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Proceeding: 2024 General Rate Case
Application: A.22-05-015/-016 (cons.)
Exhibit: SDG&E-212

**REBUTTAL TESTIMONY
OF TYSON SWETEK
(ELECTRIC DISTRIBUTION O&M)**

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



May 2023

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**REBUTTAL TESTIMONY OF
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I. SUMMARY OF DIFFERENCES

TOTAL O&M - Constant 2021 (\$000)			
	Base Year (BY) 2021	Test Year (TY) 2024	Change
SDG&E	\$110,833	\$130,962 ¹	\$20,129
CAL ADVOCATES	\$110,833	\$114,986	\$4,153
TURN	\$110,833	\$127,880	\$17,047
FEA	\$110,833	\$115,850	\$5,017
UCAN	\$110,833	\$131,795	\$20,962

II. INTRODUCTION

This rebuttal testimony regarding San Diego Gas & Electric Company's (SDG&E or Company) request for Electric Distribution Operations and Maintenance (O&M) addresses the following testimony from other parties:

- The Public Advocates Office of the California Public Utilities Commission (Cal Advocates) as submitted by Witness Ry Andresen (Exhibit CA-08 (Andresen)), dated March 27, 2023.
- The Utility Reform Network (TURN), as submitted by Witness Garrick Jones (Exhibit TURN-07 (Jones)), dated March 27, 2023.
- The Utility Reform Network (TURN), as submitted by Witness Garrick Jones (Exhibit TURN-10 (Jones)), dated March 27, 2023
- The Utility Reform Network (TURN), as submitted by Witness Robert Finkelstein (Exhibit TURN-15 (Finkelstein)), dated March 27, 2023
- The Federal Executive Agencies (FEA), as submitted by Witness Ralph C. Smith (Exhibit FEA-01 (Smith)), dated March 27, 2023
- The Utility Consumers Action Network (UCAN), as submitted by Witness Dr. Eric Charles Woychik (Exhibit UCAN (Woychik)), dated March 27, 2023.

¹ While compiling information for several data requests, SDG&E discovered errors in TY 2024 costs, resulting in SDG&E overstating Electric Distribution O&M amounts by a total of \$1,759 million. See Section IV below for a summary of errata.

1 As a preliminary matter, the absence of a response to any particular issue in this rebuttal
2 testimony does not imply or constitute agreement by SDG&E with the proposal or contention
3 made by these or other parties. The forecasts contained in my direct testimony, performed at the
4 project level, are based on sound estimates of SDG&E's revenue requirements at the time of
5 testimony preparation.

6 In this rebuttal testimony, SDG&E predominantly addresses five activities of intervenor
7 concern:

- 8 • UCAN disputes costs associated with customer Distributed Energy Resource
9 (DER) interconnection and management of the electric distribution system
10 necessary to enable those resources for electric grid benefit (Reliability and
11 Capacity and Electric System Operations cost categories). My rebuttal testimony
12 shows that UCAN's concerns of SDG&E technological obsolescence are
13 unfounded and that SDG&E's investments in both IT infrastructure and upskilling
14 SDG&E's technology and customer interconnection planning workforce are
15 necessary to meet current California Public Utilities Commission (Commission or
16 CPUC) regulation, maintain industry-wide technology necessary to run the
17 modern grid, and enable grid interconnection of customer owned DERs.
- 18 • Cal Advocates and FEA dispute SDG&E's forecast methodology related to
19 storeroom costs within the Electric System Operations cost category. My rebuttal
20 testimony proves that SDG&E's forecast method is accurate and there is a clear
21 link between storeroom costs and gas and electric infrastructure construction
22 activities.
- 23 • Cal Advocates, FEA, and TURN dispute SDG&E's forecast and the need for the
24 development and growth of SDG&E's lineman workforce and non-labor costs
25 within the Electric Regional Operations cost category. My rebuttal testimony
26 clarifies costs for workforce growth and shows that growth and development of
27 this critical competency is necessary to maintain SDG&E's safe and reliable
28 electric system, as well as meet future targets for wildfire hardening, aging
29 infrastructure replacement, and customer driven infrastructure programs.
- 30 • Cal Advocates and FEA dispute SDG&E's forecast methodology within the Skills
31 and Compliance Training cost category. My rebuttal testimony steps through

1 accounting changes and timing of costs that may have confused intervenor
2 analysis, and also provides clarity on interpreting SDG&E's forecast.

- 3 • Cal Advocates and FEA dispute the need for SDG&E's forecasted Pole
4 Attachment Data Compliance program within the Compliance Management cost
5 category. My rebuttal testimony directly shows SDG&E's diligence with cost and
6 scope calculations in regard to this new program and provides program
7 implementation updates demonstrating its continued need.

8 My rebuttal testimony also addresses remarks and recommendations by UCAN witness
9 Woychik regarding SDG&E's Grid Modernization Plan (GMP). Contrary to UCAN's claims,
10 SDG&E believes the GMP, as submitted, clearly outlines the Company's grid modernization
11 vision, anchors SDG&E's commitment to innovate and optimize a grid that is safe and reliable
12 and accelerates decarbonization, is consistent with state policies, and is centered around
13 delivering value and choice for all customers. The projects referenced in the GMP will support
14 safe and reliable operation of SDG&E's distribution system in a high DER, high electrification,
15 and low carbon energy future. Because these projects will allow SDG&E to integrate the large
16 numbers of DERs projected to be connected to the distribution system (either directly or on the
17 customer side of the meter), SDG&E's position is that the recommendations by UCAN to reduce
18 or eliminate the O&M and capital budgets associated with those projects should be rejected.

19 Lastly, I also address errata identified during the course of discovery and update my
20 forecast accordingly. These items collectively represent a reduction to the Electric Distribution
21 O&M requested funding for Test Year 2024 by \$1.759 million. SDG&E updates its total request
22 for Electric Distribution O&M to \$130,962 million. Section V of my testimony provides a
23 summary of errata with more details for each correction found within Section IV under each cost
24 category.

25 **A. Cal Advocates**

26 The following is a summary of Cal Advocates' position(s) on Electric Distribution O&M:²

² March 27, 2023, Public Advocates Office Report on Electric Distribution Operations and Maintenance (Ry Andresen), referenced as Ex. CA-08 (Andresen).

- 1 • Cal Advocates recommends \$31.505 million for Electric System Operations
2 (SDG&E-12-WP-R 1ED003), which is \$9.520 million lower than SDG&E’s
3 submitted Test Year 2024 forecast of \$41.025 million.
- 4 • Cal Advocates recommends \$36.004 million for Electric Regional Operations
5 (SDG&E-12-WP-R 1ED008), which is \$4.764 million lower than SDG&E’s
6 submitted Test Year 2024 forecast of \$40.768 million.
- 7 • Cal Advocates recommends \$2.839 million for Skills and Compliance Training
8 (SDG&E-12-WP-R 1ED009) which is \$990,000 lower than SDG&E’s submitted
9 Test Year 2024 forecast of \$3.829 million.
- 10 • Cal Advocates recommends \$4.815 million for Compliance Management
11 (SDG&E-12-WP-R 1ED015), which is \$2.459 million lower than SDG&E’s
12 submitted Test Year 2024 forecast of \$7.274 million.
- 13 • Cal Advocates does not oppose any other SDG&E forecasts within Electric
14 Distribution O&M.

15 **B. TURN**

16 The following is a summary of TURN’s position(s) on Electric Distribution O&M:³

- 17 • TURN recommends adjusting the Electric System Operations calculation for
18 Storeroom Expenses (SDG&E-12-WP-R 1ED003) to any adjustments the
19 Commission makes to the electric distribution capital program.
- 20 • TURN recommends \$35.928 million for Electric Regional Operations (SDG&E-
21 12-WP-R 1ED008), which is \$4.84 million lower than SDG&E’s submitted 2024
22 Test Year forecast of \$40.768 million.
- 23 • TURN disputes the justification for SDG&E’s forecast of fleet vehicle additions.⁴

³ March 27, 2023, Prepared Direct Testimony of Garrick Jones on Electric Distribution, on behalf of The Utility Reform Network [TURN], referenced as Ex. TURN-07 (Jones).

⁴ March 27, 2023, Prepared Testimony of Garrick Jones Addressing SDG&E & SoCalGas Fleet Services and Compensation & Benefits, on Behalf of The Utility Reform Network [TURN], referenced as Ex. TURN-10 (Jones).

- TURN disputes the creation of the Track 2 Costs Memorandum Account and alternatively recommends the utility create a proposal for a balancing account alongside a memorandum account for over-authorized cost recovery.⁵
- TURN does not oppose any other SDG&E forecasts within Electric Distribution O&M

C. FEA

The following is a summary of Cal Advocates' position(s) on Electric Distribution O&M:⁶

- FEA recommends \$35.730 million for Electric System Operations (SDG&E-12-WP-R 1ED003), which is \$5.295 million lower than SDG&E's submitted 2024 Test Year forecast of \$41.025 million.
- FEA recommends \$35.266 million for Electric Regional Operations (SDG&E-12-WR-R 1ED008), which is \$5.502 million lower than SDG&E's submitted 2024 Test Year forecast of \$40.768 million.
- FEA recommends \$2.855 million for Skills and Compliance Training (SDG&E-12-WP-R 1ED009), which is \$974 thousand lower than SDG&E's submitted 2024 Test Year forecast of \$3.829 million.
- FEA recommends \$2.175 million for Compliance Management (SDG&E-12-WR-R 1ED015), which is \$5.099 million lower than SDG&E's submitted 2024 Test Year forecast of \$7.274 million.
- FEA does not oppose any other SDG&E forecasts within Electric Distribution O&M.

D. UCAN

- The following is a summary of UCAN's position(s) on Electric Distribution Operations:⁷

⁵ March 27, 2023, Prepared Testimony of Robert Finkelstein Addressing Burden of Proof, EEI Dues, Directors and Officers Insurance, and Balancing and Memorandum Accounts, on Behalf of The Utility Reform Network [TURN], referenced as Ex. TURN-15 (Finkelstein).

⁶ March 27, 2023, Prepared Direct Testimony and Exhibits of Ralph C. Smith, on behalf of Federal Executive Agencies [FEA], referenced as Ex. FEA-01 (Smith).

⁷ March 27, 2023, Prepared Direct Testimony of Dr. Eric Charles Woychik, on behalf of The Utility Consumers Action Network [UCAN], referenced as Ex. UCAN (Woychik).

- 1 • UCAN disputes SDG&E’s 2024 Test Year forecast expense of \$407 thousand in
2 System Reliability and Capacity (SDG&E-12-WP-R 1ED001), for DER
3 interconnection Workload Demands and Compliance Projects.
- 4 • UCAN disputes SDG&E’s need for the DIIS – Rule 21 and New Energy Metering
5 IT Enhancement projects.
- 6 • UCAN disputes SDG&E’s 2024 Test Year forecast expense of \$519 thousand in
7 Electric System Operations (SDG&E-12-WP-R 1ED003), for ADMS and
8 SCADA Workforce Development.
- 9 • UCAN disputes SDG&E’s need for the Smart Grid Operations, Distributed
10 Energy Resource Management (DERMS), and Grid Small Cap IT projects.
- 11 • UCAN does not oppose any other SDG&E forecasts within Electric Distribution
12 O&M.

13 **E. UCAN (Grid Modernization Plan)**

14 The following is a summary of UCAN’s position on SDG&E’s Grid Modernization Plan:

- 15 • UCAN recommends that, the \$5.4 million in O&M and \$26.7 million in capital
16 for DER integration be denied, claiming these investments are likely to be
17 stranded.^{8,9}
- 18 • UCAN contends that the GMP and other parts of SDG&E’s GRC filing are
19 unresponsive to state policies and proceedings, including the High DER Order
20 Instituting Rulemaking (OIR), Rulemaking (R.) 21-06-007, as they relate to
21 customer side of the meter (CSOM) DERs.¹⁰
- 22 • UCAN claims SDG&E is seeking to enable DERs on the utility side of the meter
23 (USOM) but not on the CSOM.^{11,12}

⁸ Ex. UCAN (Woychik) at 7.

⁹ In its General Rate Case (GRC) filing, SDG&E requested GMP funding for costs primarily driven by DER integration: \$1.3 million for O&M and \$5.4 million for capital in TY2024. UCAN appears to have mislabeled capital cost as O&M, and then misused the 2022-2024 capital cost as TY2024.

¹⁰ Ex. UCAN (Woychik) at 9.

¹¹ *Id.* at 49.

¹² *Id.* at 189.

- 1 • UCAN claims SDG&E proposes capital investments and a GMP that will retard
2 technology innovation, reduce the penetration of DERs, and increase grid
3 interconnection costs.¹³
- 4 • UCAN alleges that SDG&E has a poor record of integrating CSOM DERs into its
5 infrastructure. UCAN further alleges that the amount of demand response in the
6 SDG&E distribution service area is a salient example of SDG&E
7 underperforming on the Commission’s directives to implement DERs.¹⁴
- 8 • UCAN states that SDG&E fails to present a DER valuation framework as directed
9 by CPUC.¹⁵
- 10 • UCAN argues that none of SDG&E’s testimony, including the GMP testimony,
11 address the CPUC’s recent Cal-Fuse report.¹⁶
- 12 • UCAN claims SDG&E’s GMP aims to provide USOM DERs and distribution
13 technology, and to avoid serving customers especially with CSOM DERs.¹⁷
- 14 • UCAN claims SDG&E’s GMP appears to selectively and severely limit DER
15 technology to primarily behind the meter renewables and USOM-based DER
16 microgrids.¹⁸
- 17 • UCAN argues that SDG&E’s GMP suggests that SDG&E seeks to control
18 virtually, with telemetry, all DERs that are connected to the grid.¹⁹
- 19 • UCAN claims smart inverters coupled with energy storage allows customers to
20 provide their own resiliency, and that SDG&E has a utility-centric view of
21 resiliency.²⁰

¹³ *Id.* at 95.

¹⁴ *Id.* at 152-153.

¹⁵ *Id.* at 154.

¹⁶ *Id.* at 156.

¹⁷ *Id.* at 189.

¹⁸ *Id.* at 212.

¹⁹ *Id.* at 215.

²⁰ *Id.* at 222.

- 1 • UCAN contends that SDG&E’s proposed projects driven by “DER Integration”
2 are largely outmoded and obsolete because they are designed only for USOM
3 DERs, not to integrate CSOM DERs.²¹
- 4 • UCAN recommends that SDG&E’s proposed O&M budget for grid
5 modernization and advanced modeling be denied at this time.²²
- 6 • UCAN claims that SDG&E has been using DERMS exclusively for its Demand
7 Response (DR) program,²³ and that SDG&E inappropriately conflates Demand
8 Response Management System (DRMS) and DERMS.²⁴
- 9 • UCAN claims SDG&E’s GMP fails to address the huge amount of unmanaged
10 load expected in a high DER scenario.²⁵
- 11 • UCAN raises specific issues with the DER integration-driven projects referenced
12 in the GMP.²⁶

13 **III. GENERAL REBUTTAL**

14 **A. Addressing TURN’s Concerns with New Fleet Vehicles**

15 Witness Jones of TURN recommends that the Commission “Eliminate the Vehicle
16 Additions forecast at 100% for both utilities [SCG and SDG&E].”²⁷ Mr. Jones’ recommendation
17 is based on the argument that “...incremental vehicles are either mentioned in passing, with no
18 quantification of the number of vehicles required, let alone substantive or trackable support for
19 the forecast.”²⁸

21 *Id.* at 240-242.

22 *Id.* at 242.

23 *Id.* at 249.

24 *Id.* at 250.

25 *Id.* at 257.

26 These issues are associated with projects proposed by SDG&E in the GRC testimony chapters where the respective budget requests reside.

27 Ex. TURN-10 (Jones) at 6.

28 *Id.* at 11.

SDG&E provided a summary of requested fleet vehicles and associated costs in the fleet workpapers of SDG&E witness Alvarez, Ex. SDG&E-22-R (Alvarez).²⁹ SDG&E did not provide a breakdown of fleet vehicles needed in each of the Electric Distribution cost categories and neither TURN nor any other intervenor requested further details on fleet vehicles needed to support Electric Distribution O&M activities. In response to TURN’s concern for further details on new fleet vehicles, the table below provides details on fleet vehicles needed to support activities within my Electric Distribution O&M testimony. The table includes references to sections of testimony and workpapers that describe the drivers of each vehicle need. The 22 vehicles identified in this summary represent a 4% increase to the fleet of vehicles currently utilized by business units within Electric Distribution.

Workpaper ID	# Vehicles	Identification in Fleet Workpapers³⁰
1ED002 – Construction Management	3	GRC Electric Ops 13-15
1ED006 – ET&D Substation C&O	6	GRC Electric Ops 1-6
1ED006.002 – ET&D Substation C&O (Relay & SCADA)	6	GRC Electric Ops 7-11
1ED008 – Electric Regional Operations	6	GRC Electric Ops 17-22
1ED014 – Project & Portfolio Management	1	GRC Electric Ops 16

IV. REBUTTAL TO PARTIES’ O&M PROPOSALS

A. Reliability & Capacity

NON-SHARED O&M – Constant 2021 (\$000)			
	3 Year Average	Test Year 2024	Change
SDG&E	\$2,034	\$2,461	\$427
UCAN	\$2,034	\$2,054	\$20

1. DIIS IT Projects and Interconnection Labor

a. UCAN

Witness Dr. Eric Woychik of UCAN discusses SDG&E’s “proposed additional grid O&M budget for grid modernization and advanced interconnection and modeling

²⁹ Ex. SDG&E-22-WP-R (Alvarez) at 65.

³⁰ *Id.* at 65.

1 (\$1,300,502).”³¹ This reference includes \$406,502 in O&M labor in Reliability and Capacity.
2 Dr. Woychik recommends that this request be denied and states the following in support of his
3 recommendation:

- 4 1. “The proposed additional grid O&M budget request for grid modernization and
5 advanced interconnection and modeling (\$1,300,502) is also outmoded,
6 inconsistent with the Commission’s priorities, and appears unjustified.”³²
- 7 2. “Not only are these expenditures untimely and inconsistent and will face
8 technology obsolescence, but they are improperly focused, leaving this set of
9 O&M costs to support only projects that will be obsolete and thus stranded.”³³

10 Dr. Woychik also recommends that SDG&E’s request for the funding of IT capital
11 projects Distribution Interconnection Information System (DIIS) 6.0 – Rule 21 and New Energy
12 Metering Enhancements and DIIS – Rule 21 and New Energy Metering Enhancements be
13 denied. In support of his recommendation, Dr. Woychik stated, “UCAN contends that there are
14 fewer proceedings now that involve interconnection requests, as related proceedings have been
15 consolidated, and there is no evidence that interconnection requests are increasing, particularly in
16 light of the expectation that solar PV incentives under NEM 3.0 will be decreasing.”³⁴

17 Dr. Woychik does not take issue with any other aspects of SDG&E’s Test Year 2024
18 costs. UCAN’s total recommendation for Test Year 2024 is \$2,054,000.

19 **i. SDG&E maintains that the forecasted headcount is**
20 **justified and required**

21 SDG&E’s headcount is justified and required to meet mandated requirements, processes
22 and programs and associated regulatory policy and reporting related to multiple ongoing
23 proceedings, including Rule 21 (R.17-07-007), High DER (R.21-06-017), Distribution Resources
24 Plans (DRP) (R.14-08-013), the Microgrid OIR (R.19-09-009), Emergency Load Reduction
25 Program (ELRP) (R.20-11-003), Net Energy Metering (NEM) (R.14-07-002), and Net Billing
26 (R.20-08-020). In particular, SDG&E’s proposed headcount supports the anticipated increase in

³¹ Ex. UCAN (Woychik) at 241 (citation omitted).

³² *Id.*

³³ *Id.* at 241-242.

³⁴ *Id.* at 242.

1 and complexity of customer requests to interconnect generation to the distribution system via
2 Rule 21 and Wholesale Distribution Access Tariff (WDAT) interconnection agreements. The
3 new headcount is required to timely process an increasing number of applications and customer
4 requests, as well as to support the technical studies required for these projects. Technical studies
5 are essential for ensuring SDG&E can maintain a safe and reliable grid with large numbers of
6 USOM and CSOM DERs.³⁵

7 Further, the Integration Capacity Analysis (ICA) Portal has been mandated and requires
8 new improvements and features. The Distribution Planning Process has grown in complexity
9 because of requirements emerging from the DRP and because requirements that are expected to
10 emerge from the High DER proceedings. More extensive analysis and data processing will be
11 required, which, in turn, requires additional Full-time Employee Equivalent (FTEs). Technology
12 can improve the accuracy of these processes, but the rate at which they have grown requires
13 additional head count to ensure SDG&E can meet its customers' needs and requests. Simply put,
14 the work items SDG&E's proposed additional FTEs will perform cannot be automated or
15 replaced by technology. UCAN fails to address, let alone demonstrate, how technology can
16 replace engineering analysis, or reduce headcount, and SDG&E disagrees with UCAN's
17 recommendation to deny funding for additional FTEs.

18 **ii. Importance of Expanding DIIS**

19 SDG&E's DIIS is an online interconnection portal by which interconnection customers
20 submit requests to SDG&E for interconnecting third-party generating facilities and energy
21 storage/battery systems to SDG&E's distribution system via SDG&E's CPUC-jurisdictional
22 Rule 21 tariff. Describing DIIS merely as a portal does not fully describe its complete
23 functionality. In addition to providing an excellent end-customer online interface, DIIS is also
24 an internal workflow management processing tool. It automates many previously manual
25 administrative, technical, and communication steps as a project moves through the multi-step
26 interconnection process, leading to the execution of an interconnection agreement and the
27 achievement of in-service for the generating or storage facility.

³⁵ UCAN's testimony confirms that a significant increase in the number of DERs is on the way. UCAN's "conservative scenario" for year 2027 is "350 thousand EV chargers and 10 million EVs," "8.5 million solar PV rooftops in place," "14 Gigawatts of customer-based storage batteries (700,000 units average 20 kW)." Ex. UCAN (Woychik) at 64-65 (citations omitted).

1 The power of DIIS is unleashed as it interfaces with other systems within SDG&E,
2 including operational systems, and financial/billing systems. DIIS also interfaces with systems
3 used by the engineers in Distribution Planning to perform the screens and interconnection studies
4 that are required to evaluate each interconnection request's unique impacts to the distribution
5 system. As an end-to-end information system, DIIS creates benefits for both external customers
6 as well as internal users. It serves as the customer-facing information system, allowing
7 customers to view their interconnection requests, with the ability to visualize the status of each
8 interconnection request in near-real time without having to call or email SDG&E personnel.

9 For internal users, DIIS is not only a tool used in the technical and administrative
10 processing of large numbers of interconnection requests. DIIS also serves as the system of
11 record, providing a "single source of truth" for interconnection request data. As such, DIIS has
12 become a valuable data repository that allows SDG&E to answer the myriad of data requests for
13 interconnection data that are received from the CPUC and intervenors.

14 For all the capabilities it already provides, DIIS will provide even greater value with
15 expansion. Just like adding apps to a smart phone, DIIS was designed to be an expandable
16 platform, where in Phase 2 SDG&E planned to incorporate additional workstreams beyond the
17 initial build that incorporated the Net Energy Metering/Rooftop solar workstream. SDG&E's
18 vision was to add additional workstreams, representing other types of interconnection requests,
19 such as Rule 21 export, Rule 21 non-export, and Wholesale Distribution Open Access Tariff
20 (WDAT) interconnection requests. These other workstreams are more complex from a technical
21 and administrative perspective, with many more steps to the process than the basic NEM projects
22 and will equally benefit from the improved workflow management that DIIS Phase 1 platform
23 established.

24 UCAN's request for denial is short-sighted and ignores these and other drivers. There are
25 many more interconnection streams than just residential rooftop solar, with drivers that are
26 completely unrelated to the sunset of NEM and implementation of the new Net Billing Tariff
27 (NBT). Dr. Woychik's opinion that there will be a decline in interconnection requests due to the
28 sunset of NEM is speculative. Even if under NBT there is a decline in the number of basic
29 rooftop solar interconnection requests, other types of interconnections, be they in front-of-meter
30 or behind-the-meter requests, are likely to continue to grow. Since these other interconnections

1 are the more complex workstreams, incorporating them into DIIS will provide immediate
2 additional benefits to both external and internal users.

3 UCAN bases its position on the fact that regulatory proceedings for legacy NEM are
4 consolidating and completing. But this is only part of the story. While legacy NEM is
5 sunsetting, UCAN completely ignores active regulatory proceedings for the other workstreams
6 mentioned above, such as the current Rule 21 proceeding that has been active since 2017, as well
7 as the High DER OIR, and Microgrid OIR, as well as ongoing Smart Inverter Working Group
8 discussions, and other proceedings that are providing additional workstreams or adding
9 complexity to existing workstreams. SDG&E will need to incorporate developments from these
10 ongoing initiatives into DIIS as part of Phase 2. To provide greater specifically, below is a list of
11 the interconnection streams that are growing in numbers due to other drivers wholly unrelated to
12 the new NBT. Each of these streams, programs, or tariff modifications adds complexity to the
13 interconnection work process and are wholly unrelated to the expected decline in NBT requests.

- 14 • Adding storage to existing NEM under the Self Generation Incentive Program (SGIP)
- 15 • Multi-family PV and storage (SOMAH)
- 16 • Vehicle-to-grid projects
- 17 • Microgrid projects, including pilots with local communities
- 18 • Emergency Load Reduction Plan (ELRP), registering and interconnecting
19 generators to participate
- 20 • Rule 21 export programs such as RES-BCT and whatever successor to feed-in
21 tariff (RE-MAT) emerges
- 22 • Rule 21 non-export programs under SGIP
- 23 • Wholesale market participating resources, including PV and storage (WDAT)
- 24 • Rule 21 notification-only process for small non-export PV and battery storage
- 25 • Rule 21 projects utilizing a Limited Generation Profile (LGP)
- 26 • Smart Inverter and Control System continued development and implementation
- 27 • Rule 21 required performance reporting

28 To leave DIIS Phase 2 unfunded would frustrate the utility's ability to continue to
29 provide a best-in-class customer experience in the interconnection space. It would undermine
30 SDG&E's ability to manage these other pieces of total flow of interconnection work over the
31 next decade and beyond, leaving behind frustrated interconnection customers and developers,

1 and taking a dramatic step back in the efficiency of the overall interconnection process for all
2 users.

3 **B. Electric Systems Operations**

NON-SHARED O&M* - Constant 2021 (\$000)			
	Base Year 2021	Test Year 2024	Change
SDG&E	\$30,150	\$41,025 ³⁶	\$10,875
CAL ADVOCATES	\$30,150	\$31,505	\$1,355
FEA	\$30,150	\$35,730	\$5,580
TURN	\$30,150	\$41,025	\$10,875

4 *These costs do not include the GISS sub-workpaper (1ED003.001)

5 **1. Storeroom Forecast Expenses**

6 Cal Advocates, FEA, and TURN take issue and propose alternative approaches to
7 forecasting expenses in Electric System Operations, particularly related to non-labor storeroom
8 expenses. Each intervenor's concerns and forecast analysis are directly addressed below.

9 **a. Cal Advocates**

10 Witness Andresen of Cal Advocates takes issue with forecasting for non-labor expenses
11 related to material storerooms for Electric System Operations.³⁷ He does not take issue with the
12 rest of SDG&E's forecast for ESO labor and non-labor activities. As an alternative approach to
13 forecasting SDG&E's Test Year 2024 costs, Mr. Andresen recommends approving SDG&E's
14 labor forecast. For non-labor he recommends taking a 2021 base year cost of \$27.116 million
15 plus incremental non-storeroom activities, totaling \$27.708 million. Cal Advocates' total
16 recommendation for Test Year 2024 is \$32.427 million. Mr. Andresen argues the following in
17 support of this approach:³⁸

- 18 1. "SDG&E's forecast methodology does not use a forecasted quantity of storeroom
19 parts or specific incremental projects."

³⁶ An adjustment to the TY2024 forecast may be warranted based on the commission's final approved 2024 gas and electric infrastructure capital, which influences expenses related to management of Storerooms (refer to SDG&E-12-WP-R 1ED003 at 42 for the storeroom forecast methodology).

³⁷ Ex. CA-08 (Andresen) at 7.

³⁸ *Id.* at 11.

- 1 2. “SDG&E’s data request responses also do not demonstrate that the ratio of O&M
2 to capital dollars in 2021 is an appropriate basis for forecasting future storeroom
3 stock.”
- 4 3. “SDG&E’s methodology results in a significantly higher forecast in TY 2024 than
5 in any of the last five years (2017-2021) but provides no protection for ratepayers
6 if it utilizes less storeroom stock than forecasted.”

7 SDG&E’s forecast for storeroom costs provides an analysis that shows a strong
8 correlation between SDG&E’s infrastructure construction costs and storeroom costs that support
9 those construction activities.³⁹ The primary drivers within the overall storeroom costs are
10 comprised of exempt gas and electric construction materials directly utilized on construction
11 projects and freight required for material deliveries to construction and inventory warehousing
12 sites. Specific inventory tracking and accounting to specific jobs is not necessary to prove this
13 correlation given both the nature of the work and general trends observed. With this correlation
14 established, it is reasonable to assume that storeroom costs will continue to increase at a linear
15 rate with overall infrastructure construction within SDG&E.

16 Witness Andresen’s recommendation to fund SDG&E’s storerooms at 2021 expense
17 levels would underfund SDG&E storeroom operations. If Mr. Andresen’s approach was applied
18 to funding for 2022 storeroom activities, his forecast of \$25.1 million is far less than actual 2022
19 costs of \$30.908 million. This results in a funding deficit of \$5.8 million as compared to 2022
20 actuals. SDG&E contends that its proposed methodology is the more accurate and reasonable
21 forecast method.

22 **b. FEA**

23 Witness Smith of FEA proposes utilizing a base year 2022 forecast for Test Year 2024
24 for Electric System Operations of \$35.730 million.⁴⁰ Mr. Smith’s alternate forecasting approach
25 relies on three main arguments pertaining to the storeroom costs and a general argument
26 summarized below.

³⁹ Ex. SDG&E-12-WP-R (Swetek) at 42.

⁴⁰ Ex. FEA (Smith) at 23.

- 1 1. SDG&E “stated that ‘the costs increase with total electric capital spend.’
2 However, the Company [SDG&E] didn’t simply base it on the total electric
3 spend, but also based it on electric, gas, and wildfire capital spending.⁴¹”
4 2. “[T]he Storeroom costs do not appear to increase in correspondence with total
5 electric capital spending. Base electric capital spending declined from 2017-2019
6 and increased in 2020 and 2021 but electric storeroom expense increased each
7 year during this period...the [storeroom] costs have increased in each year from
8 2017-2022.⁴²”
9 3. “[T]he company’s forecast over budgeted the actual cost in 2022, which supports
10 a concern that the Company’s forecast for the TY2024 may also be overstated.⁴³”

11 SDG&E believes the assessment by Witness Smith is flawed as it fails to consider both
12 the use of and key elements of how the Storeroom cost accounts operate and simply reiterates the
13 value of FEA’s forecast. Mr. Smith fails to consider the activities that are supported by
14 storerooms, timing of storeroom costs, and additional details of 2022 spending.

15 To address Witness Smith’s concern of SDG&E’s inclusion of gas and wildfire
16 forecasted capital spend in its O&M forecast for Storerooms, SDG&E clarified in discovery that
17 Storerooms activities support both gas and electric infrastructure construction and wildfire
18 hardening projects (which focus on electric infrastructure).⁴⁴

19 With respect to Witness Smith’s concern of the drop in storeroom costs when capital
20 declined, it is important to highlight the fact that storeroom costs do not necessarily align
21 perfectly with the timing of construction activities. This is for a few reasons. For instance, truck
22 stock is often replenished when mostly depleted, which often lags construction. Additionally,
23 forecasted ramps in capacity needed for future construction activity can drive both truck stock
24 and freight charges higher. Examples of activities to build that capacity include adding new
25 contractor staging yards where incremental truck stock is supplied and also freight delivery of
26 materials that may precede construction by several months. Additionally, the location of wildfire

⁴¹ *Id.* at 21.

⁴² *Id.* at 22.

⁴³ *Id.* at 23.

⁴⁴ Appendix B, FEA 001 Q36a-c.

1 hardening construction staging yards are outside of SDG&E’s traditional transportation network,
2 leading to longer drive times and larger costs in freight. Mr. Smith’s recommendation to utilize
3 base-year 2022 forecast for Storeroom costs is unreasonable because it disregards the factors that
4 drive future and incremental increases necessary to support SDG&E’s capital plan.

5 When analyzing 2022 expenses, SDG&E disagrees with FEA’s concern that SDG&E’s
6 TY 2024 forecast is overstated. To the contrary, SDG&E’s position is that its forecast for TY
7 2024⁴⁵ is conservative. When comparing 2022 actual capital and Storeroom O&M expenditures
8 to SDG&E’s Storeroom forecast, the 2022 Storeroom expenses of \$30.908 million equate to
9 3.1% of total capital infrastructure costs. The higher percentage of Storeroom costs to total
10 capital spend is because of SDG&E’s need to build capacity outside of its normal workforce and
11 transportation network. Trending of Storeroom costs as a higher percentage of total capital
12 makes SDG&E’s current forecast conservative, creating the potential for overspend and not
13 underspend. In this case, the potential for overspend is due to start-up costs causing spikes in
14 spending needed to expand logistics capacity (i.e., costs such as extra truck stock for new
15 contractors, longer freight routes, and added delivery frequencies mentioned above) ahead of the
16 capital construction. FEA also fails to identify that spend fell below the 2022 GRC submitted
17 forecast primarily because total capital also fell below forecast. The trend of both total capital
18 and Storeroom costs moving in-sync further reinforces the accuracy and reasonableness of
19 SDG&E’s Storeroom cost forecast model.

20 **c. TURN**

21 TURN Witness Jones states that “it is reasonable to adjust the forecast for any
22 adjustments that the Commission makes to the electric distribution capital program. SDG&E
23 had not intended to make such an adjustment but indicates through data response that it would be
24 ‘agreeable’ to the adjusting costs accordingly.”⁴⁶

25 SDG&E agrees with TURN’s assessment and agrees to adjust the calculation represented
26 for its O&M storeroom costs once the CPUC approves a final capital plan for SDG&E.⁴⁷

⁴⁵ Ex. SDG&E-12-WP-R (Swetek) at 42.

⁴⁶ Ex. TURN-07 (Jones) at 9 (citation omitted).

⁴⁷ Appendix B, TURN-SEU-032 Q2a.

1 **2. IT Projects and Technology Related Labor**

2 **a. UCAN**

3 UCAN takes issue with the forecast workforce development labor expenses and IT
4 projects noted in prior SDG&E testimony within Electric System Operations. These concerns
5 are also directly addressed below. In its testimony,⁴⁸ UCAN disputes the forecast O&M
6 expenses of approximately \$1,300,502 identified in SDG&E’s Grid Modernization Plan
7 (GMP).⁴⁹ Of this total expense, \$519,000 pertains to the forecast labor expense within Electric
8 System Operations. This labor expense is intended to develop the workforce that will build and
9 maintain technology supporting operation of the Electric Distribution system. UCAN also states
10 that IT software, specifically SDG&E’s planned Distributed Energy Resource Management
11 System (DERMS) and Smart Grid Operations projects are only intended to support utility owned
12 resources, is obsolete and unscalable.⁵⁰ The list of IT systems also includes 00908T-Electric
13 Grid Ops Small Capital 2024.⁵¹

14 UCAN takes issue with the \$519,000 forecast labor expense that supports workforce
15 development and maintenance of technology and skills to manage the electric distribution system
16 and states they are “outmoded, inconsistent with the Commission’s priorities, and appears
17 unjustified.” Additionally, UCAN states “SDG&E fails to provide compelling evidence that
18 these funds are needed. Not only are these expenditures untimely and inconsistent and will face
19 technology obsolescence, but they are improperly focused, leaving this set of O&M costs to
20 support only projects that will be obsolete and thus stranded.”⁵² Labor expenses identified
21 within this disputed forecast consist of four main categories:

- 22 • System Operator Training Resources
- 23 • Engineering skills needed for advanced system modeling
- 24 • Technologists and Analysts to support the hardware and software comprising the
25 SCADA head-end system

⁴⁸ Ex. UCAN (Woychik) at 241-242.

⁴⁹ Ex. SDG&E-12-R (Swetek), Appendix C, GMP at 20.

⁵⁰ Ex. UCAN (Woychik) at 305-308.

⁵¹ *Id.* at 280.

⁵² *Id.* at 241-242.

1 • Support staff for the Advanced Distribution Management System (ADMS)
2 SDG&E’s SCADA system serves as the central nervous system for communicating with
3 thousands of monitoring and control sites scattered throughout SDG&E’s electric distribution
4 system. Telemetry from SCADA is digested in the ADMS, which aggregates that data and
5 provides Distribution System Operators an understanding of traffic and use of the electric
6 system. DERMS is another system that integrates with ADMS to allow further input of
7 telemetry from DER resources (both utility-side-of-meter DERs and customer-side-of-meter
8 DERs) and provides the added capability of either directly controlling or scheduling those
9 resources for use in mitigating electric distribution system issues.

10 **i. SDG&E’s investment in DERMS, SCADA and ADMS**
11 **technologies are warranted to support DER Adoption**

12 Continued growth and development within SDG&E’s workforce and development of its
13 IT systems are required not only to integrate an increasing quantity of data sources into ADMS
14 and SCADA, but also to build new functionality to address increased complexity in managing
15 the electric system caused by increasing amounts of DER resources on SDG&E’s system.
16 UCAN’s assertion that technology and workforce development is unjustified and outmoded is
17 incorrect. This statement implies that SDG&E’s workforce capability investments are not
18 required to prepare for customer adoption of DERs at scale. This is false. In SDG&E’s view,
19 denial of SDG&E’s workforce development and technology investment will prevent
20 development of foundational capabilities necessary to promote customer DER adoption, such as
21 integration of customer DER telemetry into SDG&E systems to improve modeling, identifying
22 and mitigating when a DER is causing adverse impacts to SDG&E’s system, and developing
23 forecasting capabilities necessary to schedule customer owned DERs.

24 SDG&E’s labor and technology investments support both DER advancement and safety
25 and reliability UCAN’s suggested denial of funding technology (Smart Grid Operations and
26 Electric Small Capital) and workforce development for these technologies fails to recognize that
27 continued investment in SCADA and ADMS technologies is required for safe and reliable
28 operation of SDG&E’s system. The Smart Grid Operations Capital budget supports regular
29 developer software upgrades, which provide new safety features and cybersecurity protection.
30 Additionally, defunding the Electric Grid Small Capital would prevent necessary hardware
31 replacement required to maintain the Transmission SCADA system in good working order.

1 These investments are necessary to prevent vulnerability to catastrophic failure and subsequent
2 degradation in SDG&E’s ability to respond to emergencies on its electric system.

3 As new automated hardware is installed on SDG&E’s electric system, the number of
4 SCADA sites managed and supported continues to grow. In my revised direct testimony, I stated
5 “There are approximately 2,386 SCADA field sites installed and the Company is forecasting an
6 eight percent average annual increase based on a trending of the past three years of historic[al]
7 data.”⁵³ Additional personnel are needed to integrate, maintain the connections to, and
8 troubleshoot issues between those sites and SDG&E’s SCADA and ADMS systems. In addition
9 to all of these adverse impacts, denial of new resources may also cause stranded investment in
10 utility automation infrastructure, thus threatening realizing the benefits that infrastructure
11 provides.

12 **ii. SDG&E is taking a measured approach to investment**
13 **in DERMS**

14 UCAN witness Dr. Eric Charles Woychik expresses several concerns regarding
15 SDG&E’s planned DERMS. First, he states “SDG&E then describes its use of advanced energy
16 storage, control of microgrids, and management of PSPS events. These are exclusively SDG&E
17 resources, which suggest this DERMS is incapable of CSOM DER integration.”⁵⁴ He further
18 extrapolates concerns that the DERMS will not be designed to support customer, agent of
19 customer, or CCA needs. He goes on to argue that “coordination with a Distribution System
20 Operator (DSO), to relay pricing and constraints, appears absent except to mention state-
21 estimation power-flow, suggesting that the proposed DERMS technology and software are
22 mostly separate from DSO operations.”⁵⁵

23 SDG&E clarifies that the enterprise DERMS IT solution it seeks to implement is
24 different from prior installations of a localized DERMS or Local Area Distribution Controller
25 (LADC). Dr. Woychik incorrectly assumes that SDG&E is implementing a system incapable of
26 integrating with CSOM DERs. SDG&E continually monitors developments in the industry to
27 understand capabilities of enterprise DERMS technologies and has found that all industry

⁵³ Ex. SDG&E-12-R (Swetek) at TS-3 – TS-4.

⁵⁴ Ex. UCAN (Woychik) at 306.

⁵⁵ *Id.*

1 enterprise DERMS systems lack maturity (defined as having prior scaled installations) in the
 2 capabilities Dr. Woychik addresses in his testimony. Additionally, Dr. Woychik admits himself
 3 that the Commission has included workshops and technical reports in its agenda including
 4 “Distribution System Operator roles and Responsibilities with a Proposed Decision by 2024.”⁵⁶
 5 With high levels of uncertainty as to the incentive mechanisms, future roles between entities
 6 within a DERMS system, and Commission-led requirements, SDG&E chose to focus testimony
 7 justifying a DERMS system on near-term and known requirements and benefits that SDG&E can
 8 implement without further clarification. SDG&E also filed a roadmap with high-level
 9 descriptions inclusive of the capabilities Dr. Woychik alludes to in SDG&E’s GMP.⁵⁷

10 SDG&E clarifies that near-term goals include DERMS integration with both utility and
 11 non-SDG&E commercial DERs that provide grid level export. Additionally, SDG&E further
 12 clarifies that it will require its software to have the capability to integrate with both customers
 13 and aggregators at scale, but will not focus on developing this capability in the initial installation
 14 due to the concerns listed above.

15 **C. Electric Regional Operations**

NON-SHARED O&M - Constant 2021 (\$000)			
	Base Year 2021	Test Year 2024	Change
SDG&E	\$35,360	\$39,668 ⁵⁸	\$4,308
CAL ADVOCATES	\$35,360	\$36,004	\$644
FEA	\$35,360	\$35,266	(\$94)
TURN	\$35,360	\$35,928	\$568

16
 17 **1. Request for additional lineman**

18 Cal Advocates and TURN both take issue with SDG&E’s TY 2024 forecast for eight
 19 linemen and 24 line assistants, arguing that SDG&E does not demonstrate that the increased

⁵⁶ *Id.* at 9.

⁵⁷ Ex. SDG&E-12-R (Swetek), Appendix C, GMP at 21-22.

⁵⁸ While compiling information for data request TURN SEU-032, question 3a, the SDG&E discovered a correction needed in TY 2024 costs, where labor resources were not properly forecasted to account for attrition, resulting in SDG&E overstating O&M.

1 labor costs are incremental to existing funding levels. These concerns are addressed below,
2 showing that SDG&E's forecasted resource needs are reasonable and should be approved.

3 **a. Cal Advocates**

4 Witness Andresen of Cal Advocates asserts that SDG&E does not demonstrate that
5 increased labor costs are incremental to existing funding. Cal Advocates argues that SDG&E is
6 suggesting to replace employees that left SDG&E, with new employees that will be compensated
7 at a lower hourly rate, which will not necessarily increase labor costs.⁵⁹ Mr. Andresen contends
8 that because SDG&E's 2017 – 2021 labor expenses were relatively stable, a 5-year average
9 should be used to calculate SDG&E's TY labor expenses.⁶⁰ He does not oppose SDG&E's non-
10 labor expense ERO forecast. Witness Andresen uses the following as justification for his
11 recommendation:

- 12 1. "SDG&E does not demonstrate that the increased labor costs are incremental to
13 existing funding levels"⁶¹
- 14 2. "SDG&E provides conflicting estimates for its historic staffing levels that do not
15 demonstrate that the overall number of ERO employees is increasing in its test
16 year forecast."⁶²

17 SDG&E disagrees with the position advocated by Cal Advocates for the simple reason
18 that the eight Lineman and 24 Line Assistants at issue in fact are forecasted as an incremental
19 labor cost. SDG&E's base year forecast methodology inherently incorporates prior attrition due
20 to the loss of lineman. SDG&E's request for eight additional Lineman and 24 additional Line
21 Assistants are incremental to the base year forecast and necessary to meet existing and future
22 workload and reliability demands per year. In discovery in this proceeding, SDG&E' provided a
23 data request response regarding Lineman loss, which explains that SDG&E does not track
24 promotions and transfers of Lineman to other positions in the company.⁶³ Mr. Andresen's
25 testimony ignores, or at least fails to account for, this response. This data response demonstrates

⁵⁹ Ex. CA-08 (Andresen) at 14.

⁶⁰ *Id.* at 17-18.

⁶¹ *Id.* at 14.

⁶² *Id.* at 16.

⁶³ Appendix B, CA RYD-093 Q3.

1 an error in Mr. Andresen’s assumption that Linemen attrition is solely the cause of data provided
2 such as terminations, resignations, and retirements, which leads to incorrect conclusions
3 regarding attrition rates. SDG&E does not track Linemen transfers into other job classifications,
4 leaving a gap in data required to perform a thorough analysis. Additionally, Cal Advocates take
5 further issue with SDG&E’s system limitations regarding the way costs are settled in the
6 accounting system, which prevent SDG&E from providing Cal Advocates requested information
7 in labor costs allocated at the granular level broken down by each specific unique job category.⁶⁴

8 In lieu of the data that was not tracked, SDG&E provided clear data on the number of
9 Lineman employed, showing a downward trend from 2017-2021.⁶⁵ The table below
10 demonstrates this trend. These facts, together with the study that SDG&E provided on necessary
11 staffing levels that accounts for the capacity to manage a 5-year average of maintenance, and
12 emergency repair needs, while performing 30% of SDG&E’s capital construction.⁶⁶ The study
13 demonstrates the justification required to support hiring activities for this critical job
14 classification. Continued development of this foundational resource, allows the company to
15 deliver safe, reliable, and consistent utility service to customers.

Job Code	2017	2018	2019	2020	2021	2022*
Lineman	165	164	154	148	143	155

16 *2022 Linemen headcount was not included in prior discovery.

17 **b. TURN**

18 TURN recommends adopting the Base Year 2021 labor forecast with no increases and
19 recommends adopting SDG&E’s non-labor forecast, totaling \$35.928 million in Test Year 2024.
20 TURN argues that “SDG&E has not provided adequate evidence to support its claim that it needs
21 an increase in funds to address attrition of linemen” due to:

- 22 1. “The fact that SDG&E’s spending was below the forecast in 2022, let alone the
23 falling below the Base Year forecast, contradicts SDG&E’s claims that it needs to
24 aggressively onboard labor to support Safety and Reliability.”⁶⁷

⁶⁴ Appendix B, CA RYD-093 Q4.

⁶⁵ Appendix B, CA RYD-093 Q4.

⁶⁶ Appendix B, CA RYD-093 Q4.

⁶⁷ Ex. TURN-07 (Jones) at 10 (citation omitted).

1 2. “SDG&E claims that it expects attrition of 20 linemen to attrition owing
2 retirements, resignations, terminations, and promotions, but it is not clear from the
3 face of the testimony or TURN’s discovery if that attrition has already occurred or
4 is expected at some point in the future.”⁶⁸

5 3. “SDG&E, while formulating a response to a TURN data request, determined that
6 there is an error in its Labor forecast; the correct Labor forecast is \$3.738 million,
7 which is \$1.101 million lower than the value originally set forth in the
8 testimony.”⁶⁹

9 **i. SDG&E’s need to aggressively onboard labor to**
10 **support safety and reliability**

11 TURN does not directly dispute the need for trained and skilled utility Lineman. These
12 resources are in high demand throughout the state of California and aggressive hiring is
13 necessary to support the need to perform core Electric Regional Operations activities of
14 inspection and maintenance, emergency and outage response, and infrastructure repair and
15 replacement.⁷⁰ Instead, TURN performs a flawed analysis on SDG&E’s historical expenses and
16 questions the current state of Linemen attrition.

17 Contrary to TURN’s assumptions, in 2022, SDG&E’s ERO costs were lower than
18 authorized due to the change in its work mix, which is dependent upon timing of maintenance
19 intervals. This reduced maintenance allowed reallocation of Linemen to complete more capital
20 construction, resulting in a decrease in a net O&M labor costs. All of this occurred with SDG&E
21 continuing to aggressively hire 10 Linemen and 21 Line Assistants within the year. SDG&E
22 remains on-track with its aggressive hiring plan for Linemen. Additionally, although SDG&E
23 saw reductions in O&M costs in 2022, it expects maintenance intervals to increase in future
24 years, causing costs to average to SDG&E’s forecast over time. This expectation is based on
25 maintenance interval inspections occurring on a non-uniform ten-year cycle. “Approximately
26 95% of all wood poles are located in the non-HFTD and an increased number of poles will be

⁶⁸ *Id.*

⁶⁹ *Id.* at 11 (citation omitted).

⁷⁰ Appendix B, CA RYD-093 Q4.

1 due for inspection during the TY2024 forecast and post-test year periods than the previous five
2 years.”⁷¹

3 Similar to the rebuttal to Cal Advocates testimony (in Section IV-C-1-a above), TURN’s
4 testimony reflects an apparent misunderstanding of SDG&E’s testimony and discovery
5 explaining its need for Linemen. In particular, SDG&E responded to TURN’s request to
6 understand the net balance of Linemen in SDG&E’s forecast,⁷² and TURN did not recognize that
7 SDG&E does not track promotions and transfers within the Linemen workforce, making it
8 difficult for them to interpret the numbers provided. TURN also points out that SDG&E did not
9 appear to result in adverse impacts to customer service or performance in its maintenance
10 functions.⁷³ But the absence of adverse impacts does not prove that the requested resources are
11 not needed. SDG&E was able to prevent a reduction in its customer service due to use of
12 overtime within its existing workforce and contracted work.⁷⁴ However, continued operation at
13 this workforce level over time increases risk of sudden employee turnover, degradation of
14 workforce skills, and eventual disruption to company operations. SDG&E believes that it is
15 prudent to address this risk before associated adverse impacts become readily apparent, not after.
16 Therefore, SDG&E reiterates the need for continued hiring to address its year-over-year
17 decreasing trend in its Linemen workforce.

18 Linemen are highly skilled construction workers and the cost to create Linemen is high.
19 When hired, Line Assistants take an average of five years to become a Lineman. Similar to
20 many other highly skilled trades, the training program is subject to high attrition rates (as much
21 as 50%). Additionally, there are further risks in managing a reduced Linemen workforce. The
22 needs to respond to disturbances on SDG&E’s electric system are slowly growing as SDG&E’s
23 system ages. With the existing workforce resources reduced, there are fewer emergency
24 responders that can respond to non-working hour emergencies, placing a larger strain on the
25 existing workforce and causing further incentive to seek alternative employment opportunities.
26 Increased workloads on a per Linemen basis means that the utility will have fewer opportunities

⁷¹ Ex. SDG&E-12-R (Swetek) at TS-70.

⁷² Appendix B, TURN SEU-032 Q3a-c.

⁷³ Ex. TURN-07 (Jones) at 11.

⁷⁴ Appendix B, TURN SEU-032 Q4ai.

to rotate staff to larger construction projects with a variety of construction types not seen during normally assigned maintenance activities, and where they refresh skills in those types of construction. Large construction projects require travel around SDG&E’s service territory and may pull resources away from time sensitive or emergency repair activities. Thus, the utility believes it is necessary to maintain the staffing levels proposed in order to enable this work and promote flexibility in deploying resources to address needs.

ii. SDG&E corrects an error identified during discovery with TURN

In preparation of a discovery response to TURN, SDG&E identified an error in its labor costs associated with future Linemen and Line Assistant levels that affect its Test Year 2024 forecast. The prior calculations failed to account for the historical attrition rates through the Line Assistant program. The new recommendation accurately forecasts the annual costs for 8 lineman and 24 line assistants. SDG&E’s Electric Regional Operations Test Year 2024 labor forecast is corrected to \$6,568,010. The below table revises prior submitted workpapers.⁷⁵

Initiative/Description	Labor/Non-Labor	Unit Metric (ea./ft./mile)	O&M/Capital Split	2022			2023			2024			Total Cost	Explanation
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost		
GRC - ERO Non-Lineman (2022-2024)	Labor	FTE's	30%	16	\$ 100,000	\$ 280,000	25	\$ 100,000	\$ 750,000	34	\$ 100,000	\$ 1,020,000	\$ 2,050,000	Assumes DOH order 70% Capital/30% O&M ID 7074347. 2022 additions beginning May
GRC - ERO 2021 Line Assistants (April 2021)	Labor	FTE's	30%	16	\$ 68,640	\$ 219,648	16	\$ 68,640	\$ 219,648	16	\$ 68,640	\$ 219,648	\$ 658,944	Assumes department overhead 70% Capital/30% O&M. \$33hr for Lineman Assistant's salary. 2021 Line Assistant class of 16 started
GRC - ERO 2022 Lineman (Jan)	Labor	FTE's	30%	2.4	\$ 145,600	\$ 104,832	4.8	\$ 145,600	\$ 209,664	7.2	\$ 145,600	\$ 314,496	\$ 628,992	Assumes \$70hr for Lineman salary, attrition rate of 40% in
GRC - ERO 2022 Lineman (Mar)	Labor	FTE's	30%	2.4	\$ 145,600	\$ 78,624	4.8	\$ 145,600	\$ 209,664	7.2	\$ 145,600	\$ 314,496	\$ 602,784	Assumes beginning March (9/12 months), attrition rate of 40% in
GRC - ERO Line Assistant Class (May 2022)	Labor	FTE's	30%	14	\$ 68,640	\$ 172,973	28.4	\$ 68,640	\$ 584,813	42.8	\$ 145,600	\$ 1,869,504	\$ 2,627,290	Assumes \$33hr for Lineman Assistant salary, increases to \$70hr 2024. Assumes beginning
Labor						\$ 856,077			\$ 1,973,789			\$ 3,738,144	\$ 6,568,010	

2. Other Non-Labor Costs and Forecasting Methodology

a. FEA

FEA witness Mr. Smith takes issue with and proposes an alternative approach to SDG&E’s use of a 2021 Base Year estimate for its forecast. FEA instead recommends a five-year average forecast methodology, totaling \$35.266 million in Test Year 2024. He attempts to justify this recommendation through the following three points:

⁷⁵ Appendix B, TURN SEU-032 Q3a.

- 1 1. “A narrative response was provided describing how the non-labor increases were
2 forecasted but no supporting documents were attached.”⁷⁶
- 3 2. “Costs [have significantly] fluctuated with actual spending”⁷⁷
- 4 3. “[costs] coming in significantly below authorized levels in each of the last five
5 years (2017-2021)”⁷⁸

6 SDG&E disagrees with Witness Smith’s recommendation as his analysis contains
7 multiple flaws. One of Witness Smith’s fundamental errors is relying on an incorrect analysis
8 comparing 2019 authorized GRC expenses to the 2024 GRC historical spend and a
9 misunderstanding of the nature of the Electric Regional Operations non-labor activities. SDG&E
10 elaborates further and reiterates the accuracy of its revised Test Year 2024 forecast of \$39.669
11 million.

12 **i. SDG&E’s supporting documentation for non-labor**
13 **increases**

14 SDG&E’s forecasted other non-labor incremental increase in 2022, 2023 and 2024 is the
15 result of three main drivers.⁷⁹ These drivers include SDG&E’s request for non-labor costs
16 related to the onboarding of new lineman, a program to mitigate safety concerns caused by costal
17 contamination, and intelligent image processing to increase the quality of SDG&E’s inspection
18 program by leveraging and validating the capabilities of machine learning to drive down long-
19 term costs. SDG&E’s justification related to onboarding new linemen is associated with its
20 justification for the labor itself. For both the coastal corrosion mitigation program, and the
21 intelligent image processing, SDG&E clarifies that its goal is to start with a small program to
22 gather detailed information and better understand the risks associated with both investments.
23 Therefore, SDG&E does not have a robust amount of data to provide FEA, since the program is
24 intended to collect data to analyze if future expansion of these programs makes sense. It appears
25 that both Cal Advocates and TURN seem to agree with ERO’s cautious non-labor request and
26 approach, as they do not contest SDG&E’s forecasted expenses in this area.

⁷⁶ Ex. FEA-01 (Smith) at 16.

⁷⁷ *Id.* at 19.

⁷⁸ *Id.*

⁷⁹ Appendix B, FEA-001 Q1.41.

1 **a. Cal Advocates**

2 Witness Andresen of Cal Advocates takes issue with SDG&E’s forecast methodology for
3 Skills and Compliance Training non-labor expenses but, notably, does not take issue with
4 SDG&E’s labor forecast expenses.⁸² More specifically, Witness Andresen “agrees with
5 SDG&E’s assessment that ‘for non-labor, the base year provides an appropriate baseline in
6 comparison to future targets for the organization as opposed to average or trend
7 methodologies.’”⁸³ He goes on to clarify that “SDG&E did not provide documentation
8 demonstrating that its 2021 recorded adjusted expenses were insufficient to address its TY
9 activities for Skills and Compliance Training.” Cal Advocates then assumes that “SDG&E
10 should be able to reallocate embedded funding of \$990,000 back to its Skills and Compliance
11 Training department if additional funding is needed for six trainers and instructors.”⁸⁴ In
12 summary, Cal Advocates agrees with a base year forecast but disputes the need for further
13 adjustments intended for the Industrial Athletic Trainer and Electric Hazard Awareness Trainer
14 programs, assuming these new costs can be absorbed within the base-year allocation.

15 SDG&E disagrees with Cal Advocates assessment that costs for the Industrial Athletic
16 Trainer and Electric Hazard Awareness programs can be absorbed into SDG&E’s current
17 budgets. These contractor-filled positions create an incremental non-labor cost that is in addition
18 to existing costs to support SDG&E’s vision of “Building a Better Lineman.” The industrial
19 athletic program will be implemented to reduce OSHA defined strains and sprains, which is the
20 most common type of employee injury, in order to achieve SDG&E’s Target Zero initiative’s
21 goal of zero workplace safety incidents.⁸⁵

22 **b. FEA**

23 FEA recommends the use of a 2022 base year forecast for TY2024 of \$2.855 million for
24 Skills and Compliance. Witness Mr. Smith argues that “the company spent below the authorized

⁸² Ex. CA-08 (Andresen) at 20-21.

⁸³ *Id.*, (citation omitted).

⁸⁴ *Id.* at 21.

⁸⁵ Ex. SDG&E 12-R (Swetek) at TS-56.

1 level in each of the last five years.”⁸⁶ Witness Smith then proceeds to recommend “using the
2 2022 amount, as this is the most known and measurable amount available.”

3 SDG&E disagrees with FEA’s limited analysis of historical spend and notes that
4 additional information on Skills and Compliance costs are available to support the
5 reasonableness of SDG&E’s forecast. For instance, SDG&E clarified in a data request provided
6 to Cal Advocates that a regular accounting review changed the capital and O&M allocation
7 within Skills and Compliance, significantly reducing realized costs below O&M spend expected
8 in the 2019 GRC.⁸⁷ SDG&E also documented this change in its workpapers in the form of one-
9 sided historical adjustments.⁸⁸

10 With respect to Mr. Smith’s argument that 2022 actual costs represent “the most known
11 and measurable amount,”⁸⁹ it is SDG&E’s position that 2022 actual costs are lower than what
12 will be needed in TY 2024. This is because the 2022 data includes only some of the expenses for
13 the Industrial Athletic Trainer program and none of the expenses for the Hazard Awareness
14 program. Neither of these facts were identified in FEA’s analysis. SDG&E hired the forecasted
15 three Industrial Trainers in late 2022 and early 2023,⁹⁰ meaning that SDG&E’s 2022 actual costs
16 included only partial-year expenses for two of the three trainers and no costs. Additionally, as
17 documented in a data request provided to FEA, the O&M and Capital allocation for these
18 resources changed, further reducing realized expenses in 2022.⁹¹ Lastly, SDG&E had difficulty
19 hiring the Hazard Awareness Trainers due to an inability to find suitable candidates, delaying the
20 implementation of the program.⁹² Taking all of these factors into account, SDG&E believes that
21 its 2022 costs are in-line with the base-year forecast proposed in SDG&E’s GRC testimony for
22 Skills and Compliance. SDG&E will reduce its 2024 Test Year forecast for the Industrial
23 Athletics training program to \$148,500 due to the change in their cost allocation (30% of

⁸⁶ Ex. FEA-01 (Smith) at 32-35.

⁸⁷ Appendix B, CA RYD-015 Q1-H.

⁸⁸ Ex. SDG&E-12-WP-R (Swetek) at 132-134.

⁸⁹ Ex. FEA-01 (Smith) at 33-34.

⁹⁰ Appendix B, FEA Data Request 004-Q1b.

⁹¹ Appendix B, FEA Data Request 004-Q3.

⁹² Appendix B, FEA Data Request 004-Q2a.

1 \$495,000). However, SDG&E reiterates the need for funding to the revised TY 2024 forecast of
 2 \$3.483 million for Skills and Compliance, to support both ongoing training operations and the
 3 incremental costs associated with the important initiatives discussed here – the Industrial Athletic
 4 training and Hazard Awareness training programs.

5 **E. Electric Engineering**

NON-SHARED O&M - Constant 2021 (\$000)			
	Base Year 2021	Test Year 2024	Change
SDG&E	\$2,083	\$2,191 ⁹³	\$108

6
7 **1. Errata**

8 SDG&E is reducing its TY 2024 O&M forecast in the amount of \$294,752 to remove
 9 expenses related to the DUII project, which were incorrectly identified as O&M. This was
 10 discovered and explained when responding to a Cal Advocates data request.⁹⁴

11 When reviewing a Cal Advocates data request,⁹⁵ SDG&E also discovered a second
 12 correction should be made to correct the percentage of O&M attributed to labor in the forecast
 13 calculation. SDG&E is reducing its Test Year 2024 O&M forecast by \$17,720 due to this
 14 correction.

15 After both corrections, SDG&E has revised its TY 2024 non-shared O&M request for
 16 Electric Engineering.

17 **F. Compliance Management**

NON-SHARED O&M - Constant 2021 (\$000)			
	Base Year 2021	Test Year 2024	Change
SDG&E	\$3,061	\$7,274	\$4,213
CAL ADVOCATES	\$3,061	\$4,815	\$1,754
FEA	\$3,061	\$5,099	\$2,038

⁹³ While compiling information for data request Cal Advocates RYD-027, questions 3 and 5, the utilities discovered two corrections needed in TY 2024 costs, where O&M and Capital split was incorrectly identified, resulting in SDG&E overstating O&M.

⁹⁴ Appendix B, CA RYD-027 Q3. In preparation of this rebuttal testimony, SDG&E discovered a typographical error in the third paragraph, second sentence of this data request response. The word “non-labor” should instead be “labor.”

⁹⁵ Appendix B, CA RYD-027 Q5.

1 **1. Pole Attachment Data Compliance Program Costs**

2 Intervenors Cal Advocates and the FEA take issue with non-labor forecasted costs related
3 to SDG&E’s Pole Attachment Data Compliance Program, which is required by Commission
4 decision D.21-10-019. SDG&E summarizes each intervenor’s positions below.

5 **a. Cal Advocates**

6 Witness Andresen of Cal Advocates takes issue with the non-labor estimated cost of
7 \$2.459 million in Test Year 2024 related to SDG&E’s estimate for Pole Attachment Data
8 Compliance program. He recommends the Commission adopt all other forecasted Test Year
9 2024 costs in SDG&E’s Test Year 2024 forecast, totaling \$4.815 million. Andresen specifically
10 points out the following concerns with the Pole Attachment Data collection program forecast:⁹⁶

- 11 1. “SDG&E does not demonstrate that its pole attachment data points work is
12 incremental to existing funding.”
13 2. “SDG&E has an unclear scope of work and does not track the costs associated
14 with its current pole attachment data collection.”
15 3. “[SDG&E] should be able to reallocate the underspent funding it received in its
16 2019 GRC back to Compliance Management to support any incremental work.”

17 SDG&E disagrees with Witness Andresen’s statements and reiterates its need for its
18 forecasted funds to meet compliance with Commission regulation. SDG&E’s responses to the
19 concerns expressed by Cal Advocates’ are below. In sum, SDG&E has a strong basis for its
20 compliance program forecast.

21 Mr. Andresen states that “SDG&E did not provide any supporting documentation in its
22 response,” focusing particularly on the fact that “SDG&E did not provide any examples of
23 existing engineering and support contracts to substantiate its response.”⁹⁷ In addition, Mr.
24 Andresen asserts that “SDG&E also does not identify a clear scope of work that will be funded
25 through its Compliance Management forecast.” In SDG&E’s view, these statements do not
26 detract from the strong showing made by SDG&E in support of the requested funding.

27 To begin, Mr. Andresen fails to recognize in his testimony that SDG&E has provided Cal
28 Advocates with details of how it created its cost estimate in a subsequent discovery response.

⁹⁶ Ex. CA-08 (Andresen) at 28-29.

⁹⁷ Ex. CA-08 (Andresen) at 26.

1 Specifically, SDG&E stated that its cost estimates were based on the assumption of requiring site
2 visits to collect 20 discrete data points required by the regulation on approximately 75% of all
3 SDG&E poles (176,000) at a cost of \$150 per pole.⁹⁸ The remaining 25% of poles are estimated
4 to have current pole loading calculations or data more easily accessible to populate the 20 data
5 points. In the same data request response, SDG&E also provided Cal Advocates more details,
6 including correcting prior statements that the ongoing \$200,000 maintenance charge was related
7 to necessary contract services to maintain the database and not licensing fees.⁹⁹ These labor
8 activities include managing data discrepancies and QA/QC of the data changes, manage database
9 errors, update the database to new cybersecurity requirements, provide database enhancements
10 associated with technology changes and manage user/password issue resolution. Thus, contrary
11 to Mr. Andresen’s contentions, SDG&E believes that this justification provides a strong basis for
12 its compliance program total Compliance Management Test Year 2024 forecast of \$7.247
13 million.

14 At the time of its GRC filing, SDG&E performed its best estimate on costs necessary to
15 meet compliance with the pole attachment data decision. SDG&E reiterates that the costs
16 provided are still accurate to the best of its ability, but timeframes have shifted since the GRC
17 filing, leading to underspending the 2022 program cost forecast mentioned in FEA testimony
18 (referenced below in the FEA section of Compliance Management rebuttal testimony). Below,
19 SDG&E provides further detail and updates on its efforts to meet the scope of this regulatory
20 obligation.

21 Compliance with D.21-10-019 is divided into two phases. Data points required under
22 Phase 1 include:

- 23 • Number of Existing Attachments on Pole
- 24 • Attachment Owner
- 25 • Attachment Identifying Number
- 26 • Attachment Status
- 27 • Attachment Status Date
- 28 • Support Structures

⁹⁸ Appendix B, CA RYD-124, Q1a.

⁹⁹ Appendix B, CA RYD-124, Q1d.

- Abandoned Attachment
- Voltage

SDG&E's Tier 2 Advice letter described how it would comply with Phase 1 of D.21-10-019 and was approved by the Commission in October 2022.¹⁰⁰ Under Phase 1 requirements, by October 2023 a database must be populated with required information for both electrical related facilities as well as communications attachments. In general, the Phase 1 data points are known and will not require field surveys or review of as-built documents. Accordingly, the costs incurred for Phase 1 are largely related to establishing the database, creating data integrations with internal systems, and developing an intake process for displaying in the database data from communication companies attaching to SDG&E facilities.

Following the implementation of Phase 1, the Decision requires that pole owners hold workshops to discuss Phase 2 data points within 90 days from the October 2023 compliance date. Phase 2 data points include the following:

- Attachment Location on pole
- Pole Attachment Elevation
- Attachment Description
- Attachment Dimensions
- Attachment Weight
- Attachment Grade
- Cable Tension
- Cable Tensile Strength
- Cable Average Span Length
- Wind Loading
- Vertical Loading
- Bending Moment of Attachment

It is important to understand that most of the Phase 2 data points are not available as discrete data points. As such, SDG&E will need to undertake a significant data collection exercise, such as through review and data entry from as-built documents, field surveys to gather

¹⁰⁰ SDG&E Advice Letter 4068-E, approved and effective October 12, 2022, which included, in part, a plan for implementing the Track 2, Phase 1 data points.

1 the data, or data extraction from pole loading software. Note, however, that there are a number
2 of questions outstanding regarding the interpretation of these data points that need to be clarified
3 during the Phase 2 workshops. For example, how wind or vertical loading should be calculated
4 and displayed is unclear. Should the data be displayed at the pole level with all attachments, or
5 for each attachment discretely, and at what conditions should the data be provided (e.g., high
6 wind, average temperatures, extreme temperatures, under ice conditions, etc.), and how should
7 the data be used by those with access to the database. At this juncture, SDG&E does not
8 anticipate entering into a contractor agreement for the required work for Phase 2 compliance
9 until after the workshops are held, with an earliest possible date of November 2023.

10 **b. FEA**

11 FEA Witness Smith takes issue with SDG&E's Test Year 2024 forecast method for
12 Compliance Management and alternatively proposes either a 5-year average (2018-2022) or 4-
13 year average utilizing the same years but removing 2019 due to outlier data after removing
14 special billable costs. Mr. Smith recommends \$2.175 million Test Year 2024 forecast be applied
15 to Compliance Management. Mr. Smith's rationale for his recommendation is the following:

- 16 1. "[SDG&E] spent below the authorized level in each of the last three years..."¹⁰¹
17 and "The 2022 actual expense was lower than the forecasted amount."¹⁰²
- 18 2. "The Company did not justify the significant increase to this expense"¹⁰³

19 As discussed in more detail below, SDG&E disagrees with Mr. Smith's position as it has
20 multiple flaws. First, it relies on a comparison of year-to-year and/or year-over-year dollar
21 values authorized in the 2019 GRC to historical costs filed in the 2024 GRC, which is
22 inappropriate. In addition, the 2022 forecasted costs were accurate at the time of submittal, but
23 2022 actual costs differed from the TY 2019 forecasts due to unforeseen changes in the
24 implementation of the pole data compliance regulation and unforeseen changes to the percent of
25 poles that needed to be fielded for attachment outlined in my testimony below. Lastly, utilizing a
26 simple 5-year average completely disregards SDG&E's forecasted upward pressures. When
27 considering both the errors in FEA's analysis, the continued upward pressures not directly

¹⁰¹ Ex. FEA-01 (Smith) at 28.

¹⁰² *Id.* at 33.

¹⁰³ *Id.* at 29.

1 addressed, and the misunderstanding as to the nature of the 2022 underspend, FEA's
2 recommended 5-year average forecast should not be adopted.

3 **i. Analysis comparing 2024 GRC Historical Costs to 2019**
4 **Approved Expenses**

5 As mentioned above, FEA argues that SDG&E consistently underspent its allocated
6 budgets and, on that basis, recommends a substantial reduction to SDG&E's forecasts in this TY
7 2024 GRC. FEA's position is based on a flawed analysis comparing 2019 Commission
8 approved expenses to historical costs submitted under the 2024 GRC filing. FEA's analysis is
9 flawed because it fails to acknowledge, let alone reconcile, the fact that there are key differences
10 in how these figures were assembled. Primarily, within Compliance Management, the major
11 difference is the creation of new accounting mechanisms to track High Fire Threat District
12 (HFTD) inspections, which remove costs associated with these expenses from Compliance
13 Management to the Wildfire Mitigation Program witness area. Just one example of costs
14 removed is intrusive pole inspections in the HFTD. Therefore, FEA's analysis is an apples to
15 oranges comparison: it reflects these activities in the cost amounts authorized on the front end,
16 but fails to include these activities in the actual spend amounts. The result of this failure is that
17 FEA's analysis artificially increases the amount of alleged underspending FEA identifies for this
18 area. SDG&E shared this comparison issue with FEA during the discovery process.¹⁰⁴

19 Another factor to consider is that the remaining inspections performed may vary due to
20 Corrective Maintenance Program (CMP) cycles and structures which fall outside of the HFTD,
21 which vary over a ten-year cycle. These variances make a three or five year average
22 inappropriate. SDG&E analyzed these cycles and contends that the base year best represents
23 workloads during the 2024-2027 years, making base year with incremental adjustments the more
24 accurate forecasting method.

25 **ii. Analyzing Actual 2022 Expenses**

26 FEA indicates that SDG&E's 2022 expenses were lower than its GRC submitted forecast.
27 SDG&E concurs with that assessment. But while FEA is correct that 2022 actuals were lower
28 than anticipated, FEA has failed to grapple with the drivers of the underspend it observed.

¹⁰⁴ Appendix B, FEA-002 Q13.

1 The majority of the underspend (approximately \$9M) is related to delays in performing
2 field survey and data gathering validation work necessary to comply with Phase 2 of the Track 2
3 Decision. SDG&E details the reasons for those delays in its response to Cal Advocates in
4 section IV-F-1a above, including diligence and prudence to ensure clarity of the regulation
5 through workshops before incurring expenses. Accordingly, the fielding costs are not anticipated
6 to start until late 2023. The fact that work that will need to be done has not started yet does not
7 justify the substantial reduction proposed by FEA.

8 The second contribution to the underspend was the number of applications and support
9 activities associated with new pole attachments. SDG&E utilized data on the Communication
10 Interconnection Providers (CIP) attachment activities between 2017-2019 to forecast its expected
11 2022 workload. SDG&E anticipated having to perform fielding activities, to support pre-
12 construction assessment, for an average of 11,000 poles; however, it only performed field
13 surveys for approximately 7,000 pole attachments in 2022. This change can be attributed to
14 duplicate pole attachment applications, pole applications on-hold or pending additional
15 evaluation, and poles that were ultimately rejected or cancelled. Significantly, SDG&E does not
16 anticipate that this 2022 variance will recur in future years. The number of applications for
17 attachments submitted each year is dependent on third party provider infrastructure requirements
18 and telecommunication networks expansion. SDG&E anticipates that there will be an increase in
19 attachment requests the relatively near term (i.e., over the next few years) due to CPUC updated
20 Right of Way Rules that take effect for utility pole-owners beginning in the second quarter of
21 2023.¹⁰⁵ The updated Right of Way requests are being submitted to support the State's ongoing
22 commitment to provide greater access to broadband service to the unserved and underserved
23 communities, and to promote increased safety and competition in the telecommunications
24 industry. Nondiscriminatory access to the incumbent utilities' poles and rights of way is one of
25 the essential elements for enabling facilities-based competition to succeed consonant with
26 California's goal of providing broadband access to no less than 98% of California households.¹⁰⁶

¹⁰⁵ D.22-10-025 at 39, Ordering Paragraph 2, and Attachment A.

¹⁰⁶ Assembly Bill 1665, Eduardo Garcia. Telecommunications: California Advanced Services Fund.

1 **2. SDG&E’s need for a Track 2 Pole Attachment Cost Memorandum**
2 **Account (T2CMA)**

3 **a. TURN**

4 Witness Mr. Finkelstein of TURN recommends the Commission reject SDG&E’s
5 proposal for its Track 2 Pole Attachment Data Compliance program memorandum account
6 (T2CMA), due to the account’s balances being recovered through the annual regulatory accounts
7 update. TURN suggests that that these balances would be collected in rates without having ever
8 been reviewed for reasonableness.¹⁰⁷ The Track 2 Decision, D.21-10-019, directs pole owners
9 subject to a general rate case to seek cost recovery through a general rate case filing.¹⁰⁸
10 SDG&E’s proposal for adoption of the T2CMA would facilitate compliance with the Track 2
11 decision by tracking 2022 and 2023 Track 2 implementation costs for recovery in a future GRC.
12 The reasonableness of these costs would surely be up for review in that Application. In no way
13 does SDG&E’s request for adoption of the T2CMA circumvent reasonableness review from the
14 CPUC.

15 **V. SUMMARY OF ERRATA**

16 The following is a summary of errata items identified throughout this rebuttal testimony
17 that were identified as a result of responding to discovery. These items collectively represent a
18 reduction to the Electric Distribution O&M requested funding for Test Year 2024 by \$1.759
19 million. SDG&E updates its total request for Electric Distribution O&M to \$130.962 million.

No.	Wkp/Description	Activity	TY2024 Change (\$000)	Description
1	1ED008 – Electric Regional Operations	Safety & Reliability Workforce	(1,100)	Prior calculation on workforce failed to account for attrition in future years.
2	1ED009 – Skills & Compliance	Industrial Athletic Trainers	(347)	Updated the percent of O&M allocated from the total costs for the industrial athletic training resources.
3	1ED012 – Electric Engineering	Design unit Project	(295)	Updated the percent of O&M allocated from the total costs for the design unit project.

¹⁰⁷ Ex. TURN-15 (Finkelstein) at 24-25.

¹⁰⁸ D.21-10-019 at 131, Ordering Paragraph 24.

No.	Wkp/Description	Activity	TY2024 Change (\$000)	Description
4	1ED012 – Electric Engineering	Engineering Labor	(18)	Updated the percent of O&M allocated from the total costs for engineering labor.
		Total	(1,759)	

1
2 **VI. REBUTTAL TO PARTIES’ COMMENTS ON GRID MODERNIZATION PLAN**

3 **A. UCAN**

4 UCAN claims that SDG&E’s GMP does not support CSOM DER integration and that the
5 grid modernization investments that are outlined in the GMP will be outmoded when placed in-
6 service. UCAN recommends that SDG&E’s request for \$1.3 million in DER integration O&M
7 costs be reduced by \$5.4 million, and that SDG&E’s request for \$5.4 million in DER integration
8 capital costs be reduced by \$26.7 million. As a threshold matter, UCAN is simply incorrect in
9 asserting that the grid modernization investments in SDG&E’s GMP do not support CSOM
10 integration and that these investments will be outmoded when placed in-service. Moreover, since
11 UCAN’s recommended reductions in O&M and capital far exceed the amounts SDG&E
12 requested, it is unclear what UCAN is actually recommending. Notwithstanding the numerical
13 errors in UCAN’s recommendation, SDG&E responds below to the substance of UCAN’s
14 comments on SDG&E’s GMP.

15 UCAN takes issues with the specific proposed projects included in the GMP, claiming
16 that grid modernization investments outlined by the GMP would only enable USOM DERs, do
17 not support CSOM DER integration, and should not be approved. While the rebuttal testimony
18 of SDG&E witnesses Valero, Thai, Exxon and Reyes address UCAN’s concerns with each
19 individual project,¹⁰⁹ SDG&E explains here why UCAN’s basic policy positions are invalid.
20 SDG&E also responds to the UCAN’s evident misunderstandings with SDG&E’s grid
21 modernization vision. SDG&E emphasizes that its GMP is strategically important for enabling
22 DER integration on both the utility-side and customer-side of the meter.

¹⁰⁹ Exs. SDG&E-211 (Reyes), SDG&E-215 (Valero), SDG&E-217 (Thai), SDG&E-225 (Gordon, Ballard, Exxon).

1 Throughout its testimony, UCAN references a series of DER related proceedings,¹¹⁰
2 including the High DER OIR,¹¹¹ Demand Flexibility OIR, and the CPUC’s Cal-Fuse Report.¹¹²
3 As described previously in the GMP, SDG&E has been actively participating in these
4 proceedings and is aware of the needs to continue evaluating and refining its grid modernization
5 vision to align with state policy direction as necessary. Nevertheless, the proceedings are still
6 ongoing and the policy matters being discussed are out of scope for this GRC.

7 Taking the Cal-Fuse Report as an example, UCAN criticizes SDG&E’s GRC filing for
8 not addressing the matters raised in the Report, but UCAN completely ignores the fact that
9 SDG&E’s GRC application was filed in May 2022, while the said report was published in June
10 2022. Moreover, the recommendations included in the Report have yet to be acted on by the
11 Commission, so it would make little sense for SDG&E to reshape its GRC proposals based on
12 speculation of what the Commission will actually do.

13 A key issue with UCAN’s testimony is the claim that SDG&E has failed to propose
14 projects that will “accelerate both networking and integration of DERs at large scale.”¹¹³
15 Specifically, UCAN claims that “SDG&E’s GRC filing and its GMP are notably unresponsive
16 ... to CSOM DERs”¹¹⁴ and “SDG&E’s focus and approach categorically exclude CSOM DERs
17 and CSOM based microgrids.”¹¹⁵ UCAN even goes so far as to contend that “SDG&E’s GMP
18 aims ... to avoid serving customers ... with CSOM DERs”¹¹⁶ and “reduce the penetration of
19 DERs.”¹¹⁷

20 Here again, UCAN misinterprets SDG&E’s GRC filing to reach the conclusion that
21 SDG&E’s proposed projects are “unresponsive...to CSOM DERs.” UCAN strangely concludes
22 that because SDG&E’s GMP defines the acronym “DER” as “Distributed Energy Resource,” and

¹¹⁰ Ex. UCAN (Woychik) at 233.

¹¹¹ *Id.* at 9.

¹¹² *Id.* at 156.

¹¹³ *Id.* at 24.

¹¹⁴ *Id.* at 10.

¹¹⁵ *Id.* at 212.

¹¹⁶ *Id.* at 189.

¹¹⁷ *Id.* at 95.

1 because “DERs are not defined by the Commission or others in California to include utility-side-
2 of-meter resources,” SD&GE is somehow implying that its use of the terms “DER” and
3 “Distributed Energy Resource” are intended to exclude customer-side-of-meter DERs.¹¹⁸ UCAN
4 also states that because SDG&E’s proposed DERMS “includes ‘software and hardware needed
5 to monitor and control SDG&E Distributed Energy Resources (DERs),” “advanced energy
6 storage, control of microgrids, and management of PSPS events,” “DERMS is incapable of
7 CSOM DER integration.”¹¹⁹

8 UCAN’s conclusion is incorrect. Nowhere in its GRC filing has SDG&E indicated its
9 use of the terms “DER” and “Distributed Energy Resources,” is intended to be limited to USOM
10 DERs. UCAN provides no evidence that the goal of SDG&E’s GMP is to “avoid” serving
11 customers with DERs. And nowhere has SDG&E indicated—nor has UCAN proven—that
12 DERMS is incapable of facilitating large numbers of CSOM DERs. It is illogical to conclude
13 that DERMS cannot be used to facilitate CSOM DERs because DERMS can be used to monitor
14 and control USOM DERs. In fact, it is SDG&E’s recognition that large increases in the numbers
15 of CSOM DERs—which creates the need for increased real-time visibility of its distribution
16 system and the ability to control enough DERs (whether USOM or CSOM) to maintain safe and
17 reliable grid operations, particularly during abnormal system conditions—that is driving
18 SDG&E’s interest in DERMS. The fact that the near-term applications for DERMS may include
19 monitoring and control of utility-owned DERs, and may be used to manage grid operations
20 during PSPS events and for the operation of multi-premise microgrids, does not in any way
21 lessen the necessity for or the usefulness of DERMS in the longer-term, when the number of
22 CSOM DERs will be much larger than today.

23 It should be noted that, today, after the addition of 270,000 CSOM rooftop solar, CSOM
24 battery storage facilities, and other CSOM DERs,¹²⁰ SDG&E’s existing systems have proven
25 capable of ensuring safe and reliable service. However, SDG&E believes that DERMS will be
26 an important tool for maintaining safe and reliable service as the number of CSOM DERs
27 escalates. Likewise, contrary to UCAN’s assertion that SDG&E’s Local Area Distribution

¹¹⁸ *Id.* at 76.

¹¹⁹ *Id.* at 305-306.

¹²⁰ *Id.* at 190.

1 Controller (LADC) investments “fail to incorporate non-utility (third-party) microgrids,
2 customer needs, or CSOM DERs,”¹²¹ the LADC is fully capable to do so in the multi-premise
3 microgrids currently in development.¹²²

4 UCAN tries to use the amount of demand response¹²³ in the SDG&E distribution system
5 as evidence that SDG&E “has a poor record in integrating CSOM DERs into its
6 infrastructure.”¹²⁴ UCAN claims the SDG&E customers provided 10.4 MW of demand response
7 in August of 2021.¹²⁵ However, UCAN’s testimony has no evidence showing that customers are
8 interested in providing larger amounts, no evidence that the program incentives necessary to
9 induce larger amounts would be cost-effective relative to the benefits such demand response
10 would provide, and no evidence that the amount of demand response says anything about
11 SDG&E’s infrastructure or its ability to integrate CSOM DERs. UCAN’s contention that the
12 amount of demand response in the SDG&E distribution service area proves SDG&E “has a poor
13 record in integrating CSOM DERS into its infrastructure” is without merit since the forecast
14 amounts and types of demand response drives utility infrastructure needs, not the other way
15 around. Moreover, SDG&E has proposed to replace its existing DRMS in anticipation of DR
16 programs being expanded, a fact that UCAN acknowledges.¹²⁶ In sum, SDG&E disagrees with
17 UCAN’s comments on demand response.

18 UCAN next argues SDG&E “has historically stunted customer DER growth,”¹²⁷ and that
19 the DER installation statistics provided by SDG&E are “very misleading” because “almost all

¹²¹ *Id.* at 248.

¹²² UCAN is unclear what it means by “non-utility (third-party) microgrids.” There are many single-premise Behind-The-Meter (BTM) microgrids already in place and others planned. A LADC is not needed for these “non-utility (third party) microgrids.” Microgrids that use SDG&E distribution facilities are multi-premise In-Front-of-the-Meter (IFM) microgrids and SDG&E will use the LADC to operate those microgrids via control of enough USOM and/or CSOM resources to provide acceptable frequency and voltage during islanded operations. UCAN is also unclear what “customer needs” it is referring to, but all of the multi-premise microgrids that SDG&E is operating and developing provide resiliency and thereby address that particular “customer need.”

¹²³ *Id.* at 152.

¹²⁴ *Id.* at 152.

¹²⁵ *Id.* at 153.

¹²⁶ *Id.* at 245-246.

¹²⁷ *Id.* at 75

1 CSOM DERs are solar PVs that were initiated and funded through customer actions.”¹²⁸
2 SDG&E finds it surprising that a distribution system on which almost one in every five
3 residential customers has adopted CSOM DERs,¹²⁹ would be characterized as a system with
4 “historically stunted customer DER growth.” Indeed, SDG&E’s interconnection process for
5 CSOM DERs (for generation, such as battery storage, under Rule 21; and loads, such as electric
6 vehicles, under new service requests) is exemplary in efficiency and timeliness, a fact that
7 UCAN acknowledges.¹³⁰

8 UCAN contends that the Commission “required SDG&E to submit additional
9 information in this GRC to include a proposed approach to value DER resources” and that
10 SDG&E has “failed to present a DER ... valuation approach.”¹³¹ I am not aware of and UCAN
11 does not identify which Commission order required SDG&E to submit “additional information in
12 this General Rate Case proceeding.”

13 While repeatedly asserting that SDG&E’s GMP fails to integrate CSOM DERs at
14 scale,¹³² UCAN, at the same time, expresses alarm that SDG&E’s GMP seeks to control
15 “virtually ... all DERs that are connected to the grid”¹³³ and “resources that are provided to
16 customers.”¹³⁴ UCAN does not attempt to reconcile these two contradictory positions, or explain
17 how SDG&E could integrate CSOM DERs without controlling some amount of USOM and/or
18 CSOM DERs. The technology framework presented in the GMP supports SDG&E’s role as the
19 Distribution System Operator (DSO). SDG&E has an obligation to serve. SDG&E is
20 responsible for the safe and reliable operation of its distribution facilities. For these reasons,

¹²⁸ *Id.* at 190.

¹²⁹ *Id.* UCAN’s testimony provides a “one in every six households” number.

¹³⁰ *Id.* at 228.

¹³¹ *Id.* at 154.

¹³² For example, UCAN states that “SDG&E lacks plans that show how it will effectively connect with customers, integrate and optimize DERs for customers, or overcome existing barriers that limit the ability of CSOM DERs to fully scale...” See Ex. UCAN (Woychik) at 191. “SDG&E’s investment proposals are limited to assets that...will not enable large-scale customer (CSOM) DERs.” *Id.* at 319. “SDG&E has not shown that it is willing to integrate many of the resources that are available in its service territory, specifically from SDG&E customers who can provide CSOM DERs.” *Id.* at 158.

¹³³ *Id.* at 215.

¹³⁴ *Id.* at 110.

1 SDG&E’s DSO function must be supported with O&M funding and capital investments that will
2 continue to support the delivery of distribution services to customers. This is so regardless of
3 which specific DER technologies customers may choose. In other words, SDG&E’s GMP is
4 technology-neutral in that it facilitates customer choice in adopting customer-side technology
5 solutions.

6 It is not entirely clear how UCAN believes grid safety and reliability should be
7 maintained in a high DER environment. On the one hand UCAN takes the position that
8 SDG&E’s capital spending priorities “should be focused on ... monitoring and control.”¹³⁵ This
9 is exactly what SDG&E’s GMP does. On the other hand, UCAN argues that SDG&E’s
10 proposed GMP investments will be obsolete when implemented, and therefore stranded. For
11 these reasons UCAN recommends that the Commission deny 100% of the costs that SDG&E
12 identifies as primarily driven by DER integration (\$5.4 million in TY2024 grid modernization
13 capital costs and \$26.7 million in GMP capital costs for the 2022-2024 time period). UCAN
14 bases this recommendation on its assertion that “SDG&E’s priorities for grid modernization are
15 not consistent with the Commission’s priorities, and largely ignore customer DER integration
16 needs and opportunities, specifically to advance CSOM DERs.”¹³⁶ But nowhere does UCAN
17 explain how the elements of SDG&E’s GMP are inconsistent with Commission priorities, nor
18 why SDG&E’s proposed GMP, if implemented, would be incapable of providing safe and
19 reliable distribution service in a high DER environment.

20 Further, UCAN claims smart inverters coupled with energy storage resources can provide
21 their own resiliency, and alleges that SDG&E has a myopic view of resiliency.¹³⁷ In making this
22 claim, it appears that UCAN is ignoring the fact that in order to maximize smart inverters’
23 benefits, foundational technology proposed in SDG&E’s GMP are necessary to be developed
24 and implemented.

25 Finally, UCAN also argues that GMP fails to capture the needs to address the huge
26 unmanaged load expected with the high DER scenario, stating SDG&E ignores customers and

¹³⁵ *Id.* at 269.

¹³⁶ *Id.* at 241.

¹³⁷ *Id.* at 222.

1 integration of DERs on the CSOM.¹³⁸ SDG&E disagrees. The capacity planning process, also
2 referred to as Distribution Planning Process (DPP), already demonstrates that SDG&E explicitly
3 recognizes customers and integration of DERs by using the California Energy Commission's
4 (CEC's) forecast of customer-side DER impacts.

5 **VII. CONCLUSION**

6 To summarize, SDG&E submits an updated Test Year 2024 forecast for Electric
7 Distribution O&M of \$130.962 million. Four parties submitted proposals addressing activities
8 within Electric Distribution O&M; Cal Advocates, FEA, TURN, and UCAN. Proposals
9 submitted include alternative recommendations within five specific activity areas and challenge
10 elements of SDG&E's Grid Modernization Plan. SDG&E's activities outside of these five areas
11 were reviewed and accepted by these parties. The five activities that are the subject of
12 alternative proposals are the following:

- 13 • Workforce necessary to manage grid operating technology and customer DER
14 interconnection and planning activities within Reliability & Capacity and Electric
15 System Operations
- 16 • Storeroom costs within Electric System Operations
- 17 • Workforce development and growth of linemen within Electric Regional
18 Operations
- 19 • Skills and Compliance Training forecasting
- 20 • Pole Attachment Data Compliance program within Compliance Management

21 The largest proposed reduction is in the Electric System Operations, where Cal
22 Advocates recommendation is \$9.521 million lower than SDG&E's Test Year 2024 forecast.
23 Two other significant areas include Electric Regional Operations, where Cal Advocates
24 recommendation is \$4.764 million lower than SDG&E's revised Test Year 2024 forecast and
25 Compliance Management, where Cal Advocates recommendation is \$2.459 million lower than
26 SDG&E's Test Year 2024 forecast. In each of the five areas where alternative proposals were
27 made, my testimony reviews each party's key concerns, identifies and corrects flaws in their
28 analysis that lead to incorrect conclusions, provides supplemental evidence and justification for

¹³⁸ *Id.* at 257.

1 the need for SDG&E’s forecasted activities, and in some instances corrects the record when
2 errors are found.

3 In preparing this testimony, SDG&E found several instances in which parties focused
4 their alternatives on an analysis that compares SDG&E’s 2019 GRC Commission approved
5 forecast to the 2024 GRC historical spend submitted as part of SDG&E workpapers. These
6 analyses are flawed for multiple reasons. First and foremost, with the demands for SDG&E to
7 track costs associated with its Wildfire Mitigation Program (WMP), new accounting mechanisms
8 were put in place to separate wildfire related O&M costs from all other O&M expenses. This
9 resulted in a significant reduction in O&M spend amongst cost categories in the 2024 GRC, as
10 compared to cost levels spent and approved in the 2019 GRC. These accounting mechanisms do
11 not require 2-way transfers and are not documented in workpapers. Parties that see this
12 reduction and use it as a basis for reductions to SDG&E’s requests are mistaking it for
13 underspend amongst cost categories within Electric Distribution O&M testimony. Second, and
14 to a lesser impact, there are re-organizations of functional responsibilities internal to SDG&E
15 that change impact cost categories between GRC periods. SDG&E outlines some of these in
16 discovery with intervenors.¹³⁹ The most significant areas of cost variance due to wildfire
17 accounting adjustments between GRC periods are within the Construction Management, Electric
18 Regional Operations, Electric Engineering, and Compliance Management cost categories.

19 SDG&E has provided substantial detail supporting its forecasts in testimony, workpapers,
20 and data requests. All activities detailed in testimony support maintaining clean, safe, and
21 reliable electric service to SDG&E’s customers. Additionally, SDG&E’s testimony
22 demonstrates that its Grid Modernization Plan provides prudent infrastructure investment to
23 “innovate and optimize a grid ... that accelerates decarbonization – all while delivering value
24 and choice for all customers.”¹⁴⁰ Funding incremental activities set forth in this testimony will
25 allow SDG&E to maintain its skilled workforce in the face of high industry demand, meet new
26 compliance requirements, and increase system automation to adapt to meet California’s

¹³⁹ Appendix B, CA RYD-015, Q1.

¹⁴⁰ Ex. SDG&E-12-R (Swetek), Appendix C, GMP at 2.

1 decarbonization goals.¹⁴¹ My direct testimony and workpapers support SDG&E's continued
2 ability to uphold these obligations.

3 This concludes my prepared rebuttal testimony.

¹⁴¹ Ex. SDG&E-12-R (Swetek) at TS-2 - TS-4.

APPENDIX A
GLOSSARY OF TERMS

ACRONYM	DEFINITION
ACC	Avoidance Cost Calculator
ADMS	Advanced Distribution Management System
BY	Base Year
Cal Advocates	The Public Advocates Office of the California Public Utilities Commission
CEC	California Energy Commission
CMP	Corrective Maintenance Program
Commission	California Public Utilities Commission
CPUC	California Public Utilities Commission
CSOM	Customer side of the meter resources
C&O	Construction & Operations
DER	Distributed Energy Resources
DERMS	Distributed Energy Resource Management System
DIIS	Distribution Interconnection Information System
DPP	Distribution Planning Process
DR	Demand Response
DRP	Distributed Resources Plan
EI	Edison Electric Institute
ELRP	Electric Load Reduction Program
ERO	Electric Regional Operations
ESO	Electric System Operations
ET&D	Electric Transmission & Distribution
EV	Electric Vehicle
FEA	The Federal Executive Agencies
FTE	Full-time Employee Equivalent
GISS	Geographic Information System Services
GMP	Grid Modernization Plan
GRC	General Rate Case
HFTD	High Fire Threat District
ICA	Integration Capacity Analysis
IT	Information Technology
LADC	Local Area Distribution Controller
LGP	Limited Generation Profile
NBT	Net Billing Tariff
NEM	Net Energy Metering
OIR	Order to Institute Rulemaking
OSHA	Occupational Safety & Health Administration
O&M	Operations & Maintenance
PSPS	Public Safety Power Shutoff
PV	Photovoltaic

QA/QC	Quality Assurance/Quality Control
RES-BCT	Residential Bill Credit
RE-MAT	Renewable Market Adjusting Tariff
RFO	Request for offer
SCADA	Supervisory & Data Acquisition
SDG&E	San Diego Gas & Electric Company
SEU	Sempra Energy Utilities
SGIP	Self Generation Incentive Program
SOC	Standard Offer Contract
SOMAH	Solar on Multifamily Affordable Housing
TURN	The Utility Reform Network
TY	Test Year
T2CMA	Track 2 Pole Attachment Cost Memorandum Account
UCAN	The Utility Consumers Action Network
USOM	Utility side of the meter resources
WDAT	Wholesale Distribution Open Access Tariff
WMP	Wildfire Mitigation Plan
WMPMA	Wildfire Mitigation Plan Memorandum Account

APPENDIX B
DATA REQUEST RESPONSES

Data Request Number: FEA-SDGE-001

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Federal Executive Agencies

Date Received: 10/17/2022

Date Responded: 10/31/2022

FEA-01-36. Electric System Operations O&M. Refer to Exhibit SDG&E-12-WP, pages 31-32.

- a. Explain what the forecasted storeroom increase represents.
- b. State whether the Company used this methodology to forecast incremental increases for storeroom costs in the prior GRCs. If not, explain how the incremental increases were previously forecasted.
- c. Provide the calculations and documentation supporting the incremental increases of \$6.905 million, \$11.334 million and \$9.521 million in 2022, 2023 and 2024, respectively.

SDG&E Response 1.36:

- a. The forecasted storeroom increase represents 2.56% of the increase in forecasted capital expenditures through the 2022-2024 period over the 2021 spend. Please see Ex. SDG&E-12-WP-R, page 42 for the forecasted capital utilized in this calculation.
- b. In the prior GRC, SDG&E did not utilize a base year with incremental cost calculation. The prior GRC filing utilized a 3-year linear trend forecast, which accounted for increases in storeroom costs due to the increase in general historical trends.
- c. The exact calculations are located in Ex. SDG&E-12-WP-R, page 42. An excel spreadsheet version showing the formulas is attached in the file titled "FEA-001-SDGE-12-Q136c."

Data Request Number: FEA-SDGE-001

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Federal Executive Agencies

Date Received: 10/17/2022

Date Responded: 10/31/2022

FEA-01-41. Electric Regional Operations O&M. Refer to Exhibit SDG&E-12-WP, page 125 – ED008-Regional Operations Supplemental Workpaper. Provide documentation supporting the non-labor increase totaling \$1,462,010 in 2022, 2023 and 2024.

SDG&E Response 1.41:

The non-labor incremental increase in 2022, 2023 and 2024 is the result of 3 main drivers.

The first is the non-labor cost of onboarding 16 lineman at a cost per unit of \$5,000. Onboarding may include tools, equipment, and other miscellaneous expenses. This assumes a 70% capital/30% O&M split and is only included in 2022 at a cost of \$80,000.

The second driver is the corrosion zone enhancement program to address the ongoing safety concerns caused by coastal climate contamination. The intent of the Corrosion Zone Enhancement Program is to proactively conduct visual and mechanical inspections and install new corrosion resistant, bi-metallic connectors in highly contaminated areas to increase service life and reduce the impact of corrosion on SDG&E's system. SDG&E plans to identify, inspect and replace 20 connectors at \$10,000 per inspection per year to gather and evaluate data provided by the coastal corrosion program to determine if/where to implement a broader program in the future. See table below for yearly outages caused by connector failures within 1.5 miles of the coast.

Year	Coastal Connector Failure
2017	50
2018	68
2019	69
2020	56
2021	72
Approximate 5-year Average:	65

The third non-labor incremental cost driver is the intelligent image processing program, which includes three components (1) cloud consumption, (2) Quality Assurance (QA) review and processing, and (3) fleet image data acquisition.

For the cloud consumption drivers, SDG&E plans to spend \$2,500 per month on cloud-based services for running Artificial Intelligence (AI) and machine learning in 2023 and 2024.

The QA review and processing drivers are to support contractors reviewing and processing asset and damage model predictions. A market rate of \$90/hr with 3% increase year over year was used to determine cost for 2022-2024.

Data Request Number: FEA-SDGE-001

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Federal Executive Agencies

Date Received: 10/17/2022

Date Responded: 10/31/2022

SDG&E Response 1.41: CONTINUED

The Fleet Image Data Acquisition drivers are to support contractors for driving related to IIP with fleet capture. A market rate of \$80/hr with 3% increase year over year was used to determine cost for 2023-2024.

Data Request Number: FEA-SDGE-002

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Federal Executive Agencies

Date Received: 1/23/2023

Date Responded:2/10/2023

2.13: Electric Distribution O&M. Refer to Exh. No.: (SDG&E-12-WP-R), page 2 of 222. Provide the amounts authorized by the Commission for each of the years 2017, 2018, 2019, 2020, 2021 and 2022 for each of the categories shown.

SDG&E Response 2.13:

Please refer to the attached file “FEA_002_Q13_Q14,” which includes all the information requested in Questions 2.13 and 2.14. Please note that actual costs referenced in the document are in the format of the 2024 GRC filing. Also, please note that performing a direct comparison of year-to-year and/or year-over-year dollar values of GRC authorized v. 2024 GRC filed costs is inappropriate. There are differences in how these figures were assembled including the transferring of costs to new and/or different witness areas including, for example, costs associated with wildfire activities, escalation factors, the inclusion of costs into a witness area that did not exist in the TY 2019 GRC, and the reclassification of costs inside identified cost categories associated with organizational changes.

Data Request Number: FEA-SDGE-004

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Federal Executive Agencies

Date Received: 2/27/2023

Date Responded: 3/13/2023

Question 4-1-Continued

- b. Provide the date that the industrial trainers were hired. If they have not yet been hired, provide the anticipated hire dates.

SDG&E Response 4-1b:

Consultant	Hire Date	Classification
Employee A	11/22/2021	Industrial Athletic Trainer
Contractor A	8/10/2022	Instructional Designer 1
Contractor B	8/29/2022	Instructional Designer 1
Contractor C	2/6/2023	Instructional Designer 3

Data Request Number: FEA-SDGE-004

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Federal Executive Agencies

Date Received: 2/27/2023

Date Responded: 3/13/2023

Question 4-2-Continued

- c. Explain how municipalities were educated about electric hazards prior to this program being implemented.

SDG&E Response 4-2a:

SDG&E's existing public safety outreach program is conducted by external affairs through information sharing at safety and wildfire fair events. These forums allow for maximizing information sharing that targets the general public. The addition of the new electrical hazard awareness positions will facilitate the direct training of local first responders, public workers and the general public on SDG&E electrical hazard awareness. This training will be conducted by qualified electrical workers and safety professionals.

Data Request Number: FEA-SDGE-004

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Federal Executive Agencies

Date Received: 2/27/2023

Date Responded: 3/13/2023

Question 4-2-Continued

- b. Provide the date that the electrical worker instructors were hired. If they have not yet been hired, provide the anticipated hire dates.

SDG&E Response 4-2a:

SDG&E conducted interviews for the electrical hazard awareness program in Q1 of 2022; however, SDG&E did not find qualified candidates. SDG&E will conduct another round of interviews in Q3 of 2023 in anticipation of hiring the right candidate by end of year 2023.

Data Request Number: FEA-SDGE-004

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Federal Executive Agencies

Date Received: 2/27/2023

Date Responded: 3/13/2023

FEA-04-3. Skills and Compliance Training. Refer to Exh. No.: (SDG&E-

12-WP-R), page 129. Are the incremental costs for the industrial athletic program and electric hazard awareness program subject to the 70/30 capital/O&M split? If not, explain why not.

SDG&E Response 4-3:

The electric hazard awareness program is not subject to a 70/30 capital/O&M split, but rather is designated as 100% O&M. This is due to the electric hazard awareness program being classified as an outreach program. The industrial athletic program is subject to the 70/30 capital/O&M split.

Data Request Number: PAO-SDGE-015-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Date Received: 6/30/2022

Date Responded: 7/27/2022

1. Referring to SDG&E's response to data request PubAdv-SDG&E-002-RYD, Q.1, SDG&E's 2019 recorded costs for Electric Distribution of \$85.691 million are \$30.449 million less than its 2019 GRC approved costs of \$116.14 million. Each of the following chapters recorded lower 2019 costs than authorized in the 2019 GRC:

- B. Construction Management
- C. Electric System Operations
- D. Kearny Operations Services
- E. ET&D: Substation C&O
- F. Distribution Design and Project Management
- G. Electric Regional Operations
- H. Skills & Compliance Training
- J. Electric Engineering
- M. Compliance Management
- O. Regional Public Affairs

Please answer the following:

1a. For each chapter that recorded lower 2019 costs than authorized in the 2019 GRC, explain specifically what activities contributed to the decrease in spending.

SDG&E Response 1a:

As part of a previous data request (PAO-SDGE-002-RDY-Q1), SDG&E provided a table with the requested and authorized Test Year (TY) 2019 GRC funding for these O&M Cost Categories, along with the historical and forecasted spend as contained in the TY 2024 GRC. However, SDG&E believes performing a direct comparison of year-to-year and/or year-over-year dollar values is inappropriate and may lead to incorrect conclusions due in part to the tracking of costs presented in the TY 2019 GRC have changed in the TY 2024 GRC. These changes include the transferring of costs to new and/or different witness areas, e.g., costs associated with wildfire activities, the inclusion of costs into a witness area that did not exist in the TY 2019 GRC, and the reclassification of costs inside identified cost categories associated with organizational changes. With these factors and caveats, SDG&E provides the following main drivers for 2019 actual vs 2019 authorized spend variances for the identified categories:

Data Request Number: PAO-SDGE-015-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Date Received: 6/30/2022

Date Responded: 7/27/2022

SDG&E Response 1-CONTINUED

B. Construction Management

A major cost variance driver for the Construction Management category is the removal of wildfire mitigation costs originally mapped to the Construction Management cost centers in the TY 2019 GRC. Incurred spending for wildfire mitigation activities that were authorized in this cost category for 2019 were re-mapped when preparing the TY 2024 GRC and now reside in the Wildfire Mitigation and Vegetation Management testimony and workpapers (Exhibit SDG&E-13 and Ex. SDG&E-13-WP). These wildfire mitigation costs are tracked and balanced in the Wildfire Mitigation Plan Memo Account (WMPMA). In addition, incurred costs for the distribution O&M component of 4kV modernization activities were lower than anticipated due to design delays resulting in reduced capital construction for 4kV modernization.

C. Electric System Operations

As reflected in SDG&E's response to data request PubAdv-SDG&E-002-RYD, Q.1, SDG&E's 2019 recorded costs for Electric System Operations were higher than the equivalent combination of the TY 2019 GRC Electric Distribution and Grid Operations authorized funding.

D. Kearny Operations Services

As reflected in SDG&E's response to data request PubAdv-SDG&E-002-RYD, Q.1, SDG&E's 2019 recorded costs for the Kearny Operations Services Cost Category were higher than the 2019 GRC authorized funding.

E. ET&D: Substation C&O

A major cost variance driver for the Substation C&O category in 2019 was the timing of maintenance activities. Distribution substation maintenance activities are determined by time-based cycles, with the amount of scheduled maintenance varying from year-to-year. Also, the amount of unscheduled maintenance, such as that due to equipment failures or the results of inspections, is also variable from year-to-year. For example, only five condition-based maintenance monitors were required to be replaced in 2019 due to failure or degradation, as compared to the forecasted replacement of 15 monitors per year. Design delays associated with 4kV modernization activities also contributed to the actual spend being lower than had been forecast.

Data Request Number: PAO-SDGE-015-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Date Received: 6/30/2022

Date Responded: 7/27/2022

SDG&E Response 1-CONTINUED

F. Distribution Design and Project Management

The major cost variance driver for Distribution Design and Project Management is the one-sided adjustment removing labor and non-labor costs associated with training. The 2019 authorized spend included the cost for training, which are now allocated to the applicable capital overhead pool account to better align with the type of work supported.

G. Electric Regional Operations

The major cost variance driver for Electric Regional Operations is the removal of wildfire mitigation costs originally mapped to the ERO cost centers, which are now being tracked and balanced in the WMPMA starting in 2019. The 2019 authorized spend included the cost for wildfire mitigation work that is now discussed in the Wildfire Mitigation and Vegetation Management Testimony. Please refer to Wildfire Mitigation and Vegetation Management Workpapers (SDG&E-13-WP).

H. Skills & Compliance Training

The major cost variance driver for Skills & Compliance Training is the one-sided adjustment moving 70% of labor and non-labor costs associated with training. The 2019 authorized spend included the cost for training, which are now allocated to the applicable capital overhead pool account to better align with the type of work supported.

J. Electric Engineering

The historical spend in the Electric Engineering category was less in 2019 than was authorized in the 2019 GRC due to Wildfire activities being transferred from the Electric O&M witness area to the Wildfire Mitigation and Vegetation Management Witness. These wildfire mitigation costs are tracked and balanced in the WMPMA. Additionally, costs in the Distribution and Engineering category in the TY 2019 GRC related to the customer generator interconnection process were shifted to the Reliability and Capacity category when preparing the TY 2024 GRC.

M. Compliance Management

The major cost variance driver for Compliance Management is the one-sided adjustment excluding special billable costs that were entirely or partially billed to third parties. Additional cost variance exists due to the timing of compliance inspection and repair activities on the prescribed 10-year maintenance intervals.

Data Request Number: PAO-SDGE-015-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Date Received: 6/30/2022

Date Responded: 7/27/2022

SDG&E Response 1-CONTINUED

O. Regional Public Affairs

The major cost variance driver for Regional Public Affairs is the transfer of incurred costs associated with two cost centers to another witness area.

Data Request Number: PAO-SDGE-027-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Proceeding Number: A2205015_016 2024 GRC

Publish To: Public Advocates Office

Date Received: 7/27/2022

Date Responded:8/10/2022

5. Referring to p. TS-61 of Ex. SDG&E-12, SDG&E's TY 2024 forecast for its Engineering Capabilities activities includes costs that "will be allocated approximately 98% capital and 2% O&M."

Referring to the workpapers supporting Ex. SD&E-12, p. 167, SDG&E's Engineering Capabilities activities are all allocated 3% to O&M except for one activity that is allocated 100% to O&M.

Please explain the discrepancy between SDG&E's testimony and workpapers regarding the O&M/Capital allocation of Engineering Capabilities. Provide supporting documentation that SDG&E relied upon to determine the allocation of each activity to O&M.

SDG&E's Response 5:

SDG&E's workpaper inadvertently used a 3% O&M allocation factor in the forecast calculations. As such, the workpapers overestimate the O&M allocation by approximately \$15,000-\$25,000. SDG&E will make the correction to its workpapers at the next available opportunity.

Data Request Number: PAO-SDGE-027-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Proceeding Number: A2205015_016 2024 GRC

Publish To: Public Advocates Office

Date Received: 7/27/2022

Date Responded:8/10/2022

2. Referring to p. TS-56 of Ex. SDG&E-12, SDG&E states, "the cost driver behind Electric Hazard Awareness in Municipalities is to support the on-boarding of three contracted qualified electrical worker instructors to support public safety outreach in an effort to educate our first responders, public workers, and general public around electrical hazard awareness."

Explain specifically how SDG&E previously conducted public safety outreach to educate first responders, public workers, and the general public around electrical hazard awareness prior to filling these three positions.

SDG&E's Response 2:

SDG&E's existing public safety outreach program is conducted by external affairs through information sharing at safety and wildfire fair events. These forums allow for maximizing information sharing that targets the general public. The addition of these three positions will facilitate the direct training of local first responders, public workers and the general public on SDG&E electrical hazard awareness. This training will be conducted by qualified electrical workers and safety professionals.

3. Referring to the workpapers supporting Ex. SDG&E-12, p. 167, SDG&E forecasts \$306,000 for its Design Unit Update Initiative (DUUI) as part of its Electric Engineering forecast for TY 2024.

Provide SDG&E's calculations that show the breakdown of the annual cost of \$306,000 by DUUI activity. For each cost, provide supporting documentation that identifies who will perform the work (e.g. existing SDG&E employees, contractors, etc.) and a detailed description of each of the activities that will be funded through this \$306,000 forecast.

Data Request Number: PAO-SDGE-027-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Proceeding Number: A2205015_016 2024 GRC

Publish To: Public Advocates Office

Date Received: 7/27/2022

Date Responded:8/10/2022

SDG&E's Response 3:

The attachment provided in this response contains “Protected Materials” (i.e., trade secret, market sensitive, or other confidential and/or proprietary information) as determined by SDG&E in accordance with D.21-09-020 and GO 66-D Revision 2. The Protected Materials in the attachment have been highlighted in yellow. The confidentiality declaration of Tyson Swetek is also provided.

Please see separately attached document “PAO-SDGE-027-RYD_ Question 3_ Confidential.”

SDG&E believes it has identified an immaterial error with respect to its forecasts for the DUUI. Due to the error, the DUUI O&M forecast in the workpapers is overstated by approximately \$300,000 and incorrectly categorized as non-labor. The correction is reflected in the DUUI cost calculation. SDG&E will make the corresponding correction to testimony and workpapers at the next available opportunity.

Internal labor includes SDG&E employees performing project management activities, technical review and supporting activities throughout implementation.

The Vendor Fixed price includes aligning Compatible Unit (CU) naming convention with construction standards and aligning CU specifications with Geographical Information System (GIS) features and assets. In addition, the fixed price includes the extraction, data cleanup, and reloading of modified CU data and the redesign of CUs where applicable.

After the initial redesign phase and data cleanup of CUs included in the DUUI, further work will occur in subsequent years to implement new process and technological enhancements. These enhancements, focused on further improving cost estimating accuracy may include, but are not limited to automation of an integration process to update CUs when construction standards are updated and building differentiated CUs for the use of internal and external labor on projects.

Data Request Number: PAO-SDGE-093-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Public Advocates Office

Date Received: 10/5/2022

Date Responded: 10/19/2022

3. Referring to SDG&E's response to data request PubAdv-SDG&E-022-RYD, Q. 1f, SDG&E states, "the base forecast to which the forecast adjustments were added reflects using the 2021 recorded base year forecast methodology, and the 2021 recorded base year values reflect the loss of 15 linemen and 8 line assistants to attrition."

a. Identify, in Ex. SDG&E-12-WP, the adjustment that removed the cost of 15 linemen and 8 line assistants.

b. Provide SDG&E's calculations of the cost per FTE of the 15 linemen and 8 line assistants that it relied upon to remove these costs from its forecast.

c. Explain why SDG&E states that it removed the cost of 15 linemen and 8 line assistants, yet provides the following numbers in its testimony and data request responses:

i. Referring to SDG&E's response to data request PubAdv-SDG&E-022-RYD: "the combined loss of 8 linemen per year plus the loss of 12 line assistants who withdraw from the line assistant program."

ii. Referring to p. TS-50 of Ex. SDG&E-12, "the loss of twenty linemen due to attrition."

iii. Referring to SDG&E's response to data request PubAdv-SDG&E-022-RYD, Q. 1d, which shows a net loss of 13 linemen in 2017-2021.

SDG&E Response 3:

3a.

A forecast adjustment is not necessary since the recorded 2021 costs are already lower than they otherwise would have been due to the absence of the cost of the 15 linemen and 8 line assistants.

3b.

See SDG&E's response to Question 3a. There is no calculation needed since the forecast does not include the costs for these personnel.

3c.

Data Request Number: PAO-SDGE-093-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Public Advocates Office

Date Received: 10/5/2022

Date Responded: 10/19/2022

Costs were not removed. The cost reflected in base year 2021 incorporates the absence of the 15 lineman and 8 line assistants. To clarify, the loss of 15 lineman and 8 line assistants included those who resigned, retired or were terminated from SDG&E in 2021, this numbers does not include promotions and transfers.

Referring to data request PubAdv-SDG&E-022-RYD and Q1c above, the combined loss of 8 lineman per year plus the loss of 12 line assistants from the line assistant program represents a 7-year average. After correcting a calculation in SDG&E's database, the actual 7-year average loss of lineman should be 9. The line assistant average remains the same. See tables below for both job classifications attrition, which includes retirement, resignation and discharge. The "loss of twenty lineman due to attrition" was the prior sum of the average attrition rate for linemen and line assistants (8 lineman and 12 line assistants), which should now be updated to a loss of 21 total resources due to attrition using the 7-year average methodology.

Referring to response to data request PubAdv-SDG&E-022-RYD, Q. 1d, the lineman lost column refers to the termination, resignation and retirement of lineman. Please refer to Q1a, which states that the table does not include internal transfers into other job classifications.

Lineman Attrition	
Year	Retire/Resign/Discharge
2021	13
2020	10
2019	11
2018	9
2017	6
2016	14
2015	6
TOTAL	69
7-year Average: 9	

Line Assistant Attrition		
Year	Internal Drops	Retire/Resign/Discharge
2021	0	8
2020	16	8
2019	9	10
2018	0	6
2017	4	6
2016	5	6
2015	3	2
TOTAL	37	46
7-year Average: 12		

Data Request Number: PAO-SDGE-093-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Proceeding Number: A2205015_016 2024 GRC

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Date Received: 10/5/2022

Date Responded:10/31/2022

4. Referring to data request PubAdv-SDG&E-022-RYD, Q. 1c, Cal Advocates asked: “In a similar format as the table on p. 125 of Ex. SDG&E-12-WP, provide an Excel spreadsheet demonstrating the number of FTEs and total cost of each of the five labor categories in 2017-2021 for Electric Regional Operations. If SDG&E’s 2017-2021 ERO spending also included labor costs for other categories, include those costs and explain how they are different from the five categories above.” SDG&E in its response failed to answer Cal Advocates’ question. In its objections, SDG&E states, “SDG&E is not able to create a report that will break down the costs and labor hours per job code as requested.” SDG&E’s testimony lists the hiring of additional lineman and line assistants as a cost driver for the increase to its ERO forecast. Therefore, a trend of the number of FTEs each year and the annual cost of each FTE is necessary to analyze and compare the forecasted FTEs and their cost in 2022-2024. Thus, Cal Advocates again requests a table breaking down the number of FTEs and the cost per FTE for each of the five labor categories on p. 125 of Ex. SDG&E-12-WP in 2017-2021 and the forecasted numbers for 2022-2024.

SDG&E Response 4:

SDG&E is unable to track labor costs at the granular level of each specific unique job category (i.e., Line Assistant, Lineman, etc.) presented on workpaper page 125 due to system limitations regarding the way costs are settled in the accounting system between O&M and Capital projects. The lowest level of detail that can be obtained is at the level of union and non-union as presented in response to PubAdv-SDG&E-022-RYD, Q.1c. Accordingly, within the union cost category, SDG&E cannot differentiate between lineman and line assistants.

The table below reflects the year-end number of employees that SDG&E had within the requested labor categories for each of the five historical years. Electric Regional Operations (ERO) is comprised of electric linemen, apprentices, line assistants, schedulers, planners, office support personnel, project managers, supervisors, and management personnel. The cost for Line Assistant assumes 70% capital/30% O&M split at a rate of \$33/hour. The cost for Lineman assumes the same 70% capital /30% O&M split at a rate of \$70/hr. These costs do not include overtime worked. The assumption of capital and O&M split will convert the actual headcount to FTE based on that assumed ratio.

Data Request Number: PAO-SDGE-093-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Proceeding Number: A2205015_016 2024 GRC

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Date Received: 10/5/2022

Date Responded:10/31/2022

SDG&E Response 4:-Continued

Job Code	2017	2018	2019	2020	2021
Line Assistant	11	14	27	31	45
Lineman	165	164	154	148	143
ERO Non-Lineman	26	30	25	31	33

The forecasted need for line work related employees was developed by considering five years of historical data for inspection counts, infractions repaired, and emergency work and estimating the workforce that will be needed to inspect an increasing number of facilities, repairs to infractions, conduct emergency repairs, and construct 30% of SDG&E's capital plan.

The forecast also accounts for attrition, vacation and sick time, and also includes a small contingency for maintenance and customer work.

SDG&E believes this forecasted staffing level is needed to help the company continue to deliver safe, reliable, and consistent utility service to customers.

Work Type within Electric Regional Operations	Estimated Full-Time Equivalent Employees Needed
Inspection*	41.09
Repair*	45.26
Emergency Work**	32.13
Adders (Vac/sick, Maintenance)	24.16
Capital Plan***	36.25
Total Lineman	179

*Based on 5-year historical average

**Based on 3-year historical callout hours per day

***Based on estimate of constructing 30% of SDG&E's capital plan

Data Request Number: PAO-SDGE-124-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Public Advocates Office

Date Received: 11/10/2022

Date Responded: 11/23/2022

1. Referring to SDG&E's response to data request PubAdv-SDG&E-022-RYD, Q. 2d, SDG&E states, "SDG&E is planning to serve revised testimony that will provide additional details on the forecast in 2024 and proposed cost recovery during 2024-2027." Referring to Ex. SDG&E-12-WP-R (SDG&E's Revised Workpapers), SDG&E's TY 2024 forecast for Compliance Management changed from \$13.85 million in Ex. SDG&E-12 to \$7.274 million. This represents a \$6.576 million (47.5%) reduction. On p. 201 of SDG&E's Revised Workpapers, it states: "The 2024 total cost was updated to spread the \$9,034,564 cost of the program over the 4 years 2024-2027 +\$200,000 adjustment to accommodate Licensing fee's [sic] and general QA necessary to maintain the program once it has been established."

Please provide the following:

- a. Provide supporting calculations that SDG&E relied upon to determine to allocate the cost of its Pole Attachment Data Points work to 2024-2027, as well as allocating costs of the program into its forecasts for 2022-2023. In the calculations, identify the total forecasted cost of the Pole Attachment Data Points work and the annual cost for each year that SDG&E forecasts costs of the work.
- b. Explain whether the total forecasted cost of the Pole Attachment Data Points work has changed in Ex. SDG&E-12R relative to Ex. SDG&E-12. If so, identify the total forecasted cost in each exhibit and explain what has changed.
- c. Provide a copy of the contractor agreement that identifies the total cost of the Pole Attachment Data Points work. If SDG&E has not yet entered into an agreement, provide a copy of the calculations that SDG&E relied upon to determine the total cost.
- d. Explain how SDG&E calculated its \$200,000 licensing fee and general QA forecast. Provide a copy of a contractor agreement or statement of work identifying the cost forecast.

SDG&E Response 1:

- a. SDG&E estimated that a combination of field surveys, document review (e.g., as-builts), data processing and pole loading calculations would be needed for approximately 75% or 176,000 distribution poles to populate the 20 data points required in Track 2. It was estimated that would require approximately 1-2 hours of time per pole or an average of \$150 per pole. This resulted in a total cost of \$27M over a three-year implementation period.
- b. At this time, the forecasted cost has not changed.
- c. See response to Question 1(a). SDG&E's forecasted annual \$9.035 million for 2022-2024 is the best estimate developed using average rates in existing engineering and support contracts to perform the type and amount of work SDG&E currently believes will be required, which includes field visits to a majority of SDG&E's overhead distribution and transmission facilities.

Data Request Number: PAO-SDGE-124-RYD

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Public Advocates Office

Date Received: 11/10/2022

Date Responded: 11/23/2022

SDG&E Response 1 Continued:

- d. Both SDG&E and the communications companies infrastructure system changes on a daily basis. With data passing back and forth between SDG&E and over 40 telecommunications companies, quality control over the data will need to be maintained. SDG&E estimated that Information Technology (IT) support, along with 2 full-time equivalent labor resources (internal and external) or \$200,000 annually will be needed to maintain the system and data quality. Licensing is uncertain at this time and was not the main driver in this estimate. This also includes maintaining the system to meet changing cybersecurity requirements.

Data Request Number: TURN-SEU-032

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: The Utility Reform Network

Date Received: 2/9/2023

Date Responded: 2/24/2023

2. Re. p. TS-27:11-12, SDG&E states, “Storeroom costs generally scale with the amount of construction activities being performed, consisting of a roughly 2.56 percent cost of overall capital construction.”
 - a. Will SDG&E reduce the Storeroom-related cost item in Electric System Operations if the Commission authorizes an “overall capital construction” forecast that is lower than SDG&E’s GRC forecast? If yes, please explain how it would be accomplished. If no, why not?

SDG&E Response 2a:

Yes, for storeroom costs that generally scale with total electric capital spend, SDG&E would be agreeable to an adjusted O&M forecast in response to any changes in the authorized capital construction forecast. SDG&E suggests this association be noted in TURN’s testimony so it can be considered by SDG&E in rebuttal and eventually by the ALJ when developing a proposed decision and its proposed capital and O&M revenue requirements.

Data Request Number: TURN-SEU-032

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: The Utility Reform Network

Date Received: 2/9/2023

Date Responded: 2/24/2023

3. Re. p. TS-50, SDG&E states, “SDG&E proposes to hire an additional eight lineman and 24 line assistants to meet existing and future workload and reliability demands per year, which also accounts for the loss of twenty lineman due to attrition.”

Please:

- a. Clarify what SDG&E means by “which also accounts for the loss of twenty linemen due to attrition” with reference to the hiring of 8 linemen and 24 line assistants. For example, does it mean that the result of SDG&E’s anticipated hiring of 8 linemen and 24 line assistants will result in a net of 12 employees additional employees (i.e., $8 + 24 - 20$), or something else? Please explain.

SDG&E Response 3a:

The loss of twenty lineman includes retirements, resignations, terminations, and promotions. Lineman are the feeder pool for many other opportunities including Electric Troubleshooter, Electric Construction Supervisor, and Lineman Training instructors. The “loss of twenty lineman due to attrition” represents the combined loss of 8 lineman per year plus the loss of 12 line assistants who withdraw from the line assistant program. The additional 8 lineman and 24 line assistants will take the place of the 20 lineman lost due to attrition.

Data Request Number: TURN-SEU-032

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: The Utility Reform Network

Date Received: 2/9/2023

Date Responded: 2/24/2023

Question 3 – Continued

- b. Tie the reference to 8 linemen and 24 assistants to the unit counts in the table on p. 125 of Ex. SDG&E-12-WP-R. To which lines do the referenced counts belong?

SDG&E Response 3b:

In review of this data request, SDG&E has identified errors in its assembly of assumed hires in these categories. A corrected table is provided below.

Initiative/Description	Labor/Non-Labor	Unit Metric (ea./ft./mile)	O&M/Capital Split	2022			2023			2024			Total Cost	Explanation
				# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost	# of units	Cost per unit	Total cost		
GRC - ERO Non-Lineman (2022-2024)	Labor	FTE's	30%	16	\$ 100,000	\$ 280,000	25	\$ 100,000	\$ 750,000	34	\$ 100,000	\$ 1,020,000	\$ 2,050,000	Assumes DOH order 70% Capital/30% O&M IO 7074347. 2022 additions beginning May
GRC - ERO 2021 Line Assistants (April 2021)	Labor	FTE's	30%	16	\$ 68,640	\$ 219,648	16	\$ 68,640	\$ 219,648	16	\$ 68,640	\$ 219,648	\$ 658,944	Assumes department overhead 70% Capital/30% O&M. \$33hr for Lineman Assistant salary. 2021 Line Assistant class of 16 started
GRC - ERO 2022 Lineman (Jan)	Labor	FTE's	30%	2.4	\$ 145,600	\$ 104,832	4.8	\$ 145,600	\$ 209,664	7.2	\$ 145,600	\$ 314,496	\$ 628,992	Assumes \$70hr for Lineman salary, attrition rate of 40% in
GRC - ERO 2022 Lineman (Mar)	Labor	FTE's	30%	2.4	\$ 145,600	\$ 78,624	4.8	\$ 145,600	\$ 209,664	7.2	\$ 145,600	\$ 314,496	\$ 602,784	Assumes beginning March (9/12 months), attrition rate of 40% in
GRC - ERO Line Assistant Class (May 2022)	Labor	FTE's	30%	14	\$ 68,640	\$ 172,973	28.4	\$ 68,640	\$ 584,813	42.8	\$ 145,600	\$ 1,869,504	\$ 2,627,290	Assumes \$33hr for Lineman Assistant salary, increases to \$70hr 2024. Assumes beginning
						\$ 856,077			\$ 1,973,789			\$ 3,738,144	\$ 6,568,010	

Data Request Number: TURN-SEU-032

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

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Date Received: 2/9/2023

Date Responded: 2/24/2023

Question 3 – Continued

- c. List and explain each reason for the attrition of 20 linemen.

SDG&E Response 3c:

The 20 linemen vacancies were created due to the following defined reasons. As mentioned in testimony, some of these vacancies can be attributed to high industry demand for skilled labor:

Resigned – Left the company at the employees’ decision without collecting retirement benefits.

Retired - Left the company at the employees’ decision and collecting retirement benefits.

Discharged - Left the company at the company’s decision.

Data Request Number: TURN-SEU-032

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

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Date Responded: 2/24/2023

4. Re. pp. TS-50-51, SDG&E states, "...aggressive hiring [of linemen and line assistants] is necessary to support the need to perform the core electric regional operations activities of inspection and maintenance, emergency and outage response, and infrastructure repair and replacement."

Please:

- a. List each way that SDG&E's lineman and line-assistant count in 2019 and 2021 degraded SDG&E's ability to perform the following activities:
 - i. Inspection and maintenance

SDG&E Response 4ai:

All inspections and maintenance activities were performed in 2019 and 2021, utilizing overtime and contract support. However, due to the attrition causing skilled labor to be at critically low levels, SDG&E plans to aggressively hire to build up its skilled workforce in order to maintain and prevent degradation in its ability to perform consistent inspection and maintenance activities.

APPENDIX C

SUPPORT TO OTHER SDG&E WITNESSES

The following is a reference table of support provided in my testimony to other witness categories:

Description	Witness	Testimony Section
Fleet Vehicle Needs	Art Alvarez (Ex. SDG&E-22-R)	Section III-A
DIIS/Rule 21 Projects	Jamie Exon (SDG&E-25)	Section IV-A-1
Smart Grid Operations, Grid Small Cap, and DERMS	Jamie Exon (SDG&E-25)	Section IV-B-2
Track 2 Compliance Memorandum Account	Jason Kupfersmid (SDG&E-43)	Section IV-F-2