer project from B09080 to F09080 (T000074).						
2022 Total	-258	-2,695	0	-2,953	-2.0	3
2023	0	0	0	0	0.0	4
Explanation: Add unit for projects: T000074 T000082 T000083						
2023	-74	-1,379	0	-1,453	-0.4	-2
Explanation: Transfer project OS and Application Test Automation costs from B09080 to I09070 (IO: 200563063, 200563064)						
2023	-58	-235	0	-293	-0.5	-1
Explanation: Transfer project from B09080 to F09080 (T000074).						
2023 Total	-131	-1,614	0	-1,745	-0.9	1
2024	0	0	0	0	0.0	5
Explanation: Add unit for projects: T000074 T000083 T000133 T000082						

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2024	-77	-1,367	0	-1,444	-0.4	-2
Explanation:	Transfer project OS and Application Test Automation costs from B09080 to I09070 (IO: 200563063, 200563064).					
2024	-13	0	0	-13	-0.1	-1
Explanation:	Transfer project from B09080 to F09080 (T000074).					
2024 Total	-90	-1,367	0	-1,457	-0.5	2
2025	0	0	0	0	0.0	5
Explanation:	Add unit for projects: T000170 T000187 T000083 T000133					
2025	0.843	2	0	3	0.1	-2
Explanation:	Transfer project OS and Application Test Automation costs from B09080 to I09070 (IO: 200563063, 200563064)					
2025 Total	0.843	2	0	3	0.1	3

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group B09080**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.001 - Cloud Automation and Code Management Phase 3 (PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	421	0	0	0	0	0
Non-Labor	1,911	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	2,332	0	0	0	0	0
FTE	2.5	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.002 - Cloud Automation and Code Management Phase 3 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	255	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	255	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.003 - Cloud Automation and Code Management Phase 4 (PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	389	0	0	0	0
Non-Labor	0	2,381	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	2,770	0	0	0	0
FTE	0.0	2.3	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.004 - Cloud Automation and Code Management Phase 5 (PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	333	0	0	0
Non-Labor	0	0	2,516	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	2,849	0	0	0
FTE	0.0	0.0	2.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.005 - Infrastructure as Code Tool 2028 (Lbr)
Unit Measure: Projects

In-Service Date: 04/30/2028

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	42	0	0	0
Non-Labor	0	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	42	0	0	0
FTE	0.0	0.0	0.2	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.006 - Infrastructure as Code Tool 2028 (SW)
Unit Measure: Projects

In-Service Date: 04/30/2028

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	1,700	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	1,700	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.007 - Cloud Automation and Code Management 2029 (PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	456	0	0
Non-Labor	0	0	0	2,224	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>2,680</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	2.6	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.008 - Cloud Automation and Code Management 2030 (PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	452	0
Non-Labor	0	0	0	0	1,961	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	2,413	0
FTE	0.0	0.0	0.0	0.0	2.6	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.009 - Cloud Automation and Code Management 2031 (PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	461
Non-Labor	0	0	0	0	0	1,979
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	2,440
FTE	0.0	0.0	0.0	0.0	0.0	2.7
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.010 - Infrastructure as Code Tool 2031 (SW)
Unit Measure: Projects

In-Service Date: 04/30/2031

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	1,800
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,800</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.011 - Cloud On-Ramp (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	361	0	0	0	0	0
Non-Labor	420	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	781	0	0	0	0	0
FTE	2.1	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.012 - Cloud On-Ramp (HW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 12

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	600	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	600	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: B09080 - Cloud Platform and Automation
Workpaper Detail: B09080.013 - Code Repository Enterprise License 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 13

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	2,850	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	2,850	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group B09080

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number
SDG&E IT Capital Workpaper Name
Unit Measure
Number of Units

B09080
Cloud Platform and Automation
Projects
10

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Cloud Automation and Code Management (Phase 3-5, 2029-2031)	2,571	2,753	2,840	2,645	2,382	2,416
Labor	405	373	324	421	421	437
Non-Labor	2,166	2,381	2,516	2,224	1,961	1,979
Infrastructure as Code Tool (2028, 2031)	0	0	1,732	0	0	1,800
Labor	0	0	32	0	0	0
Non-Labor	0	0	1,700	0	0	1,800
Cloud On-Ramp	1,360	0	0	0	0	0
Labor	340	0	0	0	0	0
Non-Labor	1,020	0	0	0	0	0
Code Repository Enterprise License 2030	0	0	0	0	2,850	0
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	2,850	0
Grand Total	3,931	2,753	4,573	2,645	5,232	4,216
Total Labor	745	373	356	421	421	437
Total Non-Labor	3,186	2,381	4,216	2,224	4,811	3,779
Grand Total	3,931	2,753	4,573	2,645	5,232	4,216

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

SDG&E IT Project Name:

B09080.001--004, .007--.009

Cloud Automation and Code Management (Phase 3-5, 2029-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	2.5	162	405	2.3	162	373	2.0	162	324	2.6	162	421	2.6	162	421	2.7	162	437	2,381
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	12	159	1,911	12	198	2,381	12	210	2,516	12	185	2,224	12	163	1,961	12	165	1,979	12,971
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months		0	0		0	0		0	0		0	0		0	0		0	0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices		0	0		0	0		0	0		0	0		0	0		0	0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices		0	0		0	0		0	0		0	0		0	0		0	0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices		0	0		0	0		0	0		0	0		0	0		0	0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses		0	0		0	0		0	0		0	0		0	0		0	0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses	1	255	255		0	0		0	0		0	0		0	0		0	0	255
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services		0	0		0	0		0	0		0	0		0	0		0	0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity		0	0		0	0		0	0		0	0		0	0		0	0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts		0	0		0	0		0	0		0	0		0	0		0	0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts		0	0		0	0		0	0		0	0		0	0		0	0	0
Summary																						
					405			373			324			421			421			437		2,381
					2,166			2,381			2,516			2,224			1,961			1,979		13,226
					2,571			2,381			2,516			2,224			1,961			1,979		13,631

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

B09080.005--.006, .010
Infrastructure as Code Tool (2028, 2031)
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost	
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost		
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0	0.2	162	32			0			0			0	32	
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0	
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0	
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0	
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0	
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0	
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0	
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0	320	5	1,700			0			0		320	6	1,800	3,500
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0	
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0	
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0	
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0	
Summary						0			0			32			0			0			0	32	
	Labor					0			0			32			0			0			0	32	
	Non-Labor					0			0			1,700			0			0			1,800	3,500	
	Total					0			0			1,700			0			0			1,800	3,500	

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

809080.011--012

SDG&E IT Project Name:

Cloud On-Ramp

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	2.1	162	340			0			0			0			0			0	340
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	6	70	420			0			0			0			0			0	420
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices	8	75	600			0			0			0			0			0	600
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				340			0			0			0			0			0	340
		Non-Labor				1,020			0			0			0			0			0	1,020

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

B09080.013
Code Repository Enterprise License 2030
Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0	1,800	2	2,850			0	2,850
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			0			0			0			0			0	0
	Labor					0			0			0			0			0			0	0
	Non-Labor					0			0			0			0			2,850			0	2,850
	Total					0			0			0			0			2,850			0	2,850

**Beginning of Workpaper Group
D09080 - Workspace Endpoints**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: D09080 - Workspace Endpoints
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	538	1,149	749	132	0	0	195	323	285	277	244
Non-Labor	Zero-Based	18,228	10,832	12,728	-3,330	0	0	4,838	4,732	4,764	4,770	4,737
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		18,766	11,981	13,477	-3,198	0	0	5,033	5,055	5,049	5,047	4,981
FTE	Zero-Based	3.0	6.6	5.2	0.8	0.0	0.0	1.1	1.9	1.7	1.6	1.4
Units	Zero-Based	4	2	2	2	0	0	1	1	1	1	1

Business Purpose:

The purpose of this workpaper is to sustain and modernize workspace endpoints (such as but not limited to: laptops, tablets, and workstation devices) to support operational reliability, cybersecurity compliance, and efficient service delivery. This project enables employees to have secure, up-to-date tools to perform critical functions.

Physical Description:

This workpaper contains projects that have utility non-shared assets. The project in this workpaper focuses on sustaining and modernizing workspace endpoints used by SDG&E employees. These investments are foundational for the Company's workforce to maintain secure, reliable, and compliant tools to perform daily operational, customer-facing, and support functions.

Labor costs are primarily driven by device deployment, configuration, and software management activities. Non-labor costs are driven by hardware purchases and software licensing.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: D09080 - Workspace Endpoints
Unit Measure: Projects

Project Justification:

The project in this workpaper is justified by the following benefits:

- Regular laptop refresh cycles reduce the risk of hardware failures, minimizing downtime and improving service reliability for ratepayers.
- Modernized endpoints and tools support future technology integration, lowering long-term costs and improving operational efficiency.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: D09080 - Workspace Endpoints
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: D09080 - Workspace Endpoints
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: D09080 - Workspace Endpoints
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	0	184	304	268	261	230	0	11	19	17	16	14	0	195	323	285	277	244
NLbr	0	4,838	4,732	4,764	4,770	4,737	0	0	0	0	0	0	0	4,838	4,732	4,764	4,770	4,737
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	5,022	5,036	5,032	5,031	4,967	0	11	19	17	16	14	0	5,033	5,055	5,049	5,047	4,981
FTE	0.0	1.1	1.9	1.7	1.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.9	1.7	1.6	1.4
Units	0	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1

Forecast Adjustment Details

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026 Total	0	0	0	0	0.0	0
2027	11	0	0	11	0.0	0

Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

2027 Total	11	0	0	11	0.0	0
2028	19	0	0	19	0.0	0

Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: D09080 - Workspace Endpoints
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028 Total	19	0	0	19	0.0	0
2029	17	0	0	17	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	17	0	0	17	0.0	0
2030	16	0	0	16	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	16	0	0	16	0.0	0
2031	14	0	0	14	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	14	0	0	14	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: D09080 - Workspace Endpoints
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	602	1,105	798	310	124
Non-Labor	13,926	12,088	13,054	-854	1,956
NSE	0	0	0	0	0
Total	14,529	13,193	13,852	-544	2,080
FTE	5.2	8.6	6.3	2.4	1.1
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	-290	-335	-206	-198	-124
Non-Labor	-1,750	-3,772	-1,589	-2,356	-1,956
NSE	0	0	0	0	0
Total	-2,040	-4,107	-1,795	-2,554	-2,080
FTE	-2.6	-2.9	-1.8	-1.7	-1.1
Units	4	2	2	2	0
Recorded-Adjusted (Nominal \$)					
Labor	313	770	592	112	0
Non-Labor	12,176	8,316	11,465	-3,210	0
NSE	0	0	0	0	0
Total	12,489	9,086	12,057	-3,098	0
FTE	2.6	5.7	4.5	0.7	0.0
Units	4	2	2	2	0
Vacation & Sick (Nominal \$)					
Labor	47	112	82	15	0

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: D09080 - Workspace Endpoints
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	47	112	82	15	0
FTE	0.4	0.9	0.7	0.1	0.0
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	179	267	74	5	0
Non-Labor	6,052	2,516	1,263	-120	0
NSE	0	0	0	0	0
Total	6,230	2,783	1,337	-115	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	538	1,149	749	132	0
Non-Labor	18,228	10,832	12,728	-3,330	0
NSE	0	0	0	0	0
Total	18,766	11,981	13,477	-3,198	0
FTE	3.0	6.6	5.2	0.8	0.0
Units	4	2	2	2	0

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: D09080 - Workspace Endpoints
Unit Measure: Projects

Summary of Adjustments to Recorded:

		In Nominal \$(000)				
	Years	2021	2022	2023	2024	2025
Labor		-290	-335	-206	-198	-124
Non-Labor		-1,750	-3,772	-1,589	-2,356	-1,956
NSE		0	0	0	0	0
Total		-2,040	-4,107	-1,795	-2,554	-2,080
FTE		-2.6	-2.9	-1.8	-1.7	-1.1
Units		4	2	2	2	0

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	6
Explanation:	Add unit for projects: T000062 T000097 T17031 T18016 T19036					
2021	-155	-1,482	0	-1,637	-1.5	-1
Explanation:	Moving Field Hardware from D09080 to H09090 to align actuals to forecast.					
2021	-135	-268	0	-403	-1.1	-1
Explanation:	Transfer project CAISO 2021 from D09080 to I09200 (T000047).					

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: D09080 - Workspace Endpoints
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2021 Total	-290	-1,750	0	-2,040	-2.6	4
2022	0	0	0	0	0.0	4
Explanation:	Add unit for projects: T000032 T000062 T000097					
2022	-212	-3,610	0	-3,822	-1.9	-1
Explanation:	Moving Field Hardware from D09080 to H09090 to align actuals to forecast.					
2022	-123	-162	0	-285	-1.0	-1
Explanation:	Transfer project CAISO 2021 from D09080 to I09200 (T000047).					
2022 Total	-335	-3,772	0	-4,107	-2.9	2
2023	0	0	0	0	0.0	4
Explanation:	Add unit for projects: T000032 T000062 T000097 T000117					
2023	-206	-1,589	0	-1,795	-1.8	-2
Explanation:	Moving Field Hardware from D09080 to H09090 to align actuals to forecast.					
2023 Total	-206	-1,589	0	-1,795	-1.8	2
2024	0	0	0	0	0.0	5
Explanation:	Add unit for projects: T000062 T000097 T000117 T000150					

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: D09080 - Workspace Endpoints
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2024	-198	-2,356	0	-2,554	-1.7	-3
Explanation: Moving Field Hardware from D09080 to H09090 to align actuals to forecast.						
2024 Total	-198	-2,356	0	-2,554	-1.7	2
2025	-124	-1,956	0	-2,080	-1.1	0
Explanation: Moving Field Hardware from D09080 to H09090 to align actuals to forecast.						
2025 Total	-124	-1,956	0	-2,080	-1.1	0

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group D09080**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: D09080 - Workspace Endpoints
Workpaper Detail: D09080.002 - Workstation Refresh 2027-2031 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: Not Applicable

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	195	323	285	277	244
Non-Labor	0	4,838	4,732	4,764	4,770	4,737
NSE	0	0	0	0	0	0
Total	0	5,033	5,055	5,049	5,047	4,981
FTE	0.0	1.1	1.9	1.7	1.6	1.4
Units	0	1	1	1	1	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group D09080

SDGE Information Technology (IT) - Capital Supplemental Workpaper

SDGE IT Capital Workpaper Number **D09080**
 SDGE IT Capital Workpaper Name **Workspace Endpoints**
 Unit Measure **Projects**
 Number of Units **5**

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Workstation Refresh (2027-2031)	-	5,017	5,040	5,040	5,030	4,964
Labor	-	178	308	275	259	227
Non-Labor	-	4,838	4,732	4,764	4,770	4,737
Grand Total	-	5,017	5,040	5,040	5,030	4,964

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDGE IT Workpaper Detail:
SDGE IT Project Name:

D09080.002
Workstation Refresh (2027-2031)
Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item (select the ones that apply and leave the others blank)	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total cost (all years)
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0	1.1	162	178	1.9	162	308	1.7	162	275	1.6	162	259	1.4	162	227	1,247
Purchased (External) Labor	Blended Rate External (Hourly)	Non-Labor	# of contract months			0		0			0			0			0				0	0
Professional Services (Milestone based)	Blended Rate (monthly)	Non-Labor	# of contract months			0	1	1,338	1,338	1	1,232	1,232	1	1,264	1,264	1	1,270	1,270	1	1,237	1,237	6,341
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0	959	4	3,500	959	4	3,500	959	4	3,500	959	4	3,500	959	4	3,500	17,502
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0		0			0			0			0				0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0		0			0			0			0				0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0		0			0			0			0				0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0		0			0			0			0				0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0		0			0			0			0				0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0		0			0			0			0				0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0		0			0			0			0				0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0		0			0			0			0				0	0
Summary						0		178			308			275			259				227	1,247
	Labor					0		178			308			275			259				227	1,247
	Non-Labor					0		4,838			4,732			4,764			4,770				4,737	23,843
	Total					0		5,017			5,040			5,040			5,030				4,964	25,090

**Beginning of Workpaper Group
E09080 - IT Foundational Systems**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: E09080 - IT Foundational Systems
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	142	603	159	155	12	139	0	175	0	0	0
Non-Labor	Zero-Based	1,725	2,595	2,070	933	1,521	853	0	1,148	0	0	0
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		1,867	3,198	2,230	1,087	1,532	992	0	1,323	0	0	0
FTE	Zero-Based	0.6	2.8	0.9	0.9	0.1	0.8	0.0	1.0	0.0	0.0	0.0
Units	Zero-Based	4	4	6	4	2	1	0	1	0	0	0

Business Purpose:

This workpaper supports lifecycle-driven upgrades and refreshes to foundational systems that enable employee communications, emergency response coordination, and compliance-related call oversight. The projects address platforms approaching end of support and are necessary to preserve operational continuity, safety communications, and regulatory compliance. These investments sustain existing capabilities while aligning with broader enterprise technology strategies, including the transition to cloud-based environments where appropriate.

Physical Description:

This workpaper contains projects that have a mix of utility shared- and non-shared assets.

The scope of this workpaper includes the following initiatives:

- Enterprise Emergency Notification System Upgrade (2028):
 - o Replaces an end-of-support emergency communication platform.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: E09080 - IT Foundational Systems
Unit Measure: Projects

- o Supports rapid dissemination of critical information during safety events and business continuity incidents.
- o Aligns with internal safety and emergency response requirements .

- Mandated Call Recording Platform Upgrade:
 - o Upgrades a required call recording system used for operational oversight and compliance.
 - o Preserves secure functionality and vendor-supported status for recorded communications.

These projects are lifecycle replacements and do not expand system capacity or introduce new discretionary functionality.

The underlying cost drivers for this capital workpaper relate to labor and non-labor expenditures. Hardware is the primary cost driver, attributable to a one-time lifecycle refresh to maintain supportability and regulatory compliance of critical infrastructure platforms. Labor consists of engineers and project managers for implementing and testing required to complete these lifecycle upgrades. Other non-labor costs include purchased labor, software, and vendor services.

Project Justification:

The projects in this workpaper are justified by the following benefits:

- Reduce the risk of service disruption, security vulnerabilities, and compliance gaps associated with aging and unsupported systems.
- Support employee safety and coordinated emergency response through reliable notification capabilities.
- Preserve compliance with communication recording and oversight obligations.
- Avoid higher-cost emergency replacements and reactive remediation.
- Support stable, secure, and cost-effective operations for the benefit of ratepayers .

These projects represent prudent investments that are necessary to support core foundational systems for business operations and to maintain compliance with relevant mandates.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: E09080 - IT Foundational Systems
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: E09080 - IT Foundational Systems
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: E09080 - IT Foundational Systems
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	131	0	165	0	0	0	8	0	10	0	0	0	139	0	175	0	0	0
NLbr	853	0	1,148	0	0	0	0	0	0	0	0	0	853	0	1,148	0	0	0
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	984	0	1,313	0	0	0	8	0	10	0	0	0	992	0	1,323	0	0	0
FTE	0.8	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.0	0.0	0.0	0.0
Units	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	8	0	0	8	0.0	0
2026 Total	8	0	0	8	0.0	0
2027 Total	0	0	0	0	0.0	0
2028	10	0	0	10	0.0	0

Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: E09080 - IT Foundational Systems
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028 Total	10	0	0	10	0.0	0
2029 Total	0	0	0	0	0.0	0
2030 Total	0	0	0	0	0.0	0
2031 Total	0	0	0	0	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: E09080 - IT Foundational Systems
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	83	404	126	131	10
Non-Labor	1,152	1,992	1,865	899	1,521
NSE	0	0	0	0	0
Total	1,235	2,396	1,991	1,030	1,531
FTE	0.5	2.4	0.8	0.8	0.1
Units	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
Units	4	4	6	4	2
Recorded-Adjusted (Nominal \$)					
Labor	83	404	126	131	10
Non-Labor	1,152	1,992	1,865	899	1,521
NSE	0	0	0	0	0
Total	1,235	2,396	1,991	1,030	1,531
FTE	0.5	2.4	0.8	0.8	0.1
Units	4	4	6	4	2
Vacation & Sick (Nominal \$)					
Labor	12	59	18	18	1

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: E09080 - IT Foundational Systems
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	12	59	18	18	1
FTE	0.1	0.4	0.1	0.1	0.0
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	47	140	16	6	0
Non-Labor	573	603	205	34	0
NSE	0	0	0	0	0
Total	620	743	221	39	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	142	603	159	155	12
Non-Labor	1,725	2,595	2,070	933	1,521
NSE	0	0	0	0	0
Total	1,867	3,198	2,230	1,087	1,532
FTE	0.6	2.8	0.9	0.9	0.1
Units	4	4	6	4	2

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: E09080 - IT Foundational Systems
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
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
Units	4	4	6	4	2

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	4
Explanation:	Add unit for projects: T000036 T000039 T000040 T000041					
2021 Total	0	0	0	0	0.0	4
2022	0	0	0	0	0.0	4
Explanation:	Add unit for projects: T000039 T000040 T000041 T000095					
2022 Total	0	0	0	0	0.0	4

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: E09080 - IT Foundational Systems
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2023	0	0	0	0	0.0	6
Explanation: Add unit for projects: T000039 T000040 T000041 T000095 T000111, T000119						
2023 Total	0	0	0	0	0.0	6
2024	0	0	0	0	0.0	4
Explanation: Add unit for projects: T000111 T000119 T000149 T000039						
2024 Total	0	0	0	0	0.0	4
2025	0	0	0	0	0.0	2
Explanation: Add unit for projects: T000149 T000197						
2025 Total	0	0	0	0	0.0	2

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group E09080**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: E09080 - IT Foundational Systems
Workpaper Detail: E09080.002 - Voice Recording System Upgrade 2026 (Lbr PurchLbr & HW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	139	0	0	0	0	0
Non-Labor	853	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	992	0	0	0	0	0
FTE	0.8	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0908.0
Category: A. IT Infrastructure & Platforms
Category-Sub: 1.
Workpaper Group: E09080 - IT Foundational Systems
Workpaper Detail: E09080.003 - Emergency Notification System Upgrade
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	175	0	0	0
Non-Labor	0	0	1,148	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	1,323	0	0	0
FTE	0.0	0.0	1.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group E09080

SDGE Information Technology (IT) - Capital Supplemental Workpaper

SDGE IT Capital Workpaper Number **E09080**
 SDGE IT Capital Workpaper Name **Foundational Infrastructure**
 Unit Measure **Projects**
 Number of Units **2**

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Voice Recording System Upgrade 2026	984	0	0	0	0	0
Labor	131	0	0	0	0	0
Non-Labor	853	0	0	0	0	0
Emergency Notification System Upgrade 2028	0	0	1,313	0	0	0
Labor	0	0	165	0	0	0
Non-Labor	0	0	1,148	0	0	0
Grand Total	984	0	1,313	0	0	0
Total Labor	131	0	165	0	0	0
Total Non-Labor	853	0	1,148	0	0	0
Grand Total	984	0	1,313	0	0	0

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDGE IT Workpaper Detail:

E09080.002

SDGE IT Project Name:

Voice Recording System Upgrade 2026

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total cost (all years)
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	0.8	162	131			0			0			0			0			0	131
Purchased (External) Labor	Blended Rate External (Hourly)	Non-Labor	# of contract months	1	53	53			0			0			0			0			0	53
Professional Services (Milestone based)	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices	1	800	800			0			0			0			0			0	800
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				131			0			0			0			0			0	131
		Non-Labor				853			0			0			0			0			0	853
		Total				984			0			0			0			0			0	984

TY2028 GRC Forecast - Details

SDGE IT Workpaper Detail:
SDGE IT Project Name:

E09080.003
Emergency Notification System Upgrade 2028

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total cost (all years)
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0	1.0	162	165			0			0			0	165
Purchased (External) Labor	Blended Rate External (Hourly)	Non-Labor	# of contract months			0			0		0	0			0			0			0	0
Professional Services (Milestone based)	Blended Rate (monthly)	Non-Labor	# of contract months			0			0	1	1,148	1,148			0			0			0	1,148
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0		0	0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0		0	0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0		0	0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0		0	0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0		0	0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0		0	0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0		0	0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0		0	0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0		0	0			0			0			0	0
Summary																						
		Labor				0			0		165				0			0			0	165
		Non-Labor				0			0		1,148				0			0			0	1,148
		Total				0			0		1,313				0			0			0	1,313

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: B. Grid and Pipeline Management
Workpaper: VARIOUS

Summary for Category: B. Grid and Pipeline Management

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
Labor	1,908	2,906	3,067	3,739	4,002	4,194	4,220
Non-Labor	4,711	16,269	37,826	36,958	28,710	28,439	24,759
NSE	0	0	0	0	0	0	0
Total	6,619	19,175	40,893	40,697	32,712	32,633	28,979
FTE	12.1	17.0	17.9	21.8	23.2	24.3	24.5

Workpapers belonging to this Category:

B09250 Substation & Field Communications Compliance

Labor	302	1,213	1,144	1,955	1,985	2,032	2,017
Non-Labor	1,232	13,026	20,356	29,773	20,786	21,015	19,353
NSE	0	0	0	0	0	0	0
Total	1,534	14,239	21,500	31,728	22,771	23,047	21,370
FTE	1.4	7.1	6.7	11.4	11.5	11.8	11.7

Unit Measure: Projects

Units	10	5	5	6	4	3	4
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H09200 Grid Operations

Labor	1,154	1,235	1,463	1,284	1,510	1,558	1,601
Non-Labor	2,501	2,575	16,250	5,925	6,664	6,164	4,146
NSE	0	0	0	0	0	0	0
Total	3,655	3,810	17,713	7,209	8,174	7,722	5,747
FTE	7.7	7.2	8.5	7.5	8.8	9.0	9.3

Unit Measure: Projects

Units	4	2	5	2	3	3	2
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Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: B. Grid and Pipeline Management
Workpaper: VARIOUS

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
109200 Electric and Fuel Procurement							
Labor	452	458	460	500	507	604	602
Non-Labor	978	668	1,220	1,260	1,260	1,260	1,260
NSE	0	0	0	0	0	0	0
Total	1,430	1,126	1,680	1,760	1,767	1,864	1,862
FTE	3.0	2.7	2.7	2.9	2.9	3.5	3.5
Unit Measure: Projects							
Units	2	1	1	1	1	1	1

Note: Totals may include rounding differences.

Beginning of Workpaper Group
B09250 - Substation & Field Communications Compliance

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	1,269	1,255	494	937	302	1,213	1,144	1,955	1,985	2,032	2,017
Non-Labor	Zero-Based	17,214	12,938	4,572	6,048	1,232	13,026	20,356	29,773	20,786	21,015	19,353
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		18,484	14,194	5,067	6,984	1,534	14,239	21,500	31,728	22,771	23,047	21,370
FTE	Zero-Based	6.2	6.2	2.4	4.6	1.4	7.1	6.7	11.4	11.5	11.8	11.7
Units	Zero-Based	11	11	8	8	10	5	5	6	4	3	4

Business Purpose:

The purpose of the workpaper is to maintain compliance with regulatory requirements for critical infrastructure communications while improving field area network system reliability and resilience. The projects address the essential communications for the gas grid and field communications. The projects work together to address all portions of our grid and field communications: from the centralized components that help to monitor the grid, deliver effective communications to our grid operators and support the safety of field crews; to the end points on the communication path that help to establish effective, secure monitoring for the grid and safety for the field crews. These projects focus on equipment that needs to be addressed in order to enable continued reliable, secure, and resilient communication within the company territory.

Physical Description:

This workpaper contains projects that have a mix of utility shared- and non-shared assets. This workpaper includes 23 projects spanning 2026–2031. The overall scope involves:

- Upgrading transmission substation infrastructure under TSIP (Telecommunications System Improvement Project).
- Enhancing SCADA systems for advanced monitoring and control.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Unit Measure: Projects

- Implementing microwave backhaul and resiliency upgrades to improve network redundancy.
- Deploying Land Mobile Radio/Mission Critical Push-to-Talk for secure field communications.
- Introducing Digital Grid upgrades to support future grid automation.

Project-specific differences:

- TSIP projects focus on physical substation infrastructure .
- Advanced SCADA projects improve grid visibility and automation .
- Microwave projects enhance bandwidth and redundancy for critical communications.
- Critical communications upgrade projects modernize voice and data communications for field crews.
- Digital Grid projects enable advanced analytics and operational efficiency .

Primary cost drivers include labor for engineering, planning, and project management, and non-labor costs for hardware, software, and installation.

Project Justification:

The projects in this workpaper are justified by the following benefits:

- Grouping these projects under one workpaper preserve alignment with compliance mandates for critical infrastructure communications and efficient cost management.
- Enhancements reduce outage risk and improve emergency response, benefiting ratepayers through increased reliability and safety.
- Advanced SCADA and Digital Grid upgrades support grid modernization goals , enabling operational efficiency and long-term cost savings.
- Microwave backhaul and resiliency improvements strengthen network reliability, reducing service disruption risks.
- LMR/MC-PTT deployment enable secure and interoperable communications , meeting federal and state requirements for critical systems and improving field crew coordination.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	1,147	1,078	1,842	1,869	1,912	1,903	66	66	113	116	120	114	1,213	1,144	1,955	1,985	2,032	2,017
NLbr	13,026	20,356	29,773	20,786	21,015	19,353	0	0	0	0	0	0	13,026	20,356	29,773	20,786	21,015	19,353
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	14,173	21,434	31,615	22,655	22,927	21,256	66	66	113	116	120	114	14,239	21,500	31,728	22,771	23,047	21,370
FTE	7.1	6.7	11.4	11.5	11.8	11.7	0.0	0.0	0.0	0.0	0.0	0.0	7.1	6.7	11.4	11.5	11.8	11.7
Units	5	5	6	4	3	4	0	0	0	0	0	0	5	5	6	4	3	4

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	66	0	0	66	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	66	0	0	66	0.0	0
2027	66	0	0	66	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	66	0	0	66	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	113	0	0	113	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	113	0	0	113	0.0	0
2029	116	0	0	116	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	116	0	0	116	0.0	0
2030	120	0	0	120	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	120	0	0	120	0.0	0
2031	114	0	0	114	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	114	0	0	114	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	788	912	391	795	264
Non-Labor	12,958	11,407	4,376	5,830	1,232
NSE	0	0	0	0	0
Total	13,746	12,319	4,767	6,625	1,496
FTE	5.7	5.8	2.2	4.0	1.2
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	-51	-70	0	0	0
Non-Labor	-1,459	-1,474	-257	0	0
NSE	0	0	0	0	0
Total	-1,510	-1,545	-257	0	0
FTE	-0.4	-0.5	-0.1	0.0	0.0
Units	11	11	8	8	10
Recorded-Adjusted (Nominal \$)					
Labor	737	841	391	795	264
Non-Labor	11,499	9,933	4,119	5,830	1,232
NSE	0	0	0	0	0
Total	12,236	10,774	4,510	6,625	1,496
FTE	5.3	5.3	2.1	4.0	1.2
Units	11	11	8	8	10
Vacation & Sick (Nominal \$)					
Labor	111	123	54	108	39

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	111	123	54	108	39
FTE	0.9	0.9	0.3	0.6	0.2
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	421	292	49	34	0
Non-Labor	5,715	3,006	454	218	0
NSE	0	0	0	0	0
Total	6,137	3,297	503	251	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	1,269	1,255	494	937	302
Non-Labor	17,214	12,938	4,572	6,048	1,232
NSE	0	0	0	0	0
Total	18,484	14,194	5,067	6,984	1,534
FTE	6.2	6.2	2.4	4.6	1.4
Units	11	11	8	8	10

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	-51	-70	0	0	0
Non-Labor	-1,459	-1,474	-257	0	0
NSE	0	0	0	0	0
Total	-1,510	-1,545	-257	0	0
FTE	-0.4	-0.5	-0.1	0.0	0.0
Units	11	11	8	8	10

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	12
Explanation:	Add unit for projects: T000012 T000027 T000049 T15082 T16030, T17022, T17027, T18004, T18018, T19008, T19010					
2021	-51	-1,459	0	-1,510	-0.4	-1
Explanation:	Moving project from B09250 to A09090 to align to appropriate work paper.					
2021 Total	-51	-1,459	0	-1,510	-0.4	11
2022	0	0	0	0	0.0	12

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation:	Add unit for projects: T000012 T000027 T000049 T000084 T000088, T000096, T15080, T16030, T17022, T17027, T18018					
2022	-70	-1,474	0	-1,545	-0.5	-1
Explanation:	Moving project from B09250 to A09090 to align to appropriate work paper.					
2022 Total	-70	-1,474	0	-1,545	-0.5	11
2023	0	0	0	0	0.0	9
Explanation:	Add unit for projects: T000012 T000027 T000049 T000084 T000088, T000096, T000112, T000113					
2023	-0.112	-257	0	-257	-0.1	-1
Explanation:	Moving project from B09250 to A09090 to align to appropriate work paper.					
2023 Total	-0.112	-257	0	-257	-0.1	8
2024	0	0	0	0	0.0	8
Explanation:	Add unit for projects: T000049 T000088 T000112 T000113 T000130, T000131, T000132, T000151					
2024 Total	0	0	0	0	0.0	8
2025	0	0	0	0	0.0	10
Explanation:	Add unit for projects: T000130 T000131 T000132 T000151 T000172, T000173, T000174, T000182, T000049, T17027					
2025 Total	0	0	0	0	0.0	10

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group B09250**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.001 - Telecom Site Upgrade Program 2026 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	239	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	239	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.002 - Telecom Site Upgrade Program 2026 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	156	0	0	0	0	0
Non-Labor	2,891	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	3,047	0	0	0	0	0
FTE	0.9	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.003 - Telecom Site Upgrade Program 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	270	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	270	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.004 - Telecom Site Upgrade Program 2027 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	301	0	0	0	0
Non-Labor	0	3,044	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>3,345</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	1.8	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.005 - Advanced Grid Control Upgrade 2026 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	180	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	180	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.006 - Advanced Grid Control Upgrade 2026 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	282	0	0	0	0	0
Non-Labor	2,803	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	3,085	0	0	0	0	0
FTE	1.6	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.007 - Enhanced Digital Grid 2026 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	581	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	581	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.008 - Enhanced Digital Grid 2026 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	217	0	0	0	0	0
Non-Labor	2,503	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	2,720	0	0	0	0	0
FTE	1.3	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.009 - Microwave Network Resilience and Backhaul 2026 (Lbr VendSvc, HW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	224	0	0	0	0	0
Non-Labor	1,580	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	1,804	0	0	0	0	0
FTE	1.3	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.010 - Critical Communications Upgrade 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	558	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	558	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.011 - Critical Communications Upgrade 2027 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	137	0	0	0	0
Non-Labor	0	5,487	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	5,624	0	0	0	0
FTE	0.0	0.8	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.012 - Critical Communications Upgrade 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 12

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	480	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	480	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.013 - Critical Communications Upgrade 2028 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 13

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	49	0	0	0
Non-Labor	0	0	4,560	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	4,609	0	0	0
FTE	0.0	0.0	0.3	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.014 - Microwave Network Resilience and Backhaul 2027 (Lbr VendSvc, HW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 14

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	260	0	0	0	0
Non-Labor	0	2,715	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	2,975	0	0	0	0
FTE	0.0	1.5	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.015 - SDGE Microwave Backhaul 2028 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 15

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	275	0	0	0
Non-Labor	0	0	2,634	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>2,909</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	1.6	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.016 - Enhanced Digital Grid 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 16

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	1,076	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>1,076</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.017 - Enhanced Digital Grid 2027 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 17

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	216	0	0	0	0
Non-Labor	0	2,789	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	3,005	0	0	0	0
FTE	0.0	1.3	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.018 - Enhanced Digital Grid 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 18

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	624	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	624	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.019 - Enhanced Digital Grid 2028 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 19

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	499	0	0	0
Non-Labor	0	0	7,250	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	7,749	0	0	0
FTE	0.0	0.0	2.9	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.020 - Advanced Grid Control Upgrade 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 20

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	346	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	346	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.021 - Advanced Grid Control Upgrade 2027 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 21

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	230	0	0	0	0
Non-Labor	0	4,071	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>4,301</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	1.3	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.022 - Advanced Grid Control Upgrade 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 22

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	288	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	288	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.023 - Advanced Grid Control Upgrade 2028 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 23

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	197	0	0	0
Non-Labor	0	0	4,018	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	4,215	0	0	0
FTE	0.0	0.0	1.1	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.024 - Telecom Site Upgrade Program 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 24

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	273	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	273	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.025 - Telecom Site Upgrade Program 2028 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 25

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	284	0	0	0
Non-Labor	0	0	5,736	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	6,020	0	0	0
FTE	0.0	0.0	1.7	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.026 - Critical Communications Upgrade 2026 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 26

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	334	0	0	0	0	0
Non-Labor	2,249	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	2,583	0	0	0	0	0
FTE	2.0	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.027 - Enhanced Digital Grid 2029 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 27

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	624	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	624	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.028 - Enhanced Digital Grid 2029 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 28

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	499	0	0
Non-Labor	0	0	0	7,250	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	7,749	0	0
FTE	0.0	0.0	0.0	2.9	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.029 - Enhanced Digital Grid 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 29

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	624	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	624	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.030 - Enhanced Digital Grid 2030 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 30

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	522	0
Non-Labor	0	0	0	0	6,617	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	7,139	0
FTE	0.0	0.0	0.0	0.0	3.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.031 - Enhanced Digital Grid 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 31

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	624
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>624</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.032 - Enhanced Digital Grid 2031 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 32

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	519
Non-Labor	0	0	0	0	0	6,617
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	7,136
FTE	0.0	0.0	0.0	0.0	0.0	3.0
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.033 - Microwave Network Resilience and Backhaul 2028 (Lbr VendSvc, HW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 33

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	651	0	0	0
Non-Labor	0	0	3,910	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	4,561	0	0	0
FTE	0.0	0.0	3.8	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.034 - Microwave Network Resilience and Backhaul 2030 (Lbr VendrSvc, HW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 34

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	511	0
Non-Labor	0	0	0	0	3,797	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	4,308	0
FTE	0.0	0.0	0.0	0.0	3.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.035 - Microwave Network Resilience and Backhaul 2031 (Lbr VendSvc, HW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 35

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	478
Non-Labor	0	0	0	0	0	3,893
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	4,371
FTE	0.0	0.0	0.0	0.0	0.0	2.8
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.036 - Microwave Network Resilience and Backhaul 2029 (Lbr VendSvc, HW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 36

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	615	0	0
Non-Labor	0	0	0	2,930	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	3,545	0	0
FTE	0.0	0.0	0.0	3.6	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.037 - Telecom Site Upgrade Program 2029 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 37

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	276	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	276	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.038 - Telecom Site Upgrade Program 2029 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 38

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	524	0	0
Non-Labor	0	0	0	4,906	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	5,430	0	0
FTE	0.0	0.0	0.0	3.0	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.039 - Telecom Site Upgrade Program 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 39

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	273	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	273	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.040 - Telecom Site Upgrade Program 2030 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 40

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	651	0
Non-Labor	0	0	0	0	4,832	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	5,483	0
FTE	0.0	0.0	0.0	0.0	3.8	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.041 - Telecom Site Upgrade Program 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 41

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	273
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>273</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.042 - Telecom Site Upgrade Program 2031 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 42

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	651
Non-Labor	0	0	0	0	0	4,832
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	5,483
FTE	0.0	0.0	0.0	0.0	0.0	3.8
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.043 - Critical Communications Upgrade 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 43

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	480	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	480	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.044 - Critical Communications Upgrade 2030 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 44

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	348	0
Non-Labor	0	0	0	0	4,392	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>4,740</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	2.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.045 - Critical Communications Upgrade 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 45

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	300
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>300</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.046 - Critical Communications Upgrade 2031 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 46

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	369
Non-Labor	0	0	0	0	0	2,814
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	3,183
FTE	0.0	0.0	0.0	0.0	0.0	2.1
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.047 - Critical Communications Upgrade 2029 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 47

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	420	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	420	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0925.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: B09250 - Substation & Field Communications Compliance
Workpaper Detail: B09250.048 - Critical Communications Upgrade 2029 (Lbr VendSvc HW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 48

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	347	0	0
Non-Labor	0	0	0	4,380	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	4,727	0	0
FTE	0.0	0.0	0.0	2.0	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group B09250

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number
 SDG&E IT Capital Workpaper Name
 Unit Measure
 Number of Units

B09250
 Substation & Field Communications Compliance
 Projects
 27

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Telecom Site Upgrade Program (2026-2031)	3,275	3,605	6,284	5,667	5,721	5,721
Labor	146	292	275	486	616	616
Non-Labor	3,130	3,314	6,009	5,181	5,105	5,105
Advanced Grid Control Upgrade (2026-2028)	3,242	4,627	4,484	0	0	0
Labor	259	211	178	0	0	0
Non-Labor	2,983	4,416	4,306	0	0	0
Enhanced Digital Grid (2026-2031)	3,295	4,076	8,344	8,344	7,727	7,727
Labor	211	211	470	470	486	486
Non-Labor	3,084	3,865	7,874	7,874	7,241	7,241
Microwave Network Resilience and Backhaul (2026-2028)	1,790	2,959	2,893	0	0	0
Labor	211	243	259	0	0	0
Non-Labor	1,580	2,716	2,634	0	0	0
Critical Communications Upgrade (2026-2031)	2,573	6,175	5,089	5,124	5,196	3,454
Labor	324	130	49	324	324	340
Non-Labor	2,249	6,045	5,040	4,800	4,872	3,114
Microwave Network Resilience and Backhaul (2028-2031)	0	0	4,525	3,513	4,283	4,346
Labor	0	0	616	583	486	454
Non-Labor	0	0	3,910	2,930	3,797	3,893
Grand Total	14,176	21,441	31,619	22,648	22,927	21,248
Total Labor	1,150	1,085	1,847	1,863	1,912	1,895
Total Non-Labor	13,025	20,356	29,772	20,785	21,015	19,353
Grand Total	14,176	21,441	31,619	22,648	22,927	21,248

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

B09250.001--004, .024--025, .037--042
Telecom Site Upgrade Program (2026-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	0.9	162	146	1.8	162	292	1.7	162	275	3.0	162	486	3.8	162	616	3.8	162	616	2,430
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of sites	8	218	1,741	9	156	1,407	16	120	1,924	14	80	1,126	14	73	1,020	14	73	1,020	8,237
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, Routers, Power, etc.	Non-Labor	# of sites	8	144	1,150	9	182	1,637	16	238	3,812	14	270	3,780	14	272	3,812	14	272	3,812	18,003
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of sites	8	30	239	9	30	270	16	17	273	14	20	276	14	20	273	14	20	273	1,604
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						146		292		275		486		616		616		616		616	2,430	
	Labor					3,130		3,314		6,009		5,181		5,105		5,105		5,105		5,105	27,844	
	Non-Labor					3,275		3,605		6,284		5,667		5,721		5,721		5,721		5,721	30,274	
	Total					3,275		3,605		6,284		5,667		5,721		5,721		5,721		5,721	30,274	

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
 SDG&E IT Project Name:

B09250.005--006, .020--023
 Advanced Grid Control Upgrade (2026-2028)
 Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	1.6	162	259	1.3	162	211	1.1	162	178			0			0			0	648
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of sites	550	3	1,483	800	3	2,689	800	3	2,446			0			0			0	6,618
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, Routers, etc.	Non-Labor	# of sites	550	2	1,320	800	2	1,382	800	2	1,572			0			0			0	4,274
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of sites	550	0.3	180	800	0.4	346	800	0.4	288			0			0			0	813
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				259			211			178			0			0			0	648
		Non-Labor				2,983			4,416			4,306			0			0			0	11,705

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

B09250.007--008, .016--019, .027--032
Enhanced Digital Grid
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	1.3	162	211	1.3	162	211	2.9	162	470	2.9	162	470	3.0	162	486	3.0	162	486	2,333
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of milestones	1	1,440	1,440	1	1,724	1,724	1	2,550	2,550	1	2,550	2,550	1	2,352	2,352	1	2,352	2,352	12,968
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Routers, Telco Tower, Microwave, Radios, Servers, etc.	Non-Labor	# of milestones	1	1,063	1,063	1	1,065	1,065	1	4,700	4,700	6	783	4,700	6	711	4,265	1	4,265	4,265	20,058
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of contracts	1	581	581	1	1,076	1,076	1	624	624	1	624	624	1	624	624	1	624	624	4,153
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						211		211			470		470		486		486		486		486	2,333
						3,084		3,865			7,874		7,874		7,241		7,241		7,241		7,241	37,179
Labor						211		211			470		470		486		486		486		486	2,333
Non-Labor						3,084		3,865			7,874		7,874		7,241		7,241		7,241		7,241	37,179

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

B09250.009, .014--015
Microwave Network Resilience and Backhaul (2026-2028)
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	1.3	162	211	1.5	162	243	1.6	162	259			0			0			0	713
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of milestones	9	120	1,080	9	184	1,657	9	179	1,608			0			0			0	4,345
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Microwave Links	Non-Labor	# of links	9	56	500	9	118	1,059	9	114	1,026			0			0			0	2,584
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					211			243			259			0			0			0	713
	Non-Labor					1,580			2,716			2,634			0			0			0	6,929

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

B09250.010--013, .026, .043--048

SDG&E IT Project Name:

Critical Communications Upgrade (2026-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	2.0	162	324	0.8	162	130	0.3	162	49	2.0	162	324	2.0	162	324	2.1	162	340	1,490
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of milestones	1	900	900	3	932	2,797	3	740	2,220	3	560	1,680	3	564	1,692	3	438	1,314	10,603
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Routers, Switches, etc.	Non-Labor	# of milestones	1	1,349	1,349	3	897	2,690	3	780	2,340	3	900	2,700	3	900	2,700	3	500	1,500	13,279
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0	3	186	558	3	160	480	3	140	420	3	160	480	3	100	300	2,238
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					324			130			49			324			324			340	1,490
	Non-Labor					2,249			6,045			5,040			4,800			4,872			3,114	26,120

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

B09250.033--036
Microwave Network Resilience and Backhaul (2028-2031)
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0	3.8	162	616	3.6	162	583	3.0	162	486	2.8	162	454	2,138
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0		0	0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of milestones			0			0	9	167	1,500	9	153	1,380	9	164	1,472	9	183	1,643	5,995
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0		0	0			0			0			0	0
Telecom Devices (Hardware)	Microwave Links	Non-Labor	# of links			0			0	9	268	2,410	9	172	1,550	9	258	2,325	9	250	2,250	8,534
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0		0	0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0		0	0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0		0	0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0		0	0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0		0	0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0		0	0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0		0	0			0			0			0	0
Summary																						
						0			0		616			583			486				454	2,138
						0			0		3,910			2,930			3,797				3,893	14,529

**Beginning of Workpaper Group
H09200 - Grid Operations**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	1,777	1,874	629	1,258	1,154	1,235	1,463	1,284	1,510	1,558	1,601
Non-Labor	Zero-Based	4,958	8,128	2,117	3,102	2,501	2,575	16,250	5,925	6,664	6,164	4,146
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		6,734	10,002	2,747	4,360	3,655	3,810	17,713	7,209	8,174	7,722	5,747
FTE	Zero-Based	10.0	11.1	9.3	8.5	7.7	7.2	8.5	7.5	8.8	9.0	9.3
Units	Zero-Based	4	6	7	4	4	2	5	2	3	3	2

Business Purpose:

The Grid Operations project consists of required system changes and enhancements to SDG&E's Outage Management System / Distribution Management System (OMS/DMS), under the umbrella of the Network Management System (NMS), and the outage analytics and reporting solution. Additionally, the projects include implementation and ongoing enhancements for its authorized Distributed Energy Resource Management System (DERMS) software and the upgrade of its real-time operational data historian platform. The systems are critical to managing both planned and unplanned outages, supporting timely restoration for customers.

Physical Description:

This workpaper contains projects with utility non-shared assets and is co-sponsored by Electric Distribution Capital (Ex. SDGE-08) and Electric Distribution O&M (Ex. SDGE-09).

The projects sustain and upgrade tier-1 mission critical systems required for stable, safe, and resilient grid operations and synchronization with the as-switched electrical model. Scope includes the Network Management System (NMS), NMS tools, SAIDIDAT+ reliability reporting, the Operations

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Unit Measure: Projects

Management System and Foundational Technology System, and the Distributed Energy Resource Management System (DERMS).

NMS supports the electric distribution outage management system (OMS) and advanced distribution management system (ADMS). It allows operators to identify outages, execute switching, dispatch crews, track restoration, and support public safety. These projects upgrade and sustain NMS on a vendor-supported version. Lifecycle upgrades address performance, security, and reliability risks as software ages and support phases out.

The NMS tools include an outage mobility app and web-based tool supporting field and remote users, including outage response. Outage Analytics and Reporting supports CPUC General Order 166 compliance, requiring utilities to maintain emergency preparedness and minimize public impact from electric system failures or hazards.

SAIDIDAT+ is a custom cloud solution that calculates and publishes reports driven by regulatory requirements, including System Average Interruption Duration Index (SAIDI) metrics.

The Operations Management System and Foundational Technology System provide real-time telemetry and historical data storage across SDG&E's grid. They aggregate data from field devices, SCADA systems, and other assets, enabling analytics, compliance monitoring, outage management, reliability reporting, and regulatory dashboards.

DERMS enables SDGE to monitor, control, and optimize distributed energy resources. It supports grid stability, CAISO market participation requirements, and state-mandated renewable integration goals. This project was presented in Electric Distribution O&M and IT Capital testimony and workpapers, authorized in the 2024 GRC (Decision 24-12-074).

Labor costs consist of engineers, project managers, and analysts for configuration, integration, testing, and deployment. Non-labor costs include vendor services, purchased labor, and software covering cloud infrastructure and hosting subscriptions.

Project Justification:

This project supports compliance with regulatory requirements while maintaining the functionality of critical electric operations system.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Unit Measure: Projects

Regulatory justification for these projects include:

- o Compliance with Reliability Standards: The upgrades support adhering to CPUC and FERC reliability mandates, including outage response and grid resiliency requirements.
- o Integration of Distributed Energy Resources (DER): Enhancements to DERMS support compliance with CAISO and state-level directives for DER integration and operational transparency.
- o Data Accuracy and Reporting: Upgrades to the operations and analytics systems enable accurate reporting for regulatory filings and performance audits, reducing compliance risk.

These projects also aim to mitigate risk in the following ways:

- o Operational Continuity: Modernizing OMS/DMS and DERMS reduces the risk of system failures that could delay outage restoration or compromise grid stability.
- o Cybersecurity: Updated platforms incorporate advanced security controls to meet evolving regulatory cybersecurity standards.
- o Vendor Support: Upgrading to current versions maintains full vendor support and mitigates risks associated with end-of-life software.
- o Customer Impact: Enhancements improve outage management and communication, supporting CPUC service quality requirements.
- o Grid Modernization: Aligns with SDG&E's long-term strategy for a smarter, more resilient grid capable of integrating renewable resources and advanced analytics.
- o Future Readiness: Positions SDG&E to adapt to emerging regulatory requirements and technology advancements without significant disruption.
- o Data Accuracy: Accurate real-time situational awareness is critical for field crews working on energized, high-voltage equipment, supporting safety and operational integrity.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	1,168	1,379	1,210	1,422	1,466	1,510	67	84	74	88	92	91	1,235	1,463	1,284	1,510	1,558	1,601
NLbr	2,575	16,250	5,925	6,664	6,164	4,146	0	0	0	0	0	0	2,575	16,250	5,925	6,664	6,164	4,146
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3,743	17,629	7,135	8,086	7,630	5,656	67	84	74	88	92	91	3,810	17,713	7,209	8,174	7,722	5,747
FTE	7.2	8.5	7.5	8.8	9.0	9.3	0.0	0.0	0.0	0.0	0.0	0.0	7.2	8.5	7.5	8.8	9.0	9.3
Units	2	5	2	3	3	2	0	0	0	0	0	0	2	5	2	3	3	2

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	67	0	0	67	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	67	0	0	67	0.0	0
2027	84	0	0	84	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	84	0	0	84	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	74	0	0	74	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	74	0	0	74	0.0	0
2029	88	0	0	88	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	88	0	0	88	0.0	0
2030	92	0	0	92	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	92	0	0	92	0.0	0
2031	91	0	0	91	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	91	0	0	91	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	1,012	1,248	494	1,068	1,006
Non-Labor	3,308	6,238	1,822	2,990	2,501
NSE	0	0	0	0	0
Total	4,320	7,486	2,316	4,058	3,507
FTE	8.5	9.5	8.0	7.4	6.6
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	20	8	3	0	0
Non-Labor	3	2	86	0	0
NSE	0	0	0	0	0
Total	23	10	89	0	0
FTE	0.1	0.0	0.0	0.0	0.0
Units	4	6	7	4	4
Recorded-Adjusted (Nominal \$)					
Labor	1,031	1,256	498	1,068	1,006
Non-Labor	3,312	6,240	1,907	2,990	2,501
NSE	0	0	0	0	0
Total	4,343	7,495	2,405	4,058	3,507
FTE	8.6	9.5	8.0	7.4	6.6
Units	4	6	7	4	4
Vacation & Sick (Nominal \$)					
Labor	155	183	69	145	147

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	155	183	69	145	147
FTE	1.4	1.6	1.3	1.1	1.1
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	590	435	62	45	0
Non-Labor	1,646	1,888	210	112	0
NSE	0	0	0	0	0
Total	2,236	2,323	272	157	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	1,777	1,874	629	1,258	1,154
Non-Labor	4,958	8,128	2,117	3,102	2,501
NSE	0	0	0	0	0
Total	6,734	10,002	2,747	4,360	3,655
FTE	10.0	11.1	9.3	8.5	7.7
Units	4	6	7	4	4

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	20	8	3	0	0
Non-Labor	3	2	86	0	0
NSE	0	0	0	0	0
Total	23	10	89	0	0
FTE	0.1	0.0	0.0	0.0	0.0
Units	4	6	7	4	4

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	2
Explanation:	Add unit for projects: T20005 T20016					
2021	20	3	0	23	0.1	2
Explanation:	Moving GRID Ops Small Cap actuals from H09090 to H09200					
2021 Total	20	3	0	23	0.1	4
2022	0	0	0	0	0.0	5

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Add unit for projects: T000075 T000091 T000100 T20005 T20016						
2022	8	2	0	10	0.0	1
Explanation: Moving GRID Ops Small Cap actuals from H09090 to H09200						
2022 Total	8	2	0	10	0.0	6
2023	0	0	0	0	0.0	5
Explanation: Add unit for projects: T000029 T000075 T000091 T000100 T000106, T20005, T20016						
2023	3	86	0	89	0.0	2
Explanation: Moving GRID Ops Small Cap actuals from H09090 to H09200						
2023 Total	3	86	0	89	0.0	7
2024	0	0	0	0	0.0	4
Explanation: Add unit for projects: T000091 T000100 T000164 T20005						
2024 Total	0	0	0	0	0.0	4
2025	0	0	0	0	0.0	4
Explanation: Add unit for projects: T000164 T000192 T20005 T000100						
2025 Total	0	0	0	0	0.0	4

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group H09200**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.001 - Outage and Distribution Management and Foundational Technology 2026 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	934	0	0	0	0	0
Non-Labor	1,935	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	2,869	0	0	0	0	0
FTE	5.4	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.003 - Outage and Distribution Management and Foundational Technology 2025-2026 (Lbrs, VendSvc)
Unit Measure: Projects

In-Service Date: 04/30/2026

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	301	0	0	0	0	0
Non-Labor	640	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	941	0	0	0	0	0
FTE	1.8	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.004 - Distributed Energy Resource Management System (DERMS) Foundational Technology (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	4,204	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	4,204	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.005 - Distributed Energy Resource Management System (DERMS) Foundational Technology (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	4,000	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	4,000	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.006 - Outage and Distribution Management and Foundational Technology 2027 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	1,258	0	0	0	0
Non-Labor	0	2,946	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	4,204	0	0	0	0
FTE	0.0	7.3	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.007 - Outage Mobile App and Web Tool 2027 (SW)
Unit Measure: Projects

In-Service Date: 01/31/2027

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	700	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	700	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.008 - Outage Mobile App and Web Tool 2027 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	205	0	0	0	0
Non-Labor	0	900	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	1,105	0	0	0	0
FTE	0.0	1.2	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.009 - Operations Management System Foundational Technology (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	2,000	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	2,000	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.010 - Operations Management System License Renewal (SW)
Unit Measure: Projects

In-Service Date: 04/30/2027

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	1,500	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	1,500	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.011 - Outage and Distribution Management and Foundational Technology 2028 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	1,284	0	0	0
Non-Labor	0	0	5,007	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	6,291	0	0	0
FTE	0.0	0.0	7.5	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.012 - Outage Mobile App and Web Tool 2028 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 12

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	918	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>918</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.013 - Outage Analytics Replacement (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 13

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	1,824	1,824	0
NSE	0	0	0	0	0	0
Total	0	0	0	1,824	1,824	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	1	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.014 - Outage Mobile App and Web Tool 2029 (SW)
Unit Measure: Projects

In-Service Date: 07/31/2029

Description:

Add sub-workpaper 14

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	500	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	500	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.015 - Outage Mobile App and Web Tool 2029 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 15

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	694	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	694	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.016 - Outage and Distribution Management and Foundational Technology 2029 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 16

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	1,510	0	0
Non-Labor	0	0	0	3,646	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	5,156	0	0
FTE	0.0	0.0	0.0	8.8	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.017 - Outage Mobile App and Web Tool 2030 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 17

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	694	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	694	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.018 - Outage and Distribution Management and Foundational Technology 2030 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 18

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	1,558	0
Non-Labor	0	0	0	0	3,646	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	5,204	0
FTE	0.0	0.0	0.0	0.0	9.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.019 - Outage Mobile App and Web Tool 2031 (PurchLbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 19

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	500
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>500</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: H09200 - Grid Operations
Workpaper Detail: H09200.020 - Outage and Distribution Management and Foundational Technology 2031 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 20

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	1,601
Non-Labor	0	0	0	0	0	3,646
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	5,247
FTE	0.0	0.0	0.0	0.0	0.0	9.3
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group H09200

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number
 SDG&E IT Capital Workpaper Name
 Unit Measure
 Number of Units

H09200
 Grid Operations
 Projects
 17

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Distributed Energy Resource Management System (DERMS) Foundational Technology	0	8,204	0	0	0	0
Labor	0	0	0	0	0	0
Non-Labor	0	8,204	0	0	0	0
Operations Management System Foundational Technology	0	2,000	0	0	0	0
Labor	0	0	0	0	0	0
Non-Labor	0	2,000	0	0	0	0
Operations Management System License Renewal	0	1,500	0	0	0	0
Labor	0	0	0	0	0	0
Non-Labor	0	1,500	0	0	0	0
Outage Analytics Replacement	0	0	0	1,824	1,824	0
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	1,824	1,824	0
Outage and Distribution Management and Foundational Technology (2026-2031)	3,743	4,132	6,217	5,068	5,112	5,156
Labor	1,168	1,186	1,210	1,422	1,466	1,510
Non-Labor	2,575	2,946	5,007	3,646	3,646	3,646
Outage Mobile App and Web Tool (2027-2031)	0	1,793	918	1,194	694	500
Labor	0	193	0	0	0	0
Non-Labor	0	1,600	918	1,194	694	500
Grand Total	3,743	17,629	7,135	8,086	7,630	5,656
Total Labor	1,168	1,379	1,210	1,422	1,466	1,510
Total Non-Labor	2,575	16,250	5,925	6,664	6,164	4,146
Grand Total	3,743	17,629	7,135	8,086	7,630	5,656

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

H09200.004--005

SDG&E IT Project Name:

Distributed Energy Resource Management System (DERMS) Foundational Technology

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE		162	0		162	0		162	0		162	0		162	0		162	0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0	12	333	4,000			0			0			0			0	4,000
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0	1	4,204	4,204			0			0			0			0	4,204
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0		0	0		0		0		0		0		0		0	0
		Labor				0		0	0		0		0		0		0		0		0	0
		Non-Labor				0		8,204	0		0		0		0		0		0		0	8,204
		Total				0		8,204	0		0		0		0		0		0		0	8,204

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

H09200.009

SDG&E IT Project Name:

Operations Management System Foundational Technology

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE		162	0		162	0		162	0		162	0		162	0		162	0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0	12	167	2,000			0			0			0			0	2,000
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0		0	0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0		0	0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0		0	0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0		0	0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0		0	0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0		0	0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0		0	0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0		0	0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0		0	0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0		0	0			0			0			0			0	0
Summary						0		0	0			0			0			0			0	0
		Labor				0		0	0			0			0			0			0	0
		Non-Labor				0		2,000	0			0			0			0			0	2,000
		Total				0		2,000	0			0			0			0			0	2,000

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

H09200.010

SDG&E IT Project Name:

Operations Management System License Renewal

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0	1	1,500	1,500			0			0			0			0	1,500
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0		0	0			0			0			0			0	0
		Labor				0		0	0			0			0			0			0	0
		Non-Labor				0		1,500	0			0			0			0			0	1,500
		Total				0		1,500	0			0			0			0			0	1,500

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

H09200.013

SDG&E IT Project Name:

Outage Analytics Replacement

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost	
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost		
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0	
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0	12	152	1,824		12	152	1,824			0	3,648
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0	
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0	
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0	
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0	
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0	
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0	
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0	
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0	
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0	
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0	
Summary						0			0			0			0			0			0	0	
		Labor				0			0			0			0			0			0	0	
		Non-Labor				0			0			1,824			1,824			1,824			0	3,648	
		Total				0			0			1,824			1,824			1,824			0	3,648	

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

H09200.001, .003, .006, .011, .016, .018, .020

SDG&E IT Project Name:

Outage and Distribution Management and Foundational Technology 2026-31

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	7.2	162	1,168	7.3	162	1,186	7.5	162	1,210	8.8	162	1,422	9.0	162	1,466	9.3	162	1,510	7,962
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	12	215	2,575	12	246	2,946	12	417	5,007	12	304	3,646	12	304	3,646	12	304	3,646	21,466
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						1,168			1,186			1,210			1,422			1,466			1,510	7,962
	Labor					2,575			2,946			5,007			3,646			3,646			3,646	21,466
	Non-Labor																					
	Total					3,743			4,132			6,217			5,068			5,112			5,156	29,428

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

H09200.007--008, .012, .014--015, .017, .019

SDG&E IT Project Name:

Outage Mobile App and Web Tool (2027-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			193													193
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0	12	75	900	12	77	918	12	58	694	12	58	694	12	42	500	3,706
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0	1	700	700			0	1	500	500			0			0	1,200
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			193			0			0			0			0	193
	Labor					0			193			0			0			0			0	193
	Non-Labor					0			1,600			918			1,194			694			500	4,906
	Total					0			1,793			918			1,194			694			500	5,099

**Beginning of Workpaper Group
I09200 - Electric and Fuel Procurement**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	726	275	360	463	452	458	460	500	507	604	602
Non-Labor	Zero-Based	1,599	211	2,048	1,950	978	668	1,220	1,260	1,260	1,260	1,260
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		2,325	487	2,409	2,412	1,430	1,126	1,680	1,760	1,767	1,864	1,862
FTE	Zero-Based	4.0	1.8	2.3	3.2	3.0	2.7	2.7	2.9	2.9	3.5	3.5
Units	Zero-Based	3	2	1	2	2	1	1	1	1	1	1

Business Purpose:

This is an annual initiative required to maintain SDG&E's status as a Scheduling Coordinator. Compliance with California Independent System Operator (CAISO) program requirements is mandatory, with updates typically implemented and released twice per year.

In addition, numerous CPUC and FERC regulations align with CAISO mandates, necessitating ongoing changes and enhancements to SDG& E's software systems. To support these requirements and enable seamless CAISO interactions, SDG&E relies on three major software applications:

- a. Energy Trading & Risk Management (ETRM) and Generation Supply Management System (GSMS system)– Facilitates communication with CAISO for bidding and scheduling activities. Serves as the SOX-compliant system of record for commodity trading, risk management, and accounting .
- b. Resource Adequacy Tool– Provides Resource Adequacy (RA) planning, operational support, and analytics.
- c. Meter Data Processing System (MDPS) – Manages and reports meter data for compliance and operational needs.

Physical Description:

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Unit Measure: Projects

This workpaper contains projects that have utility non-shared assets. This workpaper is co-sponsored by Energy Procurement (Ex. SDGE- 11). The scope of this project is as follows:

1. Upgrade Commodity Trading and Risk Management (ETRM and GSMS) to latest version: Upgrade all Commodity Trading and Risk Management software components to the most current release to enable full vendor support, maintain compatibility, and achieve compliance with CAISO regulatory requirements.
2. Enhancements to Electric and Fuel Procurement (E&FP) Systems: Implement necessary updates and enhancements to the following applications to remain compliant with CAISO-mandated changes and evolving market standards:
 - a. Resource Adequacy Tool: Provides RA planning, operational analytics, and compliance reporting.
3. Meter Data Processing System (MDPS) Modernization: Transition the legacy on-premises platform to cloud to enhance performance, support resiliency and overall compliance for accurate meter data management and reporting for settlement and regulatory audits.

This project impacts three critical applications that collectively enable SDG&E's compliance, operational efficiency, and market participation.

Labor costs are driven by specialized roles including project managers, developers, and business systems analysts. Resource allocations may vary throughout the project lifecycle based on implementation phases and complexity. Non-labor costs are comprised of hardware and software prepaid maintenance, SaaS (Software-as-a-Service) subscriptions, and vendor services for external expertise and implementation support.

Project Justification:

This initiative aims to deliver the following key benefits:

- Regulatory Compliance: Supports full adherence to CAISO-mandated changes and CPUC requirements, maintaining SDG&E's eligibility as a Scheduling Coordinator and avoiding potential penalties for non-compliance.
- Operational and Market Efficiency: Improves bidding accuracy, scheduling reliability, and resource adequacy planning, resulting in optimized market participation and reduced operational risk.
- Modernized Technology Assets: Upgrades critical software systems to current versions under fully supported maintenance agreements, reducing exposure to security vulnerabilities and supporting compatibility with evolving regulatory and market standards.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Unit Measure: Projects

- Risk Reduction: Mitigates risks associated with outdated systems, unsupported hardware, and manual processes by implementing robust, automated solutions aligned with industry best practices.
- Future-Readiness: Positions SDG&E to adapt quickly to future CAISO program updates and regulatory changes without significant disruption or incremental capital investment.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	433	433	471	477	568	568	25	27	29	30	36	34	458	460	500	507	604	602
NLbr	668	1,220	1,260	1,260	1,260	1,260	0	0	0	0	0	0	668	1,220	1,260	1,260	1,260	1,260
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,101	1,653	1,731	1,737	1,828	1,828	25	27	29	30	36	34	1,126	1,680	1,760	1,767	1,864	1,862
FTE	2.7	2.7	2.9	2.9	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.7	2.9	2.9	3.5	3.5
Units	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	25	0	0	25	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	25	0	0	25	0.0	0
2027	27	0	0	27	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	27	0	0	27	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	29	0	0	29	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	29	0	0	29	0.0	0
2029	30	0	0	30	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	30	0	0	30	0.0	0
2030	36	0	0	36	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	36	0	0	36	0.0	0
2031	34	0	0	34	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	34	0	0	34	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	287	61	285	393	395
Non-Labor	800	0	1,845	1,880	978
NSE	0	0	0	0	0
Total	1,087	61	2,130	2,272	1,372
FTE	2.3	0.5	2.0	2.8	2.6
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	135	123	0	0	0
Non-Labor	268	162	0	0	0
NSE	0	0	0	0	0
Total	403	285	0	0	0
FTE	1.1	1.0	0.0	0.0	0.0
Units	3	2	1	2	2
Recorded-Adjusted (Nominal \$)					
Labor	421	184	285	393	395
Non-Labor	1,068	162	1,845	1,880	978
NSE	0	0	0	0	0
Total	1,490	347	2,130	2,272	1,372
FTE	3.4	1.5	2.0	2.8	2.6
Units	3	2	1	2	2
Vacation & Sick (Nominal \$)					
Labor	63	27	40	53	58

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	63	27	40	53	58
FTE	0.6	0.3	0.3	0.4	0.4
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	241	64	36	17	0
Non-Labor	531	49	203	70	0
NSE	0	0	0	0	0
Total	772	113	239	87	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	726	275	360	463	452
Non-Labor	1,599	211	2,048	1,950	978
NSE	0	0	0	0	0
Total	2,325	487	2,409	2,412	1,430
FTE	4.0	1.8	2.3	3.2	3.0
Units	3	2	1	2	2

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	135	123	0	0	0
Non-Labor	268	162	0	0	0
NSE	0	0	0	0	0
Total	403	285	0	0	0
FTE	1.1	1.0	0.0	0.0	0.0
Units	3	2	1	2	2

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	2
Explanation:	Add unit for projects: T000003 T19020					
2021	135	268	0	403	1.1	1
Explanation:	Transfer project CAISO 2021 from D09080 to I09200 (T000047).					
2021 Total	135	268	0	403	1.1	3
2022	0	0	0	0	0.0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Add unit for projects: T000103						
2022	123	162	0	285	1.0	1
Explanation: Transfer project CAISO 2021 from D09080 to I09200 (T000047).						
2022 Total	123	162	0	285	1.0	2
2023	0	0	0	0	0.0	1
Explanation: Add unit for projects: T000103						
2023 Total	0	0	0	0	0.0	1
2024	0	0	0	0	0.0	2
Explanation: Add unit for projects: T000103 T000168						
2024 Total	0	0	0	0	0.0	2
2025	0	0	0	0	0.0	2
Explanation: Add unit for projects: T000103 T000168						
2025 Total	0	0	0	0	0.0	2

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group I09200**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Workpaper Detail: I09200.001 - Energy Procurement Regulatory and Technology 2026 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	458	0	0	0	0	0
Non-Labor	668	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	1,126	0	0	0	0	0
FTE	2.7	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Workpaper Detail: I09200.002 - Energy Procurement Regulatory and Technology 2027 VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	460	0	0	0	0
Non-Labor	0	1,220	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	1,680	0	0	0	0
FTE	0.0	2.7	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Workpaper Detail: I09200.003 - Energy Procurement Regulatory and Technology 2028 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	500	0	0	0
Non-Labor	0	0	1,260	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	1,760	0	0	0
FTE	0.0	0.0	2.9	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Workpaper Detail: I09200.004 - Energy Procurement Regulatory and Technology 2029 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	507	0	0
Non-Labor	0	0	0	1,260	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	1,767	0	0
FTE	0.0	0.0	0.0	2.9	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Workpaper Detail: I09200.005 - Energy Procurement Regulatory and Technology 2030 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	604	0
Non-Labor	0	0	0	0	1,260	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	1,864	0
FTE	0.0	0.0	0.0	0.0	3.5	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0920.0
Category: B. Grid and Pipeline Management
Category-Sub: 1.
Workpaper Group: I09200 - Electric and Fuel Procurement
Workpaper Detail: I09200.006 - Energy Procurement Regulatory and Technology 2031 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	602
Non-Labor	0	0	0	0	0	1,260
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	1,862
FTE	0.0	0.0	0.0	0.0	0.0	3.5
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group I09200

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number **I09200**
 SDG&E IT Capital Workpaper Name **Electric and Fuel Procurement**
 Unit Measure **Projects**
 Number of Units **6**

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Energy Procurement Regulatory and Technology (2026-2031)	1,101	1,653	1,731	1,737	1,828	1,828
Labor	433	433	471	477	568	568
Non-Labor	668	1,220	1,260	1,260	1,260	1,260
Grand Total	1,101	1,653	1,731	1,737	1,828	1,828

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

109200.001--006

SDG&E IT Project Name:

Energy Procurement Regulatory and Technology (2026-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	2.7	162	433	2.7	162	433	2.9	162	471	2.9	162	477	3.5	162	568	3.5	162	568	2,950
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	12	56	668	12	102	1,220	12	105	1,260	12	105	1,260	12	105	1,260	12	105	1,260	6,928
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						433			433			471			477			568			568	2,950
	Labor					668			1,220			1,260			1,260			1,260			1,260	6,928
	Non-Labor					1,101			1,653			1,731			1,737			1,828			1,828	9,878
	Total					1,101			1,653			1,731			1,737			1,828			1,828	9,878

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: C. Asset & Work Management
Workpaper: VARIOUS

Summary for Category: C. Asset & Work Management

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
Labor	3,659	5,661	4,621	4,078	3,834	3,869	4,455
Non-Labor	44,196	39,938	53,352	58,934	23,234	15,554	19,699
NSE	0	0	0	0	0	0	0
Total	47,855	45,599	57,973	63,012	27,068	19,423	24,154
FTE	23.1	33.0	26.9	23.7	22.2	22.4	25.9

Workpapers belonging to this Category:

A09000 Customer Metering (SRM)

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

Unit Measure: Projects

Units	0	0	0	0	0	0	0
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A09090 Customer Energization

Labor	78	1,576	1,472	1,206	1,023	1,159	1,156
Non-Labor	3,292	16,154	14,321	12,229	9,488	2,784	2,784
NSE	0	0	0	0	0	0	0
Total	3,370	17,730	15,793	13,435	10,511	3,943	3,940
FTE	0.5	9.2	8.6	7.0	5.9	6.7	6.7

Unit Measure: Projects

Units	4	3	5	4	3	2	2
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Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: C. Asset & Work Management
Workpaper: VARIOUS

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
C09030 Customer Programs							
Labor	0	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unit Measure: Projects							
Units	0	0	0	0	0	0	0
E09030 Customer Service Field							
Labor	-5	0	0	0	0	0	0
Non-Labor	63	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0
Total	58	0	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unit Measure: Projects							
Units	1	0	0	0	0	0	0
G09200 Asset Management							
Labor	925	1,394	1,358	1,395	1,619	1,358	1,204
Non-Labor	12,690	8,459	27,064	21,677	4,243	4,575	3,000
NSE	0	0	0	0	0	0	0
Total	13,615	9,853	28,422	23,072	5,862	5,933	4,204
FTE	5.6	8.1	7.9	8.1	9.4	7.9	7.0
Unit Measure: Projects							
Units	4	3	5	3	3	3	2

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: C. Asset & Work Management
Workpaper: VARIOUS

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
H09090 Field Technology Solutions							
Labor	142	119	144	144	144	145	144
Non-Labor	1,956	31	2,137	2,137	1,700	1,725	1,245
NSE	0	0	0	0	0	0	0
Total	2,098	150	2,281	2,281	1,844	1,870	1,389
FTE	1.3	0.7	0.8	0.8	0.8	0.8	0.8
Unit Measure: Projects							
Units	2	1	2	2	1	1	1
K09200 Utility Operations Cloud Infrastructure							
Labor	0	0	0	0	0	0	0
Non-Labor	0	0	0	4,000	0	0	5,300
NSE	0	0	0	0	0	0	0
Total	0	0	0	4,000	0	0	5,300
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unit Measure: Projects							
Units	0	0	0	1	0	0	1
L09090 Work Management Compliance and Workload Allocation							
Labor	143	393	604	374	408	442	475
Non-Labor	8,390	360	2,009	450	500	550	600
NSE	0	0	0	0	0	0	0
Total	8,533	753	2,613	824	908	992	1,075
FTE	0.9	2.3	3.5	2.2	2.4	2.6	2.8
Unit Measure: Projects							
Units	2	1	3	1	1	1	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: C. Asset & Work Management
Workpaper: VARIOUS

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
L09200 Work Management Foundation and Field Services							
Labor	2,376	2,179	1,043	959	640	765	1,476
Non-Labor	17,805	14,934	7,821	18,441	7,303	5,920	6,770
NSE	0	0	0	0	0	0	0
Total	20,181	17,113	8,864	19,400	7,943	6,685	8,246
FTE	14.8	12.7	6.1	5.6	3.7	4.4	8.6
Unit Measure: Projects							
Units	6	4	4	5	4	4	5

Note: Totals may include rounding differences.

**Beginning of Workpaper Group
A09090 - Customer Energization**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	93	105	68	75	78	1,576	1,472	1,206	1,023	1,159	1,156
Non-Labor	Zero-Based	2,522	1,921	1,865	1,422	3,292	16,154	14,321	12,229	9,488	2,784	2,784
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		2,615	2,026	1,933	1,497	3,370	17,730	15,793	13,435	10,511	3,943	3,940
FTE	Zero-Based	0.6	0.6	0.4	0.5	0.5	9.2	8.6	7.0	5.9	6.7	6.7
Units	Zero-Based	2	1	2	1	4	3	5	4	3	2	2

Business Purpose:

The purpose of this workpaper provide the technology capabilities required for SDG&E to comply with SB 410 (Energization Timelines and Transparency), AB 50 (Standardized and Streamlined Interconnection Rules), and CPUC Rulemaking R.24-01-018, which establish standardized energization timelines and transparency requirements. These statutes require utilities to track and report energization intervals, accurately identify customer and company controlled delays, publicly report performance metrics, and sustain standardized, transparent processes for customers and contractors. They also impose enhanced customer engagement requirements, including the provision of a single point of contact (SPOC), required customer notifications, and timely, consistent status updates throughout the energization lifecycle.

These projects are grouped because they collectively deliver the integrated systems, workflows, and data foundation needed to support end-to-end energization, customer visibility, and accurate, timely CPUC reporting. The workpaper funds modernization of customer and employee facing energization systems, improvements to distribution design and energization workflows, and the establishment of a unified data foundation to reduce manual processing, improve data quality, and strengthen operational coordination. Collectively, these investments enable transparent, compliant customer communication while allowing SDG&E to meet SB 410 timeline, reporting, and customer engagement requirements while avoiding, or

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Unit Measure: Projects

minimizing, the need to add incremental labor resources as electrification demand continues to grow.

Physical Description:

This workpaper includes projects with utility nonshared assets and is cosponsored by Electric Distribution Capital (Ex. SDGE-08) and Electric Distribution O&M (Ex. SDGE-09). The portfolio modernizes and integrates SDG&E's customer and employee energization systems by enhancing distribution design tools, customer-facing platforms, internal workflow systems, and data foundation required for CPUC Rulemaking R.2401018, SB 410, and AB 50 compliance. Scope includes cloud modernization, application development, workflow automation, system integrations, data model improvements, and technology lifecycle management supporting system reliability.

All projects contribute to the end-to-end energization lifecycle by enabling project initiation, workflow coordination, customer communication, data capture, milestone tracking, and compliance reporting. Common activities include software development; configuration; integration with work management platforms, GIS, permitting, land and environmental systems, document management and reporting tools; cloud hosting; and modernization of aging components for security and compatibility.

Project specific scope:

- Automated Utility Design: expanded design capabilities, engineering task automation, contractor enablement, and enterprise system integration.
 - Customer Energization Portal: Cloud-based, self-service platform providing a single point of contact (SPOC) and real-time status visibility, Customer scheduling, two-way communications, required notifications, payment tools, enhanced document management, and virtual assistant capabilities.
 - Employee Energization Portal: Unified workflow platform with Work Management, Customer Portal, and permitting tool integrations, bulk updates, improved document management, two-way communication, and additional operational groups.
 - Energization Data Foundation & Analytics: validated data structures, cloud-based reporting, automated SB 410/ CPUC Rulemaking R.24-01-018 reporting, and standardized data exchange.
 - Technology Lifecycle Management: cloud technology service changes requiring corresponding application changes, functional changes driven by regulatory updates, software updates mitigating cybersecurity risks, and updates of core integrations driven by regulatory needs.
- Costs are driven by internal labor for system design and delivery, and by nonlabor expenses for cloud services, software licensing, vendor support, integrations, and reliability-related upgrades.

Project Justification:

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Unit Measure: Projects

These projects are grouped because they collectively provide the technology capabilities required to comply with SB 410 (Senate Bill 410) – Powering Up Californians Act under CPUC Rulemaking R.24-01-018, which mandates standardized energization timelines, accurate reporting of customer and company-controlled delays, transparency into utility performance, and enhanced customer engagement throughout the energization process. This includes supporting SB 410 customer communication requirements such as a single point of contact (SPOC), required customer notifications, and timely, consistent status updates across the energization lifecycle. Grouping reflects the integrated nature of the systems and data supporting end-to-end energization, customer visibility, and regulatory reporting. In addition, these capabilities are a core component of the workforce planning strategy for energization—enabling the organization to meet SB 410 timeline, reporting, and customer engagement requirements while avoiding, or minimizing, the need to add incremental labor resources as electrification demands grow. Further justification includes the following benefits:

- Ratepayers benefit from faster and more predictable energization timelines enabled by automation of design tasks, clearer workflow coordination, improved contractor design enablement, and real-time milestone visibility across customer and employee facing platforms.
- Enhanced reliability and accuracy of energization data reduce compliance risk from potential penalties associated with inaccurate reporting or failing to meet mandated timelines or customer engagement requirements.
- Integrations supporting the design and construction lifecycle and a unified data foundation support electrification growth and future customer demand without requiring major new technology investments, improving long-term affordability.
- Technology lifecycle management preserves continued performance, security, and vendor support for mission critical energization systems, reducing operational risk and long-term maintenance costs.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	1,490	1,388	1,137	963	1,090	1,090	86	85	70	60	68	66	1,576	1,473	1,207	1,023	1,158	1,156
NLbr	16,154	14,321	12,229	9,488	2,784	2,784	0	0	0	0	0	0	16,154	14,321	12,229	9,488	2,784	2,784
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	17,644	15,709	13,366	10,451	3,874	3,874	86	85	70	60	68	66	17,730	15,794	13,436	10,511	3,942	3,940
FTE	9.2	8.6	7.0	5.9	6.7	6.7	0.0	0.0	0.0	0.0	0.0	0.0	9.2	8.6	7.0	5.9	6.7	6.7
Units	3	5	4	3	2	2	0	0	0	0	0	0	3	5	4	3	2	2

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	86	0	0	86	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	86	0	0	86	0.0	0
2027	85	0	0	85	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	85	0	0	85	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	70	0	0	70	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	70	0	0	70	0.0	0
2029	60	0	0	60	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	60	0	0	60	0.0	0
2030	68	0	0	68	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	68	0	0	68	0.0	0
2031	66	0	0	66	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	66	0	0	66	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
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
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	54	70	53	63	68
Non-Labor	1,685	1,474	1,680	1,371	3,292
NSE	0	0	0	0	0
Total	1,739	1,545	1,733	1,434	3,360
FTE	0.5	0.5	0.4	0.4	0.5
Units	2	1	2	1	4
Recorded-Adjusted (Nominal \$)					
Labor	54	70	53	63	68
Non-Labor	1,685	1,474	1,680	1,371	3,292
NSE	0	0	0	0	0
Total	1,739	1,545	1,733	1,434	3,360
FTE	0.5	0.5	0.4	0.4	0.5
Units	2	1	2	1	4
Vacation & Sick (Nominal \$)					
Labor	8	10	7	9	10

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	8	10	7	9	10
FTE	0.1	0.1	0.0	0.1	0.0
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	31	24	7	3	0
Non-Labor	837	446	185	51	0
NSE	0	0	0	0	0
Total	868	471	192	54	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	93	105	68	75	78
Non-Labor	2,522	1,921	1,865	1,422	3,292
NSE	0	0	0	0	0
Total	2,615	2,026	1,933	1,497	3,370
FTE	0.6	0.6	0.4	0.5	0.5
Units	2	1	2	1	4

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	54	70	53	63	68
Non-Labor	1,685	1,474	1,680	1,371	3,292
NSE	0	0	0	0	0
Total	1,739	1,545	1,733	1,434	3,360
FTE	0.5	0.5	0.4	0.4	0.5
Units	2	1	2	1	4

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	51	1,459	0	1,510	0.4	1
Explanation:	Moving project from B09250 to A09090 to align to appropriate work paper.					
2021	3	226	0	229	0.1	1
Explanation:	Moving project from L09090 to A09090 to align to appropriate work paper.					
2021 Total	54	1,685	0	1,739	0.5	2
2022	70	1,474	0	1,545	0.5	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Moving project from B09250 to A09090 to align to appropriate work paper.						
2022 Total	70	1,474	0	1,545	0.5	1
2023	0.112	257	0	257	0.1	1
Explanation: Moving project from B09250 to A09090 to align to appropriate work paper.						
2023	53	1,423	0	1,477	0.3	1
Explanation: Moving project from L09090 to A09090 to align to appropriate work paper.						
2023 Total	53	1,680	0	1,733	0.4	2
2024	63	1,371	0	1,434	0.4	1
Explanation: Moving project from L09090 to A09090 to align to appropriate work paper.						
2024 Total	63	1,371	0	1,434	0.4	1
2025	2	1,170	0	1,172	0.1	1
Explanation: Moving project from 009090 to A09090 to align to appropriate work paper.						
2025	20	625	0	645	0.1	0
Explanation: Moving project from B09090 to A09090 to align to appropriate work paper.						
2025	46	1,498	0	1,544	0.3	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Moving project from L09090 to A09090 to align to appropriate work paper.						
2025	0	0	0	0	0.0	2
Explanation: Add unit						
2025 Total	68	3,292	0	3,360	0.5	4

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group A09090**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.001 - Employee Energization Portal Foundational Technology (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	433	0	0	0	0	0
Non-Labor	9,758	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	10,191	0	0	0	0	0
FTE	2.5	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.002 - Energization Data Foundation and Analytics (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	601	0	0	0	0	0
Non-Labor	1,896	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	2,497	0	0	0	0	0
FTE	3.5	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.003 - Customer Energization Portal Modernization (SW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	800	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>800</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.004 - Customer Energization Portal Modernization (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	542	0	0	0	0	0
Non-Labor	3,700	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	4,242	0	0	0	0	0
FTE	3.2	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.005 - Distribution Design - Automated Utility Design (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	144	0	0	0	0
Non-Labor	0	1,800	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>1,944</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.8	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.006 - Energization Data Analytics Enhancements (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 06/30/2027

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	198	0	0	0	0
Non-Labor	0	690	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>888</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	1.2	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.007 - Customer Energization Portal 2027 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	135	0	0	0	0
Non-Labor	0	1,800	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	1,935	0	0	0	0
FTE	0.0	0.8	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.008 - Employee Energization Portal 2027 (Lbr PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	231	0	0	0	0
Non-Labor	0	3,659	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>3,890</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	1.4	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.009 - Employee Energization Portal Modernization Phase 1 (Lbr PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	764	0	0	0	0
Non-Labor	0	6,372	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>7,136</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	4.4	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.010 - Distribution Design - Automated Utility Design (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	144	0	0	0
Non-Labor	0	0	1,800	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>1,944</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.8	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.011 - Customer Energization Portal 2028 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	135	0	0	0
Non-Labor	0	0	1,296	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	1,431	0	0	0
FTE	0.0	0.0	0.8	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.012 - Employee Energization Portal 2028 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 12

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	214	0	0	0
Non-Labor	0	0	3,184	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	3,398	0	0	0
FTE	0.0	0.0	1.3	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.013 - Employee Energization Portal Modernization Phase 2 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 13

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	713	0	0	0
Non-Labor	0	0	5,949	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	6,662	0	0	0
FTE	0.0	0.0	4.1	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.014 - Employee Energization Portal Modernization Phase 3 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 14

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	664	0	0
Non-Labor	0	0	0	5,523	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	6,187	0	0
FTE	0.0	0.0	0.0	3.8	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.015 - Employee Energization Portal 2029 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 15

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	224	0	0
Non-Labor	0	0	0	2,669	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>2,893</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	1.3	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.016 - Customer Energization Portal 2029 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 16

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	135	0	0
Non-Labor	0	0	0	1,296	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,431</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.8	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.018 - Customer Energization Portal 2030 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 18

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	435	0
Non-Labor	0	0	0	0	852	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	1,287	0
FTE	0.0	0.0	0.0	0.0	2.5	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.019 - Employee Energization Portal 2030 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 19

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	724	0
Non-Labor	0	0	0	0	1,932	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	2,656	0
FTE	0.0	0.0	0.0	0.0	4.2	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.021 - Customer Energization Portal 2031 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 21

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	434
Non-Labor	0	0	0	0	0	852
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	1,286
FTE	0.0	0.0	0.0	0.0	0.0	2.5
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: A0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: A09090 - Customer Energization
Workpaper Detail: A09090.022 - Employee Energization Portal 2031 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 22

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	722
Non-Labor	0	0	0	0	0	1,932
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	2,654
FTE	0.0	0.0	0.0	0.0	0.0	4.2
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group A09090

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number A09090
 SDG&E IT Capital Workpaper Name Customer Energization
 Unit Measure Projects
 Number of Units 19

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Customer Energization Portal Modernization	5,013	0	0	0	0	0
Labor	513	0	0	0	0	0
Non-Labor	4,500	0	0	0	0	0
Distribution Design - Automated Utility Design	0	1,936	1,936	0	0	0
Labor	0	136	136	0	0	0
Non-Labor	0	1,800	1,800	0	0	0
Employee Energization Portal Foundational Technology	10,167	0	0	0	0	0
Labor	409	0	0	0	0	0
Non-Labor	9,758	0	0	0	0	0
Employee Energization Portal Modernization Phase 1	0	7,092	0	0	0	0
Labor	0	720	0	0	0	0
Non-Labor	0	6,372	0	0	0	0
Employee Energization Portal Modernization Phase 2	0	0	6,621	0	0	0
Labor	0	0	672	0	0	0
Non-Labor	0	0	5,949	0	0	0
Employee Energization Portal Modernization Phase 3	0	0	0	6,148	0	0
Labor	0	0	0	625	0	0
Non-Labor	0	0	0	5,523	0	0
Energization Data Analytics Enhancements	0	877	0	0	0	0
Labor	0	187	0	0	0	0
Non-Labor	0	690	0	0	0	0
Energization Data Foundation and Analytics	2,464	0	0	0	0	0
Labor	568	0	0	0	0	0
Non-Labor	1,896	0	0	0	0	0
Customer Energization Portal (2027-2031)	0	1,927	1,423	1,423	1,261	1,261
Labor	0	127	127	127	409	409
Non-Labor	0	1,800	1,296	1,296	852	852
Employee Energization Portal (2027-2031)	0	3,877	3,386	2,880	2,613	2,613
Labor	0	218	202	211	681	681
Non-Labor	0	3,659	3,184	2,669	1,932	1,932
Grand Total	17,644	15,709	13,366	10,451	3,874	3,874
Total Labor	1,490	1,388	1,137	963	1,090	1,090
Total Non-Labor	16,154	14,321	12,229	9,488	2,784	2,784
Grand Total	17,644	15,709	13,366	10,451	3,874	3,874

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

A09090.003--004

SDG&E IT Project Name:

Customer Energization Portal Modernization

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	3.2	162	513			0			0			0			0			0	513
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	12	308	3,700			0			0			0			0			0	3,700
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses	12	67	800			0			0			0			0			0	800
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					513			0			0			0			0			0	513
	Non-Labor					4,500			0			0			0			0			0	4,500
	Total					5,013			0			0			0			0			0	5,013

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

A09090.005, .010
Distribution Design - Automated Utility Design
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0	0.8	162	136	0.8	162	136			0			0			0	272
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0	12	150	1,800	12	150	1,800			0			0			0	3,600
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			136			136			0			0			0	272
		Non-Labor				0			1,800			1,800			0			0			0	3,600
		Total				0			1,936			1,936			0			0			0	3,872

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

A09090.001
Employee Energization Portal Foundational Technology
Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	2.5	162	409			0			0			0			0			0	409
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	12	813	9,758			0			0			0			0			0	9,758
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					409			0			0			0			0			0	409
	Non-Labor					9,758			0			0			0			0			0	9,758
	Total					10,167			0			0			0			0			0	10,167

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

A09090.009

SDG&E IT Project Name:

Employee Energization Portal Modernization Phase 1

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0	4.4	162	720			0			0			0			0	720
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0	12	150	6,372			0			0			0			0	6,372
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0		720	0		0		0		0		0		0		0	720
		Non-Labor				0		6,372	0		0		0		0		0		0		0	6,372
		Total				0		7,092	0		0		0		0		0		0		0	7,092

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

A09090.013
Employee Energization Portal Modernization Phase 2
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0	4.1	162	672			0			0			0	672
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0	12	150	5,949			0			0			0	5,949
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			0			672			0			0			0	672
	Labor					0			0			672			0			0			0	672
	Non-Labor					0			0			5,949			0			0			0	5,949
	Total					0			0			6,621			0			0			0	6,621

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

A09090.014
Employee Energization Portal Modernization Phase 3
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0	3.8	162	625			0			0	625
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0	12	460	5,523			0			0	5,523
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				0			0			0			625			0			0	625
		Non-Labor				0			0			0			5,523			0			0	5,523
		Total				0			0			0			6,148			0			0	6,148

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

A09090.006

SDG&E IT Project Name:

Energyization Data Analytics Enhancements

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0	1.2	162	187			0			0			0			0	187
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0	12	58	690			0			0			0			0	690
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			187			0			0			0			0	187
		Labor				0			187			0			0			0			0	187
		Non-Labor				0			690			0			0			0			0	690
		Total				0			877			0			0			0			0	877

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

A09090.002

SDG&E IT Project Name:

Energyization Data Foundation and Analytics

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	3.5	162	568			0			0			0			0			0	568
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	12	158	1,896			0			0			0			0			0	1,896
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				568			0			0			0			0			0	568
		Non-Labor				1,896			0			0			0			0			0	1,896
		Total				2,464			0			0			0			0			0	2,464

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

A09090.007, .011, .016, .018, .021

SDG&E IT Project Name:

Customer Energization Portal (2027-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0	0.8	162	127	0.8	162	127	0.8	162	127	2.5	162	409	2.5	162	409	1,199
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0	12	150	1,800	12	108	1,296	12	108	1,296	12	71	852	12	71	852	6,096
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			127			127			127			409			409	1,199
	Labor					0			127			127			127			409			409	1,199
	Non-Labor					0			1,800			1,296			1,296			852			852	6,096
	Total					0			1,927			1,423			1,423			1,261			1,261	7,295

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

A09090.008, .012, .015, .019, .022

SDG&E IT Project Name:

Employee Energization Portal (2027-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0	1.4	162	218	1.3	162	202	1.3	162	211	4.2	162	681	4.2	162	681	1,993
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0	12	305	3,659	12	265	3,184	12	222	2,669	12	161	1,932	12	161	1,932	13,376
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			218			202			211			681			681	1,993
	Labor					0			218			202			211			681			681	1,993
	Non-Labor					0			3,659			3,184			2,669			1,932			1,932	13,376
	Total					0			3,877			3,386			2,880			2,613			2,613	15,369

**Beginning of Workpaper Group
G09200 - Asset Management**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	2,005	961	610	1,026	925	1,394	1,358	1,395	1,619	1,358	1,204
Non-Labor	Zero-Based	27,885	2,812	1,910	4,455	12,690	8,459	27,064	21,677	4,243	4,575	3,000
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		29,890	3,773	2,520	5,481	13,615	9,853	28,422	23,072	5,862	5,933	4,204
FTE	Zero-Based	11.1	5.6	4.0	6.7	5.6	8.1	7.9	8.1	9.4	7.9	7.0
Units	Zero-Based	9	6	3	3	4	3	5	3	3	3	2

Business Purpose:

The purpose of these projects is to modernize SDG&E’s mission-critical Electric GIS platform by replacing the legacy Geometric Network before it reaches end-of-support in 2028. The investments shift Electric GIS to a supported Utility Network architecture and secure, scalable cloud platform to support long-term reliability, performance, cybersecurity, and accurate asset data needed for core electric operations. In addition, the program delivers modern Utility Network (UN) GIS editing tools (2027), standardized integrations, and technology sustainment to address data-quality gaps and support compliance, outage response, and emergency operations. To enable uninterrupted access to these modern capabilities, the program includes a pre-payment for a three-year license term in 2030 that secures ongoing availability of editing tools fully compatible with the Utility Network model.

The project also procures licenses for the investment portfolio optimization (IPO) software to support the Company’s continued evolution toward ISO 55000-aligned asset management and CPUC-aligned risk frameworks. The IPO software provides a standardized, transparent approach for evaluating and selecting investments that maximize safety, reliability, resiliency, and affordability.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Unit Measure: Projects

Together, these efforts reduce technical debt, maintain compliance with CPUC requirements, and sustain GIS capabilities relied upon by approximately 4,000 users across electric operations.

Physical Description:

This workpaper contains projects that have utility non-shared assets and is co-sponsored by Electric Distribution Capital (Ex. SDGE-08) and Electric Distribution O&M (Ex. SDGE-09). These projects modernize the Electric GIS platform with a supported cloud-based Utility Network (UN) solution, equip teams with modern UN-compatible editing tools, and maintain the business continuity, security, compliance and advancement of all GIS applications and supporting technologies. The scope is summarized below:

GIS Utility Network

- Replace the legacy Electric GIS Geometric Network with a supported ArcGIS Utility Network architecture to address end-of-support risk and enable continued vendor support.
- Transform and migrate the existing electric distribution, transmission, and substation data model to the Utility Network using automated conversion, validation, and controlled migration processes.
- Transition the Electric GIS platform to a secure, scalable cloud environment described in WP K09200, including modern server, database, desktop, and web GIS technologies.
- Implement standardized, services-based integrations between Electric GIS and key enterprise systems, including outage management and work management. Deploy Utility Network-enabled GIS editing tools to maintain accurate asset records and meet SLA-driven updates for design, field changes, and asset attributes.

Electric GIS Software Licenses - Editing Tools 2030

- Pre-payment of a three-year license term to enable uninterrupted access to editing tools.

Regulatory and Technology

- Enhance and sustain GIS web, desktop, and mobile applications, automated workflows, to support regulatory compliance, safety, reliability, and operational readiness.
- Perform system updates, security patches, and data-quality checks to sustain Electric GIS operations.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Unit Measure: Projects

- Implement system enhancements that keep GIS applications compliant, reliable, and aligned with evolving operational and regulatory requirements.

The underlying cost drivers for this capital workpaper relate to labor and non-labor expenditures. Vendor services is the primary cost driver, attributable to the planned retirement and replacement of the GIS platform required to remain on a vendor-supported platform. Labor consists of engineers, project managers, and solution architects to support system implementation and ongoing technology lifecycle management activities. Other non-labor costs include software.

Project Justification:

The GIS Utility Network project is required to replace SDG&E's mission-critical Electric GIS platform before the legacy Geometric Network reaches end-of-support in 2028, eliminating reliance on obsolete GIS technologies and Microsoft components that no longer receive security patches or regulatory-compliant updates. Transitioning to a supported Utility Network architecture and secure cloud environment supports the long-term integrity, maintainability, and accuracy of electric asset data used across planning, engineering, compliance, outage response, and emergency operations. Complementary investments, including modern UN-native editing tools, standardized integrations, mobile and field-tool modernization, and lifecycle sustainment, are necessary to maintain operational reliability, meet CPUC requirements, and reduce wildfire, equipment-failure, and system-resilience risks.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	1,318	1,280	1,314	1,524	1,278	1,136	76	78	81	95	80	68	1,394	1,358	1,395	1,619	1,358	1,204
NLbr	8,459	27,064	21,677	4,243	4,575	3,000	0	0	0	0	0	0	8,459	27,064	21,677	4,243	4,575	3,000
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	9,777	28,344	22,991	5,767	5,853	4,136	76	78	81	95	80	68	9,853	28,422	23,072	5,862	5,933	4,204
FTE	8.1	7.9	8.1	9.4	7.9	7.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	7.9	8.1	9.4	7.9	7.0
Units	3	5	3	3	3	2	0	0	0	0	0	0	3	5	3	3	3	2

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	76	0	0	76	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	76	0	0	76	0.0	0
2027	78	0	0	78	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	78	0	0	78	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	81	0	0	81	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	81	0	0	81	0.0	0
2029	95	0	0	95	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	95	0	0	95	0.0	0
2030	80	0	0	80	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	80	0	0	80	0.0	0
2031	68	0	0	68	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	68	0	0	68	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	477	327	469	560	579
Non-Labor	17,744	1,369	1,599	1,767	1,867
NSE	0	0	0	0	0
Total	18,221	1,696	2,068	2,327	2,445
FTE	4.0	2.6	3.4	3.7	3.5
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	687	317	13	311	229
Non-Labor	883	789	122	2,528	10,823
NSE	0	0	0	0	0
Total	1,570	1,107	135	2,838	11,052
FTE	5.5	2.2	0.1	2.1	1.3
Units	9	6	3	3	4
Recorded-Adjusted (Nominal \$)					
Labor	1,164	644	482	871	807
Non-Labor	18,627	2,158	1,721	4,295	12,690
NSE	0	0	0	0	0
Total	19,791	2,803	2,203	5,166	13,497
FTE	9.5	4.8	3.5	5.8	4.8
Units	9	6	3	3	4
Vacation & Sick (Nominal \$)					
Labor	175	94	67	118	118

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	175	94	67	118	118
FTE	1.6	0.8	0.5	0.9	0.8
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	666	223	61	37	0
Non-Labor	9,258	653	189	160	0
NSE	0	0	0	0	0
Total	9,923	876	250	197	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	2,005	961	610	1,026	925
Non-Labor	27,885	2,812	1,910	4,455	12,690
NSE	0	0	0	0	0
Total	29,890	3,773	2,520	5,481	13,615
FTE	11.1	5.6	4.0	6.7	5.6
Units	9	6	3	3	4

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	687	317	13	311	229
Non-Labor	883	789	122	2,528	10,823
NSE	0	0	0	0	0
Total	1,570	1,107	135	2,838	11,052
FTE	5.5	2.2	0.1	2.1	1.3
Units	9	6	3	3	4

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	5
Explanation:	Add unit for projects: T000069 T19015 T20001 T20009 T20010					
2021	687	883	0	1,570	5.5	4
Explanation:	Transfer projects from G09090 to G09200 (T000010 T000057 T18011, T20017).					
2021 Total	687	883	0	1,570	5.5	9
2022	0	0	0	0	0.0	3

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Add unit for projects: T000081 T20001 T20009						
2022	317	789	0	1,107	2.2	3
Explanation: Transfer projects from G09090 to G09200 (T000010 T000057 T20017).						
2022 Total	317	789	0	1,107	2.2	6
2023	0	0	0	0	0.0	1
Explanation: Add unit for project: T000081						
2023	13	122	0	135	0.1	2
Explanation: Transfer projects from G09090 to G09200 (T000010 T000057).						
2023 Total	13	122	0	135	0.1	3
2024	0	0	0	0	0.0	2
Explanation: Add unit for projects: T000081 T000156						
2024	311	2,530	0	2,841	2.1	1
Explanation: Transfer costs to G09200 in order to align actuals to forecast.						
2024	0	-2	0	-2	0.0	0
Explanation: Transfer projects from G09090 to G09200 (T000010).						

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2024 Total	311	2,528	0	2,838	2.1	3
2025	0	7,247	0	7,247	0.0	1
Explanation:	Transfer ESRI License costs to correct workpaper G09200.					
2025	229	3,575	0	3,804	1.3	1
Explanation:	Transfer costs to G09200 in order to align actuals to forecast.					
2025	0	0	0	0	0.0	2
Explanation:	Add unit for projects: T000135 T000156					
2025 Total	229	10,823	0	11,052	1.3	4

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group G09200**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.001 - GIS Utility Network Project (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub - workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	434	0	0	0	0	0
Non-Labor	5,739	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	6,173	0	0	0	0	0
FTE	2.5	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.002 - GIS Utility Network Project (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub - workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	643	0	0	0	0
Non-Labor	0	17,450	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>18,093</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	3.7	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.003 - GIS Utility Network Project (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub - workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	663	0	0	0
Non-Labor	0	0	17,941	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	18,604	0	0	0
FTE	0.0	0.0	3.9	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.004 - Electric GIS Regulatory and Technology 2026 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub - workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	660	0	0	0	0	0
Non-Labor	1,712	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	2,372	0	0	0	0	0
FTE	3.9	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.005 - Electric GIS Regulatory and Technology 2026 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub - workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	100	0	0	0	0
Non-Labor	0	257	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	357	0	0	0	0
FTE	0.0	0.6	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.007 - Electric GIS Regulatory and Technology 2027 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub - workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	314	0	0	0	0
Non-Labor	0	1,562	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>1,876</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	1.8	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.008 - Electric GIS Regulatory and Technology 2027 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub - workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	107	0	0	0
Non-Labor	0	0	492	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	599	0	0	0
FTE	0.0	0.0	0.6	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.009 - Electric GIS Regulatory and Technology 2028 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub - workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	324	0	0	0
Non-Labor	0	0	1,567	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	1,891	0	0	0
FTE	0.0	0.0	1.8	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.010 - Electric GIS Regulatory and Technology 2028 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub- workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	111	0	0
Non-Labor	0	0	0	493	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	604	0	0
FTE	0.0	0.0	0.0	0.6	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.014 - Electric GIS Software Licenses - Editing Tools 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub - workpaper 14

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	1,200	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,200</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.015 - Electric GIS Regulatory and Technology 2030 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub - workpaper 15

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	1,056	0
Non-Labor	0	0	0	0	2,625	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	3,681	0
FTE	0.0	0.0	0.0	0.0	6.1	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.016 - Electric GIS Regulatory and Technology 2031 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub - workpaper 16

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	903
Non-Labor	0	0	0	0	0	2,250
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	3,153
FTE	0.0	0.0	0.0	0.0	0.0	5.3
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.017 - Electric GIS Regulatory and Technology 2029 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub - workpaper 17

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	1,207	0	0
Non-Labor	0	0	0	3,000	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>4,207</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	7.0	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.018 - Electric and Gas Mobile Apps 2028 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub - workpaper 18

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	301	0	0	0
Non-Labor	0	0	750	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	1,051	0	0	0
FTE	0.0	0.0	1.8	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.019 - Electric and Gas Mobile Apps 2029 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub - workpaper 19

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	301	0	0
Non-Labor	0	0	0	750	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	1,051	0	0
FTE	0.0	0.0	0.0	1.8	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.020 - Electric and Gas Mobile Apps 2030 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub - workpaper 20

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	302	0
Non-Labor	0	0	0	0	750	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	1,052	0
FTE	0.0	0.0	0.0	0.0	1.8	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.021 - Electric and Gas Mobile Apps 2031 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub - workpaper 21

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	301
Non-Labor	0	0	0	0	0	750
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	1,051
FTE	0.0	0.0	0.0	0.0	0.0	1.7
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.023 - GIS Utility Network Project (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add subworkpaper 23

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	1,000	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>1,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.025 - Electric and Gas Mobile Apps 2027 (Non VMBA) (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add subworkpaper 25

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	301	0	0	0	0
Non-Labor	0	750	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	1,051	0	0	0	0
FTE	0.0	1.8	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.026 - Electric and Gas Mobile Apps 2026 (Non VMBA) (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 26

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	300	0	0	0	0	0
Non-Labor	852	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	1,152	0	0	0	0	0
FTE	1.7	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.027 - Investment Portfolio Optimization 2027 (SW)
Unit Measure: Projects

In-Service Date: 02/28/2027

Description:

Add sub-workpaper 27

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	5,045	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>5,045</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.028 - GIS Utility Network Project (SW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 28

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	156	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>156</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.029 - GIS Utility Network Project (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 29

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	1,000	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>1,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: G09200 - Asset Management
Workpaper Detail: G09200.030 - GIS Utility Network Project (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 30

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	927	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>927</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group G09200

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number

G09200

SDG&E IT Capital Workpaper Name

Asset Management

Unit Measure

Projects

Number of Units

19

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
GIS Utility Network Project	6,305	20,056	19,492	0	0	0
Labor	410	606	624	0	0	0
Non-Labor	5,895	19,450	18,868	0	0	0
Electric GIS Software Licenses - Editing Tools	0	0	0	0	1,200	0
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	1,200	0
Electric GIS Regulatory and Technology (2026-2031)	2,336	2,209	2,448	4,724	3,619	3,102
Labor	624	390	389	1,231	994	852
Non-Labor	1,712	1,819	2,059	3,493	2,625	2,250
Electric and Gas Mobile Apps	1,127	1,034	1,034	1,042	1,034	1,025
Labor	275	284	284	292	284	275
Non-Labor	852	750	750	750	750	750
Investment Portfolio Optimization 2027	0	5,045	0	0	0	0
Labor	0	0	0	0	0	0
Non-Labor	0	5,045	0	0	0	0
Grand Total	9,768	28,344	22,974	5,766	5,853	4,127
Total Labor	1,309	1,280	1,297	1,523	1,278	1,127
Total Non-Labor	8,459	27,064	21,677	4,243	4,575	3,000
Grand Total	9,768	28,344	22,974	5,766	5,853	4,127

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

G09200.001--003, .023, .028--030
GIS Utility Network Project
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	2.5	162	410	3.7	162	606	3.9	162	624			0			0			0	1,640
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	478	5,739	12	1,454	17,450	12	1,495	17,941			0			0			0	41,130
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0	1	1,000	1,000			0			0			0			0	1,000
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services	6	26	156	12	83	1,000	12	77	927			0			0			0	2,083
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						410		606			624			0			0			0	1,640	
	Labor					410		606			624			0			0			0	1,640	
	Non-Labor					5,895		19,450			18,868			0			0			0	44,213	
	Total					6,305		20,056			19,492			0			0			0	45,853	

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

G09200.014

SDG&E IT Project Name:

Electric GIS Software Licenses - Editing Tools 2030

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0	1	1,200	1,200			0	1,200
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			0			0			0			0			0	0
		Labor				0			0			0			0			0			0	0
		Non-Labor				0			0			0			0			1,200			0	1,200
		Total				0			0			0			0			1,200			0	1,200

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

G09200.004--005, .007--010, .015--017

SDG&E IT Project Name:

Electric GIS Regulatory and Technology

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	3.9	162	624	2.4	162	390	2.4	162	389	7.6	162	1,231	6.1	162	994	5.3	162	852	4,480
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	143	1,712	12	152	1,819	12	172	2,059	12	291	3,493	12	219	2,625	12	188	2,250	13,958
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						624			390			389			1,231			994			852	4,480
	Labor					624			390			389			1,231			994			852	4,480
	Non-Labor					1,712			1,819			2,059			3,493			2,625			2,250	13,958
	Total					2,336			2,209			2,448			4,724			3,619			3,102	18,438

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

G09200.018--021, .025--026

SDG&E IT Project Name:

Electric and Gas Mobile Apps

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	1.7	162	275	1.8	162	284	1.8	162	284	1.8	162	292	1.8	162	284	1.7	162	275	1,694
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	71	852	12	63	750	12	63	750	12	63	750	12	63	750	12	63	750	4,602
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					275			284			284			292			284			275	1,694
	Non-Labor					852			750			750			750			750			750	4,602
	Total					1,127			1,034			1,034			1,042			1,034			1,025	6,296

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

G09200.027

SDG&E IT Project Name:

Investment Portfolio Optimization 2027

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0	1	5,045	5,045			0			0			0			0	5,045
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			0			0			0			0			0	0
		Labor				0			0			0			0			0			0	0
		Non-Labor				0			5,045			0			0			0			0	5,045
		Total				0			5,045			0			0			0			0	5,045

**Beginning of Workpaper Group
H09090 - Field Technology Solutions**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	267	317	260	233	142	119	144	144	144	145	144
Non-Labor	Zero-Based	2,219	4,702	1,764	2,444	1,956	31	2,137	2,137	1,700	1,725	1,245
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		2,486	5,019	2,024	2,677	2,099	150	2,281	2,281	1,844	1,870	1,389
FTE	Zero-Based	1.8	2.2	2.1	2.0	1.3	0.7	0.8	0.8	0.8	0.8	0.8
Units	Zero-Based	1	1	2	3	2	1	2	2	1	1	1

Business Purpose:

The purpose of this workpaper is to establish timely delivery and deployment of field mobile hardware and a centralized asset management database system that support operational continuity, regulatory compliance, and improved reliability of field operations. These projects support safe, reliable, and resilient field operations; strengthen cybersecurity compliance and risk mitigation; and advance technology modernization and application enablement by supporting the transition of field applications to modern platforms.

Physical Description:

This workpaper contains projects that have utility non-shared assets. This workpaper is co-sponsored by Electric Distribution Capital (Ex. SDGE-08), Electric Distribution O&M (Ex. SDGE-09), and Gas Distribution (Ex. SDGE-04). The Field Technology Solutions projects procure, configure, and deploy mobile hardware—including mobile data terminals (MDTs), iPads, and phones—along with secure vehicle docking systems, and implement a centralized Asset Management Database (AMDB) system for lifecycle governance. These investments address technology obsolescence and provide field personnel with modernized, cloud-compatible mobile hardware required for real-time asset visibility, electronic work order execution, and operational communications essential to executing mandated inspection and maintenance programs, emergency response and

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Unit Measure: Projects

supporting wildfire mitigation. The projects also integrate mobile hardware lifecycle management, through a centralized asset management system, with enterprise IT systems (WP G07700). The centralized asset management system enhances mobile hardware traceability, auditability, and compliance by automating synchronization of asset attributes, improving data accuracy and strengthening reporting. Costs include hardware, licensing, vendor services, and internal labor for configuration, deployment, and system integration.

By replacing aging MDTs and transitioning to modern iOS-compatible devices when technically feasible—while retaining MDTs for users requiring serial connectivity—the projects reduce dual-device burden and align field technology with cybersecurity and lifecycle requirements. Maintaining operational and modernized mobile hardware supports seamless execution of work-management applications, supports accurate recording of electric and gas asset data, and supports verification of electric and gas meters to affirm customer billing reflects correct information. Field personnel rely on this technology for routing, work management and maintenance to continue to provide reliable service to customers. Collectively, field technology solutions support operational reliability and safety.

Project Justification:

The projects in this workpaper are justified by the following benefits:

- Grouping these projects under a single workpaper aligns with their shared objective of modernizing and governing field technology infrastructure that enables safe, reliable field operations. Ratepayers benefit through improved service reliability, reduced outage response and restoration times, enhanced operational efficiency, and improved data quality that strengthens decision-making and regulatory reporting.
- Mobile hardware replacement and modernization addresses technology obsolescence and enhances the Field Hardware program as authorized in the previous 2024 GRC Rate Case.
- Compliance with safety, reliability, and cybersecurity standards requires modern hardware capable of supporting secure applications, real-time data capture, and device governance controls.
- Reduce mobile hardware costs by replacing MDTs, when technically feasible, with lower cost and modern cloud compatible iPad devices.
- Timely investment aims to mitigate long lead times for devices and avoid deployment delays, supporting reliable field operations and effective lifecycle governance.
- Eliminate technical debt by retiring the legacy, non-enterprise supported SQL Server asset database and replacing it with an enhancement module in the enterprise IT systems (WP G07700).

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	113	136	136	136	136	136	6	8	8	8	9	8	119	144	144	144	145	144
NLbr	31	2,137	2,137	1,700	1,725	1,245	0	0	0	0	0	0	31	2,137	2,137	1,700	1,725	1,245
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	144	2,273	2,273	1,836	1,861	1,381	6	8	8	8	9	8	150	2,281	2,281	1,844	1,870	1,389
FTE	0.7	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.8	0.8	0.8	0.8
Units	1	2	2	1	1	1	0	0	0	0	0	0	1	2	2	1	1	1

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	6	0	0	6	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	6	0	0	6	0.0	0
2027	8	0	0	8	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	8	0	0	8	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	8	0	0	8	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	8	0	0	8	0.0	0
2029	8	0	0	8	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	8	0	0	8	0.0	0
2030	9	0	0	9	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	9	0	0	9	0.0	0
2031	8	0	0	8	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	8	0	0	8	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	20	8	3	0	0
Non-Labor	3	2	86	0	0
NSE	0	0	0	0	0
Total	23	10	89	0	0
FTE	0.1	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	135	204	202	198	124
Non-Labor	1,479	3,608	1,503	2,356	1,956
NSE	0	0	0	0	0
Total	1,614	3,812	1,706	2,554	2,080
FTE	1.4	1.9	1.8	1.7	1.1
Units	1	1	2	3	2
Recorded-Adjusted (Nominal \$)					
Labor	155	212	206	198	124
Non-Labor	1,482	3,610	1,589	2,356	1,956
NSE	0	0	0	0	0
Total	1,637	3,822	1,795	2,554	2,080
FTE	1.5	1.9	1.8	1.7	1.1
Units	1	1	2	3	2
Vacation & Sick (Nominal \$)					
Labor	23	31	29	27	18

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	23	31	29	27	18
FTE	0.3	0.3	0.3	0.3	0.2
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	89	74	26	8	0
Non-Labor	737	1,092	175	88	0
NSE	0	0	0	0	0
Total	825	1,166	201	96	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	267	317	260	233	142
Non-Labor	2,219	4,702	1,764	2,444	1,956
NSE	0	0	0	0	0
Total	2,486	5,019	2,024	2,677	2,099
FTE	1.8	2.2	2.1	2.0	1.3
Units	1	1	2	3	2

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Unit Measure: Projects

Summary of Adjustments to Recorded:

		In Nominal \$(000)				
	Years	2021	2022	2023	2024	2025
Labor		135	204	202	198	124
Non-Labor		1,479	3,608	1,503	2,356	1,956
NSE		0	0	0	0	0
	Total	1,614	3,812	1,706	2,554	2,080
FTE		1.4	1.9	1.8	1.7	1.1
Units		1	1	2	3	2

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	1
Explanation:	Add unit for projects: T000029					
2021	-20	-3	0	-23	-0.1	-2
Explanation:	Moving GRID Ops Small Cap actuals from H09090 to H09200					
2021	155	1,482	0	1,637	1.5	1
Explanation:	Moving Field Hardware from D09080 to H09090 to align actuals to forecast.					

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	1
Explanation: Add unit						
2021 Total	135	1,479	0	1,614	1.4	1
2022	0	0	0	0	0.0	1
Explanation: Add unit for projects: T000029						
2022	-8	-2	0	-10	0.0	-1
Explanation: Moving GRID Ops Small Cap actuals from H09090 to H09200						
2022	212	3,610	0	3,822	1.9	1
Explanation: Moving Field Hardware from D09080 to H09090 to align actuals to forecast.						
2022 Total	204	3,608	0	3,812	1.9	1
2023	0	0	0	0	0.0	1
Explanation: Add unit for projects: T000106						
2023	-3	-86	0	-89	0.0	-2
Explanation: Moving GRID Ops Small Cap actuals from H09090 to H09200						
2023	206	1,589	0	1,795	1.8	2

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Moving Field Hardware from D09080 to H09090 to align actuals to forecast.						
2023	0	0	0	0	0.0	1
Explanation: Add unit						
2023 Total	202	1,503	0	1,706	1.8	2
2024	198	2,356	0	2,554	1.7	3
Explanation: Moving Field Hardware from D09080 to H09090 to align actuals to forecast.						
2024 Total	198	2,356	0	2,554	1.7	3
2025	124	1,956	0	2,080	1.1	0
Explanation: Moving Field Hardware from D09080 to H09090 to align actuals to forecast.						
2025	0	0	0	0	0.0	2
Explanation: Add unit						
2025 Total	124	1,956	0	2,080	1.1	2

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group H09090**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Workpaper Detail: H09090.001 - Field Hardware Delivery 2027 (PurchLbr Lbr HW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	144	0	0	0	0
Non-Labor	0	1,387	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	1,531	0	0	0	0
FTE	0.0	0.8	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Workpaper Detail: H09090.002 - Field Hardware Delivery 2028 (PurchLbr Lbr HW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	144	0	0	0
Non-Labor	0	0	1,387	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	1,531	0	0	0
FTE	0.0	0.0	0.8	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Workpaper Detail: H09090.003 - Field Hardware Delivery 2029 (PurchLbr Lbr HW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	144	0	0
Non-Labor	0	0	0	1,700	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	1,844	0	0
FTE	0.0	0.0	0.0	0.8	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Workpaper Detail: H09090.004 - Field Hardware Delivery 2030 (PurchLbr Lbr HW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	145	0
Non-Labor	0	0	0	0	1,725	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	1,870	0
FTE	0.0	0.0	0.0	0.0	0.8	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Workpaper Detail: H09090.005 - Field Hardware Delivery 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	100
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>100</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Workpaper Detail: H09090.006 - Field Hardware Delivery 2031 (VendSvc PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	144
Non-Labor	0	0	0	0	0	1,145
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	1,289
FTE	0.0	0.0	0.0	0.0	0.0	0.8
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Workpaper Detail: H09090.007 - Field Hardware Asset Tracking and Management (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	250	250	0	0	0
NSE	0	0	0	0	0	0
Total	0	250	250	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Workpaper Detail: H09090.008 - Field Hardware Asset Tracking and Management (VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	500	500	0	0	0
NSE	0	0	0	0	0	0
Total	0	500	500	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	1	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: H09090 - Field Technology Solutions
Workpaper Detail: H09090.011 - Field Hardware Delivery 2025-2026 (PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	119	0	0	0	0	0
Non-Labor	31	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>150</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.7	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group H09090

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number	H09090
SDG&E IT Capital Workpaper Name	Field Technology Solutions
Unit Measure	Projects
Number of Units	8

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Field Hardware Delivery (2026-2031)	150	1,517	1,517	1,830	1,855	1,375
Labor	119	130	130	130	130	130
Non-Labor	31	1,387	1,387	1,700	1,725	1,245
Field Hardware Asset Tracking and Management (2027-2028)	0	750	750	0	0	0
Labor	0	0	0	0	0	0
Non-Labor	0	750	750	0	0	0
Grand Total	150	2,267	2,267	1,830	1,855	1,375
Total Labor	119	130	130	130	130	130
Total Non-Labor	31	2,137	2,137	1,700	1,725	1,245
Grand Total	150	2,267	2,267	1,830	1,855	1,375

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

H09090.001--006, .011
Field Hardware Delivery (2026 - 2031)
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	0.7	162	119	0.8	162	130	0.8	162	130	0.8	162	130	0.8	162	130	0.8	162	130	767
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	3	12	31	12	50	607	12	50	607	12	50	600	12	50	600	2	50	120	2,565
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0	260	3	780	260	3	780	367	3	1,100	375	3	1,125	342	3	1,025	4,810
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			100	1	100	100	100
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					119			130			130			130			130			130	767
	Non-Labor					31			1,387			1,387			1,700			1,725			1,245	7,475
	Total					150			1,517			1,517			1,830			1,855			1,375	8,242

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

H09090.007--008

SDG&E IT Project Name:

Field Hardware Asset Tracking and Management (2027-2028)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0	1	500	500	1	500	500			0			0			0	1,000
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0	1	250	250	1	250	250			0			0			0	500
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				0		0			0		0		0		0		0		0	0
		Non-Labor				0		750			750		0		0		0		0		0	1,500
		Total				0		750			750		0		0		0		0		0	1,500

Beginning of Workpaper Group
K09200 - Utility Operations Cloud Infrastructure

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: K0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: K09200 - Utility Operations Cloud Infrastructure
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Non-Labor	Zero-Based	0	0	0	0	0	0	0	4,000	0	0	5,300
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		0	0	0	0	0	0	0	4,000	0	0	5,300
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Units	Zero-Based	0	0	0	0	0	0	0	1	0	0	1

Business Purpose:

These initiatives are part of foundational technology investments to modernize the Electric Geographic Information System (eGIS) from on-premises infrastructure to the Company’s Cloud environment. These efforts are part of a larger initiative to upgrade the electric GIS system (GIS Utility Network) [Asset Management - WP G09200] to vendor supported version of the GIS Utility Network product.

Physical Description:

This workpaper contains projects that have utility non-shared assets. The modernization of the electric GIS system from on-premises to cloud is critical to align with the Companies’ transition to cloud strategy [Data Center Exit Program - WP H07700], reduce technical debt, and enhance cybersecurity while enabling scalable and resilient infrastructure. This move supports the Utility Network upgrade under the GIS Utility Network project [Asset Management - WP G09200], sustaining compliance with modern GIS architecture and preparing for the end-of-life of the current geographic data model in March 2028. The transition also improves integration, performance, and disaster recovery capabilities across enterprise GIS systems.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: K0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: K09200 - Utility Operations Cloud Infrastructure
Unit Measure: Projects

Scope of the effort includes modernizing the electric GIS system to cloud Infrastructure as a Service (IaaS) platform to host application and database servers as well as utilizing cloud native offerings for security and integrations .

- The 2028 cost includes 3-year pre-paid cloud infrastructure and consumption.
- The 2031 cost includes 3-year pre-paid cloud infrastructure and consumption.

Project Justification:

The modernization of the electric GIS on-premises system in the Cloud is a foundational technology investment that strengthens compliance, improves operational resilience, and enhances service continuity for customers. This transition supports the Companies' broader strategy to transition its mission critical applications to the Cloud and lessen its on-premises data center footprint [Data Center Consolidation Program - WP H07700] and positions the Companies for future scalability and innovation that improves safety, resiliency, and customer experience.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: K0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: K09200 - Utility Operations Cloud Infrastructure
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: K0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: K09200 - Utility Operations Cloud Infrastructure
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: K0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: K09200 - Utility Operations Cloud Infrastructure
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NLbr	0	0	4,000	0	0	5,300	0	0	0	0	0	0	0	0	4,000	0	0	5,300
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	4,000	0	0	5,300	0	0	0	0	0	0	0	0	4,000	0	0	5,300
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1

Forecast Adjustment Details

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026 Total	0	0	0	0	0.0	0
2027 Total	0	0	0	0	0.0	0
2028 Total	0	0	0	0	0.0	0
2029 Total	0	0	0	0	0.0	0
2030 Total	0	0	0	0	0.0	0
2031 Total	0	0	0	0	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: K0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: K09200 - Utility Operations Cloud Infrastructure
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
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
Units	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
Units	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
Units	0	0	0	0	0
Vacation & Sick (Nominal \$)					
Labor	0	0	0	0	0

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: K0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: K09200 - Utility Operations Cloud Infrastructure
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
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
Units	0	0	0	0	0
Escalation to 2025\$					
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
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
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
Units	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.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: K0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: K09200 - Utility Operations Cloud Infrastructure
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
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
Units	0	0	0	0	0

Year	Labor	NLbr	NSE	Total	FTE	Units

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group K09200**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: K0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: K09200 - Utility Operations Cloud Infrastructure
Workpaper Detail: K09200.004 - Electric GIS - Cloud Infrastructure 2028 (SW)
Unit Measure: Projects

In-Service Date: 10/31/2028

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	4,000	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	4,000	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: K0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: K09200 - Utility Operations Cloud Infrastructure
Workpaper Detail: K09200.005 - Electric GIS - Cloud Infrastructure 2031 (SW)
Unit Measure: Projects

In-Service Date: 10/31/2031

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	5,300
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	5,300
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group K09200

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number K09200
SDG&E IT Capital Workpaper Name Utility Operations Cloud Infrastructure
Unit Measure Projects
Number of Units 2

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Electric GIS - Cloud Infrastructure	0	0	4,000	0	0	5,300
Labor	0	0	0	0	0	0
Non-Labor	0	0	4,000	0	0	5,300
Grand Total	0	0	4,000	0	0	5,300

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

K09200.004--005
Electric GIS - Cloud Infrastructure
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0		1	4,000	4,000		0			0		1	5,300	5,300		9,300	
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			0			4,000			0			0			5,300	9,300
	Labor					0			0			0			0			0			0	0
	Non-Labor					0			0			4,000			0			0			5,300	9,300
	Total					0			0			4,000			0			0			5,300	9,300

Beginning of Workpaper Group
L09090 - Work Management Compliance and Workload Allocation

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	35	168	37	71	143	393	604	374	408	442	475
Non-Labor	Zero-Based	152	1,317	344	2,044	8,390	360	2,009	450	500	550	600
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		187	1,484	381	2,115	8,533	753	2,613	824	908	992	1,075
FTE	Zero-Based	0.1	0.9	0.3	0.5	0.9	2.3	3.5	2.2	2.4	2.6	2.8
Units	Zero-Based	1	1	2	2	2	1	3	1	1	1	1

Business Purpose:

This workpaper groups a set of coordinated initiatives that strengthen SDG&E's Work Management capabilities and supports SDGE's Electric Assets & Compliance outcomes as described in IED009.001 and C526 (Distribution Overhead Detailed Inspections), C530 (Distribution Wood Pole Intrusive Inspections), C536 (Distribution Overhead Patrol Inspections), C534 (Risk Informed Drone Inspections (RID)), C507, which represent SDG&E's governance framework for maintaining regulatory compliance, operational integrity, and mitigating risk across electric distribution systems. Specifically, the combined efforts aim to:

- Enhance, support, and maintain Work Management applications, data flows, and reporting to meet CPUC (GO165, GO 95 and GO 128) and OEIS Wildfire Mitigation Plan mandates with regards to electric distribution asset inspections and maintenance work
- Improve field mobility and user experience and sustain high data quality for work management, compliance and reporting.
- Deliver targeted workload forecasting enhancements to improve scheduling, resource allocation, and downstream construction execution.
- Enhance and sustain applications associated with the joint use of electric assets by third parties. This includes maintaining asset attachment and billing records, sending maintenance notifications to third-parties, processing applications for new, modified or alterations to pole attachments in compliance with the CPUC Right-of-Way Rules under Decision 22-10-025 and maintaining the Pole Database required by D.20-07-004 and

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
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Category: C. Asset & Work Management
Category-Sub: 1.
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Unit Measure: Projects

D.21-10-019.

- **Safety:** These systems support compliance with CPUC regulations and SDG&E standards related to its comprehensive inspection and repair programs and robust QA/QC audits that reduce hazards to the public and wildfire risks.
- **Reliability:** This technology is integral to support timely performance of corrective maintenance activities and that asset health is maintained.
- **Affordability:** These systems allow the business to prioritize preventive maintenance over costly emergency repairs that can also cause system disruptions and safety events, help leverage efficient work planning, and offset costs through revenues associated with joint-use compliance.

Together, the technology supported by these investments help SDG&E deliver a resilient, compliant, and cost-effective electric distribution system for its service area.

Physical Description:

This workpaper contains projects that have utility non-shared assets. This workpaper is co-sponsored by Electric Distribution Capital (Ex. SDGE-08) and Electric Distribution O&M (Ex. SDGE-09).

This program encompasses two primary workstreams, each with discrete deliverables:

- **Power Asset Data Compliance Agile Team (2026–2031):** Ongoing agile support and technical enhancements across multiple applications to support annual CPUC mandated electric overhead inspections; enhance, support and sustain multiple systems in support of data analytics and reporting requirements related to Communication Infrastructure Provider (CIPs) to meet CPUC decisions and general orders (GO95, GO165).
- **Workload Management Application (WMA) Enhancements:** delivers targeted enhancements and defect corrections to improve workload forecast accuracy and quality, improve usability and maintain/enhance reliability. The Workload Management Application is custom-built for the Resource Forecasting team to support and streamline the Construction Allocation Process (CAP).

Scope includes:

- o Automated validation replacing Excel-based validation
- o Assignment of internal vs. external crews
- o Enhanced visibility into the CAP status and workflow
- o Field Service Delivery scheduler planning functionality to replace legacy SharePoint processes

Delineating between the two projects, Power Asset Data & Compliance Agile Support targets compliance-driven application sustainment and

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
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Unit Measure: Projects

reporting while WMA enhancements focus on operational efficiency and construction readiness .

Cost drivers for this capital workpaper relate to labor and non-labor expenditures. Vendor services is the primary cost driver, attributable to technology modernization enhancements to existing large-scale usage portals over a three-year period, with yearly enhancements to align with compliance regulations and efficiency improvements. These updates are required to remain aligned with evolving CPUC rules and decisions, including General Order 095, 165 and 128, Wildfire Mitigation Plan requirements, and CPUC Decisions D.20-07-004, D.21-10-019 and CPUC Right-of-Way Rules under Decision 22-1-025. Labor consists of engineers and project managers for system monitoring, automated health checks, patching, and incident response. Other non-labor costs include purchased labor and software.

Project Justification:

Justification for this workpaper's projects includes:

- Supporting regulatory compliance, meeting oversight and reporting requirements for:
 - o CPUC requests: Responding within specific timeframes, including providing notifications to other third-parties of potential rearrangements by others, timely responses to requests for information, and performing field reviews on specific types of construction work within specific timeframes.
 - o General Order 165: Sets requirements for the inspection and maintenance of electric distribution and transmission facilities (excluding substations). Utilities must conduct patrol (visual), detailed, and intrusive inspections at prescribed intervals, with specific requirements for urban and rural areas, and for different types of equipment (e.g., wood poles, transformers).
 - o CPUC GO 95: Sets standards for design, construction, maintenance of overhead electric lines and affiliated equipment .
 - o CPUC GO 128: Sets standards for design, construction, maintenance of underground electric lines and affiliated equipment . CPUC Decisions D.20-07-004 and D.21-10-019: Requires standardized, granular data collection and reporting for all pole data and attachments across California's major pole owners (including SDG&E)
 - o CPUC Right-of-Way Rules under Decision 22-10-025: Requires utilities to review and grant or deny third-party attachment
- Risk and cost avoidance: Failure to comply can lead to significant fines; recent industry actions demonstrate enforcement severity.
- Reliability and data quality: Sustained application health and high-quality data improve availability, accuracy, and timely CPUC responses.
- Affordability: These systems allow the business to prioritize preventive maintenance over costly emergency repairs that can also cause system disruptions and safety events, help leverage efficient work planning, and offset costs through revenues associated with joint-use compliance.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
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Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	372	569	352	384	416	448	21	35	22	24	26	27	393	604	374	408	442	475
NLbr	360	2,009	450	500	550	600	0	0	0	0	0	0	360	2,009	450	500	550	600
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	732	2,578	802	884	966	1,048	21	35	22	24	26	27	753	2,613	824	908	992	1,075
FTE	2.3	3.5	2.2	2.4	2.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0	2.3	3.5	2.2	2.4	2.6	2.8
Units	1	3	1	1	1	1	0	0	0	0	0	0	1	3	1	1	1	1

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	21	0	0	21	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	21	0	0	21	0.0	0
2027	35	0	0	35	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	35	0	0	35	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	22	0	0	22	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	22	0	0	22	0.0	0
2029	24	0	0	24	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	24	0	0	24	0.0	0
2030	26	0	0	26	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	26	0	0	26	0.0	0
2031	27	0	0	27	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	27	0	0	27	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	23	113	83	124	171
Non-Labor	328	1,011	1,733	3,341	9,888
NSE	0	0	0	0	0
Total	351	1,123	1,816	3,465	10,059
FTE	0.2	0.8	0.5	0.9	1.0
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	-3	0	-53	-63	-46
Non-Labor	-226	0	-1,423	-1,371	-1,498
NSE	0	0	0	0	0
Total	-229	0	-1,477	-1,434	-1,544
FTE	-0.1	0.0	-0.3	-0.4	-0.3
Units	1	1	2	2	2
Recorded-Adjusted (Nominal \$)					
Labor	20	113	29	60	125
Non-Labor	102	1,011	310	1,970	8,390
NSE	0	0	0	0	0
Total	122	1,123	339	2,031	8,515
FTE	0.1	0.8	0.2	0.5	0.7
Units	1	1	2	2	2
Vacation & Sick (Nominal \$)					
Labor	3	16	4	8	18

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
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Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	3	16	4	8	18
FTE	0.0	0.1	0.1	0.0	0.2
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	11	39	4	3	0
Non-Labor	50	306	34	74	0
NSE	0	0	0	0	0
Total	62	345	38	76	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	35	168	37	71	143
Non-Labor	152	1,317	344	2,044	8,390
NSE	0	0	0	0	0
Total	187	1,484	381	2,115	8,533
FTE	0.1	0.9	0.3	0.5	0.9
Units	1	1	2	2	2

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	-3	0	-53	-63	-46
Non-Labor	-226	0	-1,423	-1,371	-1,498
NSE	0	0	0	0	0
Total	-229	0	-1,477	-1,434	-1,544
FTE	-0.1	0.0	-0.3	-0.4	-0.3
Units	1	1	2	2	2

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	1
Explanation:	Add unit					
2021	-3	-226	0	-229	-0.1	-1
Explanation:	Moving project from L09090 to A09090 to align to appropriate work paper.					
2021	0	0	0	0	0.0	1
Explanation:	Add unit					

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2021 Total	-3	-226	0	-229	-0.1	1
2022	0	0	0	0	0.0	1
Explanation:	Add unit					
2022 Total	0	0	0	0	0.0	1
2023	0	0	0	0	0.0	1
Explanation:	Add unit					
2023	-53	-1,423	0	-1,477	-0.3	-1
Explanation:	Moving project from L09090 to A09090 to align to appropriate work paper.					
2023	0	0	0	0	0.0	2
Explanation:	Add unit					
2023 Total	-53	-1,423	0	-1,477	-0.3	2
2024	0	0	0	0	0.0	1
Explanation:	Add unit for projects: T000114 T000193					
2024	-63	-1,371	0	-1,434	-0.4	-1
Explanation:	Moving project from L09090 to A09090 to align to appropriate work paper.					

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2024	0	0	0	0	0.0	2
Explanation:	Add unit					
2024 Total	-63	-1,371	0	-1,434	-0.4	2
2025	-46	-1,498	0	-1,544	-0.3	-1
Explanation:	Moving project from L09090 to A09090 to align to appropriate work paper.					
2025	0	0	0	0	0.0	3
Explanation:	Add unit					
2025 Total	-46	-1,498	0	-1,544	-0.3	2

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group L09090**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Workpaper Detail: L09090.001 - Power Asset Data and Compliance 2026 (Lbr PurchLbr)
Unit Measure: Projects

In-Service Date: 01/31/2027

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	393	34	0	0	0	0
Non-Labor	360	30	0	0	0	0
NSE	0	0	0	0	0	0
Total	753	64	0	0	0	0
FTE	2.3	0.2	0.0	0.0	0.0	0.0
Units	1	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Workpaper Detail: L09090.010 - Workload Management Application Enhancements (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	230	0	0	0	0
Non-Labor	0	1,579	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	1,809	0	0	0	0
FTE	0.0	1.3	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Workpaper Detail: L09090.012 - Power Asset Data and Compliance 2027 (Lbr PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 12

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	340	0	0	0	0
Non-Labor	0	400	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>740</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	2.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Workpaper Detail: L09090.016 - Power Asset Data and Compliance (PADC) 2028 Labor and Vendor Services
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 16

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	374	0	0	0
Non-Labor	0	0	450	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>824</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	2.2	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Workpaper Detail: L09090.019 - Power Asset Data and Compliance 2029 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 19

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	408	0	0
Non-Labor	0	0	0	500	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>908</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	2.4	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Workpaper Detail: L09090.023 - Power Asset Data and Compliance 2030 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 23

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	442	0
Non-Labor	0	0	0	0	550	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>992</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	2.6	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0909.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09090 - Work Management Compliance and Workload Allocation
Workpaper Detail: L09090.029 - Power Asset Data and Compliance 2031 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 29

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	475
Non-Labor	0	0	0	0	0	600
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,075</u>
FTE	0.0	0.0	0.0	0.0	0.0	2.8
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group L09090

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number **L09090**
 SDG&E IT Capital Workpaper Name **Work Management Compliance and Workload Allocation**
 Unit Measure **Projects**
 Number of Units **8**

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Power Asset Data and Compliance (2026-2031)	733	786	806	889	971	1,054
Labor	373	356	356	389	421	454
Non-Labor	360	430	450	500	550	600
Workload Management Application Enhancements	0	1,790	0	0	0	0
Labor	0	211	0	0	0	0
Non-Labor	0	1,579	0	0	0	0
Grand Total	733	2,576	806	889	971	1,054

Total Labor	373	567	356	389	421	454
Total Non-Labor	360	2,009	450	500	550	600
Grand Total	733	2,576	806	889	971	1,054

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

L09090.001, .012, .016, .019, .023, .029

SDG&E IT Project Name:

Power Asset Data and Compliance (2026-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	2.3	162	373	2.2	162	356	2.2	162	356	2.4	162	389	2.6	162	421	2.8	162	454	2,349
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	11	33	360	12	36	430	12	38	450	12	42	500	12	46	550	12	50	600	2,890
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				373			356			356			389			421			454	2,349
		Non-Labor				360			430			450			500			550			600	2,890
		Total				733			786			806			889			971			1,054	5,239

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

L09090.010

SDG&E IT Project Name:

Workload Management Application Enhancements

Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0	1.3	162	211			0			0			0			0	211
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0	12	132	1,579			0			0			0			0	1,579
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0		211	0		0		0		0		0		0		0	211
		Labor				0		211	0		0		0		0		0		0		0	211
		Non-Labor				0		1,579	0		0		0		0		0		0		0	1,579
		Total				0		1,790	0		0		0		0		0		0		0	1,790

Beginning of Workpaper Group
L09200 - Work Management Foundation and Field Services

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	1,322	1,257	1,919	2,390	2,376	2,179	1,043	959	640	765	1,476
Non-Labor	Zero-Based	8,212	14,233	16,001	19,933	17,805	14,934	7,821	18,441	7,303	5,920	6,770
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		9,533	15,490	17,920	22,324	20,181	17,113	8,864	19,400	7,943	6,685	8,246
FTE	Zero-Based	7.4	7.5	11.6	14.2	14.8	12.7	6.1	5.6	3.7	4.4	8.6
Units	Zero-Based	7	3	6	6	6	4	4	5	4	4	5

Business Purpose:

The projects in this workpaper enable and sustain critical technologies that support planning, construction, and asset maintenance/inspection across SDG&E's Gas and Electric distribution operations. The scope focuses on modernizing and integrating Field Service Management with ERP, GIS, and Crew Management systems, replacing obsolete platforms and improving scheduling, dispatch, emergency response, and compliance reporting. Objectives include improving usability, data accuracy, cybersecurity posture, and operational resilience through ongoing agile development, system upgrades, and enhancements.

Reliability:Field Service Delivery replaces outdated technology that risks business continuity if not maintained through regular releases and improvements. System degradation or downtime would force manual processes for hundreds of employees. Enhancements improve efficiency, work-order transparency, forecasting, and resource utilization to enable timely execution of critical work.

Safety:These systems support compliance-driven maintenance and inspection for gas and electric distribution assets. Addressing technical debt and maintaining core software reduces cybersecurity risk and enables stable, secure operations. Failure to support these systems could impede timely inspections required for safe system operation.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Unit Measure: Projects

Operational Resilience: Work management capabilities support multiple CPUC compliance requirements , and timely system updates are necessary to avoid potential fines. Supported mandates include:

- GO95: Standards for overhead electric line design, construction, and maintenance
- GO128: Requirements for underground electric and communications systems
- GO165: Inspection, record-keeping, and reporting requirements for electric distribution and transmission facilities, including specific intervals and heightened inspections in high fire-threat zones
- Decision 23-12-037: System modifications required to support updated rules for mixed-fuel new construction, including billing and costing updates

Physical Description:

This workpaper contains projects that have utility non-shared assets. This workpaper is co-sponsored by Electric Distribution Capital (Ex. SDGE-08), and Electric Distribution O&M (Ex. SDGE-09), and Gas Distribution (Ex. SDGE-04). The Work Management Foundation and Field Services portfolio encompasses a set of interrelated projects designed to modernize and sustain SDG& E's work order lifecycle systems for Gas and Electric operations. Collectively, these projects address planning, scheduling, dispatch, execution, and reconciliation of work orders across multiple work types, including maintenance, inspection, emergency response, and construction.

Distribution Design Planning (DDP): Continuous enhancements to ERP Construction Planning and Design systems for usability , reporting, cost estimating, design improvements, accounting, and cybersecurity compliance.

Field Service Delivery (FSD): Deployment and enhancement of the Field Service Management SaaS solution to replace the legacy field service management system, enabling scheduling, dispatch, work execution, outage response, and integrated workflows for electric and gas field work.

Field Service Management Regulatory and Technology (2026–2031): Ongoing upgrades, bug fixes, and deferred enhancements to maintain system stability and compliance, including user interface/user experience improvements, geolocation capture, and auto-dispatch capabilities.

Design Overlap: Establishes a centralized repository and framework to detect and resolve design overlaps, improve communication workflows, and integrate systems with the ERP and GIS for enterprise visibility.

Inspections Overhaul: Modernizes SDG&E's inspection processes using a digital layer , geospatial ERP integration, and dashboards to improve compliance, forecasting, and cost efficiency. The initiative aims to consolidate inspections, reduce site visits by up to 20%, minimize customer impact, and strengthen adherence to CPUC GO 165—advancing SDG&E's strategic goals by maintaining reliability through timely execution of critical work, enhancing safety with improved planning and risk reduction, driving affordability via efficiency and automation , and fostering innovation through technology-enabled continuous improvement.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Unit Measure: Projects

Project Justification:

The Work Management Foundation and Field Services portfolio groups projects that collectively modernize and sustain SDG &E's work order lifecycle systems, maintaining compliance with regulatory mandates and delivering operational reliability for Gas and Electric operations. This grouping is justified by replacing obsolete platforms , integrating critical systems (ERP, Field Service Management SaaS, Crew Management software) and enabling persistent enhancements to maintain technical currency and cybersecurity compliance. Additionally, grouping these projects aims to optimize resource allocation, reduces duplication of effort, and enables prudent investment in systems that support safe, reliable, and efficient service delivery.

Justification for this workpaper's projects include:

- Compliance and regulatory drivers include adherence to GO95, GO165, and California Decarb Commission Decision 23-12-037. Failure to implement these projects would result in operational risks such as non-compliance, cybersecurity vulnerabilities, increased outages, and productivity loss for hundreds of field users.
- Benefits include:
 - Improved reliability and reduced outage-related costs through optimized scheduling and dispatch.
 - Strategic process improvements such as Inspections Overhaul deliver cost synergies and avoid costly rework. Improved work tracking through system enhancements to track work under a unified framework, improved identification of overlapping work, and dashboards and reporting tools to support accurate forecasting and operational planning

The underlying cost drivers for this capital workpaper relate to labor and non-labor expenditures. Vendor services is the primary cost driver, attributable to yearly design planning and field service initiatives to sustain and secure systems for compliance mandates and avoid higher costs associated with unsupported technology and manual workarounds. These updates are required to remain aligned with evolving CPUC inspection cycles and related reporting requirements, including General Orders 95, 128, and 165, as well as CPUC decisions 23-12-037 and 22-09-026. Labor consists of development teams for system configuration, testing and implementation. Other non-labor costs include field service management software licenses.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																			
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast						
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	
Labor	2,061	983	904	603	720	1,392	118	60	55	37	45	84	2,179	1,043	959	640	765	1,476	
NLbr	14,934	7,821	18,441	7,303	5,920	6,770	0	0	0	0	0	0	14,934	7,821	18,441	7,303	5,920	6,770	
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	16,995	8,804	19,345	7,906	6,640	8,162	118	60	55	37	45	84	17,113	8,864	19,400	7,943	6,685	8,246	
FTE	12.7	6.1	5.6	3.7	4.4	8.6	0.0	0.0	0.0	0.0	0.0	0.0	12.7	6.1	5.6	3.7	4.4	8.6	
Units	4	4	5	4	4	5	0	0	0	0	0	0	4	4	5	4	4	5	

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	118	0	0	118	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	118	0	0	118	0.0	0
2027	60	0	0	60	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	60	0	0	60	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	55	0	0	55	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	55	0	0	55	0.0	0
2029	37	0	0	37	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	37	0	0	37	0.0	0
2030	45	0	0	45	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	45	0	0	45	0.0	0
2031	84	0	0	84	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	84	0	0	84	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	767	842	1,518	2,029	1,967
Non-Labor	5,485	10,926	14,414	19,216	17,349
NSE	0	0	0	0	0
Total	6,253	11,769	15,932	21,245	19,316
FTE	6.3	6.4	10.0	12.3	12.6
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	105
Non-Labor	0	0	0	0	457
NSE	0	0	0	0	0
Total	0	0	0	0	562
FTE	0.0	0.0	0.0	0.0	0.1
Units	7	3	6	6	6
Recorded-Adjusted (Nominal \$)					
Labor	767	842	1,518	2,029	2,073
Non-Labor	5,485	10,926	14,414	19,216	17,805
NSE	0	0	0	0	0
Total	6,253	11,769	15,932	21,245	19,878
FTE	6.3	6.4	10.0	12.3	12.7
Units	7	3	6	6	6
Vacation & Sick (Nominal \$)					
Labor	116	123	211	275	303

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	116	123	211	275	303
FTE	1.1	1.1	1.6	1.9	2.1
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	439	292	190	86	0
Non-Labor	2,726	3,306	1,587	718	0
NSE	0	0	0	0	0
Total	3,165	3,598	1,778	804	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	1,322	1,257	1,919	2,390	2,376
Non-Labor	8,212	14,233	16,001	19,933	17,805
NSE	0	0	0	0	0
Total	9,533	15,490	17,920	22,324	20,181
FTE	7.4	7.5	11.6	14.2	14.8
Units	7	3	6	6	6

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	0	0	0	0	105
Non-Labor	0	0	0	0	457
NSE	0	0	0	0	0
Total	0	0	0	0	562
FTE	0.0	0.0	0.0	0.0	0.1
Units	7	3	6	6	6

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	7
Explanation:	Add unit for projects: T000014 T000016 T000058 T19013 T19022, T18019, T19003					
2021 Total	0	0	0	0	0.0	7
2022	0	0	0	0	0.0	3
Explanation:	Add unit for projects: T000014 T000016 T000058					
2022 Total	0	0	0	0	0.0	3

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2023	0	0	0	0	0.0	6
Explanation:	Add unit for projects: T000014 T000016 T000118 T000120 T000122 T000058					
2023 Total	0	0	0	0	0.0	6
2024	0	0	0	0	0.0	6
Explanation:	Add unit for projects: T000118 T000120 T000122 T000163 T000165, T000014					
2024 Total	0	0	0	0	0.0	6
2025	105	457	0	562	0.1	1
Explanation:	Transfer costs for Field Service Delivery to correct workpaper L09200.					
2025	0	0	0	0	0.0	5
Explanation:	Add unit for projects: T000118 T000122 T000163 T000165 T000183, T000191					
2025 Total	105	457	0	562	0.1	6

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group L09200**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.001 - Field Service Delivery - Investments & Compliance Reporting (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub - workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	433	0	0	0
Non-Labor	0	0	11,772	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	12,205	0	0	0
FTE	0.0	0.0	2.5	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.002 - Field Service Delivery - Investments & Compliance Reporting (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub - workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	108	0	0
Non-Labor	0	0	0	2,943	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	3,051	0	0
FTE	0.0	0.0	0.0	0.6	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.003 - Distribution Design Planning 2026 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub - workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	49	0	0	0	0	0
Non-Labor	800	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	849	0	0	0	0	0
FTE	0.3	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.004 - Distribution Design Planning 2026 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 06/30/2027

Description:

Add sub - workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	50	0	0	0	0
Non-Labor	0	800	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>850</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.3	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.007 - Distribution Design Planning 2027 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub - workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	49	0	0	0	0
Non-Labor	0	800	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>849</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.3	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.008 - Distribution Design Planning 2027 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 06/30/2028

Description:

Add sub - workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	50	0	0	0
Non-Labor	0	0	800	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>850</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.3	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.009 - Distribution Design Planning 2028 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub - workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	50	0	0	0
Non-Labor	0	0	800	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>850</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.3	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.010 - Distribution Design Planning 2028 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 06/30/2029

Description:

Add sub - workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	49	0	0
Non-Labor	0	0	0	800	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>849</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.3	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.014 - Field Service Management - Regulatory and Technology 2026 (VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub - workpaper 14

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	2,246	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	2,246	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.015 - Field Service Management - Regulatory and Technology 2027 (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub - workpaper 15

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	936	0	0	0	0
Non-Labor	0	2,221	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	3,157	0	0	0	0
FTE	0.0	5.4	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.016 - Field Service Management - Regulatory and Technology 2028 (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub - workpaper 16

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	426	0	0	0
Non-Labor	0	0	2,969	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>3,395</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	2.5	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.017 - Field Service Management Cloud License Subscription 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub - workpaper 17

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	4,000	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>4,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.018 - Field Service Management Cloud License Subscription 2027 (Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub - workpaper 18

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	8	0	0	0	0
Non-Labor	0	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>8</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.1	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.019 - Field Service Management - Regulatory and Technology 2029 (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub - workpaper 19

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	433	0	0
Non-Labor	0	0	0	2,760	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	3,193	0	0
FTE	0.0	0.0	0.0	2.5	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.025 - Field Service Management - Regulatory and Technology 2030 (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub - workpaper 25

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	665	0
Non-Labor	0	0	0	0	2,120	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2,785</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	3.8	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.026 - Field Service Management - Regulatory and Technology 2031 (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub workpaper 26

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	664
Non-Labor	0	0	0	0	0	2,120
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2,784</u>
FTE	0.0	0.0	0.0	0.0	0.0	3.9
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.027 - Distribution Design Planning 2029 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub - workpaper 27

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	50	0	0
Non-Labor	0	0	0	800	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	850	0	0
FTE	0.0	0.0	0.0	0.3	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.028 - Distribution Design Planning 2029 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 06/30/2030

Description:

Add sub - workpaper 28

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	50	0
Non-Labor	0	0	0	0	800	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	850	0
FTE	0.0	0.0	0.0	0.0	0.3	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.029 - Distribution Design Planning 2031 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub - workpaper 29

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	50
Non-Labor	0	0	0	0	0	800
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	850
FTE	0.0	0.0	0.0	0.0	0.0	0.3
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.030 - Distribution Design Planning 2030 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub - workpaper 30

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	50	0
Non-Labor	0	0	0	0	800	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>850</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.3	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.031 - Distribution Design Planning 2030 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 06/30/2031

Description:

Add sub - workpaper 31

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	50
Non-Labor	0	0	0	0	0	800
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	850
FTE	0.0	0.0	0.0	0.0	0.0	0.3
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.032 - Inspections Overhaul (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub - workpaper 32

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	339
Non-Labor	0	0	0	0	0	1,400
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	1,739
FTE	0.0	0.0	0.0	0.0	0.0	2.0
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.035 - Field Service Delivery - Release 2 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub - workpaper 35

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	1,020	0	0	0	0	0
Non-Labor	11,138	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	12,158	0	0	0	0	0
FTE	6.0	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.037 - Distribution Design Planning 2025-2026 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub - workpaper 37

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	67	0	0	0	0	0
Non-Labor	750	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	817	0	0	0	0	0
FTE	0.3	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.038 - Crew Management Cloud License Subscription 2029 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 38

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	2,100	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	2,100	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.039 - Design Project Overlap (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 39

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	373
Non-Labor	0	0	0	0	0	1,650
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	2,023
FTE	0.0	0.0	0.0	0.0	0.0	2.1
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.040 - Crew Management Cloud License Subscription 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 40

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	2,200	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	2,200	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: L0920.0
Category: C. Asset & Work Management
Category-Sub: 1.
Workpaper Group: L09200 - Work Management Foundation and Field Services
Workpaper Detail: L09200.041 - Field Service Management - Regulatory and Technology 2026 (Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 41

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	1,043	0	0	0	0	0
Non-Labor	0	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	1,043	0	0	0	0	0
FTE	6.1	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group L09200

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number
 SDG&E IT Capital Workpaper Name
 Unit Measure
 Number of Units

L09200
 Work Management Foundation and Field Services
 Projects
 26

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Crew Management Cloud License Subscription	0	0	2,100	0	2,200	0
Labor	0	0	0	0	0	0
Non-Labor	0	0	2,100	0	2,200	0
Design Project Overlap	0	0	0	0	0	1,990
Labor	0	0	0	0	0	340
Non-Labor	0	0	0	0	0	1,650
Distribution Design Planning (2026-2031)	1,647	1,697	1,697	1,697	1,697	1,697
Labor	97	97	97	97	97	97
Non-Labor	1,550	1,600	1,600	1,600	1,600	1,600
Field Service Delivery - Release 2	12,110	0	0	0	0	0
Labor	972	0	0	0	0	0
Non-Labor	11,138	0	0	0	0	0
Field Service Delivery - Investments & Compliance Reporting	0	0	12,177	3,040	0	0
Labor	0	0	405	97	0	0
Non-Labor	0	0	11,772	2,943	0	0
Field Service Management - Regulatory and Technology (2026-2031)	3,234	3,096	3,374	3,165	2,736	2,752
Labor	988	875	405	405	616	632
Non-Labor	2,246	2,221	2,969	2,760	2,120	2,120
Field Service Management Cloud License Subscription	0	4,000	0	0	0	0
Labor	0	0	0	0	0	0
Non-Labor	0	4,000	0	0	0	0
Inspection Overhaul	0	0	0	0	0	1,724
Labor	0	0	0	0	0	324
Non-Labor	0	0	0	0	0	1,400
Grand Total	16,991	8,793	19,348	7,902	6,633	8,163
Total Labor	2,057	972	907	599	713	1,393
Total Non-Labor	14,934	7,821	18,441	7,303	5,920	6,770
Grand Total	16,991	8,793	19,348	7,902	6,633	8,163

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

L09200.038, .040
Crew Management Cloud License Subscription
Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				0			0			0			0			0			0	0
		Non-Labor				0			0			2,100			0			2,200			0	4,300
		Total				0			0			2,100			0			2,200			0	4,300

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

L09200.039

SDG&E IT Project Name:

Design Project Overlap

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost	
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost		
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0	2.1	162	340	340	
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0	12	138	1,650	1,650	
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0	
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0	
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0	
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0	
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0	
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0	
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0	
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0	
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0	
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0	
Summary																							
		Labor				0			0			0			0			0			340	340	
		Non-Labor				0			0			0			0			0			1,650	1,650	
		Total				0			0			0			0			0			1,990	1,990	

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

L09200.003, .004, .007, .008, .009, .010, .027, .028, .029, .030, .031, .037

SDG&E IT Project Name:

Distribution Design Planning (2026-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	0.6	162	97	0.6	162	97	0.6	162	97	0.6	162	97	0.6	162	97	0.6	162	97	583
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	12	129	1,550	12	133	1,600	12	133	1,600	12	133	1,600	12	133	1,600	12	133	1,600	9,550
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						97			97			97			97			97			97	583
						1,550			1,600			1,600			1,600			1,600			1,600	9,550
						1,647			1,697			1,697			1,697			1,697			1,697	10,133

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

L09200.035

SDG&E IT Project Name:

Field Service Delivery - Release 2

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	Total Cost
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	6.0	162	972			0			0			0			0			0	972
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	12	928	11,138			0			0			0			0			0	11,138
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					972			0			0			0			0			0	972
	Non-Labor					11,138			0			0			0			0			0	11,138
	Total					12,110			0			0			0			0			0	12,110

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

L09200.001, .002

SDG&E IT Project Name:

Field Service Delivery - Investments & Compliance Reporting

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	Total Cost
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0	2.5	162	405	0.6	162	97			0			0	502
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0	12	981	11,772	12	245	2,943			0			0	14,715
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			0			405			97			0			0	502
	Labor					0			0			405			97			0			0	502
	Non-Labor					0			0			11,772			2,943			0			0	14,715
	Total					0			0			12,177			3,040			0			0	15,217

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

L09200.014, .041, .015, .016, .019, .025, .026

SDG&E IT Project Name:

Field Service Management - Regulatory and Technology (2026-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	6.1	162	988	5.4	162	875	2.5	162	405	2.5	162	405	3.8	162	616	3.9	162	632	3,920
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	12	187	2,246	12	185	2,221	12	247	2,969	12	230	2,760	12	177	2,120	12	177	2,120	14,436
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						988			875			405			405			616			632	3,920
		Labor				988			875			405			405			616			632	3,920
		Non-Labor				2,246			2,221			2,969			2,760			2,120			2,120	14,436
		Total				3,234			3,096			3,374			3,165			2,736			2,752	18,356

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

L09200.017

SDG&E IT Project Name:

Field Service Management Cloud License Subscription 2027

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	Total Cost
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0	1	4,000	4,000			0			0			0			0	4,000
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				0			0			0			0			0			0	0
		Non-Labor				0			4,000			0			0			0			0	4,000
		Total				0			4,000			0			0			0			0	4,000

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

L09200.032

SDG&E IT Project Name:

Inspections Overhaul

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0	2.0	162	324	324
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0	12	117	1,400	1,400
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
		Labor				0			0			0			0			0			324	324
		Non-Labor				0			0			0			0			0			1,400	1,400
		Total				0			0			0			0			0			1,724	1,724

Area: INFORMATION TECHNOLOGY
 Witness: William J. Exon
 Category: D. Customer Applications
 Workpaper: VARIOUS

Summary for Category: D. Customer Applications

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
Labor	6,883	7,767	7,297	7,465	7,344	7,088	7,262
Non-Labor	46,562	36,461	35,879	43,301	36,090	40,422	35,195
NSE	0	0	0	0	0	0	0
Total	53,445	44,228	43,176	50,766	43,434	47,510	42,457
FTE	43.8	45.4	42.4	43.3	42.8	41.2	42.3

Workpapers belonging to this Category:

B09030 Customer Experience

Labor	955	1,517	1,593	896	923	951	977
Non-Labor	11,878	6,028	6,007	2,033	1,501	1,501	1,501
NSE	0	0	0	0	0	0	0
Total	12,833	7,545	7,600	2,929	2,424	2,452	2,478
FTE	5.9	8.9	9.3	5.2	5.4	5.5	5.7

Unit Measure: Projects

Units	1	2	2	1	1	1	1
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D09030 Customer Care & Billing

Labor	4,756	4,390	4,871	5,018	5,172	5,331	5,478
Non-Labor	31,513	22,969	23,902	24,170	24,263	24,310	24,409
NSE	0	0	0	0	0	0	0
Total	36,269	27,359	28,773	29,188	29,435	29,641	29,887
FTE	30.2	25.6	28.3	29.2	30.1	31.0	31.9

Unit Measure: Projects

Units	3	2	2	2	2	2	2
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Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: D. Customer Applications
Workpaper: VARIOUS

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
G09030 Transportation Electrification							
Labor	96	87	74	77	80	82	85
Non-Labor	1,476	1,512	2,438	2,522	2,628	2,713	2,797
NSE	0	0	0	0	0	0	0
Total	1,572	1,599	2,512	2,599	2,708	2,795	2,882
FTE	0.5	0.5	0.4	0.4	0.5	0.5	0.5
Unit Measure: Projects							
Units	1	1	1	1	1	1	1
G09090 Customer Generation							
Labor	1,076	785	759	781	723	724	722
Non-Labor	1,695	676	804	840	1,200	1,300	1,400
NSE	0	0	0	0	0	0	0
Total	2,771	1,461	1,563	1,621	1,923	2,024	2,122
FTE	7.2	4.6	4.4	4.5	4.2	4.2	4.2
Unit Measure: Projects							
Units	4	1	1	1	1	1	1
H09030 Customer Cloud Infrastructure							
Labor	0	988	0	693	446	0	0
Non-Labor	0	5,276	2,728	13,736	6,498	10,598	5,088
NSE	0	0	0	0	0	0	0
Total	0	6,264	2,728	14,429	6,944	10,598	5,088
FTE	0.0	5.8	0.0	4.0	2.6	0.0	0.0
Unit Measure: Projects							
Units	0	1	1	3	2	2	1

Note: Totals may include rounding differences.

**Beginning of Workpaper Group
B09030 - Customer Experience**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	0	0	264	666	955	1,517	1,593	896	923	951	977
Non-Labor	Zero-Based	0	0	5,256	11,940	11,878	6,028	6,007	2,033	1,501	1,501	1,501
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		0	0	5,519	12,606	12,832	7,545	7,600	2,929	2,424	2,452	2,478
FTE	Zero-Based	0.0	0.0	1.7	4.1	5.9	8.9	9.3	5.2	5.4	5.5	5.7
Units	Zero-Based	0	0	1	1	1	2	2	1	1	1	1

Business Purpose:

The Customer Experience workpaper captures key projects aimed at improving both customer awareness and customer experience. The Customer Notification & Outage Experience Projects aim to enhance employee safety and customer experience through improvements in customer communications. These enhancements empower customers with better information, improve employee safety, reduce uncertainty during outages, and strengthen trust in service reliability. The costs captured reflect the enhancements over the period of 2026-2031.

The Bill Print Refresh Projects are enhancements for SDG&E’s digital and printed bill formats. These projects upgrade how billing information is presented across both digital and paper channels, allowing customers to receive clear, consistent, and easy to navigate communications regardless of how they interact with SDG&E. The enhancements align with evolving customer expectations for transparency, usability, and accessibility in utility communications.

Physical Description:

This workpaper contains projects that have utility non-shared assets. This workpaper is co-sponsored by Customer Services (Ex. SDGE-12). These

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Unit Measure: Projects

projects are designed to:

1. Modernize SDGE's Bill Print Refresh focused on improving SDGE's digital and printed bill communications . These initiatives update how billing information is displayed, allowing customers to receive consistent, clear, and user-friendly communications regardless of their preferred engagement method.

2. Enhance outbound customer notifications for emails, texts, phone calls push notifications to provide customers with accurate, timely information. This includes employee and customer safety notifications for increasing customer awareness of employees doing work on / or near customers' properties. Specific enhancements will include:

- Advance Field Notifications automation and expansion to alert customers of SDG&E employees doing work on or near their property.
- Enable Push Notifications through SDG&E's mobile app.
- Cloud Transition: shifting all existing notifications to drive reliability and provide greater metrics around customer engagement.
- Contact Management Feedback Loop: Prompt customers for updated contact data and enable real-time validations for customer contact data.
- Enhanced Customer Surveys.

3. Enhance the end-to-end processes used to support both unplanned and planned customer power outages. This project aims to provide timely updates and offer greater visibility on the scale of impact and restoration progress . Specific enhancements will include:

- Enhance Unplanned Outage Notifications-
- Automate and Enhance Planned Outage notification to provide more real-time updates day of outage.
- Enhance customers' online outage tool experience: Enhance authenticated Outage display and Mobile App Outage Map .
- Enhanced Outage Communications for Business customers: Enable Multi Meter notifications and notifications to business contacts.
- Reporting an Outage Experience enhancements.
- Outage Communications for Momentary & Secondary Outages, two-way interactive SMS Outage communications.

Cost drivers for these capital projects relate to labor and non-labor expenditures. Purchased labor and labor are the primary cost drivers, attributable to a yearly modernization effort for the customer notification system and a shift to a cloud -based platform to support customer notifications over the course of the GRC cycle.

Project Justification:

These projects are required to improve billing comprehension and transparency, customer experience and preserve employee/customer safety.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
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- 1) Billing Comprehension and Transparency
 - a. Bill Print: Implements enhanced layouts, improved visual hierarchy, and clearer explanations of bill components providing customers with better visibility into how usage, rates, and required charges combine to form their total bill. These improvements enable customers to more easily review, interpret, and validate their billing information across both digital and paper formats.
- 2) Customer Experience
 - Enhanced Outage Notifications: This initiative improves communication for both planned and unplanned outages by providing timely updates and greater visibility into the scope of impact and restoration progress.
 - Real-Time Customer Notifications: Expands notification capabilities through additional channels, including in-app push notifications, to deliver a personalized experience and strengthen customer engagement.
 - Customer Insights: Maintains and enhances the customer survey program to capture actionable feedback. These insights enable data-driven decisions that improve overall customer satisfaction and service quality.
- 3) Safety
 - The Advance Field Notification component enables customers to be informed ahead of scheduled service work that may affect their experience . Proactive notifications reduce unexpected disruptions and enhance safety for both customers and field technicians.
 - Outage communication enhancements minimize risk by reducing customer dissatisfaction and confusion during outages . The initiative delivers a more intuitive, informative, and user-friendly experience, supporting operational efficiency and compliance.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
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Category: D. Customer Applications
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Workpaper Group: B09030 - Customer Experience
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
Years	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	1,435	1,501	844	869	895	922	82	92	52	54	56	55	1,517	1,593	896	923	951	977
NLbr	6,028	6,007	2,033	1,501	1,501	1,501	0	0	0	0	0	0	6,028	6,007	2,033	1,501	1,501	1,501
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	7,463	7,508	2,877	2,370	2,396	2,423	82	92	52	54	56	55	7,545	7,600	2,929	2,424	2,452	2,478
FTE	8.9	9.3	5.2	5.4	5.5	5.7	0.0	0.0	0.0	0.0	0.0	0.0	8.9	9.3	5.2	5.4	5.5	5.7
Units	2	2	1	1	1	1	0	0	0	0	0	0	2	2	1	1	1	1

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	82	0	0	82	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	82	0	0	82	0.0	0
2027	92	0	0	92	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	92	0	0	92	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	52	0	0	52	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	52	0	0	52	0.0	0
2029	54	0	0	54	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	54	0	0	54	0.0	0
2030	56	0	0	56	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	56	0	0	56	0.0	0
2031	55	0	0	55	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	55	0	0	55	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	0	0	208	565	833
Non-Labor	0	0	4,734	11,510	11,878
NSE	0	0	0	0	0
Total	0	0	4,943	12,075	12,711
FTE	0.0	0.0	1.5	3.6	5.1
Units	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
Units	0	0	1	1	1
Recorded-Adjusted (Nominal \$)					
Labor	0	0	208	565	833
Non-Labor	0	0	4,734	11,510	11,878
NSE	0	0	0	0	0
Total	0	0	4,943	12,075	12,711
FTE	0.0	0.0	1.5	3.6	5.1
Units	0	0	1	1	1
Vacation & Sick (Nominal \$)					
Labor	0	0	29	77	122

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	29	77	122
FTE	0.0	0.0	0.2	0.5	0.8
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	0	0	26	24	0
Non-Labor	0	0	521	430	0
NSE	0	0	0	0	0
Total	0	0	547	454	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	0	0	264	666	955
Non-Labor	0	0	5,256	11,940	11,878
NSE	0	0	0	0	0
Total	0	0	5,519	12,606	12,832
FTE	0.0	0.0	1.7	4.1	5.9
Units	0	0	1	1	1

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Unit Measure: Projects

Summary of Adjustments to Recorded:

		In Nominal \$(000)				
Years	2021	2022	2023	2024	2025	
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	
Units	0	0	1	1	1	

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021 Total	0	0	0	0	0.0	0
2022 Total	0	0	0	0	0.0	0
2023	0	0	0	0	0.0	1
Explanation: Add unit for projects: T000116						
2023 Total	0	0	0	0	0.0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2024	0	0	0	0	0.0	1
Explanation: Add unit for projects: T000116						
2024 Total	0	0	0	0	0.0	1
2025	0	0	0	0	0.0	1
Explanation: Add unit						
2025 Total	0	0	0	0	0.0	1

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group B09030**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Workpaper Detail: B09030.001 - Customer Systems - Bill Print Refresh 2026 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub - workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	809	0	0	0	0	0
Non-Labor	4,335	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	5,144	0	0	0	0	0
FTE	4.7	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Workpaper Detail: B09030.002 - Customer Systems - Bill Print Refresh 2027 (Lbr PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub - workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	724	0	0	0	0
Non-Labor	0	3,867	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	4,591	0	0	0	0
FTE	0.0	4.2	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Workpaper Detail: B09030.005 - Customer Systems - Notifications and Outage Experience 2026 (PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub - workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	708	0	0	0	0	0
Non-Labor	1,693	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	2,401	0	0	0	0	0
FTE	4.2	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Workpaper Detail: B09030.006 - Customer Systems - Notifications and Outage Experience 2027 (Lbr, PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub - workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	869	0	0	0	0
Non-Labor	0	2,140	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>3,009</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	5.1	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Workpaper Detail: B09030.007 - Customer Systems - Notifications and Outage Experience 2028 (Lbr & PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub - workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	896	0	0	0
Non-Labor	0	0	2,033	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	2,929	0	0	0
FTE	0.0	0.0	5.2	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Workpaper Detail: B09030.008 - Customer Systems - Notifications and Outage Experience 2029 (Lbr & PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub - workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	923	0	0
Non-Labor	0	0	0	1,501	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	2,424	0	0
FTE	0.0	0.0	0.0	5.4	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Workpaper Detail: B09030.009 - Customer Systems - Notifications and Outage Experience 2030 (Lbr & PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub - workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	951	0
Non-Labor	0	0	0	0	1,501	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	2,452	0
FTE	0.0	0.0	0.0	0.0	5.5	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: B09030 - Customer Experience
Workpaper Detail: B09030.010 - Customer Systems - Notifications and Outage Experience 2031 (Lbr & PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub - workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	977
Non-Labor	0	0	0	0	0	1,501
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	2,478
FTE	0.0	0.0	0.0	0.0	0.0	5.7
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group B09030

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number	B09030
SDG&E IT Capital Workpaper Name	Customer Experience
Unit Measure	Projects
Number of Units	8

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Bill Print Refresh	5,100	4,550	0	0	0	0
Labor	765	683	0	0	0	0
Non-Labor	4,335	3,868	0	0	0	0
Customer Systems - notifications and Outage Experince (2026-2031)	2,363	2,959	2,877	2,370	2,396	2,423
Labor	670	819	844	869	895	922
Non-Labor	1,693	2,140	2,033	1,501	1,501	1,501
Grand Total	7,463	7,509	2,877	2,370	2,396	2,423
Total Labor	1,435	1,501	844	869	895	922
Total Non-Labor	6,028	6,007	2,033	1,501	1,501	1,501
Grand Total	7,463	7,509	2,877	2,370	2,396	2,423

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

809030.001--002
Bill Print Refresh
Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	4.7	162	765	4.2	162	683			0			0			0			0	1,448
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	361	4,335	12	322	3,868			0			0			0			0	8,203
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					765			683			0			0			0			0	1,448
	Non-Labor					4,335			3,868			0			0			0			0	8,203
	Total					5,100			4,550			0			0			0			0	9,650

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

B09030.005--010
Customer Systems - Notifications and Outage Experience
Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	4.1	162	670	5.1	162	819	5.2	162	844	5.4	162	869	5.5	162	895	5.7	162	922	5,019
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	141	1,693	12	178	2,140	12	169	2,033	12	125	1,501	12	125	1,501	12	125	1,501	10,369
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						670		819		844		869		895		922		5,019				
						1,693		2,140		2,033		1,501		1,501		1,501		10,369				
						2,363		2,959		2,877		2,370		2,396		2,423		15,388				

**Beginning of Workpaper Group
D09030 - Customer Care & Billing**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	1,176	3,445	3,976	5,382	4,756	4,390	4,871	5,018	5,172	5,331	5,478
Non-Labor	Zero-Based	25,853	28,409	24,567	31,627	31,513	22,969	23,902	24,170	24,263	24,310	24,409
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		27,029	31,854	28,543	37,009	36,269	27,359	28,773	29,188	29,435	29,641	29,887
FTE	Zero-Based	6.0	19.8	25.3	34.1	30.2	25.6	28.3	29.2	30.1	31.0	31.9
Units	Zero-Based	6	4	4	4	3	2	2	2	2	2	2

Business Purpose:

This project encompasses annual support costs including system upgrades, authorized Regulatory mandates, and enhancements for customer-facing applications, including the Customer Information System (CIS), My Energy Center, Call Center telephony, and Service Order Routing Technology (SORT). These systems enable essential digital front- and back-office functions such as billing, credit and collections, service order processing, call center operations, digital self-service, and device management.

Physical Description:

This workpaper contains projects that have utility non-shared assets. This workpaper is co-sponsored by Customer Services (Ex. SDGE-12).

This workpaper includes the following initiatives:

Implementation of Regulatory Projects and Compliance Alignment

- Execute mandated regulatory initiatives accurately and in full compliance with applicable requirements, including:

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Unit Measure: Projects

- o GRC Phase 2
- o Title 20, Section 1353 Enhancements
- o Market Informed Demand Automation Server (MIDAS) Enhancements (California Energy Commission tool supporting load management standards)
 - Application sustainment to adhere to customer privacy standards and data protection regulations .
 - Sustain robust security measures across all applications to safeguard customer data.
 - Implement enhancements that enable secure and reliable interactions within SDG& E's My Energy Center and other customer-facing platforms.

System Monitoring and Reliability

- Implement efficient disaster recovery processes , including Global Resiliency for Cloud applications to support reliability and continual performance.
- Automate system health monitoring and alerting to proactively address issues .

System Upgrades and Enhancements

- Perform upgrades for all customer-facing applications, including cloud-based solutions and SDG& E's My Energy Center , to optimize performance and minimize downtime.
- Support integration technology upgrades and shift SORT to cloud infrastructure .
- Modernize and sustain the Consent to Share application.
- Expand Customer 360 capabilities, including cloud-based Customer Data Lake, external stakeholder management, and customer relationship management integration.
- Enhance digital payment options
- Operationalize automation across channels, including intelligent routing enhancements for SORT .
- Advance customer journey analytics to improve engagement and service delivery .

The labor costs for this project are driven by various resources such as process designers, solution architects, project leads, multiple business analysts, and project managers. Labor roles and allocations may vary. The non-labor costs for this project are driven by multiple vendor services contracts.

Project Justification:

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Unit Measure: Projects

This project enables compliance with regulatory requirements while sustaining the functionality of critical customer-facing systems. It supports accurate billing and payment processing, efficient call center operations, streamlined self-service capabilities, timely service order processing, and adherence to established Service Level Agreements (SLAs) for system performance and availability.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	4,152	4,590	4,728	4,870	5,016	5,167	238	281	290	302	315	311	4,390	4,871	5,018	5,172	5,331	5,478
NLbr	22,969	23,902	24,170	24,263	24,310	24,409	0	0	0	0	0	0	22,969	23,902	24,170	24,263	24,310	24,409
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	27,121	28,492	28,898	29,133	29,326	29,576	238	281	290	302	315	311	27,359	28,773	29,188	29,435	29,641	29,887
FTE	25.6	28.3	29.2	30.1	31.0	31.9	0.0	0.0	0.0	0.0	0.0	0.0	25.6	28.3	29.2	30.1	31.0	31.9
Units	2	2	2	2	2	2	0	0	0	0	0	0	2	2	2	2	2	2

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	238	0	0	238	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	238	0	0	238	0.0	0
2027	281	0	0	281	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	281	0	0	281	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	290	0	0	290	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	290	0	0	290	0.0	0
2029	302	0	0	302	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	302	0	0	302	0.0	0
2030	315	0	0	315	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	315	0	0	315	0.0	0
2031	311	0	0	311	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	311	0	0	311	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	683	2,309	3,144	4,568	4,149
Non-Labor	17,270	21,809	22,130	30,488	31,625
NSE	0	0	0	0	0
Total	17,953	24,118	25,275	35,056	35,774
FTE	5.1	17.0	21.9	29.6	25.9
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	-112
NSE	0	0	0	0	0
Total	0	0	0	0	-112
FTE	0.0	0.0	0.0	0.0	0.0
Units	6	4	4	4	3
Recorded-Adjusted (Nominal \$)					
Labor	683	2,309	3,144	4,568	4,149
Non-Labor	17,270	21,809	22,130	30,488	31,513
NSE	0	0	0	0	0
Total	17,953	24,118	25,275	35,056	35,662
FTE	5.1	17.0	21.9	29.6	25.9
Units	6	4	4	4	3
Vacation & Sick (Nominal \$)					
Labor	103	336	437	620	607

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	103	336	437	620	607
FTE	0.9	2.8	3.4	4.5	4.3
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	391	800	394	194	0
Non-Labor	8,583	6,599	2,437	1,139	0
NSE	0	0	0	0	0
Total	8,974	7,400	2,831	1,332	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	1,176	3,445	3,976	5,382	4,756
Non-Labor	25,853	28,409	24,567	31,627	31,513
NSE	0	0	0	0	0
Total	27,029	31,854	28,543	37,009	36,269
FTE	6.0	19.8	25.3	34.1	30.2
Units	6	4	4	4	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.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	-112
NSE	0	0	0	0	0
Total	0	0	0	0	-112
FTE	0.0	0.0	0.0	0.0	0.0
Units	6	4	4	4	3

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	6
Explanation:	Add unit for projects: T000011 T000046 T18014 T19001 T19009					
2021 Total	0	0	0	0	0.0	6
2022	0	0	0	0	0.0	4
Explanation:	Add unit for projects: T000011 T000046 T000105 T19009					
2022 Total	0	0	0	0	0.0	4

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2023	0	0	0	0	0.0	4
Explanation: Add unit for projects: T000046 T000105 T000109						
2023 Total	0	0	0	0	0.0	4
2024	0	0	0	0	0.0	4
Explanation: Add unit for projects: T000105 T000109 T000134						
2024 Total	0	0	0	0	0.0	4
2025	0	-112	0	-112	0.0	0
Explanation: Transferring costs for Customer Systems Regulatory and Compliance to D09030.						
2025	0	0	0	0	0.0	3
Explanation: Add unit for projects: T000105 T000109 T000134						
2025 Total	0	-112	0	-112	0.0	3

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group D09030**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Workpaper Detail: D09030.001 - Customer Systems Technology Lifecycle and Foundational Investments 2026 (PurchLbr, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	2,715	0	0	0	0	0
Non-Labor	16,814	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	19,529	0	0	0	0	0
FTE	15.9	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Workpaper Detail: D09030.002 - Customer Systems - Regulatory and Compliance 2026 (PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	1,675	0	0	0	0	0
Non-Labor	6,155	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	7,830	0	0	0	0	0
FTE	9.7	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Workpaper Detail: D09030.003 - Customer Systems Technology Lifecycle and Foundational Investments 2027 (PurchLbr, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	4,232	0	0	0	0
Non-Labor	0	13,808	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	18,040	0	0	0	0
FTE	0.0	24.6	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Workpaper Detail: D09030.004 - Customer Systems - Regulatory and Compliance 2027 (Lbr PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	639	0	0	0	0
Non-Labor	0	10,094	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	10,733	0	0	0	0
FTE	0.0	3.7	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Workpaper Detail: D09030.005 - Customer Systems Technology Lifecycle and Foundational Investments 2028 (PurchLbr, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	4,359	0	0	0
Non-Labor	0	0	13,869	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	18,228	0	0	0
FTE	0.0	0.0	25.4	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Workpaper Detail: D09030.006 - Customer Systems - Regulatory and Compliance 2028 (PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	659	0	0	0
Non-Labor	0	0	10,301	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	10,960	0	0	0
FTE	0.0	0.0	3.8	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Workpaper Detail: D09030.007 - Customer Systems Technology Lifecycle and Foundational Investments 2029 (PurchLbr, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	4,493	0	0
Non-Labor	0	0	0	13,869	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	18,362	0	0
FTE	0.0	0.0	0.0	26.1	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Workpaper Detail: D09030.008 - Customer Systems Technology Lifecycle and Foundational Investments 2030 (PurchLbr, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	4,632	0
Non-Labor	0	0	0	0	13,820	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	18,452	0
FTE	0.0	0.0	0.0	0.0	26.9	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Workpaper Detail: D09030.009 - Customer Systems Technology Lifecycle and Foundational Investments 2031 (PurchLbr, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	4,759
Non-Labor	0	0	0	0	0	13,820
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	18,579
FTE	0.0	0.0	0.0	0.0	0.0	27.7
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Workpaper Detail: D09030.010 - Customer Systems - Regulatory and Compliance 2029 (PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	679	0	0
Non-Labor	0	0	0	10,394	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	11,073	0	0
FTE	0.0	0.0	0.0	4.0	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Workpaper Detail: D09030.011 - Customer Systems - Regulatory and Compliance 2030 (PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	699	0
Non-Labor	0	0	0	0	10,490	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	11,189	0
FTE	0.0	0.0	0.0	0.0	4.1	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: D09030 - Customer Care & Billing
Workpaper Detail: D09030.012 - Customer Systems - Regulatory and Compliance 2031 (PurchLbr Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 12

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	719
Non-Labor	0	0	0	0	0	10,589
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	11,308
FTE	0.0	0.0	0.0	0.0	0.0	4.2
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group D09030

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number	D09030
SDG&E IT Capital Workpaper Name	Customer Care & Billing
Unit Measure	Projects
Number of Units	12

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Customer Systems – Technology Lifecycle and Foundational Investments	19,382	17,796	17,977	18,100	18,178	18,309
Labor	2,568	3,988	4,108	4,231	4,358	4,488
Non-Labor	16,814	13,808	13,869	13,869	13,820	13,820
Customer Systems - Regulatory and Compliance	7,738	10,696	10,922	11,042	11,148	11,267
Labor	1,584	603	621	648	658	678
Non-Labor	6,154	10,094	10,301	10,394	10,490	10,589
Grand Total	27,120	28,493	28,898	29,142	29,326	29,576
Total Labor	4,152	4,590	4,728	4,879	5,016	5,167
Total Non-Labor	22,969	23,902	24,170	24,263	24,310	24,409
Grand Total	27,120	28,493	28,898	29,142	29,326	29,576

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

D09030.001, .003, .005, .007-009
Customer Systems – Technology Lifecycle and Foundational Investments
Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	15.9	162	2,568	24.6	162	3,988	25.4	162	4,108	26.1	162	4,231	26.9	162	4,358	27.7	162	4,488	23,741
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	1,401	16,814	12	1,151	13,808	12	1,156	13,869	12	1,156	13,869	12	1,152	13,820	12	1,152	13,820	86,001
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					2,568			3,988			4,108			4,231			4,358			4,488	23,741
	Non-Labor					16,814			13,808			13,869			13,869			13,820			13,820	86,001
	Total					19,382			17,796			17,977			18,100			18,178			18,309	109,742

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

D09030.002, .004, .006, .010--012

SDG&E IT Project Name:

Customer Systems - Regulatory and Compliance

Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	9.8	162	1,584	3.7	162	603	3.8	162	621	4.0	162	648	4.1	162	658	4.2	162	678	4,791
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	513	6,154	12	841	10,094	12	858	10,301	12	866	10,394	12	874	10,490	12	882	10,589	58,023
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						1,584		603	621		648		658		678		4,791				10,589	58,023
	Labor					1,584		603	621		648		658		678		4,791				10,589	58,023
	Non-Labor					6,154		10,094	10,301		10,394		10,490		10,589		58,023				0	0
	Total					7,738		10,696	10,922		11,042		11,148		11,267		62,814				11,267	62,814

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

SDG&E IT Project Name:

Customer Systems – Technology Lifecycle and Foundational Investments
Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric (Contract, FTE, Licenses, etc.)	2026			2027			2028			2029			2030			2031					
				# of units	Cost per unit*	Total cost	# of units	Cost per unit*	Total cost	# of units	Cost per unit*	Total cost	# of units	Cost per unit*	Total cost	# of units	Cost per unit*	Total cost	# of units	Cost per unit*	Total cost			
System Upgrades (CIS, SORT, Cloud Based Customer Care Center, My Energy Center)						13,652			9,980			7,854			8,398			8,345			8,353			56,584
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	Number of FTE	11.2	162	1,809	13.8	162	2,236	11.1	162	1,795	12.1	162	1,963	12.3	162	2,001	12.6	162	2,048	11,852		
Professional Services (Monthly Average)	Blended Rate (Monthly Average)	Non-Labor	Number of months	12.0	987	11,943	12.0	645	7,744	12.0	505	6,061	12.0	536	6,435	12.0	529	6,345	12.0	525	6,305	44,732		
Customer 360 / CRM Capabilities						1,875			1,931			1,989			376			387			399			6,957
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	Number of FTE	1.5	162	248	2.7	162	433	2.8	162	455	0.5	162	88	0.6	162	93	0.6	162	98	1,414		
Professional Services (Monthly Average)	Blended Rate (Monthly Average)	Non-Labor	Number of months	12.0	136	1,627	12.0	125	1,498	12.0	128	1,535	12.0	24	288	12.0	25	294	12.0	25	301	5,543		
Digital Payment Options						550			567			583			603			619			638			3,558
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	Number of FTE	0.4	162	73	0.8	162	127	0.8	162	133	0.9	162	140	0.9	162	148	1.0	162	156	778		
Professional Services (Monthly Average)	Blended Rate (Monthly Average)	Non-Labor	Number of months	12.0	40	477	12.0	37	440	12.0	38	450	12.0	38	461	12.0	39	471	12.0	40	481	2,779		
Customer Journey Analytics						275			283			292			301			310			319			1,779
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	Number of FTE	0.2	162	36	0.4	162	63	0.4	162	67	0.4	162	70	0.5	162	74	0.5	162	78	389		
Professional Services (Monthly Average)	Blended Rate (Monthly Average)	Non-Labor	Number of months	12.0	20	239	12.0	18	220	12.0	19	225	12.0	19	230	12.0	20	235	12.0	20	241	1,390		
Customer Arrangements Enhancements						250			254			263			273			281			290			1,617
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	Number of FTE	0.2	162	33	0.4	162	58	0.4	162	61	0.4	162	64	0.4	162	67	0.4	162	71	354		
Professional Services (Monthly Average)	Blended Rate (Monthly Average)	Non-Labor	Number of months	12.0	18	217	12.0	17	200	12.0	17	205	12.0	17	209	12.0	18	214	12.0	18	219	1,263		
My Energy Center Enhancements						-			-			-			-			-			-			-
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	Number of FTE	-	-	-	-	-	-	4.8	162	776	5.7	162	928	6.0	162	980	6.4	162	1,032	3,716		
Professional Services (Monthly Average)	Blended Rate (Monthly Average)	Non-Labor	Number of months	-	-	-	-	-	-	12.0	218	2,620	12.0	253	3,041	12.0	259	3,108	12.0	265	3,178	11,947		
Consent to Share Modernization						580			2,401			1,631			-			-			-			4,612
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	Number of FTE	0.5	162	77	3.3	162	535	2.3	162	378	-	-	-	-	-	-	-	-	-	-	-	988
Professional Services (Monthly Average)	Blended Rate (Monthly Average)	Non-Labor	Number of months	12.0	42	503	12.0	155	1,853	12.0	105	1,258	-	-	-	-	-	-	-	-	-	-	-	3,625
CVR and Chatbot Enhancements						1,550			1,597			1,644			1,694			1,743			1,797			10,026
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	Number of FTE	1.3	162	205	2.2	162	358	2.3	162	376	2.4	162	396	2.6	162	418	2.7	162	441	2,194		
Professional Services (Monthly Average)	Blended Rate (Monthly Average)	Non-Labor	Number of months	12.0	112	1,345	12.0	109	1,239	12.0	106	1,269	12.0	108	1,298	12.0	111	1,326	12.0	113	1,356	7,833		
SORT Move to Cloud						-			-			-			-			-			-			-
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	Number of FTE	-	-	-	-	-	-	0.2	162	39	3.6	162	582	3.6	162	576	3.5	162	565	1,761		
Professional Services (Monthly Average)	Blended Rate (Monthly Average)	Non-Labor	Number of months	-	-	-	-	-	-	12.0	11	131	12.0	159	1,907	12.0	152	1,827	12.0	145	1,739	5,604		
SORT Compliance Reporting Enhancements						650			780			150			-			-			-			1,580
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	Number of FTE	0.5	162	86	1.1	162	175	0.2	162	34	-	-	162	-	-	162	-	-	-	295		
Professional Services (Monthly Average)	Blended Rate (Monthly Average)	Non-Labor	Number of months	12	47	564	12.0	50	605	12.0	10	116	12	-	-	12	-	-	12	-	-	1,285		
Summary						\$ 2,568			\$ 3,988			\$ 4,108			\$ 4,231			\$ 4,358			\$ 4,488			\$ 23,742
	Labor					\$ 15,614			\$ 13,808			\$ 13,859			\$ 13,969			\$ 14,070			\$ 14,171			\$ 86,692
	Non-Labor					-			-			-			-			-			-			-
	Total					\$ 19,342			\$ 17,796			\$ 17,977			\$ 18,100			\$ 18,178			\$ 18,309			\$ 109,742

**Beginning of Workpaper Group
G09030 - Transportation Electrification**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	646	287	168	166	96	87	74	77	80	82	85
Non-Labor	Zero-Based	1,853	1,407	1,613	1,631	1,476	1,512	2,438	2,522	2,628	2,713	2,797
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		2,499	1,694	1,781	1,797	1,572	1,599	2,512	2,599	2,708	2,795	2,882
FTE	Zero-Based	3.6	1.8	1.0	0.9	0.5	0.5	0.4	0.4	0.5	0.5	0.5
Units	Zero-Based	1	2	3	2	1	1	1	1	1	1	1

Business Purpose:

This project develops new applications and enhances Transportation Electrification IT systems in support of Transportation Electrification initiatives and programs.

Physical Description:

This workpaper contains projects that have utility non-shared assets. This workpaper is co-sponsored by Customer Services (Ex. SDGE-12). The project includes enhancements to core Transportation Electrification applications used for customer intake, compliance reporting, and EV infrastructure program lifecycle management. Planned work includes updates to the Transportation Electrification Solutions Tool and customer-facing portals, integration with SDG&E's enterprise data mesh, and deployment of AWS-based analytics to support forecasting and reporting requirements to support CPUC mandated programs. The project includes usability and security improvements to internal facing Transportation Electrification operational tools and systems that are integrated with SDG&E billing platforms.

Software applications include the Transportation Electrification Solutions Tool, which functions as a Customer Relationship Management system for

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Unit Measure: Projects

logging, managing, and collecting required data from customers and completed sites participating in SDG&E EV programs. The tool serves as the system of record for data elements and documents required in regulatory compliance reports.

This project enhances multiple Transportation Electrification program-related applications over the project duration.

Internal labor costs are driven by resources such as product owners, software developers, business subject matter experts, scrum masters, information security engineers, database administrators, architects, and delivery leads. Non-labor costs are driven by contracted labor and vendor services.

Project Justification:

Justification for this workpaper's projects includes:

- Grouping IT support for all CPUC-regulated Transportation Electrification programs under one product team supports consistent compliance across dozens of overlapping decisions and reporting calendars, reducing the likelihood of reporting errors, penalties, or delays and helping maintain stable program delivery at lower cost to customers.
- Delivering the technology foundation for new advisory and rebate-based programs, such as upcoming LCFS offerings and the Technical Assistance program that follows TEAS (Res E-5300), provides modern customer enrollment pathways, rebate processing systems, and automated reporting, improving the accuracy and speed of customer-facing services while reducing administrative expenses.
- Maintaining reliable, compliant operation of core IT platforms allows the Transportation Electrification department to meet reporting obligations, helps prevent service interruptions, and preserves data integrity that ultimately enhances customer value.
- Sustaining a persistent internal Agile Team lowers long-term costs and risk by avoiding repeated vendor re-procurement and preventing loss of institutional knowledge needed to implement CPUC-mandated system changes, enabling faster, more accurate enhancements across all Transportation Electrification programs and supporting efficient stewardship of ratepayer-funded infrastructure.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	82	70	73	75	77	80	5	4	4	5	5	5	87	74	77	80	82	85
NLbr	1,512	2,438	2,522	2,628	2,713	2,797	0	0	0	0	0	0	1,512	2,438	2,522	2,628	2,713	2,797
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,594	2,508	2,595	2,703	2,790	2,877	5	4	4	5	5	5	1,599	2,512	2,599	2,708	2,795	2,882
FTE	0.5	0.4	0.4	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.4	0.5	0.5	0.5
Units	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	5	0	0	5	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	5	0	0	5	0.0	0
2027	4	0	0	4	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	4	0	0	4	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	4	0	0	4	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	4	0	0	4	0.0	0
2029	5	0	0	5	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	5	0	0	5	0.0	0
2030	5	0	0	5	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	5	0	0	5	0.0	0
2031	5	0	0	5	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	5	0	0	5	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	375	193	133	141	84
Non-Labor	1,238	1,080	1,453	1,572	1,476
NSE	0	0	0	0	0
Total	1,613	1,273	1,586	1,713	1,560
FTE	3.1	1.5	0.9	0.8	0.4
Units	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
Units	1	2	3	2	1
Recorded-Adjusted (Nominal \$)					
Labor	375	193	133	141	84
Non-Labor	1,238	1,080	1,453	1,572	1,476
NSE	0	0	0	0	0
Total	1,613	1,273	1,586	1,713	1,560
FTE	3.1	1.5	0.9	0.8	0.4
Units	1	2	3	2	1
Vacation & Sick (Nominal \$)					
Labor	56	28	18	19	12

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	56	28	18	19	12
FTE	0.5	0.3	0.1	0.1	0.1
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	214	67	17	6	0
Non-Labor	615	327	160	59	0
NSE	0	0	0	0	0
Total	830	394	177	65	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	646	287	168	166	96
Non-Labor	1,853	1,407	1,613	1,631	1,476
NSE	0	0	0	0	0
Total	2,499	1,694	1,781	1,797	1,572
FTE	3.6	1.8	1.0	0.9	0.5
Units	1	2	3	2	1

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
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
Units	1	2	3	2	1

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	1
Explanation:	Add unit for projects: T000013					
2021 Total	0	0	0	0	0.0	1
2022	0	0	0	0	0.0	2
Explanation:	Add unit for projects: T000013 T000079					
2022 Total	0	0	0	0	0.0	2

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2023	0	0	0	0	0.0	3
Explanation: Add unit for projects: T000079 T000121 T000013						
2023 Total	0	0	0	0	0.0	3
2024	0	0	0	0	0.0	2
Explanation: Add unit for projects: T000121 T000160						
2024 Total	0	0	0	0	0.0	2
2025	0	0	0	0	0.0	1
Explanation: Add unit for project: T000160						
2025 Total	0	0	0	0	0.0	1

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group G09030**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Workpaper Detail: G09030.001 - Transportation Electrification 2026 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	87	0	0	0	0	0
Non-Labor	1,512	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	1,599	0	0	0	0	0
FTE	0.5	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Workpaper Detail: G09030.002 - Transportation Electrification 2027 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	74	0	0	0	0
Non-Labor	0	2,311	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	2,385	0	0	0	0
FTE	0.0	0.4	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Workpaper Detail: G09030.003 - Transportation Electrification 2028 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	77	0	0	0
Non-Labor	0	0	2,395	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	2,472	0	0	0
FTE	0.0	0.0	0.4	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Workpaper Detail: G09030.004 - Transportation Electrification 2029 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	80	0	0
Non-Labor	0	0	0	2,485	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	2,565	0	0
FTE	0.0	0.0	0.0	0.5	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Workpaper Detail: G09030.005 - Transportation Electrification 2030 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	82	0
Non-Labor	0	0	0	0	2,570	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	2,652	0
FTE	0.0	0.0	0.0	0.0	0.5	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Workpaper Detail: G09030.006 - Transportation Electrification 2031 (Labor Vendor Services)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	85
Non-Labor	0	0	0	0	0	2,653
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	2,738
FTE	0.0	0.0	0.0	0.0	0.0	0.5
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Workpaper Detail: G09030.007 - Transportation Electrification 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	127	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	127	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Workpaper Detail: G09030.008 - Transportation Electrification 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	127	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	127	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Workpaper Detail: G09030.009 - Transportation Electrification 2029 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	143	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	143	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Workpaper Detail: G09030.010 - Transportation Electrification 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	143	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	143	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09030 - Transportation Electrification
Workpaper Detail: G09030.011 - Transportation Electrification 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add subworkpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	144
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>144</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group G09030

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number	G09030
SDG&E IT Capital Workpaper Name	Transportation Electrification
Unit Measure	Projects
Number of Units	6

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Transportation Electrification	1,595	2,503	2,587	2,709	2,794	2,878
Labor	83	65	65	81	81	81
Non-Labor	1,512	2,438	2,522	2,628	2,713	2,797
Grand Total	1,595	2,503	2,587	2,709	2,794	2,878

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

G09030.001--011
Transportation Electrification
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	0.5	162	83	0.4	162	65	0.4	162	65	0.5	162	81	0.5	162	81	0.5	162	81	455
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	126	1,512	12	193	2,311	12	200	2,395	12	207	2,485	12	214	2,570	12	221	2,653	13,926
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0	12	11	127	12	11	127	12	12	143	12	12	143	12	12	144	684
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						83			65			65			81			81			81	455
						1,512			2,438			2,522			2,628			2,713			2,797	14,610
						1,595			2,503			2,587			2,709			2,794			2,878	15,065

**Beginning of Workpaper Group
G09090 - Customer Generation**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	675	1,215	1,245	1,157	1,076	785	759	781	723	724	722
Non-Labor	Zero-Based	947	1,401	2,890	2,028	1,695	676	804	840	1,200	1,300	1,400
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		1,622	2,617	4,135	3,185	2,771	1,461	1,563	1,621	1,923	2,024	2,122
FTE	Zero-Based	3.9	7.4	8.1	7.8	7.2	4.6	4.4	4.5	4.2	4.2	4.2
Units	Zero-Based	1	4	4	3	4	1	1	1	1	1	1

Business Purpose:

The Distribution Interconnection Information System (DIIS) is SDG&E's 24/7 online secure portal which facilitates time-sensitive, real-time compliance-driven functions for SDG&E's Customer Generation Department. Customer Generating facilities are behind or in front of the load-meter, interconnected with SDG&E's grid and may be importing or exporting electricity through the distribution system. This project encompasses costs related to the implementation of regulatory mandates and modernization/transformation of processes to the AWS cloud.

Physical Description:

This workpaper contains projects that have utility non-shared assets. This workpaper is co-sponsored by Electric Distribution Capital (Ex. SDGE-08) and Electric Distribution O&M (Ex. SDGE-09). These projects are designed to implement technology enhancements to the DIIS in support of Customer Generation regulatory changes and existing functionality modernization. This will include quarterly prioritized regulatory changes in DIIS and its system integrations, such as:

- a. Regulatory mandated requirements from Rule 21 Phase 2 proceeding
- b. Mandates Rulings, Proceedings, Resolutions and Decisions for Rule 21 Tariff

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Unit Measure: Projects

- c. Mandated Applications including Clean Transportation Vehicle-V2G, Microgrid Application
- d. Rulings and Decisions related to WDAT Tariff and meeting time-based cluster study requirements
- e. Timely online customer payments enabling accurate collection and reporting of customer payments
- f. Engineering study result records tracking for Rule 21
- g. Cross-functional integrations with builder services, large projects, and distribution
- h. DER Generation data tracking, enrichment and dissemination to mission critical systems
- i. Other customer and operational efficiency efforts and SDGE driven policies
- j. Compliance monitoring dashboards with alerts
- k. Regulatory reporting and Data Requests requirements driven enhancements and data enrichments
- l. Cloud modernization of DIIS to sustain system reliability and business continuity
- m. Enhancements in DIIS to enable application automations and self-service enhancements for customers

The underlying cost drivers for this capital workpaper relate to labor and non-labor expenditures. Vendor services is the primary cost driver, attributable to recurring regulatory initiatives addressing updated compliance mandates. Labor consists of project managers and engineers for regulatory implementation, testing, and deployment.

Project Justification:

- This project is required to maintain compliance with Regulatory mandates, including the following:
- a. Rule 21 Phase 2 Proceeding - (R.25-08-004)
 - b. Rule 21 OIR – R.17-07-007
 - c. High DER Future OIR – R.21-06-017
 - d. Microgrid OIR – R.19-09-009-Microgrid Isolation Devices
 - e. Building Decarb OIR D.19-01-011
 - f. Rulemaking R.20-08-020
 - g. Rulemaking R.20-05-012
 - h. Rulemaking R.14-08-013, the Distribution Resources Planning (DRP) proceeding
 - i. California Solar Mandates

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Unit Measure: Projects

- j. E-5030 (D.14-11-001)
- k. CPUC and Energy Division Reporting Requirements
- l. Rulemaking R.20-11-003 Decision D. 20-11-003 – (Electric Reliability)
- m. Rulemaking R.21-10-002 Decision D. 21-10-002 – (Resource Adequacy)
- n. FERC Order 2023 Compliance and Filing

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	742	715	736	681	681	681	43	44	45	42	43	41	785	759	781	723	724	722
NLbr	676	804	840	1,200	1,300	1,400	0	0	0	0	0	0	676	804	840	1,200	1,300	1,400
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,418	1,519	1,576	1,881	1,981	2,081	43	44	45	42	43	41	1,461	1,563	1,621	1,923	2,024	2,122
FTE	4.6	4.4	4.5	4.2	4.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.4	4.5	4.2	4.2	4.2
Units	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	43	0	0	43	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	43	0	0	43	0.0	0
2027	44	0	0	44	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	44	0	0	44	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	45	0	0	45	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	45	0	0	45	0.0	0
2029	42	0	0	42	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	42	0	0	42	0.0	0
2030	43	0	0	43	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	43	0	0	43	0.0	0
2031	41	0	0	41	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	41	0	0	41	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	1,079	1,131	998	982	939
Non-Labor	1,516	1,865	2,725	1,952	1,695
NSE	0	0	0	0	0
Total	2,595	2,997	3,723	2,934	2,634
FTE	8.8	8.6	7.1	6.8	6.2
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	-687	-317	-13	0	0
Non-Labor	-883	-789	-122	2	0
NSE	0	0	0	0	0
Total	-1,570	-1,107	-135	2	0
FTE	-5.5	-2.2	-0.1	0.0	0.0
Units	1	4	4	3	4
Recorded-Adjusted (Nominal \$)					
Labor	392	814	985	982	939
Non-Labor	633	1,076	2,603	1,955	1,695
NSE	0	0	0	0	0
Total	1,024	1,890	3,588	2,937	2,634
FTE	3.3	6.4	7.0	6.8	6.2
Units	1	4	4	3	4
Vacation & Sick (Nominal \$)					
Labor	59	119	137	133	137

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	59	119	137	133	137
FTE	0.6	1.0	1.1	1.0	1.0
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	224	282	123	42	0
Non-Labor	314	326	287	73	0
NSE	0	0	0	0	0
Total	538	608	410	115	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	675	1,215	1,245	1,157	1,076
Non-Labor	947	1,401	2,890	2,028	1,695
NSE	0	0	0	0	0
Total	1,622	2,617	4,135	3,185	2,771
FTE	3.9	7.4	8.1	7.8	7.2
Units	1	4	4	3	4

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Unit Measure: Projects

Summary of Adjustments to Recorded:

		In Nominal \$(000)				
	Years	2021	2022	2023	2024	2025
Labor		-687	-317	-13	0	0
Non-Labor		-883	-789	-122	2	0
NSE		0	0	0	0	0
Total		-1,570	-1,107	-135	2	0
FTE		-5.5	-2.2	-0.1	0.0	0.0
Units		1	4	4	3	4

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	5
Explanation:	Add unit for projects: T000010 T000018 T000057 T18011 T20017					
2021	-687	-883	0	-1,570	-5.5	-4
Explanation:	Transfer projects from G09090 to G09200 (T000010 T000057 T18011, T20017).					
2021 Total	-687	-883	0	-1,570	-5.5	1
2022	0	0	0	0	0.0	7

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Add unit for projects: T000010 T000018 T000093 T000102						
2022	-317	-789	0	-1,107	-2.2	-3
Explanation: Transfer projects from G09090 to G09200 (T000010 T000057 T20017).						
2022 Total	-317	-789	0	-1,107	-2.2	4
2023	0	0	0	0	0.0	6
Explanation: Add unit for projects: T000010 T000018 T000093 T000102						
2023	-13	-122	0	-135	-0.1	-2
Explanation: Transfer projects from G09090 to G09200 (T000010 T000057).						
2023 Total	-13	-122	0	-135	-0.1	4
2024	0	0	0	0	0.0	3
Explanation: Add unit for projects: T000102 T000093 T000010						
2024	0	2	0	2	0.0	0
Explanation: Transfer projects from G09090 to G09200 (T000010).						
2024 Total	0	2	0	2	0.0	3
2025	0	0	0	0	0.0	4

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Add unit for projects: T000093 T000102 T000169 T000185						
2025 Total	0	0	0	0	0.0	4

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group G09090**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Workpaper Detail: G09090.001 - Customer Generation Regulatory and Technology 2026 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	785	0	0	0	0	0
Non-Labor	676	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	1,461	0	0	0	0	0
FTE	4.6	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Workpaper Detail: G09090.002 - Customer Generation Regulatory and Technology 2027 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	759	0	0	0	0
Non-Labor	0	804	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	1,563	0	0	0	0
FTE	0.0	4.4	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Workpaper Detail: G09090.003 - Customer Generation Regulatory and Technology 2028 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	781	0	0	0
Non-Labor	0	0	840	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>1,621</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	4.5	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Workpaper Detail: G09090.004 - Customer Generation Regulatory and Technology 2029 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	723	0	0
Non-Labor	0	0	0	1,200	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	1,923	0	0
FTE	0.0	0.0	0.0	4.2	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Workpaper Detail: G09090.005 - Customer Generation Regulatory and Technology 2030 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	724	0
Non-Labor	0	0	0	0	1,300	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	2,024	0
FTE	0.0	0.0	0.0	0.0	4.2	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: G0909.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: G09090 - Customer Generation
Workpaper Detail: G09090.006 - Customer Generation Regulatory and Technology 2031 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	722
Non-Labor	0	0	0	0	0	1,400
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	2,122
FTE	0.0	0.0	0.0	0.0	0.0	4.2
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group G09090

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number	G09090
SDG&E IT Capital Workpaper Name	Customer Generation
Unit Measure	Projects
Number of Units	6

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Customer Generation Regulatory and Technology (2026-2031)	1,418	1,519	1,576	1,881	1,981	2,081
Labor	742	715	736	681	681	681
Non-Labor	676	804	840	1,200	1,300	1,400
Grand Total	1,418	1,519	1,576	1,881	1,981	2,081

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

G09090.001 - G09090.006

SDG&E IT Project Name:

Customer Generation Regulatory and Technology (2026-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	4.6	162	742	4	162	715	5	162	736	4	162	681	4	162	681	4	162	681	4,236
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months	12	56	676	12	67	804	12	70	840	12	100	1,200	12	108	1,300	12	117	1,400	6,220
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						742			715			736			681			681			681	4,236
	Labor					676			804			840			1,200			1,300			1,400	6,220
	Non-Labor																					
	Total					1,418			1,519			1,576			1,881			1,981			2,081	10,456

SDG&E/INFORMATION TECHNOLOGY/Exh No:SDGE-14-CWP/Witness: W. Exon
Page 612 of 860

San Diego Gas & Electric Company
2028 GRC - APPLICATION
Capital Workpapers

**Beginning of Workpaper Group
H09030 - Customer Cloud Infrastructure**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	212	14	1	0	0	988	0	693	446	0	0
Non-Labor	Zero-Based	502	78	0	0	0	5,276	2,728	13,736	6,498	10,598	5,088
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		713	92	1	0	0	6,264	2,728	14,429	6,944	10,598	5,088
FTE	Zero-Based	0.9	0.1	0.0	0.0	0.0	5.8	0.0	4.0	2.6	0.0	0.0
Units	Zero-Based	1	1	1	0	0	1	1	3	2	2	1

Business Purpose:

This initiative is a strategic technology modernization effort to transition SDG&E's Customer Information System (CIS) and document management platforms from on-premises infrastructure to Cloud and to upgrade SDG&E's current Cloud for Customer application to the next version. The project includes migration of the underlying infrastructure in 2026 and forecasted annual cloud consumption costs for 2027–2031.

Physical Description:

This workpaper contains projects that have utility non-shared assets. The hardware supporting the CIS and document management systems will reach end-of-life in 2026 and will no longer be supported by the vendor. These systems are mission-critical, enabling over 1,500 employees to perform essential functions such as billing, payment processing, revenue collection, and providing customer contact center and field support. Migrating these systems to the Cloud by 2026 enables continued support, improved performance, and alignment with SDG& E's enterprise IT strategy and regulatory commitments.

Labor costs for this project are driven by a range of specialized roles, including process designers, solution architects, project leads, business

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Unit Measure: Projects

analysts, and project managers. Specific roles and resource allocations may vary throughout the project lifecycle. Non-labor costs are primarily associated with multiple vendor service contracts required to support implementation and migration activities.

Project Justification:

These projects included in this workpaper are justified by the following benefits:

Compliance and System Stability

- **Regulatory Compliance:** Migration aligns with SDG&E's obligations under applicable regulatory frameworks for data security , privacy, and operational reliability. .
- **Risk Mitigation:** Transitioning to the Cloud mitigates risks associated with aging hardware , vendor support discontinuation, and potential system failures. Cloud infrastructure provides enhanced resiliency, disaster recovery capabilities, and geographic redundancy.
- **Business Continuity:** Maintains uninterrupted support for critical customer operations and compliance with service reliability mandates. This includes Cloud multi-region capabilities, which can be leveraged to support overall system reliability.
- **Security Controls:** Advanced security measures, including encryption, identity and access management, and continuous monitoring, will safeguard sensitive data.

Cost Justification and Financial Prudence

- **Avoided Capital Expenditure:** Migrating to the Cloud eliminates the need for significant upfront investment in new on-premises hardware and associated maintenance contracts.
- **Predictable Operating Costs:** Cloud consumption costs are forecasted for 2027–2031, providing transparency and predictability for budgeting and regulatory review.
- **Efficiency Gains:** The Cloud's scalable architecture reduces over-provisioning and optimizes resource utilization, lowering total cost of ownership compared to legacy infrastructure.
- **Lifecycle Savings:** Transition avoids recurring costs tied to hardware refresh cycles and mitigates risk of unplanned outages that could result in financial penalties or customer dissatisfaction.
- **Alignment with Industry Trends:** Cloud adoption supports long-term cost efficiency and positions SDGE to leverage future innovations without incremental capital outlay.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	934	0	653	420	0	0	54	0	40	26	0	0	988	0	693	446	0	0
NLbr	5,276	2,728	13,736	6,498	10,598	5,088	0	0	0	0	0	0	5,276	2,728	13,736	6,498	10,598	5,088
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	6,210	2,728	14,389	6,918	10,598	5,088	54	0	40	26	0	0	6,264	2,728	14,429	6,944	10,598	5,088
FTE	5.8	0.0	4.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0	4.0	2.6	0.0	0.0
Units	1	1	3	2	2	1	0	0	0	0	0	0	1	1	3	2	2	1

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	54	0	0	54	0.0	0
2026 Total	54	0	0	54	0.0	0
2027 Total	0	0	0	0	0.0	0
2028	40	0	0	40	0.0	0

Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028 Total	40	0	0	40	0.0	0
2029	26	0	0	26	0.0	0
Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.						
2029 Total	26	0	0	26	0.0	0
2030 Total	0	0	0	0	0.0	0
2031 Total	0	0	0	0	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	123	9	1	0	0
Non-Labor	335	60	0	0	0
NSE	0	0	0	0	0
Total	458	69	1	0	0
FTE	0.8	0.1	0.0	0.0	0.0
Units	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
Units	1	1	1	0	0
Recorded-Adjusted (Nominal \$)					
Labor	123	9	1	0	0
Non-Labor	335	60	0	0	0
NSE	0	0	0	0	0
Total	458	69	1	0	0
FTE	0.8	0.1	0.0	0.0	0.0
Units	1	1	1	0	0
Vacation & Sick (Nominal \$)					
Labor	18	1	0	0	0

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	18	1	0	0	0
FTE	0.1	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	70	3	0	0	0
Non-Labor	167	18	0	0	0
NSE	0	0	0	0	0
Total	237	21	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	212	14	1	0	0
Non-Labor	502	78	0	0	0
NSE	0	0	0	0	0
Total	713	92	1	0	0
FTE	0.9	0.1	0.0	0.0	0.0
Units	1	1	1	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.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
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
Units	1	1	1	0	0

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	1
Explanation:	Add unit for projects: T20003					
2021 Total	0	0	0	0	0.0	1
2022	0	0	0	0	0.0	1
Explanation:	Add unit for projects: T20003					
2022 Total	0	0	0	0	0.0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2023	0	0	0	0	0.0	1
Explanation: Add unit						
2023 Total	0	0	0	0	0.0	1
2024 Total	0	0	0	0	0.0	0
2025 Total	0	0	0	0	0.0	0

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group H09030**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Workpaper Detail: H09030.001 - Customer Cloud Infrastructure 2026 (Lbr & PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add Sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	988	0	0	0	0	0
Non-Labor	5,276	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	6,264	0	0	0	0	0
FTE	5.8	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Workpaper Detail: H09030.002 - Customer Cloud Infrastructure 2028 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	693	0	0	0
Non-Labor	0	0	3,979	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>4,672</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	4.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Workpaper Detail: H09030.003 - Customer Cloud Infrastructure 2029 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sup-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	446	0	0
Non-Labor	0	0	0	2,343	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	2,789	0	0
FTE	0.0	0.0	0.0	2.6	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Workpaper Detail: H09030.004 - Customer Cloud Infrastructure 2028 (SW)
Unit Measure: Projects

In-Service Date: 06/30/2028

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	6,000	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>6,000</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Workpaper Detail: H09030.005 - Customer Cloud Infrastructure 2028 (SW)
Unit Measure: Projects

In-Service Date: 07/31/2030

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	6,000	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>6,000</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Workpaper Detail: H09030.006 - Customer Cloud Infrastructure 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	2,728	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	2,728	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Workpaper Detail: H09030.007 - Customer Systems - AWS Consumption 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	3,757	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	3,757	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Workpaper Detail: H09030.008 - Customer Cloud Infrastructure 2029 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	4,155	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	4,155	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Workpaper Detail: H09030.009 - Customer Cloud Infrastructure 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	4,598	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	4,598	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: H0903.0
Category: D. Customer Applications
Category-Sub: 1.
Workpaper Group: H09030 - Customer Cloud Infrastructure
Workpaper Detail: H09030.010 - Customer Cloud Infrastructure 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	5,088
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	5,088
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group H09030

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number
 SDG&E IT Capital Workpaper Name
 Unit Measure
 Number of Units

H09030
 Customer Cloud Infrastructure
 Projects
 10

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Customer Cloud Infrastructure – SAP Upgrade	0	0	4,632	2,763	0	0
Labor	0	0	653	420	0	0
Non-Labor	0	0	3,979	2,343	0	0
Customer Cloud Infrastructure – AWS Migration & Consumption	6,216	2,728	3,757	4,155	4,598	5,088
Labor	940	0	0	0	0	0
Non-Labor	5,276	2,728	3,757	4,155	4,598	5,088
Customer Cloud Infrastructure – SAP Cloud Prepaid	0	0	6,000	0	6,000	0
Labor	0	0	0	0	0	0
Non-Labor	0	0	6,000	0	6,000	0
Grand Total	6,216	2,728	14,389	6,918	10,598	5,088
Total Labor	940	0	653	420	0	0
Total Non-Labor	5,276	2,728	13,736	6,498	10,598	5,088
Grand Total	6,216	2,728	14,389	6,918	10,598	5,088

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

H09030.002--003

Customer Cloud Infrastructure – SAP Upgrade

Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0	4	162	653	2.6	162	420			0			0	1,073
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0	12	332	3,979	12	195	2,343			0			0	6,322
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			0			653			420			0			0	1,073
						0			0			3,979			2,343			0			0	6,322
						0			0			4,632			2,763			0			0	7,394

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

H09030.001,.006--010

SDG&E IT Project Name:

Customer Cloud Infrastructure – AWS Migration & Consumption

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	5.8	162	940			0			0			0			0			0	940
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	440	5,276			0			0			0			0			0	5,276
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0	12	227	2,728	12	313	3,757	12	346	4,155	12	383	4,598	12	424	5,088	20,326
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						940			0			0			0			0			0	940
		Labor				940			0			0			0			0			0	940
		Non-Labor				5,276			2,728			3,757			4,155			4,598			5,088	25,602
		Total				6,216			2,728			3,757			4,155			4,598			5,088	26,541

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

H09030.004--005

SDG&E IT Project Name:

Customer Cloud Infrastructure – SAP Cloud Prepaid

Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0	1	6,000	6,000			\$ -	1	6,000	6,000			0	12,000
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			0			0			0			0			0	0
	Labor					0			0			0			0			0			0	0
	Non-Labor					0			0			6,000			0			6,000			0	12,000
	Total					0			0			6,000			0			6,000			0	12,000

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: E. Enterprise Applications
Workpaper: VARIOUS

Summary for Category: E. Enterprise Applications

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
Labor	1,028	599	428	432	422	423	431
Non-Labor	4,874	6,895	5,544	13,842	10,373	8,801	10,178
NSE	0	0	0	0	0	0	0
Total	5,902	7,494	5,972	14,274	10,795	9,224	10,609
FTE	6.2	3.5	2.5	2.6	2.5	2.5	2.5

Workpapers belonging to this Category:

A09070 Data Center & Compute Lifecycle (Uncommon)

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

Unit Measure: Projects

Units	0	0	0	0	0	0	0
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C09070 Data Protection & Recovery (Uncommon)

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

Unit Measure: Projects

Units	0	0	0	0	0	0	0
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Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: E. Enterprise Applications
Workpaper: VARIOUS

In 2025\$ (000) Incurred Costs							
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
C09090 Records and Content Management							
Labor	0	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unit Measure: Projects							
Units	0	0	0	0	0	0	0
E09090 Supply Chain & Supply Management							
Labor	0	0	0	0	0	0	0
Non-Labor	600	1,900	0	5,800	5,500	1,600	2,900
NSE	0	0	0	0	0	0	0
Total	600	1,900	0	5,800	5,500	1,600	2,900
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unit Measure: Projects							
Units	1	1	0	2	1	2	2
F09080 Enterprise Application and Integration Platforms							
Labor	937	456	428	387	353	354	360
Non-Labor	3,371	4,387	4,499	6,010	3,675	4,710	4,569
NSE	0	0	0	0	0	0	0
Total	4,308	4,843	4,927	6,397	4,028	5,064	4,929
FTE	5.7	2.7	2.5	2.3	2.1	2.1	2.1
Unit Measure: Projects							
Units	4	1	1	1	1	1	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: E. Enterprise Applications
Workpaper: VARIOUS

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
109070 Enterprise Application and Testing Platforms							
Labor	91	143	0	45	69	69	71
Non-Labor	903	608	1,045	2,032	1,198	2,491	2,709
NSE	0	0	0	0	0	0	0
Total	994	751	1,045	2,077	1,267	2,560	2,780
FTE	0.5	0.8	0.0	0.3	0.4	0.4	0.4
Unit Measure: Projects							
Units	2	1	1	1	1	1	1

Note: Totals may include rounding differences.

Beginning of Workpaper Group
E09090 - Supply Chain & Supply Management

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	926	412	249	26	0	0	0	0	0	0	0
Non-Labor	Zero-Based	14,541	12,220	4,029	84	600	1,900	0	5,800	5,500	1,600	2,900
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		15,467	12,632	4,278	111	600	1,900	0	5,800	5,500	1,600	2,900
FTE	Zero-Based	5.1	2.4	1.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Units	Zero-Based	8	5	4	2	1	1	0	2	1	2	2

Business Purpose:

The Supply Chain & Supply Management program encompasses technology solutions that enable procurement, supplier management, demand planning, inventory management, and work order processing for the enterprise. These systems support planning, sourcing, and execution by enabling timely availability of materials, efficient supplier collaboration, and accurate tracking of goods and services across the supply chain lifecycle. Maintaining and optimizing these capabilities is critical for operational reliability, cost control, and compliance with procurement and supply chain governance requirements.

Physical Description:

This workpaper contains projects that have utility shared assets. This workpaper is co-sponsored by Operations Support (Ex. SDGE-16). This scope includes replacing aging systems, implementing enhancements to improve automation and integration with ERP and operational systems, and procurement of developer tool licenses for the digital experience platform. These efforts reduce manual processes, improve procurement cycle times, and strengthen controls for vendor and material management and enable better integration with enterprise systems to support end-to-end supply chain visibility.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Unit Measure: Projects

This workpaper's scope aims to:

- Enhance procurement and supplier management capabilities for contracts and statements of work; standardize and streamline the external labor engagement lifecycle
- Strengthen governance, spend oversight, and supplier accountability
- Reduce cycle time and administrative effort in procurement processes
- Improve enterprise inventory visibility and tracking accuracy across storerooms and field locations and strengthen inventory controls and accountability across the supply chain
- Reduce manual inventory handling and data entry errors
- Enable timely availability of materials to support operational readiness and work execution

The underlying cost drivers for this capital workpaper relate to non-labor expenditures. Vendor services is the primary cost driver, attributable to ongoing updates to supply chain systems addressing functional limitations. Other non-labor costs include software.

Project Justification:

The justification for this work is driven by aging technology and the need to modernize supply chain systems to address functional limitations and support evolving business requirements. Legacy systems and lack of modern processes increase errors, create inefficiencies, and heighten the risk of procurement delays and escalating operational costs.

Timely investment supports reliable sourcing and supplier management, accurate inventory tracking, and compliance with regulatory requirements. These capabilities are essential for maintaining efficient operations, controlling costs, and reducing the risk of procurement delays or compliance gaps.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
Years	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NLbr	1,900	0	5,800	5,500	1,600	2,900	0	0	0	0	0	0	1,900	0	5,800	5,500	1,600	2,900
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,900	0	5,800	5,500	1,600	2,900	0	0	0	0	0	0	1,900	0	5,800	5,500	1,600	2,900
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Units	1	0	2	1	2	2	0	0	0	0	0	0	1	0	2	1	2	2

Forecast Adjustment Details

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026 Total	0	0	0	0	0.0	0
2027 Total	0	0	0	0	0.0	0
2028 Total	0	0	0	0	0.0	0
2029 Total	0	0	0	0	0.0	0
2030 Total	0	0	0	0	0.0	0
2031 Total	0	0	0	0	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	537	276	197	22	0
Non-Labor	9,713	9,381	3,629	81	0
NSE	0	0	0	0	0
Total	10,251	9,657	3,826	104	0
FTE	4.4	2.1	1.5	0.2	0.0
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	600
NSE	0	0	0	0	0
Total	0	0	0	0	600
FTE	0.0	0.0	0.0	0.0	0.0
Units	8	5	4	2	1
Recorded-Adjusted (Nominal \$)					
Labor	537	276	197	22	0
Non-Labor	9,713	9,381	3,629	81	600
NSE	0	0	0	0	0
Total	10,251	9,657	3,826	104	600
FTE	4.4	2.1	1.5	0.2	0.0
Units	8	5	4	2	1
Vacation & Sick (Nominal \$)					
Labor	81	40	27	3	0

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	81	40	27	3	0
FTE	0.7	0.3	0.2	0.0	0.0
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	307	96	25	1	0
Non-Labor	4,828	2,839	400	3	0
NSE	0	0	0	0	0
Total	5,135	2,934	424	4	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	926	412	249	26	0
Non-Labor	14,541	12,220	4,029	84	600
NSE	0	0	0	0	0
Total	15,467	12,632	4,278	111	600
FTE	5.1	2.4	1.7	0.2	0.0
Units	8	5	4	2	1

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	600
NSE	0	0	0	0	0
Total	0	0	0	0	600
FTE	0.0	0.0	0.0	0.0	0.0
Units	8	5	4	2	1

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	8
Explanation:	Add unit for projects: T15086 T18027 T18028 T20006 T20014, T20015, T000001, T000052					
2021 Total	0	0	0	0	0.0	8
2022	0	0	0	0	0.0	5
Explanation:	Add unit for projects: T000001 T000052 T18028 T20006 T000087					
2022 Total	0	0	0	0	0.0	5

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2023	0	0	0	0	0.0	4
Explanation:	Add unit for projects: T000001 T000052 T000123 T20006					
2023 Total	0	0	0	0	0.0	4
2024	0	0	0	0	0.0	1
Explanation:	Add unit for project: T000052					
2024	0	0	0	0	0.0	1
Explanation:	Add unit for projects: T000123					
2024 Total	0	0	0	0	0.0	2
2025	0	600	0	600	0.0	1
Explanation:	Transfer costs for Neptune License to correct workpaper E09090.					
2025 Total	0	600	0	600	0.0	1

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group E09090**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Workpaper Detail: E09090.001 - Procurement Solution Enhancements (SW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	1,900	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	1,900	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Workpaper Detail: E09090.002 - Procurement Solution Enhancements 2031 (SW)
Unit Measure: Projects

In-Service Date: 07/31/2031

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	1,900
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	1,900
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Workpaper Detail: E09090.003 - Supply Chain Material Visibility 2028 (VendSvc)
Unit Measure: Projects

In-Service Date: 03/31/2028

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	5,200	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	5,200	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Workpaper Detail: E09090.004 - Supply Chain Material Visibility 2029 (VendSvc)
Unit Measure: Projects

In-Service Date: 03/31/2029

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	5,500	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	5,500	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Workpaper Detail: E09090.005 - Supply Chain Material Visibility 2030 (VendSvc)
Unit Measure: Projects

In-Service Date: 03/31/2030

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	1,000	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,000</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Workpaper Detail: E09090.006 - Supply Chain Material Visibility 2031 (VendSvc)
Unit Measure: Projects

In-Service Date: 03/31/2031

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	1,000
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	1,000
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Workpaper Detail: E09090.007 - Digital Experience Platform Developer Tool Licenses 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	600	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	600	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: E0909.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: E09090 - Supply Chain & Supply Management
Workpaper Detail: E09090.008 - Digital Experience Platform Developer Tool Licenses 2030
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	600	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	600	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group E09090

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number

E09090

SDG&E IT Capital Workpaper Name

Supply Chain & Supply Management

Unit Measure

Projects

Number of Units

8

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Procurement Solution Enhancements	1,900	0	0	0	0	1,900
Labor	0	0	0	0	0	0
Non-Labor	1,900	0	0	0	0	1,900
Supply Chain Material Visibility	0	0	5,200	5,500	1,000	1,000
Labor	0	0	0	0	0	0
Non-Labor	0	0	5,200	5,500	1,000	1,000
Digital Experience Platform Developer Tool	0	0	600	0	600	0
Labor	0	0	0	0	0	0
Non-Labor	0	0	600	0	600	0
Grand Total	1,900	0	5,800	5,500	1,600	2,900
Total Labor	0	0	0	0	0	0
Total Non-Labor	1,900	0	5,800	5,500	1,600	2,900
Grand Total	1,900	0	5,800	5,500	1,600	2,900

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

E09090.001 - .002

SDG&E IT Project Name:

Procurement Solution Enhancements

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost	
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost		
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0	
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0	
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0	
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0	
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0	
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0	
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0	
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses	1	1,900	1,900			0			0			0			0		1	1,900	1,900	3,800
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0	
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0	
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0	
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0	
Summary																							
		Labor				0			0			0			0			0			0	0	
		Non-Labor				1,900			0			0			0			0			1,900	3,800	
		Total				1,900			0			0			0			0			1,900	3,800	

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

E09090.003 - .006
Supply Chain Material Visibility
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0	162	0		162	0		162	0		162	0	0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0		0		0	0		0	0		0	0	0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0	12	433	5,200	12	458	5,500	12	83	1,000	12	83	1,000	12	83	1,000	12,700
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0				0			0			0			0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0				0			0			0			0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0				0			0			0			0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0				0			0			0			0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0				0			0			0			0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0				0			0			0			0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0				0			0			0			0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0				0			0			0			0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0				0			0			0			0
Summary																						
		Labor				0			0			0			0			0		0		0
		Non-Labor				0			5,200			5,500			1,000			1,000		1,000		12,700
		Total				0			5,200			5,500			1,000			1,000		1,000		12,700

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

E09090.007 - .008
Digital Experience Platform Developer Tool
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item (select the ones that apply and leave the others blank)	Unit Description	Labor/Non- Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0			0			0			0			0			0	0
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0	1	600	600			0	1	600	600			0	1,200
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						0			0			0			0			0			0	0
		Labor				0			0			0			0			0			0	0
		Non-Labor				0			0			600			0			600			0	1,200

Beginning of Workpaper Group
F09080 - Enterprise Application and Integration Platforms

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	0	425	452	648	937	456	428	387	353	354	360
Non-Labor	Zero-Based	0	3,428	2,930	3,826	3,371	4,387	4,499	6,010	3,675	4,710	4,569
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		0	3,853	3,382	4,473	4,308	4,843	4,927	6,397	4,028	5,064	4,929
FTE	Zero-Based	0.0	2.5	2.7	3.3	5.7	2.7	2.5	2.3	2.1	2.1	2.1
Units	Zero-Based	0	2	2	5	4	1	1	1	1	1	1

Business Purpose:

The purpose of this workpaper is to strengthen SDG&E’s node of the core integration platforms that allow different systems to securely and reliably share information with each other. These platforms support both operational systems and customer-facing systems. These projects collectively support digital transformation, regulatory compliance, and operational efficiency.

The company relies on many connected systems, such as billing systems, meter data systems, outage maps, and customer notification tools. These systems must exchange information in up-to near real time to support accurate billing, outage communications, regulatory reporting, and customer service. As system activity increases and regulatory requirements change, older integration methods become harder to maintain, less secure, and more likely to fail. These projects standardize and strengthen how systems connect and share data.

Physical Description:

This workpaper contains projects that have utility non-shared assets. The scope of this workpaper includes the following enterprise integration platform enhancements for the SDG&E node:

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Unit Measure: Projects

- Enterprise Application Programming Interface (API) enablement standardizes how systems exchange information by using secure, defined interfaces instead of custom, one-off connections. Standardized APIs reduce the risk that changes in one system will disrupt others and allow faster implementation of regulatory and business updates.
- Enterprise data integration expansion expands and modernizes the services that move and transform data between systems. It replaces fragmented, system-specific data logic with centralized and governed processes. This improves data consistency, availability, and quality across the company.
- Enterprise service orchestration coordinates and automates multi-step processes that involve multiple systems. Instead of relying on manual steps or tightly connected systems, orchestration manages the sequence, timing, and error handling of transactions. This reduces process failures and improves reliability.
- Digital integration enhancements as part of technology lifecycle management aim to improve performance, monitoring, resiliency, and recovery for the integration platform. It addresses technology obsolescence and strengthens continuity during system upgrades or outages. These enhancements reduce the likelihood that integration failures could disrupt operational or customer-facing systems.

Together, these capabilities support a foundational integration layer that supports current operations and future technology changes.

Costs are primarily driven by labor for design, development, and testing, and non-labor for software licensing and platform enhancements.

Project Justification:

Justification for this workpaper's projects include:

- Projects are grouped due to shared objectives of improving integration and interoperability across enterprise systems.
- Enhancements address technology lifecycle needs by modernizing aging integration components and strengthening system resiliency.
- These enhancements aim to reduce manual processes, improve data accuracy, and enable faster service delivery, benefiting ratepayers through improved reliability and responsiveness.
- Investments aim to lower long-term maintenance costs and support scalability.
- Compliance with regulatory standards supports secure and reliable operations for customers.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																			
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast						
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	
Labor	431	403	365	332	333	340	25	25	22	21	21	20	456	428	387	353	354	360	
NLbr	4,387	4,499	6,010	3,675	4,710	4,569	0	0	0	0	0	0	4,387	4,499	6,010	3,675	4,710	4,569	
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	4,818	4,902	6,375	4,007	5,043	4,909	25	25	22	21	21	20	4,843	4,927	6,397	4,028	5,064	4,929	
FTE	2.7	2.5	2.3	2.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.5	2.3	2.1	2.1	2.1	
Units	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	25	0	0	25	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	25	0	0	25	0.0	0
2027	25	0	0	25	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	25	0	0	25	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	22	0	0	22	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	22	0	0	22	0.0	0
2029	21	0	0	21	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	21	0	0	21	0.0	0
2030	21	0	0	21	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	21	0	0	21	0.0	0
2031	20	0	0	20	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	20	0	0	20	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	0	91	300	536	818
Non-Labor	0	1,232	2,404	3,688	3,371
NSE	0	0	0	0	0
Total	0	1,323	2,704	4,224	4,188
FTE	0.0	0.5	1.8	2.8	4.9
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	0	194	58	13	0
Non-Labor	0	1,400	235	0	0
NSE	0	0	0	0	0
Total	0	1,594	293	13	0
FTE	0.0	1.6	0.5	0.1	0.0
Units	0	2	2	5	4
Recorded-Adjusted (Nominal \$)					
Labor	0	285	357	550	818
Non-Labor	0	2,632	2,639	3,688	3,371
NSE	0	0	0	0	0
Total	0	2,917	2,997	4,238	4,188
FTE	0.0	2.1	2.3	2.9	4.9
Units	0	2	2	5	4
Vacation & Sick (Nominal \$)					
Labor	0	42	50	75	120

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	42	50	75	120
FTE	0.0	0.4	0.4	0.4	0.8
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	0	99	45	23	0
Non-Labor	0	796	291	138	0
NSE	0	0	0	0	0
Total	0	895	335	161	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	0	425	452	648	937
Non-Labor	0	3,428	2,930	3,826	3,371
NSE	0	0	0	0	0
Total	0	3,853	3,382	4,473	4,308
FTE	0.0	2.5	2.7	3.3	5.7
Units	0	2	2	5	4

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Unit Measure: Projects

Summary of Adjustments to Recorded:

		In Nominal \$(000)				
Years	2021	2022	2023	2024	2025	
Labor	0	194	58	13	0	
Non-Labor	0	1,400	235	0	0	
NSE	0	0	0	0	0	
Total	0	1,594	293	13	0	
FTE	0.0	1.6	0.5	0.1	0.0	
Units	0	2	2	5	4	

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021 Total	0	0	0	0	0.0	0
2022	0	0	0	0	0.0	1
Explanation:	Add unit for projects: T000072					
2022	194	1,400	0	1,594	1.6	1
Explanation:	Transfer project from B09080 to F09080 (T000074).					
2022 Total	194	1,400	0	1,594	1.6	2

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2023	0	0	0	0	0.0	1
Explanation:	Add unit for projects: T000072					
2023	58	235	0	293	0.5	1
Explanation:	Transfer project from B09080 to F09080 (T000074).					
2023 Total	58	235	0	293	0.5	2
2024	0	0	0	0	0.0	4
Explanation:	Add unit for projects: T000072 T000136 T000137 T000138 T000153					
2024	13	0	0	13	0.1	1
Explanation:	Transfer project from B09080 to F09080 (T000074).					
2024 Total	13	0	0	13	0.1	5
2025	0	0	0	0	0.0	4
Explanation:	Add unit for projects: T000136 T000137 T000138 T000177					
2025 Total	0	0	0	0	0.0	4

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group F09080**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Workpaper Detail: F09080.001 - Enterprise Integration Platform Enhancements for Reliability & Continuity 2026 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	456	0	0	0	0	0
Non-Labor	4,207	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	4,663	0	0	0	0	0
FTE	2.7	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Workpaper Detail: F09080.002 - Enterprise Integration Platform Enhancements for Reliability & Continuity 2026 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	180	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	180	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Workpaper Detail: F09080.003 - Enterprise Integration Platform Enhancements for Reliability & Continuity 2027 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	428	0	0	0	0
Non-Labor	0	3,395	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>3,823</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	2.5	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Workpaper Detail: F09080.004 - Enterprise Integration Platform Enhancements for Reliability & Continuity 2027 (Software)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	1,104	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	1,104	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Workpaper Detail: F09080.005 - Enterprise Integration Platform Enhancements for Reliability & Continuity 2028 (Labor, Vendor Svcs)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	387	0	0	0
Non-Labor	0	0	3,447	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	3,834	0	0	0
FTE	0.0	0.0	2.3	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Workpaper Detail: F09080.006 - Enterprise Integration Platform Enhancements for Reliability & Continuity 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	2,563	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>2,563</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Workpaper Detail: F09080.007 - Enterprise Integration Platform Enhancements for Reliability & Continuity 2029 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	353	0	0
Non-Labor	0	0	0	3,495	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>3,848</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	2.1	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Workpaper Detail: F09080.008 - Enterprise Integration Platform Enhancements for Reliability & Continuity 2029 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	180	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	180	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Workpaper Detail: F09080.009 - Enterprise Integration Platform Enhancements for Reliability & Continuity 2030 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	354	0
Non-Labor	0	0	0	0	3,514	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3,868</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	2.1	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Workpaper Detail: F09080.010 - Enterprise Integration Platform Enhancements for Reliability & Continuity 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	1,196	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,196</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Workpaper Detail: F09080.011 - Enterprise Integration Platform Enhancements for Reliability & Continuity 2031 (Labor, Vendor Svcs)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	360
Non-Labor	0	0	0	0	0	3,528
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	3,888
FTE	0.0	0.0	0.0	0.0	0.0	2.1
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: F0908.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: F09080 - Enterprise Application and Integration Platforms
Workpaper Detail: F09080.012 - Enterprise Integration Platform Enhancements for Reliability & Continuity 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 12

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	1,041
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,041</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group F09080

SDGE Information Technology (IT) - Capital Supplemental Workpaper

SDGE IT Capital Workpaper Number
SDGE IT Capital Workpaper Name
Unit Measure
Number of Units

F09080
Enterprise Application and Integration Platforms
Projects
6

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Enterprise Integration Platform Enhancements for Reliability & Continuity (2026-2031)	4,818	4,902	6,375	4,007	5,043	4,909
Labor	431	403	365	332	333	340
Non-Labor	4,387	4,499	6,010	3,675	4,710	4,569
Grand Total	4,818	4,902	6,375	4,007	5,043	4,909

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDGE IT Workpaper Detail:
SDGE IT Project Name:

F09080.001--012
Enterprise Integration Platform Enhancements for Reliability & Continuity (2026-2031)
Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026		2027		2028		2029		2030		2031		Total cost (all years)						
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost		# of units	Cost per unit	Total cost			
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	2.7	162	431	2.5	162	403	2.3	162	365	2.1	162	332	2.1	162	333	2.1	162	340	2,204
Purchased (External) Labor	Blended Rate External (Hourly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services (Milestone based)	Blended Rate (monthly)	Non-Labor	# of contract months	1	4,207	4,207	1	3,395	3,395	1	3,447	3,447	1	3,495	3,495	1	3,514	3,514	1	3,528	3,528	21,586
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses	1	180	180	1	1,104	1,104	1	2,563	2,563	1	180	180	1	1,196	1,196	1	1,041	1,041	6,264
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					431			403			365			332			333			340	2,204
	Non-Labor					4,387			4,499			6,010			3,675			4,710			4,569	27,850
	Total					4,818			4,902			6,375			4,007			5,043			4,909	30,054

Beginning of Workpaper Group
I09070 - Enterprise Application and Testing Platforms

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	31	95	93	98	91	143	0	45	69	69	71
Non-Labor	Zero-Based	2,464	1,687	1,531	2,186	903	608	1,045	2,032	1,198	2,491	2,709
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		2,495	1,782	1,624	2,284	994	751	1,045	2,077	1,267	2,560	2,780
FTE	Zero-Based	0.1	0.5	0.5	0.6	0.5	0.8	0.0	0.3	0.4	0.4	0.4
Units	Zero-Based	1	2	1	2	2	1	1	1	1	1	1

Business Purpose:

The purpose of this workpaper is to modernize enterprise IT Quality Assurance (QA) capabilities by adopting cloud-based platforms, implementing self-service testing, and advancing automation standards. These initiatives would implement capabilities for consistent QA practices across systems, improve reliability, and accelerate delivery of technology solutions that support customer programs and operational efficiency .

Physical Description:

This workpaper contains projects that have utility shared assets. The overall scope involves:

- Shifting QA tools and platforms to cloud environments for scalability and security .
- Establishing self-service testing capabilities to empower development teams and reduce dependency on centralized QA resources .
- Expanding test automation frameworks to improve coverage and reduce manual testing effort .
- Standardizing QA processes and tools across enterprise systems to align with industry best practices .

Project-specific differences are primarily in timing and incremental enhancements introduced each year . Labor costs are driven by engineering,

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Unit Measure: Projects

integration, and QA enablement activities, while non-labor costs are primarily associated with cloud platform subscriptions, automation tools, and vendor support.

Project Justification:

Justification for this workpaper's projects include:

1. Grouping these projects under a single workpaper reflects their shared purpose of modernizing QA capabilities and leveraging cloud -based solutions for enterprise integration.
2. These initiatives support compliance with industry best practices for software quality and security.
3. Benefits include improved reliability of customer-facing applications, faster deployment of new features, and reduced risk of system outages through enhanced QA processes.
4. Automation and self-service testing reduce long-term operational costs by minimizing manual effort and accelerating testing cycles , which ultimately lowers the cost of delivering technology solutions.
5. Cloud-based QA tools provide scalability and resilience , supporting secure and reliable system performance as customer and operational demands grow.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	135	0	42	65	65	67	8	0	3	4	4	4	143	0	45	69	69	71
NLbr	608	1,045	2,032	1,198	2,491	2,709	0	0	0	0	0	0	608	1,045	2,032	1,198	2,491	2,709
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	743	1,045	2,074	1,263	2,556	2,776	8	0	3	4	4	4	751	1,045	2,077	1,267	2,560	2,780
FTE	0.8	0.0	0.3	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.3	0.4	0.4	0.4
Units	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	8	0	0	8	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	8	0	0	8	0.0	0
2027 Total	0	0	0	0	0.0	0
2028	3	0	0	3	0.0	0

Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028 Total	3	0	0	3	0.0	0
2029	4	0	0	4	0.0	0
Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.						
2029 Total	4	0	0	4	0.0	0
2030	4	0	0	4	0.0	0
Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.						
2030 Total	4	0	0	4	0.0	0
2031	4	0	0	4	0.0	0
Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.						
2031 Total	4	0	0	4	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
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
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	18	64	74	83	80
Non-Labor	1,646	1,295	1,379	2,107	903
NSE	0	0	0	0	0
Total	1,664	1,359	1,453	2,190	982
FTE	0.1	0.4	0.4	0.5	0.4
Units	1	2	1	2	2
Recorded-Adjusted (Nominal \$)					
Labor	18	64	74	83	80
Non-Labor	1,646	1,295	1,379	2,107	903
NSE	0	0	0	0	0
Total	1,664	1,359	1,453	2,190	982
FTE	0.1	0.4	0.4	0.5	0.4
Units	1	2	1	2	2
Vacation & Sick (Nominal \$)					
Labor	3	9	10	11	12

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	3	9	10	11	12
FTE	0.0	0.1	0.1	0.1	0.1
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	10	22	9	4	0
Non-Labor	818	392	152	79	0
NSE	0	0	0	0	0
Total	828	414	161	82	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	31	95	93	98	91
Non-Labor	2,464	1,687	1,531	2,186	903
NSE	0	0	0	0	0
Total	2,495	1,782	1,624	2,284	994
FTE	0.1	0.5	0.5	0.6	0.5
Units	1	2	1	2	2

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Unit Measure: Projects

Summary of Adjustments to Recorded:

		In Nominal \$(000)				
	Years	2021	2022	2023	2024	2025
Labor		18	64	74	83	80
Non-Labor		1,646	1,295	1,379	2,107	903
NSE		0	0	0	0	0
Total		1,664	1,359	1,453	2,190	982
FTE		0.1	0.4	0.4	0.5	0.4
Units		1	2	1	2	2

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	18	1,646	0	1,664	0.1	1
Explanation:	Transfer project OS and Application Test Automation costs from B09080 to I09070 (IO: 200543081)					
2021 Total	18	1,646	0	1,664	0.1	1
2022	64	1,295	0	1,359	0.4	3
Explanation:	Transfer project OS and Application Test Automation costs from B09080 to I09070 (IO: 200543081, 200563063, 200563064)					
2022	0	0	0	0	0.0	-1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Correct unit						
2022 Total	64	1,295	0	1,359	0.4	2
2023	74	1,379	0	1,453	0.4	2
Explanation: Transfer project OS and Application Test Automation costs from B09080 to I09070 (IO: 200563063, 200563064)						
2023	0	0	0	0	0.0	-1
Explanation: Correct unit						
2023 Total	74	1,379	0	1,453	0.4	1
2024	77	1,367	0	1,444	0.4	2
Explanation: Transfer project OS and Application Test Automation costs from B09080 to I09070 (IO: 200563063, 200563064).						
2024	6	741	0	747	0.1	1
Explanation: Transfer project costs from C09250 to I09070 (IO: 200577005)						
2024	0	0	0	0	0.0	-1
Explanation: Correct unit						
2024 Total	83	2,107	0	2,190	0.5	2
2025	-0.843	-2	0	-3	-0.1	2

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Transfer project OS and Application Test Automation costs from B09080 to I09070 (IO: 200563063, 200563064)						
2025	80	905	0	986	0.5	1
Explanation: Transfer project costs from C09250 to I09070 (IO: 200583634)						
2025	0	0	0	0	0.0	-1
Explanation: Correct unit						
2025 Total	80	903	0	982	0.4	2

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group I09070**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Workpaper Detail: I09070.001 - Quality Engineering Platform Modernization 2026 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	143	0	0	0	0	0
Non-Labor	536	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	679	0	0	0	0	0
FTE	0.8	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Workpaper Detail: I09070.002 - Quality Engineering Platform Modernization 2026 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	72	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	72	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Workpaper Detail: I09070.003 - Quality Assurance Modernization and Automation 2027 (VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	46	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	46	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Workpaper Detail: I09070.004 - Quality Assurance Modernization and Automation 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	999	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>999</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Workpaper Detail: I09070.005 - Quality Assurance Modernization and Automation 2028 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	45	0	0	0
Non-Labor	0	0	235	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	280	0	0	0
FTE	0.0	0.0	0.3	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Workpaper Detail: I09070.006 - Quality Assurance Modernization and Automation 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	1,797	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>1,797</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Workpaper Detail: I09070.007 - Quality Assurance Modernization and Automation 2029 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	69	0	0
Non-Labor	0	0	0	1,036	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	1,105	0	0
FTE	0.0	0.0	0.0	0.4	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Workpaper Detail: I09070.008 - Quality Assurance Modernization and Automation 2029 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	162	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>162</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Workpaper Detail: I09070.009 - Quality Assurance Modernization and Automation 2030 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	69	0
Non-Labor	0	0	0	0	972	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	1,041	0
FTE	0.0	0.0	0.0	0.0	0.4	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Workpaper Detail: I09070.010 - Quality Assurance Modernization and Automation 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	1,519	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,519</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Workpaper Detail: I09070.011 - Quality Assurance Modernization and Automation 2031 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	71
Non-Labor	0	0	0	0	0	822
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>893</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.4
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: I0907.0
Category: E. Enterprise Applications
Category-Sub: 1.
Workpaper Group: I09070 - Enterprise Application and Testing Platforms
Workpaper Detail: I09070.012 - Quality Assurance Modernization and Automation 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 12

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	1,887
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	1,887
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group I09070

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number 109070
SDG&E IT Capital Workpaper Name Enterprise Application and Testing Platforms
Unit Measure Projects
Number of Units 6

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Quality Engineering Modernization Autoamation Platform (2026-2031)	738	1,045	2,081	1,262	2,556	2,774
Labor	130	0	49	65	65	65
Non-Labor	608	1,045	2,032	1,198	2,491	2,709
Grand Total	738	1,045	2,081	1,262	2,556	2,774

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

109070.001--012

SDG&E IT Project Name:

Quality Engineering Modernization Autoamation Platform (2026-2031)

Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	0.8	162	130		162	0	0.3	162	49	0.4	162	65	0.4	162	65	0.4	162	65	373
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	45	536	12	4	46	12	20	235	12	86	1,036	12	81	972	12	69	822	3,647
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses	1	72	72	27	37	999	500	1	356	1	162	162	30	51	1,519	500	1	375	3,483
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0	200	7	1,441			0			0	200	8	1,512	2,953
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of services			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						130		0			49		65		65		65		65		65	373
	Labor					608		1,045			2,032		1,198		2,491		2,709		2,774		10,083	
	Non-Labor																					
	Total					738		1,045			2,081		1,262		2,556		2,774		2,774		10,455	

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: F. Data, Analytics, and Automation
Workpaper: VARIOUS

Summary for Category: F. Data, Analytics, and Automation

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
Labor	2,918	2,903	2,999	2,908	2,799	2,842	2,877
Non-Labor	21,095	15,173	21,870	23,278	25,252	24,321	23,495
NSE	0	0	0	0	0	0	0
Total	24,013	18,076	24,869	26,186	28,051	27,163	26,372
FTE	18.3	17.0	17.4	16.9	16.2	16.5	16.7

Workpapers belonging to this Category:

B09090 Data & Analytics Foundations

Labor	1,807	1,150	1,289	1,198	832	858	881
Non-Labor	11,030	8,182	8,048	8,742	9,048	8,887	8,927
NSE	0	0	0	0	0	0	0
Total	12,837	9,332	9,337	9,940	9,880	9,745	9,808
FTE	11.9	6.7	7.5	7.0	4.8	5.0	5.1

Unit Measure: Projects

Units	10	2	2	2	2	2	2
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D09090 Digital Automation Foundational Technology

Labor	445	595	506	506	507	507	506
Non-Labor	5,382	2,086	3,910	4,004	4,000	4,046	4,060
NSE	0	0	0	0	0	0	0
Total	5,827	2,681	4,416	4,510	4,507	4,553	4,566
FTE	2.1	3.5	2.9	2.9	2.9	2.9	2.9

Unit Measure: Projects

Units	7	1	1	1	1	1	1
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Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: F. Data, Analytics, and Automation
Workpaper: VARIOUS

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
D09200 Digital Compliance Foundations							
Labor	666	902	723	723	723	724	722
Non-Labor	4,683	3,219	4,534	5,134	5,134	3,438	3,438
NSE	0	0	0	0	0	0	0
Total	5,349	4,121	5,257	5,857	5,857	4,162	4,160
FTE	4.3	5.3	4.2	4.2	4.2	4.2	4.2
Unit Measure: Projects							
Units	1	4	4	4	6	4	4
J09090 Climate Science							
Labor	0	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unit Measure: Projects							
Units	0	0	0	0	0	0	0
M09090 Data Platforms & Solutions							
Labor	0	256	257	257	513	529	544
Non-Labor	0	421	1,208	428	2,100	2,980	2,100
NSE	0	0	0	0	0	0	0
Total	0	677	1,465	685	2,613	3,509	2,644
FTE	0.0	1.5	1.5	1.5	3.0	3.1	3.2
Unit Measure: Projects							
Units	0	1	1	1	1	1	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Category: F. Data, Analytics, and Automation
Workpaper: VARIOUS

	In 2025\$ (000) Incurred Costs						
	Adjusted-Recorded	Adjusted-Forecast					
	2025	2026	2027	2028	2029	2030	2031
M09200 Climate Resilience Platform Foundational Technology							
Labor	0	0	224	224	224	224	224
Non-Labor	0	1,265	4,170	4,970	4,970	4,970	4,970
NSE	0	0	0	0	0	0	0
Total	0	1,265	4,394	5,194	5,194	5,194	5,194
FTE	0.0	0.0	1.3	1.3	1.3	1.3	1.3
Unit Measure: Projects							
Units	0	1	1	1	1	1	1

Note: Totals may include rounding differences.

**Beginning of Workpaper Group
B09090 - Data & Analytics Foundations**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	531	1,243	1,851	1,939	1,807	1,150	1,289	1,198	832	858	881
Non-Labor	Zero-Based	13,622	24,702	21,048	20,038	11,030	8,182	8,048	8,742	9,048	8,887	8,927
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		14,153	25,945	22,899	21,977	12,837	9,332	9,337	9,940	9,880	9,745	9,808
FTE	Zero-Based	2.8	7.6	11.7	13.0	11.9	6.7	7.5	7.0	4.8	5.0	5.1
Units	Zero-Based	4	7	6	10	10	2	2	2	2	2	2

Business Purpose:

The purpose of these initiatives is to improve the accuracy, consistency, and structure of the information the utility relies on for daily operations, planning, and regulatory reporting. High quality, well-organized data is essential for preparing accurate filings, meeting statutory requirements, and enabling timely operational decisions. By strengthening the traceability and reliability of information, these initiatives aim to reduce the amount of rework, minimize manual reconciliation, and prevent duplicative effort.

These initiatives also aim to eliminate inefficiencies that increase operational expenses, such as delays caused by fragmented data sources, inconsistent reporting processes, and reliance on outdated systems. Modernizing how SDG&E organizes and sustains operational information supports CPUC mandated obligations.

Physical Description:

This workpaper contains projects that have a mix of utility shared- and non-shared assets, and is cosponsored by Electric Distribution O&M (Ex. SDGE-09). These projects' scope cover the following areas:

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Unit Measure: Projects

- Information & Reporting Platform: Establish a secure, modern environment for managing the information used in SDG&E's operational and regulatory activities. The platform provides consistent definitions, documented data flows, and transparent traceability, enabling SDG&E to produce timely, accurate, and repeatable reporting.
- Foundational Technology Investments: Support core operational programs—including vegetation management, asset inspections, project and portfolio tracking, and work management—by consolidating information into consistent, well-structured formats.
- Document Processing and Compliance Support: Streamline the handling of records, inspection notes, construction documents, and invoices by organizing and extracting relevant information efficiently to improve the speed and accuracy of responding to regulatory audits and CPUC data requests, reducing labor hours and administrative burden.
- Regulatory Reporting Automation: Automate recurring reporting requirements—such as SB410, Pole Attachment OIR Track 2, GO 66D, and other mandated submissions.
- Field Operations Enablement: Provide standardized approaches to capturing field information, monitoring KPIs, and tracking performance. Decision Support Methods: establish structured decision support methods to strengthen SDG&E's ability to evaluate asset condition, identify operational issues, and prioritize maintenance.
- Reporting & Transparency Improvements: Enhance standardized reporting to reduce reliance on custom analyses and manual spreadsheet work by creating consistent, repeatable reporting practices across the organization. These capabilities enhance transparency, reduce labor effort, and contribute to lower administrative and operating costs.

Non-labor consists of software, vendor services and purchased labor to sustain the enterprise data mesh compliance platform supporting CPUC-mandated affordability obligations. Labor consists of engineers who configure, integrate and modernize processes to support efficient operations. Other non-labor costs include software and vendor services.

Project Justification:

- Support SDG&E's ability to comply with multiple state and CPUC requirements—including SB410, GO 66D, Pole Attachment OIR Track 2, wildfire related mandates (through reusable components only), GO 95 and GO 165 inspection obligations, and FERC Order 881.
- Standardized preparation and validation processes reduce the risk of errors that could require costly remediation. Automation efforts support affordability by reducing manual workload and enabling repeatable, cost-effective reporting cycles.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Unit Measure: Projects

- Automating regulatory data retrieval, classification, and reporting eliminates large-scale manual work across millions of documents, reducing manual labor hours and improving filing timeliness, accuracy, and completeness.

- In alignment with industry best practices, the platform supports continuous improvement by enabling better visibility into process performance, shortening cycle times, and allowing earlier identification of bottlenecks or inefficiencies.

- Modernizing the information environment supporting these processes aims to reduce long-term expenses associated with fragmented systems, manual handling of data, and repeated reconciliation efforts.

- Enhancing data quality and visibility for field operations helps avoid rework, reduces variability in field practices, and improves the efficiency of maintenance and inspection programs. Better insight into field activities also supports faster decision-making and more cost-effective deployment of resources.

- Improving document processing helps strengthen compliance with requirements such as GO 66D while lowering the cost of preparing materials used in regulatory proceedings.

- Aim to Avoid unnecessary expenditures and reduce the likelihood of more expensive emergency work by using the data to support directing limited resources toward the most impactful work

- Reducing fragmentation across systems lowers long-term costs by preventing duplicative work and minimizing the need for custom reporting or manual reconciliation. Reusing Employee Energization Portal and the ERP-based data lake data helps SDG&E avoid unnecessary redevelopment.

These investments represent essential baseline capabilities required to avoid higher costs in the future, particularly those stemming from outdated tools, increasing regulatory complexity, and growing volumes of compliance work. By enabling reuse of existing data assets and standardized reporting structures, the initiatives contribute to reducing the long-term cost.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	1,088	1,215	1,129	783	807	831	62	74	69	49	51	50	1,150	1,289	1,198	832	858	881
NLbr	8,182	8,048	8,742	9,048	8,887	8,927	0	0	0	0	0	0	8,182	8,048	8,742	9,048	8,887	8,927
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	9,270	9,263	9,871	9,831	9,694	9,758	62	74	69	49	51	50	9,332	9,337	9,940	9,880	9,745	9,808
FTE	6.7	7.5	7.0	4.8	5.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	6.7	7.5	7.0	4.8	5.0	5.1
Units	2	2	2	2	2	2	0	0	0	0	0	0	2	2	2	2	2	2

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	62	0	0	62	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	62	0	0	62	0.0	0
2027	74	0	0	74	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	74	0	0	74	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	69	0	0	69	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	69	0	0	69	0.0	0
2029	49	0	0	49	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	49	0	0	49	0.0	0
2030	51	0	0	51	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	51	0	0	51	0.0	0
2031	50	0	0	50	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	50	0	0	50	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	309	833	1,464	1,957	1,824
Non-Labor	9,100	18,964	18,960	21,847	5,170
NSE	0	0	0	0	0
Total	9,408	19,797	20,424	23,803	6,994
FTE	2.4	6.5	10.1	13.4	11.6
Units	0	0	0	0	0
Adjustments (Nominal \$) **					
Labor	0	0	0	-311	-248
Non-Labor	0	0	0	-2,530	5,860
NSE	0	0	0	0	0
Total	0	0	0	-2,841	5,612
FTE	0.0	0.0	0.0	-2.1	-1.4
Units	4	7	6	10	10
Recorded-Adjusted (Nominal \$)					
Labor	309	833	1,464	1,646	1,576
Non-Labor	9,100	18,964	18,960	19,316	11,030
NSE	0	0	0	0	0
Total	9,408	19,797	20,424	20,962	12,606
FTE	2.4	6.5	10.1	11.3	10.2
Units	4	7	6	10	10
Vacation & Sick (Nominal \$)					
Labor	46	121	203	223	231

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	46	121	203	223	231
FTE	0.4	1.1	1.6	1.7	1.7
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	176	289	184	70	0
Non-Labor	4,523	5,738	2,088	721	0
NSE	0	0	0	0	0
Total	4,699	6,027	2,272	791	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	531	1,243	1,851	1,939	1,807
Non-Labor	13,622	24,702	21,048	20,038	11,030
NSE	0	0	0	0	0
Total	14,153	25,945	22,899	21,977	12,837
FTE	2.8	7.6	11.7	13.0	11.9
Units	4	7	6	10	10

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
Labor	0	0	0	-311	-248
Non-Labor	0	0	0	-2,530	5,860
NSE	0	0	0	0	0
Total	0	0	0	-2,841	5,612
FTE	0.0	0.0	0.0	-2.1	-1.4
Units	4	7	6	10	10

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	4
Explanation:	Add unit for projects: T000009 T000030 T19006 T19007					
2021 Total	0	0	0	0	0.0	4
2022	0	0	0	0	0.0	7
Explanation:	Add unit for projects: T000030 T000066 T000067 T000086 T000089, T000098, T19006					
2022 Total	0	0	0	0	0.0	7

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2023	0	0	0	0	0.0	6
Explanation:	Add unit for projects: T000030 T000066 T000067 T000089 T000098 T000086					
2023 Total	0	0	0	0	0.0	6
2024	0	0	0	0	0.0	11
Explanation:	Add unit for projects: T000066 T000067 T000089 T000098 T000139 T000140 T000141 T000143 T000144 T000157					
2024	-311	-2,530	0	-2,841	-2.1	-1
Explanation:	Transfer costs to G09200 in order to align actuals to forecast.					
2024 Total	-311	-2,530	0	-2,841	-2.1	10
2025	-20	-625	0	-645	-0.1	0
Explanation:	Moving project from B09090 to A09090 to align to appropriate work paper.					
2025	0	0	0	0	0.0	8
Explanation:	Add unit for projects: T000067 T000089 T000139 T000140 T000141, T000143, T000144, T000157, T000180, T000196					
2025	0	10,060	0	10,060	0.0	3
Explanation:	Transfercosts for Document Management Analytics Platforms and Data Enablement to correct workpaper B09090.					
2025	-229	-3,575	0	-3,804	-1.3	-1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Transfer costs to G09200 in order to align actuals to forecast.						
2025 Total	-248	5,860	0	5,612	-1.4	10

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group B09090**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.001 - Asset Work Mgt & Project/Portfolio Management - Data Foundation 2026 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	816	0	0	0	0	0
Non-Labor	1,214	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	2,030	0	0	0	0	0
FTE	4.7	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.002 - Data & Analytics Foundations 2026 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	1,625	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	1,625	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.003 - Ent Data Mesh Governance Compliance Platform 2026 (Lbr PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	334	0	0	0	0	0
Non-Labor	5,343	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	5,677	0	0	0	0	0
FTE	2.0	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.004 - Ent Data Mesh Governance Compliance Platform 2027 (Lbr PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	699	0	0	0	0
Non-Labor	0	6,218	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	6,917	0	0	0	0
FTE	0.0	4.1	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.005 - Asset Work Mgt & Project/Portfolio Management - Data Foundation 2027 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	590	0	0	0	0
Non-Labor	0	1,830	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	2,420	0	0	0	0
FTE	0.0	3.4	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.006 - Data & Analytics Foundations 2028 (Lbr PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	590	0	0	0
Non-Labor	0	0	6,338	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	6,928	0	0	0
FTE	0.0	0.0	3.4	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.007 - Data & Analytics Foundations 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	1,200	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>1,200</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.008 - Asset Work Mgt & Project/Portfolio Management - Data Foundation 2028 (Lbr, VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	608	0	0	0
Non-Labor	0	0	1,204	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	1,812	0	0	0
FTE	0.0	0.0	3.6	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.010 - Asset Work Mgt & Project/Portfolio Management - Data Foundation 2029 (Lbr, PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	352	0	0
Non-Labor	0	0	0	567	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	919	0	0
FTE	0.0	0.0	0.0	2.0	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.011 - Data & Analytics Foundations 2029 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	2,400	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>2,400</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.012 - Data & Analytics Foundations 2029 (Lbr PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 12

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	480	0	0
Non-Labor	0	0	0	6,081	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	6,561	0	0
FTE	0.0	0.0	0.0	2.8	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.015 - Asset Work Mgt & Project/Portfolio Management - Data Foundation 2030 (Lbr, PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 15

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	363	0
Non-Labor	0	0	0	0	567	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	930	0
FTE	0.0	0.0	0.0	0.0	2.1	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.016 - Data & Analytics Foundations 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 16

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	1,680	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	1,680	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.017 - Data & Analytics Foundations 2030 (Lbr PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 17

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	495	0
Non-Labor	0	0	0	0	6,640	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	7,135	0
FTE	0.0	0.0	0.0	0.0	2.9	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.019 - Data & Analytics Foundations 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	960
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	960
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.020 - Data & Analytics Foundations 2031 (Lbr PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 20

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	508
Non-Labor	0	0	0	0	0	7,400
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	7,908
FTE	0.0	0.0	0.0	0.0	0.0	3.0
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: B0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: B09090 - Data & Analytics Foundations
Workpaper Detail: B09090.021 - Asset Work Mgt & Project/Portfolio Management - Data Foundation 2031 (Lbr, PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 21

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	373
Non-Labor	0	0	0	0	0	567
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	940
FTE	0.0	0.0	0.0	0.0	0.0	2.1
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group B09090

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number
SDG&E IT Capital Workpaper Name
Unit Measure
Number of Units

B09090
Data & Analytics Platforms
Projects
12

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E Capital Workpaper #	2026	2027	2028	2029	2030	2031
Ent Data Mesh Governance Compliance Platform (2026-2031)	7,292	6,882	8,089	8,935	8,790	8,851
Labor	324	664	551	454	470	491
Non-Labor	6,968	6,218	7,538	8,481	8,320	8,360
Asset, Work Mgmt, & Project/Portfolio Management Analytics (2026-2031)	1,975	2,381	1,787	891	907	907
Labor	761	551	583	324	340	340
Non-Labor	1,214	1,830	1,204	567	567	567
Grand Total	9,267	9,263	9,876	9,826	9,697	9,758
Total Labor	1,085	1,215	1,134	778	810	831
Total Non-Labor	8,182	8,048	8,742	9,048	8,887	8,927
Grand Total	9,267	9,263	9,876	9,826	9,697	9,758

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

B09090.002--004, .006--007, .011--012, .016--017, .019--020

SDG&E IT Project Name:

Ent Data Mesh Governance Compliance Platform (2026 - 2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	2.0	162	324	4.1	162	664	3.4	162	551	2.8	162	454	2.9	162	470	3.0	162	491	2,953
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	445	5,343	12	518	6,218	12	528	6,338	12	507	6,081	12	553	6,640	12	617	7,400	38,020
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses	1	1,625	1,625			0	1	1,200	1,200	1	2,400	2,400	1	1,680	1,680	1	960	960	7,865
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of months			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						324			664			551			454			470			491	2,953
		Labor				324			664			551			454			470			491	2,953
		Non-Labor				6,968			6,218			7,538			8,481			8,320			8,360	45,885

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

B09090.001, .005, .008, .010, .015, .021

SDG&E IT Project Name:

Asset, Work Mgmt, & Project/Portfolio Management Analytics (2026-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	4.7	162	761	3.4	162	551	3.6	162	583	2.0	162	324	2.1	162	340	2.1	162	340	2,900
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	101	1,214	12	153	1,830	12	100	1,204	12	47	567	12	47	567	12	47	567	5,949
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of months			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						761			551			583			324			340			340	2,900
						1,214			1,830			1,204			567			567			567	5,949

Beginning of Workpaper Group
D09090 - Digital Automation Foundational Technology

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	1,300	844	607	839	445	595	506	506	507	507	506
Non-Labor	Zero-Based	19,645	18,930	13,017	8,284	5,382	2,086	3,910	4,004	4,000	4,046	4,060
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		20,945	19,774	13,623	9,123	5,827	2,681	4,416	4,510	4,507	4,553	4,566
FTE	Zero-Based	6.7	4.4	3.9	4.6	2.1	3.5	2.9	2.9	2.9	2.9	2.9
Units	Zero-Based	7	10	8	10	7	1	1	1	1	1	1

Business Purpose:

This project upgrades and replaces end-of-life software-based automations that support day-to-day business activities across the Company, including Accounting Operations and Support Services. These automations support core business processes such as approvals, workflow routing, documentation, and regulatory reporting. Accurate and traceable records are necessary for activities tied to federal, state, and CPUC compliance obligations.

Several existing components depend on older workflow tools, custom code, and manual handoffs that increase the likelihood of errors, delays, and incomplete records. These limitations create compliance risks in areas such as Sarbanes-Oxley (SOX) financial controls, where automated routing, audit trails, and system-tracked approvals are required for Work Order Authorization and other financial processes. Automated SOX workflows support quarterly certification reviews and help maintain accurate classifications for capital project reporting.

The project also supports processes subject to California Consumer Privacy Act (CCPA/CPRA) record-handling mandates, including system-driven deletion, data retention, and audit requirements specified in California Government Code Sections 34090 through 34090.7 and related federal

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Unit Measure: Projects

regulations. Modernizing these workflows reduces reliance on outdated components that are no longer aligned with current privacy, retention, and audit requirements.

Upgrades include replacing unsupported components, updating software required for supported operation, rebuilding selected workflows, and improving integrations across financial, operational, privacy-related, and compliance-driven processes. These improvements reduce risks tied to aging technology and help limit customer cost exposure that could result from disruptions, rework, or regulatory non-compliance. Multi-year funding is necessary because the automation portfolio contains components with different end-of-life timelines and evolving compliance requirements across SOX, CPRA, and CPUC reporting needs.

Physical Description:

This workpaper contains projects that have utility non-shared assets. The current automation platform includes a portfolio of more than 35 software-based automations that support day-to-day business activities across the Company, including functions such as Accounting Operations and Support Services. These applications support approvals, workflow routing, documentation, and compliance-related activities, where accurate and traceable records are important for business operations and regulatory reporting. Many of the automations rely on older workflow software, custom code, and limited data connections, which makes it harder for them to keep aligned with current security requirements and vendor support standards. Furthermore, several components are approaching end-of-life, increasing operational and cybersecurity risks if not replaced or upgraded.

The project updates this portfolio by rebuilding selected workflows, replacing aging components that perform repeatable rule-based steps, and improving data connections so information can move more accurately between financial, operational, and compliance processes. Where appropriate, selected automation may be transitioned to supported hosted platforms that improve stability, scalability, and long-term support. The modernization approach allows the Company to remain compatible with vendor requirements, security standards, and future system versions.

The upgraded solution includes improved workflow functions, modernized software-based automations, enhanced document-processing, and improved record handling functions that support multiple efforts, including regulatory reporting and record retention.

The underlying cost drivers for this capital workpaper relate to labor and non-labor expenditures. Vendor services is the primary cost driver, attributable to annual intelligent data processing enhancements that improve decision-making and reduce manual effort. Labor consists of architects, engineers, analysts, and project managers who can provide specialized development and implementation services. Other non-labor costs

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Unit Measure: Projects

include software.

Project Justification:

The projects address growing technical debt within the current workflow platform and related applications. Several components are at or nearing end of life and no longer meet vendor security or compatibility requirements. As versions age, risks increase for security gaps, process interruptions, and compliance issues. Replacing these components supports safer, continuous processing across financial, operational, compliance, safety, and privacy mandated workflows. The automation portfolio includes workflows to meet federal and state obligations such as SOX financial controls, CPUC reporting, California Consumer Privacy Rights Act (CPRA) privacy mandates, and safety related programs including the California DMV Pull Notice Program (Vehicle Code §1808.1).

The projects support SOX related workflow controls, including Work Order Authorization routing and automated journal entry logging that generate system records used in financial control reviews and audits. It also supports workflows required for CPUC reporting and regulatory record retention, where consistent data movement and complete records are necessary for compliance. CPRA governed workflows require automated retention, deletion, and audit activities tied to California Government Code sections 34090 - 34090.7. Safety related workflows support required driving record updates under the California DMV Pull Notice Program (Vehicle Code §1808.1), which mandates monitoring of employee driving records for safety sensitive roles.

The projects reduce dependence on outdated workflow software, custom code, and limited data connections that contribute to errors, incomplete records, and rework. Improving data movement and rebuilding selected workflows enhances consistency and traceability for regulatory reporting and required record retention. Strengthened controls help maintain accurate, timely records.

The projects also support staged upgrades across automations with different end of life timelines and vendor requirements, maintaining supported versions while reducing unsupported software risks. It enables selected automations to transition to stable hosted platforms, supporting long term vendor supportability. Overall, the project reduces the likelihood of process disruptions, compliance deficiencies, and customer cost exposure tied to unsupported technology, while supporting obligations related to SOX controls, CPUC reporting, CPRA mandates, and Vehicle Code §1808.1.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	563	477	477	477	477	477	32	29	29	30	30	29	595	506	506	507	507	506
NLbr	2,086	3,910	4,004	4,000	4,046	4,060	0	0	0	0	0	0	2,086	3,910	4,004	4,000	4,046	4,060
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2,649	4,387	4,481	4,477	4,523	4,537	32	29	29	30	30	29	2,681	4,416	4,510	4,507	4,553	4,566
FTE	3.5	2.9	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	3.5	2.9	2.9	2.9	2.9	2.9
Units	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	32	0	0	32	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	32	0	0	32	0.0	0
2027	29	0	0	29	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	29	0	0	29	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	29	0	0	29	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	29	0	0	29	0.0	0
2029	30	0	0	30	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	30	0	0	30	0.0	0
2030	30	0	0	30	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	30	0	0	30	0.0	0
2031	29	0	0	29	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	29	0	0	29	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	754	566	480	712	388
Non-Labor	13,123	14,532	11,725	7,986	5,382
NSE	0	0	0	0	0
Total	13,877	15,098	12,205	8,698	5,770
FTE	5.7	3.8	3.4	4.0	1.8
Units	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
Units	7	10	8	10	7
Recorded-Adjusted (Nominal \$)					
Labor	754	566	480	712	388
Non-Labor	13,123	14,532	11,725	7,986	5,382
NSE	0	0	0	0	0
Total	13,877	15,098	12,205	8,698	5,770
FTE	5.7	3.8	3.4	4.0	1.8
Units	7	10	8	10	7
Vacation & Sick (Nominal \$)					
Labor	114	82	67	97	57

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	114	82	67	97	57
FTE	1.0	0.6	0.5	0.6	0.3
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	431	196	60	30	0
Non-Labor	6,522	4,397	1,291	298	0
NSE	0	0	0	0	0
Total	6,954	4,593	1,351	328	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	1,300	844	607	839	445
Non-Labor	19,645	18,930	13,017	8,284	5,382
NSE	0	0	0	0	0
Total	20,945	19,774	13,623	9,123	5,827
FTE	6.7	4.4	3.9	4.6	2.1
Units	7	10	8	10	7

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
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
Units	7	10	8	10	7

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	7
Explanation:	Add unit for projects: T000031 T000050 T18003 T18024 T19019, T19039, T20002					
2021 Total	0	0	0	0	0.0	7
2022	0	0	0	0	0.0	10
Explanation:	Add unit for projects: T000031 T000050 T000060 T000070 T000071, T000073, T18003, T19019, T19039, T20002					
2022 Total	0	0	0	0	0.0	10

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2023	0	0	0	0	0.0	8
Explanation:	Add unit for projects: T000031 T000050 T000060 T000070 T000071, T000073, T19039, T20002					
2023 Total	0	0	0	0	0.0	8
2024	0	0	0	0	0.0	10
Explanation:	Add unit for projects: T000060 T000070 T000071 T000073 T000142, T000145, T000146, T000147, T000148, T000031					
2024 Total	0	0	0	0	0.0	10
2025	0	0	0	0	0.0	7
Explanation:	Add unit for projects: T000142 T000145 T000146 T000147 T000148, T000178, T000070					
2025 Total	0	0	0	0	0.0	7

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group D09090**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Workpaper Detail: D09090.001 - SDG&E Digital Automation & Climate Platform Enhancements 2026 (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	595	0	0	0	0	0
Non-Labor	1,976	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	2,571	0	0	0	0	0
FTE	3.5	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Workpaper Detail: D09090.002 - SDG&E Digital Automation & Climate Platform Enhancements 2026 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	110	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	110	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Workpaper Detail: D09090.003 - SDG&E Digital Automation & Climate Platform Enhancements 2027 (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	506	0	0	0	0
Non-Labor	0	2,160	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>2,666</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	2.9	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Workpaper Detail: D09090.004 - SDG&E Digital Automation & Climate Platform Enhancements 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	1,750	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>1,750</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Workpaper Detail: D09090.005 - SDG&E Digital Automation & Climate Platform Enhancements 2028 (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	506	0	0	0
Non-Labor	0	0	3,324	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>3,830</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	2.9	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Workpaper Detail: D09090.006 - SDG&E Digital Automation & Climate Platform Enhancements 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	680	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	680	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Workpaper Detail: D09090.007 - SDG&E Digital Automation & Climate Platform Enhancements 2029 (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	507	0	0
Non-Labor	0	0	0	3,840	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	4,347	0	0
FTE	0.0	0.0	0.0	2.9	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Workpaper Detail: D09090.008 - SDG&E Digital Automation & Climate Platform Enhancements 2029 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	160	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	160	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Workpaper Detail: D09090.009 - SDG&E Digital Automation & Climate Platform Enhancements 2030 (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	507	0
Non-Labor	0	0	0	0	1,956	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	2,463	0
FTE	0.0	0.0	0.0	0.0	2.9	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Workpaper Detail: D09090.010 - SDG&E Digital Automation & Climate Platform Enhancements 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	2,090	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	2,090	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Workpaper Detail: D09090.011 - SDG&E Digital Automation & Climate Platform Enhancements 2031 (VendSvc, Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	506
Non-Labor	0	0	0	0	0	3,840
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	4,346
FTE	0.0	0.0	0.0	0.0	0.0	2.9
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09090 - Digital Automation Foundational Technology
Workpaper Detail: D09090.012 - SDG&E Digital Automation & Climate Platform Enhancements 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 12

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	220
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	220
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group D09090

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number	D09090
SDG&E IT Capital Workpaper Name	Digital Automation Foundational Technology
Unit Measure	Projects
Number of Units	6

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
SDG&E Digital Automation & Climate Platform Enhancements (2026-2031)	2,649	4,387	4,481	4,477	4,523	4,537
Labor	563	477	477	477	477	477
Non-Labor	2,086	3,910	4,004	4,000	4,046	4,060
Grand Total	2,649	4,387	4,481	4,477	4,523	4,537

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

D09090.001--012

SDG&E IT Project Name:

SDG&E Digital Automation & Climate Platform Enhancements (2026-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	3.5	162	563	2.9	162	477	2.9	162	477	2.9	162	477	2.9	162	477	2.9	162	477	2,948
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	165	1,976	12	180	2,160	12	277	3,324	12	320	3,840	12	163	1,956	12	320	3,840	17,097
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0	1	1,650	1,650	1	550	550			0	1	1,900	1,900			0	4,100
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of months	12	9	110	12	8	100	12	11	130	12	13	160	12	16	190	12	18	220	910
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						563			477			477			477			477			477	2,948
		Labor				2,086			3,910			4,004			4,000			4,046			4,060	22,106
		Non-Labor				2,649			4,387			4,481			4,477			4,523			4,537	25,054
		Total				2,649			4,387			4,481			4,477			4,523			4,537	25,054

**Beginning of Workpaper Group
D09200 - Digital Compliance Foundations**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	149	27	10	0	666	902	723	723	723	724	722
Non-Labor	Zero-Based	1,036	0	0	0	4,683	3,219	4,534	5,134	5,134	3,438	3,438
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		1,185	27	10	0	5,349	4,121	5,257	5,857	5,857	4,162	4,160
FTE	Zero-Based	0.7	0.1	0.1	0.0	4.3	5.3	4.2	4.2	4.2	4.2	4.2
Units	Zero-Based	1	1	1	0	1	4	4	4	6	4	4

Business Purpose:

The Asset Compliance Optimization Platform supports SDG&E's electric compliance activities by providing application capabilities used to manage inspection data, track compliance obligations, and coordinate corrective actions required under internal standards and external regulatory requirements. Operational costs associated with conducting inspections, drone flight operations, and field inspection labor are addressed in Electric Distribution business testimony under the Risk-Informed Inspections.

The platform supports ongoing and expanding inspection and compliance programs, including risk-informed inspection, pole attachment oversight, and other asset compliance and risk-mitigation activities. Increasing inspection volumes, wildfire mitigation initiatives, and evolving regulatory requirements require standardized, auditable applications to support consistent execution and oversight of compliance obligations.

Physical Description:

This workpaper contains projects that have utility non-shared assets. This workpaper is co-sponsored by Electric Distribution Capital (Ex. SDGE-08) and Electric Distribution O&M (Ex. SDGE-09). The Asset Compliance Optimization Platform consists of integrated application capabilities that support asset condition identification and compliance workflow execution.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Unit Measure: Projects

The platform supports the review and organization of inspection data collected through the Risk-Informed Inspection program, overhead patrols, and detailed pole inspections. These application capabilities assist with identification of electric distribution assets, third-party attachments, and observable damage conditions, and organize inspection outputs to support risk-informed prioritization, compliance tracking, and corrective-action follow-up.

The platform also provides digital workflow capabilities that standardize asset compliance processes. These workflows integrate inspection findings, asset condition indicators, and program-specific requirements into structured processes used by asset management and compliance teams. Workflow capabilities support pole attachment review and billing activities, coordination of inspection follow-up with construction activity, and management of compliance backlogs and regulatory deadlines.

The platform integrates with existing inspection, work management, and construction systems used to support electric operations.

The underlying cost drivers for this capital workpaper relate to labor and non-labor expenditures. Vendor services is the primary cost driver, attributable growth in inspection imagery volumes generated by the Risk-Informed Inspection program, expansion of compliance workflow automation for inspection follow-up activities, and ongoing software lifecycle upgrades and security enhancements required. Labor consists of architects, engineers, and project managers to support system lifecycle management and enhancements. Other non-labor costs include software, including licenses.

Project Justification:

The Asset Compliance Optimization Platform is required to support SDG&E's electric distribution compliance activities, with primary support for the Risk-Informed Inspection (RII) program and support for related compliance and oversight functions.

RII has materially increased the volume, frequency, and complexity of inspection data collected across the electric system. The program includes drone inspections which generate large quantities of imagery that must be reviewed, organized, and translated into required compliance and corrective-action activities. Scalable application capabilities are required to support consistent, auditable review of RII results and to integrate those results into established asset compliance processes.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Unit Measure: Projects

In addition to RII, the platform supports other core compliance functions, including pole attachment oversight and Joint Asset Management activities . These activities require consistent identification and tracking of third-party equipment installed on distribution poles to support safety reviews, compliance verification, and billing processes. The platform provides standardized application capabilities to support these requirements alongside RII-related inspection activity.

The platform also supports management of inspection follow-up, corrective actions, and compliance backlogs across multiple inspection and risk-mitigation programs, including those associated with wildfire mitigation and infrastructure safety. As inspection volumes and regulatory requirements increase, application support is required to provide visibility into compliance status, workload prioritization, and regulatory deadlines.

This project supports ongoing compliance execution rather than a one-time implementation. Continued investment is required to sustain, update, and integrate platform application capabilities as inspection programs, regulatory requirements, and supporting systems evolve over time.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
Years	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	853	681	681	681	681	681	49	42	42	42	43	41	902	723	723	723	724	722
NLbr	3,219	4,534	5,134	5,134	3,438	3,438	0	0	0	0	0	0	3,219	4,534	5,134	5,134	3,438	3,438
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	4,072	5,215	5,815	5,815	4,119	4,119	49	42	42	42	43	41	4,121	5,257	5,857	5,857	4,162	4,160
FTE	5.3	4.2	4.2	4.2	4.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0	5.3	4.2	4.2	4.2	4.2	4.2
Units	4	4	4	6	4	4	0	0	0	0	0	0	4	4	4	6	4	4

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	49	0	0	49	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	49	0	0	49	0.0	0
2027	42	0	0	42	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	42	0	0	42	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	42	0	0	42	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	42	0	0	42	0.0	0
2029	42	0	0	42	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	42	0	0	42	0.0	0
2030	43	0	0	43	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	43	0	0	43	0.0	0
2031	41	0	0	41	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	41	0	0	41	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Recorded (Nominal \$)*					
Labor	87	18	8	0	581
Non-Labor	692	0	0	0	4,683
NSE	0	0	0	0	0
Total	779	18	8	0	5,264
FTE	0.6	0.1	0.1	0.0	3.7
Units	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
Units	1	1	1	0	1
Recorded-Adjusted (Nominal \$)					
Labor	87	18	8	0	581
Non-Labor	692	0	0	0	4,683
NSE	0	0	0	0	0
Total	779	18	8	0	5,264
FTE	0.6	0.1	0.1	0.0	3.7
Units	1	1	1	0	1
Vacation & Sick (Nominal \$)					
Labor	13	3	1	0	85

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	13	3	1	0	85
FTE	0.1	0.0	0.0	0.0	0.6
Units	0	0	0	0	0
Escalation to 2025\$					
Labor	50	6	1	0	0
Non-Labor	344	0	0	0	0
NSE	0	0	0	0	0
Total	394	6	1	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
Labor	149	27	10	0	666
Non-Labor	1,036	0	0	0	4,683
NSE	0	0	0	0	0
Total	1,185	27	10	0	5,349
FTE	0.7	0.1	0.1	0.0	4.3
Units	1	1	1	0	1

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
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
Units	1	1	1	0	1

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021	0	0	0	0	0.0	1
Explanation:	Add unit for projects: T19032					
2021 Total	0	0	0	0	0.0	1
2022	0	0	0	0	0.0	1
Explanation:	Add unit					
2022 Total	0	0	0	0	0.0	1

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
2023	0	0	0	0	0.0	1
Explanation: Add unit						
2023 Total	0	0	0	0	0.0	1
2024 Total	0	0	0	0	0.0	0
2025	0	0	0	0	0.0	1
Explanation: Add unit for project: T000179						
2025 Total	0	0	0	0	0.0	1

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group D09200**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Workpaper Detail: D09200.001 - SDGE Asset Compliance Optimization Platform 2026 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub - workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	902	0	0	0	0	0
Non-Labor	3,093	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	3,995	0	0	0	0	0
FTE	5.3	0.0	0.0	0.0	0.0	0.0
Units	4	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Workpaper Detail: D09200.002 - SDGE Asset Compliance Optimization Platform 2026 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub - workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	126	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	126	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Workpaper Detail: D09200.003 - SDGE Asset Compliance Optimization Platform 2027 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub - workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	723	0	0	0	0
Non-Labor	0	4,420	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	5,143	0	0	0	0
FTE	0.0	4.2	0.0	0.0	0.0	0.0
Units	0	4	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Workpaper Detail: D09200.004 - SDGE Asset Compliance Optimization Platform 2027 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub - workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	114	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	114	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Workpaper Detail: D09200.005 - SDGE Asset Compliance Optimization Platform 2028 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub - workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	723	0	0	0
Non-Labor	0	0	5,010	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	5,733	0	0	0
FTE	0.0	0.0	4.2	0.0	0.0	0.0
Units	0	0	4	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Workpaper Detail: D09200.006 - SDGE Asset Compliance Optimization Platform 2028 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub - workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	124	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	124	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Workpaper Detail: D09200.008 - SDGE Asset Compliance Optimization Platform 2029 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub - workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	723	0	0
Non-Labor	0	0	0	5,044	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	5,767	0	0
FTE	0.0	0.0	0.0	4.2	0.0	0.0
Units	0	0	0	6	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Workpaper Detail: D09200.009 - SDGE Asset Compliance Optimization Platform 2029 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub - workpaper 9

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	90	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	90	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Workpaper Detail: D09200.010 - SDGE Asset Compliance Optimization Platform 2030 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub - workpaper 10

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	724	0
Non-Labor	0	0	0	0	3,348	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	4,072	0
FTE	0.0	0.0	0.0	0.0	4.2	0.0
Units	0	0	0	0	4	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Workpaper Detail: D09200.011 - SDGE Asset Compliance Optimization Platform 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub - workpaper 11

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	90	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>90</u>	<u>0</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Workpaper Detail: D09200.012 - SDGE Asset Compliance Optimization Platform 2031 (VendSvc Lbr)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub - workpaper 12

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	722
Non-Labor	0	0	0	0	0	3,348
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	4,070
FTE	0.0	0.0	0.0	0.0	0.0	4.2
Units	0	0	0	0	0	4

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: D0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: D09200 - Digital Compliance Foundations
Workpaper Detail: D09200.013 - SDGE Asset Compliance Optimization Platform 2031 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub - workpaper 13

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	90
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>90</u>
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group D09200

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number	D09200
SDG&E IT Capital Workpaper Name	Digital Compliance Foundations
Unit Measure	Projects
Number of Units	26

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
SDG&E Asset Compliance Optimization Platform (2026-2031)	4,072	5,215	5,815	5,815	4,119	4,119
Labor	853	681	681	681	681	681
Non-Labor	3,219	4,534	5,134	5,134	3,438	3,438
Grand Total	4,072	5,215	5,815	5,815	4,119	4,119

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

D09200.001--006, .008--013

SDG&E IT Project Name:

SDG&E Asset Compliance Optimization Platform (2026-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	5.3	162	853	4.2	162	681	4.2	162	681	4.2	162	681	4.2	162	681	4.2	162	681	4,258
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	258	3,093	12	368	4,420	12	418	5,010	12	420	5,044	12	279	3,348	12	279	3,348	24,263
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of months	12	11	126	12	10	114	12	10	124	12	8	90	12	8	90	12	8	90	634
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary						853		681		681		681		681		681		681		681		4,258
	Labor					3,219		4,534		5,134		5,134		5,134		3,438		3,438		3,438		24,897
	Non-Labor					4,072		5,215		5,815		5,815		5,815		4,119		4,119		4,119		29,155
	Total					7,291		9,749		10,949		10,949		10,949		7,557		7,557		7,557		54,052

**Beginning of Workpaper Group
M09090 - Data Platforms & Solutions**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	0	0	0	0	0	256	257	257	513	529	544
Non-Labor	Zero-Based	0	0	0	0	0	421	1,208	428	2,100	2,980	2,100
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		0	0	0	0	0	677	1,465	685	2,613	3,509	2,644
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	3.0	3.1	3.2
Units	Zero-Based	0	0	0	0	0	1	1	1	1	1	1

Business Purpose:

This workpaper outlines the need to establish and enhance scalable data platforms and low-code application development capabilities that enable deeper data insights and support data driven decision making across the organization.

These projects establish secure, compliant, and resilient data and application platforms and solutions that aim to accelerate the adoption of self-service application development and data visualization, reporting, and analytics capabilities thus enabling business units to enhance operational efficiency, strengthen KPI and metric tracking, and improve compliance and regulatory reporting.

Physical Description:

This workpaper contains projects that have utility shared assets. This workpaper is co-sponsored by Electric Distribution O&M (Ex. SDGE-09). This workpaper includes six Data Platforms and Solutions projects with scope that includes:

- Building and enhancing foundational data reporting and analytics platforms to enable efficient and timely reporting and data insights .
- Building and enhancing low code application development for cost-effective applications that are used for improving business processes .

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Unit Measure: Projects

- Implementing automation for timely provisioning and governance of these platforms.
- Integration of security and compliance controls into the platforms
- Software licensing and maintenance needed to support continuity of essential services.

The underlying cost drivers for this capital workpaper relate to labor and non-labor expenditures. Software is the primary cost driver, attributable to licensing fees for the standardized data and application development platforms. Labor consists of engineers for data and automation development, integration, and compliance. Other non-labor costs include purchased labor and vendor services.

Project Justification:

Foundational data and analytics platforms are key enablers for the SDG&E business units to gain data insights for improving and optimizing operational activities. Besides improving productivity, the ability to integrate, manage and visualize data from multiple sources on these platforms allows for efficient and effective understanding and improvement of business processes and operations. Having standardized and well-governed data platforms and tooling also aims to reduce the long-term expenses associated with different technologies, minimizing cost of ownership while providing quicker data insights.

Low code or no code application development platforms and tools enable business units to develop fewer complex applications quickly by shortening the software development lifecycle while operating in a governed and secure platform. Using standardized application development platforms will reduce long-term costs, cost of ownership, and reduction of technical debt.

Without these foundational capabilities, SDG&E would face higher operating expenses due to outdated tools, increased compliance risk, and a growing amount of manual work.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																			
	Base Forecast						Forecast Adjustments						Adjusted-Forecast						
Years	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	
Labor	242	242	242	483	498	513	14	15	15	30	31	31	256	257	257	513	529	544	
NLbr	421	1,208	428	2,100	2,980	2,100	0	0	0	0	0	0	421	1,208	428	2,100	2,980	2,100	
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	663	1,450	670	2,583	3,478	2,613	14	15	15	30	31	31	677	1,465	685	2,613	3,509	2,644	
FTE	1.5	1.5	1.5	3.0	3.1	3.2	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	3.0	3.1	3.2	
Units	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	

Forecast Adjustment Details:

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026	14	0	0	14	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2026 Total	14	0	0	14	0.0	0
2027	15	0	0	15	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2027 Total	15	0	0	15	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028	15	0	0	15	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2028 Total	15	0	0	15	0.0	0
2029	30	0	0	30	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2029 Total	30	0	0	30	0.0	0
2030	31	0	0	31	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2030 Total	31	0	0	31	0.0	0
2031	31	0	0	31	0.0	0
Explanation:	Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.					
2031 Total	31	0	0	31	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
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
Units	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
Units	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
Units	0	0	0	0	0
Vacation & Sick (Nominal \$)					
Labor	0	0	0	0	0

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
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
Units	0	0	0	0	0
Escalation to 2025\$					
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
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
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
Units	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.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
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
Units	0	0	0	0	0

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021 Total	0	0	0	0	0.0	0
2022 Total	0	0	0	0	0.0	0
2023 Total	0	0	0	0	0.0	0
2024 Total	0	0	0	0	0.0	0
2025	0	0	0	0	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Add project as a unit of measure.						
2025 Total	0	0	0	0	0.0	0

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group M09090**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Workpaper Detail: M09090.001 - Data Platforms & Solutions 2026 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	256	0	0	0	0	0
Non-Labor	421	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	<u>677</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	1.5	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Workpaper Detail: M09090.002 - Data Platforms & Solutions 2027 (SW)
Unit Measure: Projects

In-Service Date: 02/28/2027

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	780	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	780	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Workpaper Detail: M09090.003 - Data Platforms & Solutions 2027 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 02/28/2027

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	257	0	0	0	0
Non-Labor	0	428	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	685	0	0	0	0
FTE	0.0	1.5	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Workpaper Detail: M09090.004 - Data Platforms & Solutions 2028 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 02/29/2028

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	257	0	0	0
Non-Labor	0	0	428	0	0	0
NSE	0	0	0	0	0	0
Total	0	0	685	0	0	0
FTE	0.0	0.0	1.5	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Workpaper Detail: M09090.005 - Data & Analytics Foundations 2029 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	513	0	0
Non-Labor	0	0	0	2,100	0	0
NSE	0	0	0	0	0	0
Total	0	0	0	2,613	0	0
FTE	0.0	0.0	0.0	3.0	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Workpaper Detail: M09090.006 - Data & Analytics Foundations 2030 (SW)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	880	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	880	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	0	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Workpaper Detail: M09090.007 - Data & Analytics Foundations 2030 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 7

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	529	0
Non-Labor	0	0	0	0	2,100	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	2,629	0
FTE	0.0	0.0	0.0	0.0	3.1	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0909.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09090 - Data Platforms & Solutions
Workpaper Detail: M09090.008 - Data & Analytics Foundations 2031 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 8

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	544
Non-Labor	0	0	0	0	0	2,100
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	2,644
FTE	0.0	0.0	0.0	0.0	0.0	3.2
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group M09090

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number **M09090**
 SDG&E IT Capital Workpaper Name **Data Platforms & Solutions**
 Unit Measure **Projects**
 Number of Units **6**

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Data Platforms & Solutions (2026-2031)	663	1,450	670	2,583	3,478	2,613
Labor	242	242	242	483	498	513
Non-Labor	421	1,208	428	2,100	2,980	2,100
Grand Total	663	1,450	670	2,583	3,478	2,613

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:
SDG&E IT Project Name:

M09090.001, .003--005, .007--008

Data Platforms & Solutions (2026-2031)

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

Line Item	Unit Description	Labor/Non-Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE	1.5	162	242	1.5	162	242	1.5	162	242	3.0	162	483	3.1	162	498	3.2	162	513	2,220
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0			0			0			0			0			0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	35	421	12	36	428	12	36	428	12	175	2,100	12	175	2,100	12	175	2,100	7,578
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0			0			0			0			0			0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0			0			0			0			0			0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0	1	780	780			0			0	1	880	880			0	1,660
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of months			0			0			0			0			0			0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0			0			0			0			0			0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0			0			0			0			0			0	0
Summary																						
	Labor					242			242			242			483			498			513	2,220
	Non-Labor					421			1,208			428			2,100			2,980			2,100	9,238
	Total					663			1,450			670			2,583			3,478			2,613	11,458

Beginning of Workpaper Group
M09200 - Climate Resilience Platform Foundational Technology

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Unit Measure: Projects

Summary of Results (Constant 2025 \$ in 000s):

Forecast Method		Adjusted Recorded					Adjusted Forecast					
Years		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Labor	Zero-Based	0	0	0	0	0	0	224	224	224	224	224
Non-Labor	Zero-Based	0	0	0	0	0	1,265	4,170	4,970	4,970	4,970	4,970
NSE	Zero-Based	0	0	0	0	0	0	0	0	0	0	0
Total		0	0	0	0	0	1,265	4,394	5,194	5,194	5,194	5,194
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3
Units	Zero-Based	0	0	0	0	0	1	1	1	1	1	1

Business Purpose:

The Climate Resilience Platform project updates and strengthens SDG&E's existing Climate Intelligence Platform so climate model outputs can be translated into standardized, decision-ready information that is aligned with CPUC Climate Adaptation and Vulnerability Assessment (CAVA) requirements and SDG&E planning and operational needs. Climate model projections from established, peer-reviewed external sources require additional processing and framing before they can be applied consistently to internal resilience use cases. This project expands the platform's ability to organize climate information using CAVA-aligned approaches, including additional views through the Global Warming Level (GWL) framing, multiple planning time horizons, and hazard relevant indicators that are most directly tied to system impacts. The intent is to improve the quality, accuracy, and completeness of climate related information used to understand how changing weather patterns and long-term climate conditions may affect electric and gas infrastructure performance over time.

The project upgrades climate data integration, geospatial layers, and hazard indicators so that SDG&E can apply consistent methods when evaluating climate-related exposures and vulnerabilities. By translating climate projections into operationally meaningful hazard layers, the platform can support identification of locations where electric and gas infrastructure may be more vulnerable to extreme heat, wildfire conditions, inland

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Unit Measure: Projects

flooding, coastal flooding, and other long-term environmental stressors. These capabilities support risk-based planning and provide a common set of inputs that can be used across functions when comparing scenarios and prioritizing resilience actions.

The project also expands the use of climate information across SDG&E by enabling climate inputs to be incorporated into additional planning and operational activities. This includes applications that support emergency operations, vegetation management, asset planning, and electrification planning. Overall, the Climate Resilience Platform addresses limitations in the current system related to evaluating technology lifecycle exposure, responds to updated regulatory requirements, and supports customer cost management by improving the ability to target and prioritize resilience investments using climate-informed inputs.

Physical Description:

This workpaper contains projects that have utility non-shared assets. This workpaper is co-sponsored by Electric Distribution O&M (Ex. SDGE-09). The project will establish SDG&E's ability to evaluate climate-driven hazards by creating decision-ready hazard indicators, updated geospatial datasets, and improved climate-science inputs that can be used consistently across planning, engineering, and compliance workflows. This work is required to meet the mandates of CPUC Order R.18-04-019, which established the Climate Adaptation Vulnerability Assessment (CAVA) process and requires utilities to assess climate risks to infrastructure, operations, and communities using best-available science and standardized climate variables.

Under these requirements, utilities must integrate forward-looking climate projections, evaluate system vulnerabilities, assess impacts on disadvantaged and vulnerable communities, and provide data that is transparent, traceable, and suitable for regulatory review. The upgraded Climate Resilience Platform will support this by translating peer-reviewed climate projections into usable hazard indicators; adding global warming level framing; supporting multiple planning horizons; and expanding data layers that link climate conditions to potential impacts on assets and communities.

The platform will also enable foundational Climate Conditioning capabilities that allow climate-hazard information to be used in emergency planning, vegetation-risk evaluation, long-term asset planning, outage-communication activities, and electrification planning. These upgrades reduce the need for separate analyses performed outside the system and help meet recurring CAVA filing obligations. The work includes designing, building, testing, and deploying updated platform components, data pipelines, and mapping tools, performed by internal technical teams and external vendors with

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Unit Measure: Projects

specialized climate-science, geospatial, and system-integration expertise.

Labor costs include engineering and product roles. Vendor services support the creation of a scalable and secure foundation that allows climate hazard information to be integrated with core business systems. Additional non-labor costs include cloud licensing for platform and enterprise tool subscriptions, annual software maintenance, and hardware, including servers, storage, and networking necessary for the Climate Resilience platform.

Project Justification:

Justification for this workpaper's projects includes:

- Improves Long-Term Planning and Investment Decisions: Provides climate-hazard, geospatial, and asset-risk insights that support long-term system planning, renewable energy integration, and electrification, enabling more informed and defensible investment prioritization.
- Strengthens Risk Identification and Transparency (CPUC Order R.18-04-019 – CAVA): Delivers consistent, transparent, and traceable climate-risk data for recurring filings; integrates forward-looking climate projections; improves assessment of system vulnerabilities and impacts on disadvantaged and vulnerable communities.
- Strengthens Infrastructure Compliance (CPUC General Order 165 and Decision 09-08-029): Provides climate-informed asset-risk insights that reinforce inspection, documentation, and corrective-action activities for electric infrastructure under evolving climate conditions.
- Enhances Investment Prioritization: Applies scoring methods combining hazard intensity and frequency, asset sensitivity, and community vulnerability to identify where resilience actions provide the greatest customer and community benefit.
- Improves Operational Readiness and Reliability: Enhances situational awareness for emergency response; informs vegetation-management needs; strengthens distribution-planning analyses; identifies climate-related drivers of localized electrification growth.
- Supports Clear Community Communication: Translates complex climate projections into accessible, location-specific visualizations that improve engagement and understanding of resilience planning.
- Sustains Data Quality and Regulatory Alignment: Sustains reliable, repeatable, and auditable climate-informed evaluations that support ongoing compliance and consistent decision-making.
- State Policy Alignment (SB 100 and 2045 Carbon-Neutrality Mandate): Provides climate-hazard, geospatial, and asset-risk information to support long-term system planning, renewable-energy integration, and electrification; aligns with SB 100 joint-agency expectations requiring integration of climate-driven weather variability and electrification trends into planning processes.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Unit Measure: Projects

Forecast Methodology:

Labor - Zero-Based

A zero-based forecasting approach was used to develop the labor forecast for this workpaper. This method builds estimated labor needs from current project activities and expected work requirements, rather than relying on historical averages that may not reflect current technology conditions or the anticipated scope of work.

Labor cost estimates were developed from the ground up using the average salary for information technology employees within the company. This average salary was applied to the estimated labor hours needed to complete each activity. Labor hour estimates were informed by input from internal delivery teams and external delivery partners, where applicable. These teams relied on experience with similar work to identify the type and amount of labor needed to complete each activity. This includes labor for planning, design, configuration, testing, and implementation.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

Non-Labor - Zero-Based

A zero-based forecasting approach was also used to develop the non-labor forecast. This method develops cost estimates from current needs rather than relying on historical averages, which may not represent today's technology requirements or the expected scope of work .

Non-labor estimates were developed using current market information and input from internal and external delivery teams, where applicable. These teams used experience from similar work to identify expected costs related to systems, software, licensing, infrastructure, and implementation needs.

This approach reflects present conditions, supports consistent development of capital forecasts, and aligns estimates with the anticipated sequence of project activities and resource needs.

NSE - Zero-Based

N/A

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Unit Measure: Projects

Units - Zero-Based

For this workpaper, using number of projects as the unit of measure is used to align costs with the scope and scale of delivery. This approach reflects tangible outputs—such as completed projects—rather than relying on abstract or generalized estimates. It promotes transparency, measurability, and alignment with business objectives, providing a clear connection between investment and deliverables.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Unit Measure: Projects

Summary of Adjustments to Forecast:

In 2025 \$ (000)																		
Years	Base Forecast						Forecast Adjustments						Adjusted-Forecast					
	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031	2026	2027	2028	2029	2030	2031
Labor	0	211	211	211	211	211	0	13	13	13	13	13	0	224	224	224	224	224
NLbr	1,265	4,170	4,970	4,970	4,970	4,970	0	0	0	0	0	0	1,265	4,170	4,970	4,970	4,970	4,970
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,265	4,381	5,181	5,181	5,181	5,181	0	13	13	13	13	13	1,265	4,394	5,194	5,194	5,194	5,194
FTE	0.0	1.3	1.3	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3
Units	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1

Forecast Adjustment Details

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2026 Total	0	0	0	0	0.0	0
2027	13	0	0	13	0.0	0

Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

2027 Total	13	0	0	13	0.0	0
2028	13	0	0	13	0.0	0

Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Unit Measure: Projects

Year	Labor (Zero-Based)	NLbr (Zero-Based)	NSE (Zero-Based)	Total	FTE	Units (Zero-Based)
2028 Total	13	0	0	13	0.0	0
2029	13	0	0	13	0.0	0
Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.						
2029 Total	13	0	0	13	0.0	0
2030	13	0	0	13	0.0	0
Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.						
2030 Total	13	0	0	13	0.0	0
2031	13	0	0	13	0.0	0
Explanation: Reflects changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.						
2031 Total	13	0	0	13	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
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
Units	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
Units	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
Units	0	0	0	0	0
Vacation & Sick (Nominal \$)					
Labor	0	0	0	0	0

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Unit Measure: Projects

Determination of Adjusted-Recorded (in thousands):

	2021	2022	2023	2024	2025
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
Units	0	0	0	0	0
Escalation to 2025\$					
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
Units	0	0	0	0	0
Recorded-Adjusted (Constant 2025\$)					
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
Units	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.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Unit Measure: Projects

Summary of Adjustments to Recorded:

In Nominal \$(000)					
Years	2021	2022	2023	2024	2025
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
Units	0	0	0	0	0

Detail of Adjustments to Recorded in Nominal \$:

Year	Labor	NLbr	NSE	Total	FTE	Units
2021 Total	0	0	0	0	0.0	0
2022 Total	0	0	0	0	0.0	0
2023 Total	0	0	0	0	0.0	0
2024 Total	0	0	0	0	0.0	0
2025	0	0	0	0	0.0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Unit Measure: Projects

Year	Labor	NLbr	NSE	Total	FTE	Units
Explanation: Add unit of measure.						
2025 Total	0	0	0	0	0.0	0

Note: Totals may include rounding differences.

**Beginning of Workpaper Sub Details for
Workpaper Group M09200**

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Workpaper Detail: M09200.001 - Climate Intelligence - Regulatory & Technology 2026 (VendSvc, PurchLbr)
Unit Measure: Projects

In-Service Date: 12/31/2026

Description:

Add sub-workpaper 1

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	0
Non-Labor	1,265	0	0	0	0	0
NSE	0	0	0	0	0	0
Total	1,265	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0
Units	1	0	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Workpaper Detail: M09200.002 - Climate Intelligence - Regulatory & Technology 2027 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2027

Description:

Add sub-workpaper 2

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	224	0	0	0	0
Non-Labor	0	4,170	0	0	0	0
NSE	0	0	0	0	0	0
Total	0	4,394	0	0	0	0
FTE	0.0	1.3	0.0	0.0	0.0	0.0
Units	0	1	0	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Workpaper Detail: M09200.003 - Climate Intelligence - Regulatory & Technology 2028 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2028

Description:

Add sub-workpaper 3

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	224	0	0	0
Non-Labor	0	0	4,970	0	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>5,194</u>	<u>0</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	1.3	0.0	0.0	0.0
Units	0	0	1	0	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Workpaper Detail: M09200.004 - Climate Intelligence - Regulatory & Technology 2029 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2029

Description:

Add sub-workpaper 4

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	224	0	0
Non-Labor	0	0	0	4,970	0	0
NSE	0	0	0	0	0	0
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>5,194</u>	<u>0</u>	<u>0</u>
FTE	0.0	0.0	0.0	1.3	0.0	0.0
Units	0	0	0	1	0	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Workpaper Detail: M09200.005 - Climate Intelligence - Regulatory & Technology 2030 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2030

Description:

Add sub-workpaper 5

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	224	0
Non-Labor	0	0	0	0	4,970	0
NSE	0	0	0	0	0	0
Total	0	0	0	0	5,194	0
FTE	0.0	0.0	0.0	0.0	1.3	0.0
Units	0	0	0	0	1	0

Note: Totals may include rounding differences.

Area: INFORMATION TECHNOLOGY
Witness: William J. Exon
Budget Code: M0920.0
Category: F. Data, Analytics, and Automation
Category-Sub: 1.
Workpaper Group: M09200 - Climate Resilience Platform Foundational Technology
Workpaper Detail: M09200.006 - Climate Intelligence - Regulatory & Technology 2031 (Lbr VendSvc)
Unit Measure: Projects

In-Service Date: 12/31/2031

Description:

Add sub-workpaper 6

Forecast In 2025 \$(000)

Years	2026	2027	2028	2029	2030	2031
Labor	0	0	0	0	0	224
Non-Labor	0	0	0	0	0	4,970
NSE	0	0	0	0	0	0
Total	0	0	0	0	0	5,194
FTE	0.0	0.0	0.0	0.0	0.0	1.3
Units	0	0	0	0	0	1

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper Group M09200

SDG&E Information Technology (IT) - Capital Supplemental Workpaper

SDG&E IT Capital Workpaper Number	M09200
SDG&E IT Capital Workpaper Name	Climate Resilience Platform Foundational Technology
Unit Measure	Projects
Number of Units	6

Forecast In 2025 \$(000) - Minor variances may occur due to rounding

SDG&E IT Capital Projects	2026	2027	2028	2029	2030	2031
Climate Intelligence - Regulatory & Technology (2026-2031)	1,265	4,381	5,181	5,181	5,181	5,181
Labor	0	211	211	211	211	211
Non-Labor	1,265	4,170	4,970	4,970	4,970	4,970
Grand Total	1,265	4,381	5,181	5,181	5,181	5,181

The variance between the direct costs found in workpapers and the supplemental workpapers supporting Ex. SCG-10/SDGE-14 are due to a system wide adjustment to reflect changes in connection with the compensation modernization initiative. Please refer to the Compensation and Benefits testimony, Ex. SCG-16/SDGE-20.

TY2028 GRC Forecast - Details

SDG&E IT Workpaper Detail:

M09200.001--006

SDG&E IT Project Name:

Climate Intelligence - Regulatory & Technology (2026-2031)

Forecast in 2025 \$(000) - Minor variances may occur due to rounding

Line Item (select the ones that apply and leave the others blank)	Unit Description	Labor/Non- Labor	Unit Metric	2026			2027			2028			2029			2030			2031			Total Cost
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	
Employee (Internal) Labor	Blended Rate Internal (FTE)	Labor	# of FTE			0	1.3	162	211	1.3	162	211	1.3	162	211	1.3	162	211	1.3	162	211	1,053
Purchased (External) Labor	Blended Rate External (monthly)	Non-Labor	# of contract months			0		0	0		0	0		0	0		0	0		0	0	0
Professional Services	Blended Rate (monthly)	Non-Labor	# of contract months	12	105	1,265	12	348	4,170	12	414	4,970	12	414	4,970	12	414	4,970	12	414	4,970	25,315
Workspace Devices (Hardware)	MDT, Laptops, iPads, etc.	Non-Labor	# of devices			0		0	0		0	0		0	0		0	0		0	0	0
Telecom Devices (Hardware)	Telco Tower, Microwave, etc.	Non-Labor	# of devices			0		0	0		0	0		0	0		0	0		0	0	0
Data Center Infrastructure (Hardware)	Servers, Storage, etc.	Non-Labor	# of devices			0		0	0		0	0		0	0		0	0		0	0	0
Software License (On-Premise) - Perpetual or Subscription (Term)	On-Prem Software License	Non-Labor	# of licenses			0		0	0		0	0		0	0		0	0		0	0	0
Software License (Cloud) - Prepaid Subscription (Term)	Cloud Subscription License	Non-Labor	# of licenses			0		0	0		0	0		0	0		0	0		0	0	0
Cloud Infrastructure - Non-prepaid Consumption (during build)	Consumption services (Monthly)	Non-Labor	# of months			0		0	0		0	0		0	0		0	0		0	0	0
Cloud Infrastructure - Prepaid Consumption (Term)	Blocks of Capacity	Non-Labor	# of capacity			0		0	0		0	0		0	0		0	0		0	0	0
Prepaid Software Maintenance (with software asset purchase)	Software maintenance contract	Non-Labor	# of contracts			0		0	0		0	0		0	0		0	0		0	0	0
Prepaid Hardware Maintenance (with hardware asset purchase)	Hardware maintenance contract	Non-Labor	# of contracts			0		0	0		0	0		0	0		0	0		0	0	0
Summary						0		211		211		211		211		211		211		211		1,053
						1,265		4,170		4,970		4,970		4,970		4,970		4,970		4,970		25,315
						1,265		4,381		5,181		5,181		5,181		5,181		5,181		5,181		26,368