BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF CALIFORNIA

Application of Southern California Edison Company (U 338-E) Regarding 2022 Risk Assessment Mitigation Phase.	Application 22-05-013
NOT CONSOLIDATED	
Application of Southern California Edison Company (U 338-E) for Authority to Increase its Authorized Revenues for Electric Service in 2025, among other things, and to Reflect that Increase in Rates.	Application 23-05-010
NOT CONSOLIDATED	
Application of Southern California Edison Company (U 338-E) for Authority to Increase its Authorized Revenues for Electric Service in 2021, among other things, and to Reflect that Increase in Rates.	Application 19-08-013

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) RISK SPENDING ACCOUNTABILITY REPORT FOR 2024

CLAIRE E. TORCHIA
NAYIRI K. PILIKYAN

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-4838
E-mail: Nayiri.Pilikyan@sce.com

Dated: **April 30, 2025**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF CALIFORNIA

Application of Southern California Edison Company (U 338-E) Regarding 2022 Risk Assessment Mitigation Phase.	Application 22-05-013
NOT CONSOLIDATED	
Application of Southern California Edison Company (U 338-E) for Authority to Increase its Authorized Revenues for Electric Service in 2025, among other things, and to Reflect that Increase in Rates.	Application 23-05-010
NOT CONSOLIDATED	
Application of Southern California Edison Company (U 338-E) for Authority to Increase its Authorized Revenues for Electric Service in 2021, among other things, and to Reflect that Increase in Rates.	Application 19-08-013

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) RISK SPENDING ACCOUNTABILITY REPORT FOR 2024

Southern California Edison Company (SCE) submits its 2024 Risk Spending Accountability Report (RSAR) in compliance with the Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics For Investor-Owned Utilities And Adopting A Safety Model Approach For Small And Multi-Jurisdictional Utilities, Decision (D.) 19-04-020 and D. 22-10-002, respectively (collectively, the Decisions). This 2024 RSAR covers spend authorized in SCE's Test Year 2021 General Rate Case (GRC) cycle for activities that address safety, reliability, and/or maintenance, consistent with Public Utilities Code Section 591.

In compliance with the Decisions, SCE is incorporating new requirements in this annual RSAR. Consistent with Ordering Paragraph 8 of D.19-04-020, SCE is filing and serving the RSAR on the service lists for proceedings Application (A.) 22-05-013 (SCE's 2022 RAMP), A.19-08-013

(SCE's 2021 GRC), and A.23-05-010 (SCE's 2025 GRC), as well as on the California Public Utilities Commission's Safety Policy Division, Safety Enforcement Division, and Public Advocates Office. SCE is also providing the 2024 RSAR to the Energy Division Tariff Unit by emailing the report to edtariffunit@cpuc.ca.gov. SCE's 2024 RSAR is provided as Attachment A.

Respectfully submitted,

CLAIRE E. TORCHIA
NAYIRI K. PILIKYAN

/s/ Nayiri K. Pilikyan
By: Nayiri K. Pilikyan

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-4838
E-mail: Nayiri.Pilikyan@sce.com

Dated: April 30, 2025

Attachment A

Southern California Edison Company's Risk Spending Accountability Report for 2024

Southern California Edison Company's
Risk Spending Accountability Report for 2024

April 30, 2025

Southern California Edison Company's
Risk Spending Accountability Report for 2024

Table of Contents

Southern California Edison Company's
Risk Spending Accountability Report for 2024

Table of Contents (Continued)

Table of Contents (Continued)

I.

INTRODUCTION

Southern California Edison Company (SCE) appreciates the opportunity to present its Risk Spending Accountability Report (RSAR) for calendar year 2024 and looks forward to further dialogue with the Energy Division (Energy Division or ED) of the California Public Utilities Commission (Commission or CPUC) and other interested parties regarding the data provided in this report.

SCE's RSAR is organized into twelve chapters and one appendix:[1]

- The Background chapter (Chapter II) summarizes the regulatory background giving rise to the RSAR, including decisions and guidance from the Energy Division regarding the contents and format of this report.
- Chapter III presents recorded aggregate operations and maintenance (O&M) expenses and capital expenditures for 2021 - 2024 relative to what was authorized in SCE's Test Year 2021 General Rate Case (2021 GRC)[2] and in Track 4 to SCE's 2021 GRC (for a third attrition year covering 2024)[3] for the applicable safety, reliability and maintenance activities along with a discussion of variance drivers.
- In Chapter IV, SCE provides important context for its variance analyses for 2024 authorized funding compared to recorded funding. Authorized funding is based on forecast ratemaking over a multi-year GRC cycle, including the Commission's adoption of non-budget-based Post-Test Year Ratemaking funding mechanisms for some categories of spend.
- Chapter V discusses SCE's compliance with new requirements from Decision (D.)22-10-002 and walks through the presentation of the 2024 RSAR data.

---

1 Decision (D.)22-10-002 requires that SCE annually file and serve its RSAR on April 30.
2 Application (A.)19-08-013; D.21-08-036.
3 D.23-11-096.

- Chapter VI describes the process by which activities impacting safety, reliability and maintenance were chosen for this report.
- Consistent with direction from the Energy Division,Chapter VII explains the process used to derive authorized dollars for GRC activities and Risk Assessment Mitigation Phase (RAMP) controls and mitigations.
- Chapters VIII through XI describe operation and maintenance (O&M) expenses and capital expenditures for Spending Accountability Report (SAR)-eligible activities, and variance calculations and explanations for the Distribution, Transmission, Generation and Other categories.[4] The variance explanations are provided for: (a) expense activities with a difference of at least $10 million, or a percentage difference of at least 20% subject to a minimum difference of $5 million; and (b) capital expenditures with a difference of at least $20 million, or a percentage difference of at least 20% subject to a minimum difference of $10 million. In addition, SCE included explanations of variances in recorded versus authorized units, where appropriate, in accordance with D.19-04-020.[5]
- Finally, Chapter XII summarizes SCE spending in 2024 on safety, reliability, and maintenance activities specific to balancing and memorandum accounts.
- The Appendix includes a map of Risk Assessment Mitigation Phase control and mitigation activities to GRC activities.

---

[4] For those activities meeting the materiality thresholds, the Energy Division also directed that SCE provide: (a) a description of the programs; (b) location in GRC testimony where the program is described; (c) a list of projects that were canceled or deferred within each program; and (d) projects not presented in the rate case but that were taken up anyway. *See* Energy Division letter dated February 14, 2020, Attachment at p. 2.

[5] *See* D.19-04-020, Attachment 2, p. 7 ("We direct the IOUs to provide narrative explanations of activities for those risk mitigation programs for which work unit data is available and where the deviation between authorized work units and performed work units is equal to or greater than 20 percent. The IOUs shall describe deviations of 20 percent or more both in the quantity of work units performed and in the type of work units performed.").

During 2024, SCE continued to focus on delivering safe, reliable and increasingly clean electricity to our customers and their communities. As explained in this report, SCE prioritized overall authorized spending and prudently varied from what was authorized when circumstances changed, needs emerged, or new and better solutions later appeared.

II.

BACKGROUND

In D.14-12-025, the Commission revised the Rate Case Plan to incorporate a risk-based decision-making framework encompassing two new procedures – the RAMP and Safety Model Assessment Proceeding (S-MAP) – to support the development and presentation of risk-based methodologies in rate case filings. In addition, the Commission required the filing of risk spending accountability reports to "assist in the goal of improving utility accountability for the ratepayer money spent on risk mitigation efforts."[6] The Commission's Energy Division was assigned responsibility for developing the requirements for reporting and reviewing the filed reports.

Throughout 2018, the Energy Division conducted a series of workshops to refine the scope and nature of the reports. Among other things, the Energy Division expanded the scope of the reports beyond spending on items associated with risk mitigation. The reports would also include all maintenance items, consistent with the statutory requirements specified in Public Utilities Code Section 591. On January 3, 2019, Energy Division Director Edward Randolph sent a letter to SCE requesting an interim Spending Accountability Report for specified activities[7]

---

[6] D.14-12-025, p. 43.

[7] Specifically, the Energy Division required SCE to include "programs authorized or in effect during each record year that were identified as impacting safety or reliability within SCE's Risk Informed Planning Process and Risk Evaluation Methodology filed as part of the 2018 GRC [see Exhibit SCE-01 and associated workpapers, served in A.16-09-001], as well as programs associated with a maintenance activity."

covering years 2018 to 2020 ("January 3, 2019 Letter").[8, 9] In addition to showing authorized versus actual spending for the record year (expressed in terms of dollars and percentages), the Energy Division asked SCE to include a derivation of authorized amounts,[10] and to discuss (where applicable) related balancing or memorandum accounts.[11]

In 2019, through D.19-04-020, Ordering Paragraph 10, the Commission adopted a new RSAR reporting framework. This new framework applied to SCE's RSARs regarding our Test Year 2021 GRC, which was filed on August 30, 2019. The most notable modifications to the RSAR framework in D.19-04-020 compared to the guidance originally provided by the Energy Division in the January 3, 2019 Letter are: 1) the separation of risk mitigation programs identified in RAMP and other programs related to safety, reliability and maintenance in the GRC; and 2) the reporting on authorized activities and actual activities performed, for each program, using "work units" as the unit of reporting where applicable. Attachment 2 to D.19-04-020 provides example tables for reporting authorized and recorded spending and work units. In October 2022, the S-MAP Track 3 Decision, D.22-10-022, adopted additional RSAR requirements that take effect for either this current 2023 RSAR or SCE's first RSAR following the approval of our next GRC Application, for Test Year 2025.[12] Additional detail on SCE's compliance with these new requirements is included in Section V.

Unit costs in various programs can span multiple years (e.g., planning costs incurred in 2022 for work completed in 2023) such that taking the annual expenditures and dividing by the

---

[8] On February 14, 2020, the Energy Division notified SCE of its recommendation that SCE submit the RSAR covering calendar year 2019 no later than March 31, 2020. On February 27, 2020, SCE submitted a request to file on the original due date of May 31, 2020. On April 10, 2020, Energy Division issued a schedule for its review of Risk Spending Accountability Reports in 2020. In that document, Energy Division confirmed that SCE could file its 2019 RSAR by May 31, 2021. See Energy Division Annual Risk Spending Accountability Report 2020 Review Schedule (issued April 10, 2020), fn. 3.

[9] In 2020, SCE received three letters from the Energy Division concerning its review of SCE's 2016-2017, 2018 and 2019 RSARs. In all, the Energy Division found that SCE had met the applicable requirements for RSARs.

[10] *See* Section VII below.

[11] *See* Section XII below.

[12] D.22-10-022, Ordering Paragraph 1, p. 55.

total units does not provide an accurate unit cost. SCE was unable to incorporate the first item above – the separation of risk mitigation programs – until we received a decision on our 2021 GRC application that included the integration of our 2018 RAMP. In compliance with D.19-04-020 and D.20-10-002, the tables in Sections VIII to XI below provide the link from GRC activities to RAMP risk mitigation programs, as well as the comparison of authorized to actual units where applicable.[13]

With respect to unit variances, SCE followed the most recent guidance provided by Energy Division, which was provided in response to the Sempra utilities' 2020 RSAR. In response to San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company's (SoCalGas) request for clarification on applying the variance selection criteria, Energy Division provided the following guidance in an email dated February 14, 2020: "We have reviewed pages 41-43 of D.19-04-020 and believe that you should apply the selection criteria and explanations for all GRC programs as well as the risk mitigation programs, where work unit data is available. That is to say that you will only need to provide greater details for the unitized risk mitigation programs."[14] SCE followed this guidance and applied the variance criteria thresholds at the GRC activity level, except for GRC activities that comprised a RAMP activity with work units. For example, SCE's Underground Structure Replacement Distribution capital GRC activity is comprised of a RAMP component (Covered Pressure Relief Restraint or CPRR), and a non-RAMP component (vault replacements and shoring). Since both of these components are forecasted using work units, SCE applied the variance threshold criteria to the RAMP and non-RAMP components.

SCE diligently sought to incorporate work units into this RSAR and continues to refine this approach for future reports. Authorized and recorded work units are provided for activities where there were clearly defined work units in the 2021 GRC. Work units were not created for

---

[13] Please refer to Appendix A for the RAMP control and mitigation activity mapping to GRC activities.

[14] *See* Risk Spending Accountability Report of San Diego Gas & Electric Company and Southern California Gas Company for 2020, p. 9.

activities which were not clearly presented in that format in our 2021 GRC.[15] There are a number of specific projects that are not unit-based. For example, for several GRC activities in Load Growth, where SCE's forecast is based on multiple independent projects of varying scopes and forecasts, these activities are not translatable into units. Unit costs in various infrastructure replacement programs can span multiple years (e.g., planning costs incurred in 2023 for work completed in 2024) such that taking the annual expenditures and dividing by the total units does not provide an accurate unit cost. Further, SCE uses historical averages and last year recorded (LYR) in many of our GRC activity forecasts. Both of these methodologies have been accepted and approved by the CPUC[16] for activities that are not unit-based and for which work units cannot be directly imputed from the forecasts.

III.

OVERVIEW OF AGGREGATE SPENDING VERSUS AUTHORIZED IN SELECT SAFETY, RELIABILITY AND MAINTENANCE PROGRAMS

A. O&M

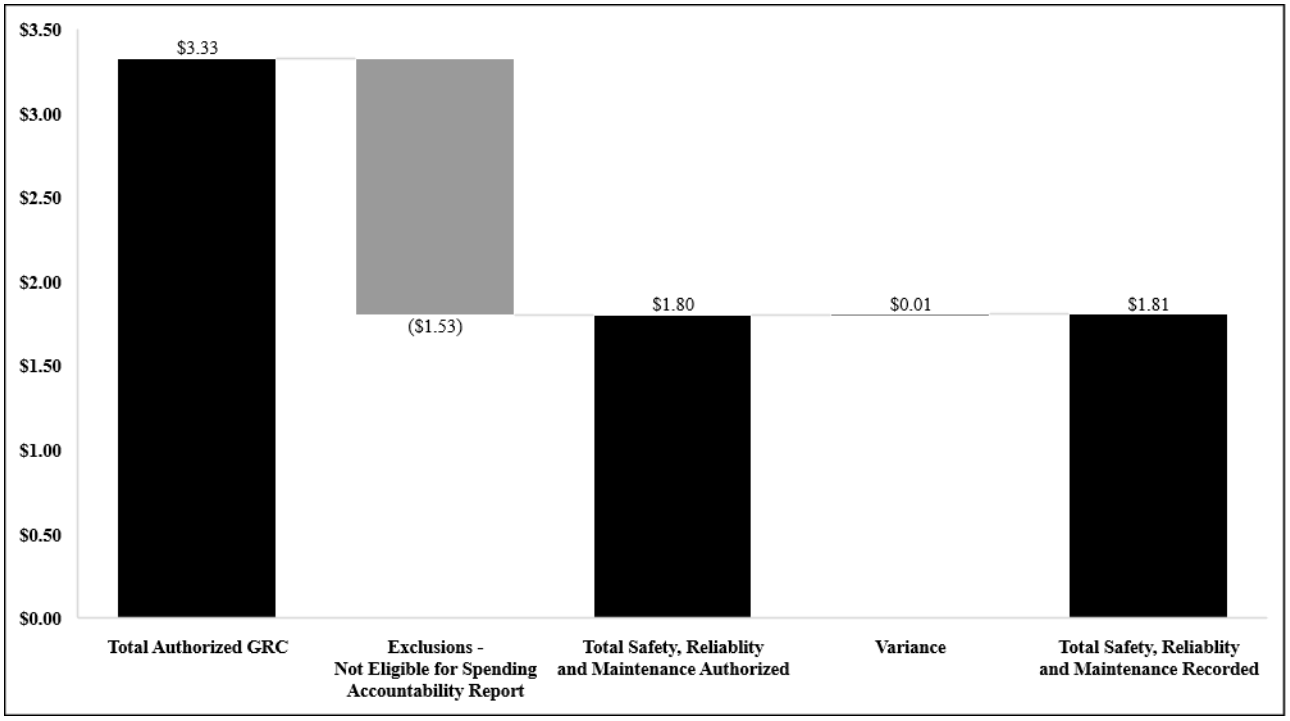
Figure III-1 below depicts the total GRC authorized and recorded expenses for RSAR-eligible O&M activities in 2024.

---

15 If the total activity forecast was not entirely comprised of number of units * unit cost we did not consider that activity to be unit-based (for instance if 75% of an activity's authorized spending is units * unit cost and 25% is based on historical spend or some other forecast methodology, then units were not included).

16 For instance, in D.89-12-057, and subsequently in D.04-07-022, the CPUC stated that if recorded expenses have significant fluctuations from year to year, or expenses are influenced by external forces beyond the utility's control, an average of recorded-expenses is appropriate. Also in D.89-12-057, and subsequently in D.04-07-022, the CPUC stated that if recorded expenses have been relatively stable for three or more years, the last recorded year is an appropriate base estimate.

Figure III-1
2024 O&M GRC Authorized vs. Recorded - ($000s)



For 2024, recorded O&M expenses were approximately $8 million more than the 2024 GRC authorized funding for the RSAR-eligible activities, as shown in Table III-1 below, which represents a variance of ~0%. Overall, SCE overspent $922 million or 16% from 2021 – 2024 as shown below in Table III-2. While SCE experienced a greater spending variance in Distribution and Generation related activities, this was offset by underspending in Transmission, and Other activities. Further explanations for these categories are provided below.

Table III-1
2024 O&M RSAR Authorized v. Recorded Variances by Function- ($000s)

RSAR Category	2024 Recorded	2024 Authorized	Variance (Rec. – Auth.)	% Variance ((Rec. - Auth.)/Auth.)
Distribution	$878,248	$858,298	$19,950	2%
Generation	$202,285	$187,991	$14,294	7%
Other	$580,990	$591,233	($10,243)	-2%
Transmission	$148,395	$164,079	($15,684)	-11%
Grand Total	**$1,809,918**	**$1,801,601**	**$8,317**	**0%**

Table III-2
2021 – 2024 O&M RSAR Authorized v. Recorded Variances by Function- ($000s)

RSAR Category	2021 - 2024 Recorded	2021 - 2024 Authorized	Variance (Rec. – Auth.)	% Variance ((Rec. - Auth.)/Auth.)
Distribution	$3,270,195	$2,345,968	$924,227	39%
Generation	$693,834	$697,577	($3,743)	-1%
Other	$2,140,138	$2,116,511	$8,067	0%
Transmission	$517,339	$524,061	($6,722)	-1%
Grand Total	**$6,621,505**	**$5,684,117**	**$921,829**	**16%**

Within the Distribution category of O&M, in 2024 SCE spent more than authorized by approximately $20 million, or 2% and spent more than authorized by $924 million or 39% from 2021 – 2024. One of the key programs contributing to the overspend in 2024 and this GRC cycle was Distribution Routine Vegetation Management, however the magnitude of the overspend in this activity ($32M or 8%) was significantly reduced in 2024 compared to previous years. In 2024, various factors contributed to SCE's spend over authorized for GRC Activity Distribution Routine Vegetation Management work, which included, but was not limited to, increased work volume/scope, continued impact of SB 247, market pressures, and wage inflation that impacted contractor costs. However, SCE notes that our total VMBA costs were less than 115% of the authorized amount in 2024 and therefore do not require a separate reasonableness review application for recovery of incremental costs. Similar to Distribution Routine Vegetation Management, SCE also experienced an overspend in Enhanced Overhead Inspections (EOI). For Enhanced Overhead Inspections and Remediations, the main driver that led to the 2024 recorded O&M expenses being higher than authorized was the volume of distribution remediations; however, SCE notes that the overall variance was only 11% of the forecast, which was significantly less than 2021 - 2023. The 2024 forecast for distribution remediations was based on the 2021 recorded volumes, as SCE anticipated the volume of work in 2024 would be similar to that in 2021, based on known information at the time of filing our Track 4 application in May 2022. However, the actual 2024 recorded volume of distribution remediations was higher, primarily due to an increase in the find rate. The overspend in these activities was offset by

underspending in other activities which are further described below in Section VIII.A.3. Most of the overspending in these activities is subject to additional reasonableness review in future cost recovery applications.

Within the Transmission category of O&M, in 2024 SCE spent less than authorized by $16 million or 11% and spent less than authorized by $7 million or 1% from 2021 – 2024. SCE spent less than authorized in Transmission O&M Maintenance due to the non-HFRA Aerial Inspection program sub-activity still being included within this GRC Activity when SCE filed its 2021 GRC Track 1 application in August 2019. However, since filing the TY 2021 GRC application, SCE did not move forward with its proposed non-HFRA Aerial Inspections Program, for which it was authorized, as resources were focused on further building out and expanding the HFRA (wildfire) aerial programs. Similar to Distribution Routine Vegetation Management, the main driver of the additional overspend in 2024 was Transmission Routine Vegetation Management. However, similar to Distribution, the magnitude of the overspend in 2024 was significantly less than previous years (2021 – 2023). The same cost drivers that are discussed above for Distribution Routine Vegetation Management apply to Transmission Routine Vegetation Management and are not repeated here.

Within the Generation category of O&M, in 2024 SCE spent more than authorized by approximately $14 million, or 7%, and spent less than authorized by $4 million, or 1%, from 2021 – 2024. Some of the underrun in 2021 – 2024 can be attributed to costs associated with SCE's Mountainview Generating Station ("Mountainview"). The underspend was partly due to the cancelling of the General Electric ("GE") contractual service agreement ("GE CSA") in 2021 for maintenance related activities at Mountainview. After evaluating the terms and conditions of the GE CSA in light of current operating conditions, and following several rounds of discussions with GE, SCE found it prudent to discontinue the contract from both an operational and overall cost standpoint. This will not impact SCE's ability to safely and reliably operate Mountainview. Mountainview O&M is subject to significant year-to-year variances, as the plant approaches the midpoint of its expected lifecycle and components that may have remained

relatively trouble-free in the earlier years of plant existence begin to require higher levels of maintenance, and in some cases may experience in-service failures.

Within the Other category of O&M, SCE spent less than authorized by approximately $10 million, or 2% and spent more than authorized by $8 million or ~0.4% from 2021 – 2024. The majority of the overspend in 2024 and 2021 – 2024 can be attributed to the Public Safety Power Shutoff (PSPS) Customer Support and PSPS Execution GRC activities. The 2021 - 2023 recorded amounts for PSPS Customer Support exceeded the 2021 – 2023 GRC authorized amount primarily due to the Critical Care Backup Battery (CCBB) Program, which was not included in SCE's 2021 GRC request. The CCBB Program addresses the needs of SCE's income-qualified Medical Baseline (MBL) customers residing in the High Fire Risk Areas (HFRA) by fully funding the cost of a battery-powered portable backup solution to operate medical equipment during PSPS events. SCE's 2024 incremental spending on PSPS Customer Support was further driven by new requirements adopted by the Legislature and/or Commission for sub-activities, such as the Disability Disaster & Access Resources (DDAR) program and Access and Functional Needs (AFN) enhancements; these new requirements were adopted after SCE had already submitted its Track 4 application. Additionally, the software licensing fees associated with the Incident Management Teams Customer Notification activity is another factor for spending over authorized since those costs were not part of SCE's 2021 recorded spending, which served as the basis for the Track 4 authorized amount. These licensing fees were not in effect until after SCE filed our Track 4 testimony in May 2022. Further, in 2021 - 2023, SCE spent more than authorized for PSPS Execution due to aerial suppression costs that were not forecasted or included in SCE's 2021 GRC but are crucial to our wildfire mitigation efforts (and were approved as just and reasonable for 2021 in D.24-03-008). Similar to 2021 - 2023, in 2024 SCE spent more than authorized for PSPS Execution primarily due to approximately $36 million in aerial suppression costs in 2024 (approximately $19 million over authorized). At the time of filing SCE's Track 4 testimony in May 2022 for calendar year 2024, SCE had not yet moved to year-round aerial suppression coverage utilizing a quick-reaction force (QRF), and SCE's

forecast was based on 2021 recorded amounts for the QRF. This is the cause for the spending over authorized. Other various activities underspent authorized, offsetting some of the impacts of the overspend on PSPS-related work activities.

Table III-3 and Table III-4 below shows the 2024 and 2021 – 2024 recorded and authorized O&M expenses by SCE's 2018 RAMP risks.

Table III-3
2024 O&M Spending Variances by SCE 2018 RAMP Risk- ($000s)

SCE 2018 RAMP Risk	2024 Recorded	2024 Authorized	Variance (Rec. – Auth.)	% Variance ((Rec. - Auth.)/Auth.)
Building Safety	$2,411	$7,766	($5,355)	-69%
Climate Change	$4,000	$4,045	($45)	-1%
Contact with Energized Equipment	$5,466	$7,665	($2,199)	-29%
Cyber Attack	$25,415	$33,196	($7,781)	-23%
Employee, Contractor and Public Safety	$5,792	$10,122	($4,330)	-43%
Physical Security	$23,399	$28,337	($4,938)	-17%
Wildfire	$141,614	$103,538	$38,076	37%
Grand Total	**$208,096**	**$194,668**	**$13,428**	**7%**

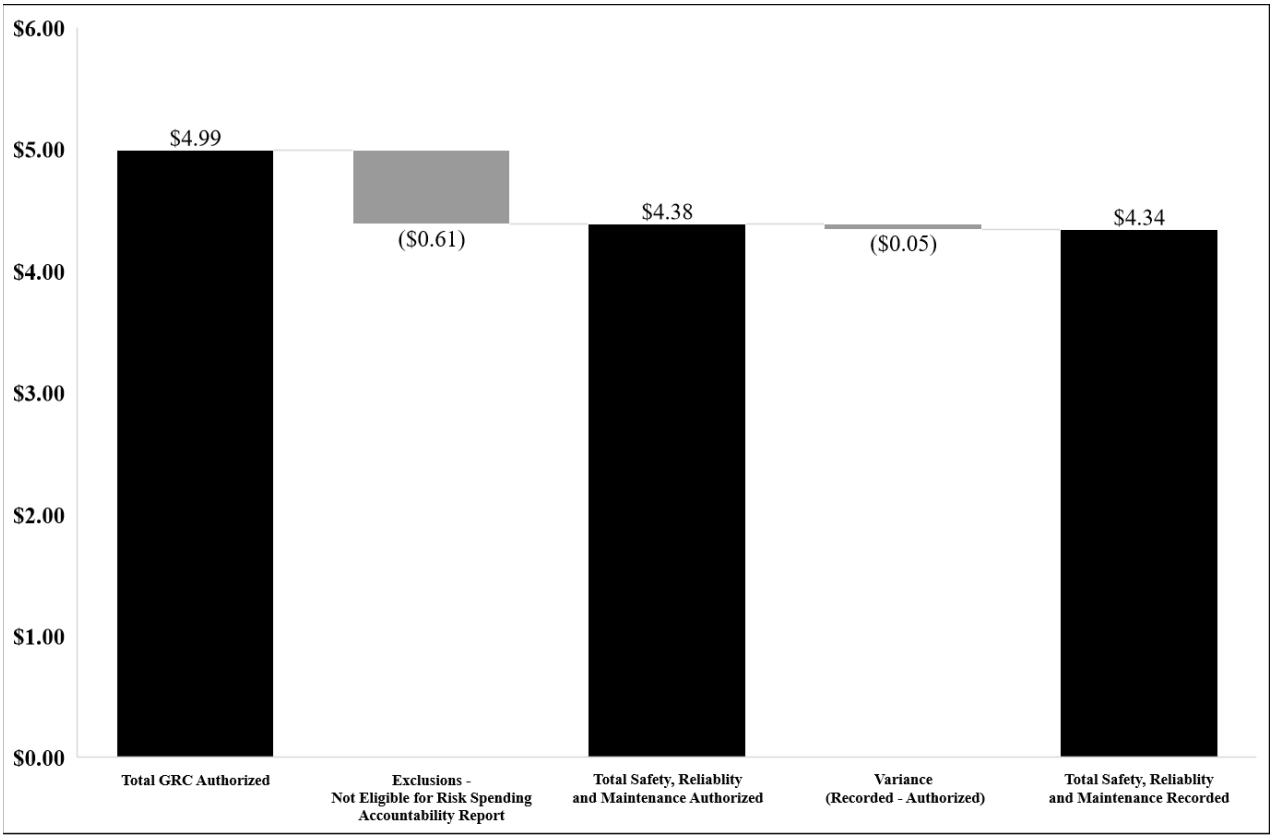
Table III-4
2021 – 2024 O&M Spending Variances by SCE 2018 RAMP Risk- ($000s)

SCE 2018 RAMP Risk	2021 - 2024 Recorded	2021 - 2024 Authorized	Variance (Rec. – Auth.)	% Variance ((Rec. - Auth.)/Auth.)
Building Safety	$16,533	$29,246	($12,712)	-43%
Climate Change	$15,832	$15,147	$685	5%
Contact with Energized Equipment	$22,658	$28,839	($6,181)	-21%
Cyber Attack	$96,939	$124,365	($27,426)	-22%
Employee, Contractor and Public Safety	$18,549	$37,900	($19,352)	-51%
Physical Security	$89,288	$106,584	($17,296)	-16%
Wildfire	$476,146	$288,468	$187,677	65%
Grand Total	**$735,945**	**$630,550**	**$105,395**	**17%**

B. Capital

Figure III-2 below depicts the total 2024 GRC authorized and recorded expenditures for RSAR-eligible Capital activities.

Figure III-2
2024 Capital GRC Authorized vs. Recorded - ($000s)



For 2024, recorded capital expenditures were approximately $46 million or 1% below the 2024 GRC authorized funding for RSAR-eligible activities, as shown below in Table III-5 and an overall $418 million or 2% overspend from 2021 – 2024 as shown below in Table III-6. The additional spend in Distribution, Generation and Other was offset by lower spending than authorized in Transmission. Further explanations for these categories are provided below.

Table III-5
2024 Capital Spending Accountability Report Variances by Function- ($000s)

RSAR Category	2024 Recorded	2024 Authorized	Variance (Rec. - Auth.)	% Variance ((Rec. - Auth.)/Auth.)
Distribution	$2,584,206	$2,441,230	$142,976	6%
Generation	$151,927	$95,713	$56,214	59%
Other	$868,190	$751,376	$116,815	16%
Transmission	$734,881	$1,096,444	($361,563)	-33%
Grand Total	**$4,339,205**	**$4,384,763**	**($45,558)**	**-1%**

Table III-6
2021 – 2024 Capital Spending Accountability Report Variances by Function- ($000s)

RSAR Category	2021 - 2024 Recorded	2021 - 2024 Authorized	Variance (Rec. - Auth.)	% Variance ((Rec. - Auth.)/Auth.)
Distribution	$10,653,497	$9,096,554	$1,556,943	17%
Generation	$468,594	$372,618	$95,976	26%
Other	$2,967,360	$2,961,290	$6,070	0%
Transmission	$3,090,863	$4,332,139	($1,241,276)	-29%
Grand Total	**$17,180,314**	**$16,762,601**	**$417,713**	**2%**

Within the Distribution category, in 2024, SCE spent more than the amounts adopted in the Track 4 GRC decision by $143 million or 6% and spent more than authorized by $1.57 billion or 17% from 2021 - 2024. The majority of this overspend in 2021 – 2023 was driven by SCE's necessary efforts to mitigate wildfire risk. For the purposes of this RSAR, and in order to ensure transparency, SCE did not remove the amounts over authorized for wildfire activities, even though they are captured in memorandum and balancing accounts subject to future reasonableness review. For example, in 2023 SCE spent more than the imputed amount initially adopted in the Track 1 GRC decision for Wildfire Covered Conductor Program (WCCP) by $201 million.[17] For additional details about SCE's 2021 – 2023 spending please refer to those RSAR

[17] In the Track 1 Final Decision, the Commission authorized a scope of 4,500 miles of covered conductor and its associated capital-related revenue requirement for the WCCP for the period 2019-2023 (with the ability to seek cost recovery after a reasonableness review for costs above 110 percent of the authorized revenue requirement threshold). *See, e.g.*, D.21-08-036 at Conclusion of Law (CoL) 74. Over the 2019 through 2023 period, SCE executed a total of 5,017 miles of WCCP and incurred

Continued on the next page

reports. Unlike 2021 – 2023, in 2024 SCE's wildfire related recorded capital were within 7% of authorized, since SCE's Track 4 was more aligned with SCE's actual historical spending (including unit costs) and forecasted work levels. In 2024, SCE overspent by $105 million on Distribution Transformers due to the significant (2 – 4x) increase in transformer cost-pers since SCE filed our TY 2021 GRC in August of 2019. Additionally, in 2024 SCE overspent in Distribution Preventive and Breakdown Capital Maintenance due to two significant activities that were not included in the 2021 GRC forecast for 2024 and therefore would not be included in the 2024 imputed authorized amount: 1) Pole Related Maintenance Splice (PRMS) and 2) Live Front Equipment Replacement. Additionally, SCE experienced cost pressures (increased material costs, increased labor costs, supply chain constraints) for this and other activities that resulted in spending over authorized.

Within the Transmission category, in 2024 SCE spent less than authorized by approximately $362 million or 33% and $1.24 billion or 29% from 2021 - 2024. SCE notes that a portion of this lower spend was associated with Federal Energy Regulatory Commission (FERC)-jurisdictional projects and programs. Similarly to 2021 – 2023, SCE underspent authorized in Grid Reliability Projects in 2024 due to continued delays with the Riverside Transmission Reliability Project (RTRP). In 2024, the CPUC denied the City of Norco's Petition for Modification to underground a portion of the project. SCE also experienced delays in other projects such as the Cerritos Channel Transmission Line Relocation Project, Annual Transmission Reliability Assessment (ATRA) Protection Upgrades, the Lugo 500 kV Substation Breaker Installation Project, and the Pardee-Sylmar No.1 & No.2 230 kV Line Rating Increase Project. These projects were delayed for various reasons including licensing, permitting, outage availability, and/or delays with pre-cursor projects. Lower expenditures on these projects was partially offset by higher incurred 2024 costs on Eldorado-Lugo-Mohave and Laguna Bell-Mesa

---

WCCP-related capital expenditures totaling $3.337 billion, thus exceeding 110 percent of the amount authorized in the 2021 GRC Track 1 Final Decision. In D.24-04-005, SCE is seeking reasonableness review for, and cost recovery of that amount.

230 kV, which was due to delays in prior years shifting more work to 2024. SCE also spent under authorized for the Transmission Line Rating Remediation (TLRR) program in 2024, consistent with previous years**.** Several projects in the TLRR Portfolio were delayed while SCE assessed the root cause of a material failure. The delayed projects were reinitiated in late 2023, which resulted in the deferral of construction to 2025. In addition, SCE's TLRR projects that require licensing continued to experience delays related to the licensing and permitting process. The licensing and permitting delays continue to impact Eagle Mountain-Blythe 161 kV subtransmission project, Ivanpah-Control 115kV subtransmission project, Gorman-Kern River 66kV subtransmission project, Control Silver Peak 55kV subtransmission project and Eldorado-Lugo-Pisgah 220 kV transmission project. SCE remains committed to making progress on all projects within the TLRR Portfolio. Most projects and associated costs under the TLRR Program are FERC-jurisdictional. To address Energy Division's feedback on our 2021 RSAR, we continue to communicate that progress in quarterly letters to the CPUC Safety Enforcement Division (SED) and in semi-annual letters to the Western Electricity Coordinating Council (WECC).

Within the Generation category, in 2024 SCE spent more than authorized by $56 million or 59% and overspent authorized by $96 million or 26% from 2021 – 2024. The overspend in 2024, and representative of 2021 – 2024, is related to the decommissioning of the San Gorgonio small hydro and Solar Photovoltaic Program (SPVP) sites. In the 2021 GRC Final Decision, the CPUC approved $0.408 million annually for SCE to address ongoing safety, regulatory, and other requirements for the San Gorgonio project. The CPUC authorized amount was consistent with recorded 2019 capital expenditures but did not cover physical decommissioning activities at San Gorgonio because the timeline for decommissioning activities was unclear at the time. SCE's recorded costs in 2024 were to resume the necessary physical decommissioning work (including road and water conveyance system repairs), which was exacerbated by the 2023 winter storms and tropical storm Hillary. Thus the 2024 recorded cost was higher than the authorized amount for repair and maintenance under the 2021 GRC final decision. Additionally,

SCE started decommissioning SPVP sites that were not included in our TY 2021 GRC forecast, which the 2024 authorized is based on. While SCE has reasonably operated and maintained its SPVP assets, as demonstrated in the Commission's annual ERRA review of operations, the assets have undergone significant wear and tear since the first solar plant entered service in 2008 and recent wiring and component failures have caused hotspots and localized roof fires on occupied buildings. As noted in our TY 2025 GRC, SCE has determined that decommissioning the SPVP sites is the least cost option. Further, de-energization of the solar systems, followed by removal of the infrastructure, will remove the identified risks associated with the current conditions and is the least-cost option for customers. The decommissioning of the SPVP sites is the driver for the recorded spending over the imputed authorized amount for 2024, as well as 2021 - 2024.

Within the Other category, in 2024 SCE spent over authorized by approximately $117 million or ~16% and spent over authorized by $6M or ~0% from 2021 – 2024. SCE overspent its imputed authorized amount in 2024 due to the need to support high-priority business capabilities in the NextGen ERP project, which recorded $72.4 million in 2024, and was not contemplated in the portfolio-based spending allocation developed in the 2021 GRC for capitalized software. NextGen ERP serves as a roadmap to enhance business processes, improve application functionality, and provide advanced tools for employees. It drives Enterprise Resource Planning (ERP) transformation by streamlining and modernizing processes and systems across the ERP landscape. The project will deliver a fully integrated, accessible, and governed data foundation across Operations and Finance, leveraging SAP's cloud and AI-enabled platforms for continuous innovation.

Table III-7 below shows the recorded and authorized capital expenditures by SCE's 2018 RAMP risks.

Table III-7
2024 Capital Spending Report Variances by SCE 2018 RAMP Risk- ($000s)

SCE 2018 RAMP Risk	2024 Recorded	2024 Authorized	Variance (Rec. – Auth.)	% Variance ((Rec. - Auth.)/Auth.)
Building Safety	$18,503	$7,480	$11,023	147%
Contact with Energized Equipment	$67,328	$73,730	($6,402)	-9%
Cyber Attack	$107,659	$111,762	($4,103)	-4%
Employee Safety	$2,319	$2,550	($231)	-9%
Hydro Asset Failure	$10,616	$12,776	($2,160)	-17%
Physical Security	$77,478	$49,715	$27,763	56%
Underground Equipment Failure	$58,218	$24,955	$33,263	133%
Wildfire	$686,836	$706,253	($19,417)	-3%
Grand Total	**$1,028,956**	**$989,220**	**$39,737**	**4%**

Table III-8
2021 – 2024 Capital Spending Report Variances by SCE 2018 RAMP Risk- ($000s)

SCE 2018 RAMP Risk	2021 - 2024 Recorded	2021 - 2024 Authorized	Variance (Rec. – Auth.)	% Variance ((Rec. - Auth.)/Auth.)
Building Safety	$56,647	$29,587	$27,060	91%
Contact with Energized Equipment	$296,938	$291,653	$5,285	2%
Cyber Attack	$398,674	$442,092	($43,419)	-10%
Employee Safety	$9,852	$10,086	($233)	-2%
Hydro Asset Failure	$70,217	$50,537	$19,680	39%
Physical Security	$204,715	$193,784	$10,931	6%
Underground Equipment Failure	$152,485	$98,715	$53,770	54%
Wildfire	$3,311,168	$2,460,248	$850,921	35%
Grand Total	**$4,500,697**	**$3,576,701**	**$923,996**	**26%**

IV.

SCE'S REPORT PLACED IN CONTEXT

As this RSAR compares SCE's recorded spending for selected activities with Commission-authorized amounts, it is essential that the report be analyzed in the proper context. The Commission continues to recognize that a utility's actual spending can differ from

Commission-authorized spending, and that utilities have the flexibility to apply their judgment in managing the business.[18] The Commission has stated that "[u]nder GRC ratemaking, the utilities are given an authorized revenue requirement to manage various parts of their utility business."[19] In a consistent line of decisions, the Commission has confirmed that GRC forecasts represent reasonable estimates of what the utility expects to spend in a given area.[20]

This discretion has traditionally been afforded to utilities by the Commission, and has been re-confirmed, including when the Commission issued its decision making the change from a three-year GRC cycle to a four-year one. The Commission observed that:

> [A] longer GRC cycle will facilitate the Commission's adjustment to an emerging reality of modern utility regulation, one that implies a fundamental change in the role of GRC proceedings. In earlier days, the theoretical and real-world purposes of a GRC were essentially the same: the Commission authorized the revenue requirement necessary to allow the utility to recover the reasonable costs of providing safe and reliable service, and to have an opportunity to earn a fair return on its investments. This focus on basic utility service was a workable approach during a time of less rapid technological change, relatively stable costs, and growing populations and demand for utility service. The core activities of the GRC process needed only to be repeated on a periodic basis to maintain fairness for all stakeholders. Over time, GRC proceedings at the Commission have become much less simple and straightforward. For example, in our review of the "regulatory compact" earlier in this decision**, we noted that a utility's response to rapidly unfolding events that affect utility service … may require a utility to fund its response by quickly re-directing Commission-authorized GRC funding from its originally-intended purpose to a wholly different purpose. …. The Commission has always acknowledged that utilities may need to reprioritize spending between GRCs. Now, given the evolving reality we described above, that necessity may even be growing**.[21]

In other words, recognizing that utilities may need to re-prioritize funds and spend more or less in a particular area of their business, the Commission affords them substantial flexibility

---

[18] See, e.g., Re California-American Water Co., D.02-07-011, (mimeo), pp. 6-7, 2002 Cal. PUC LEXIS 423, 220 P.U.R. 4th 556.

[19] CPUC Resolution E-4464 (May 10, 2012), at p. 3.

[20] *See, e.g*., D.08-09-026, Section 6.2 ("A GRC is used to set rates based on reasonable estimates of the costs the utility will incur in providing service. It is not generally intended to set a specific budget. Actual costs for the test year, including plant additions, may vary.")

[21] D.20-01-002 at pp. 35-38 (emphasis added).

to decide how much to spend in any particular area.[22] Moreover, the Commission has specifically recognized that "new programs or projects may come up, others may be cancelled, and there maybe reprioritization. This process is expected and is necessary for the utility to manage its operations in a safe and reliable manner."[23] In providing guidance on spending accountability reports, the Energy Division has similarly confirmed that "a utility is allowed the flexibility to reprioritize the authorized funds in order to ensure safe and reliable operations."[24]

The starting point for this 2024 RSAR was the Commission's examination of SCE's forecasts in its 2021 GRC. SCE's 2021 GRC Application encompassed Test Year 2021, and attrition years 2022 and 2023. The April 17, 2020 Amended Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judges (Amended Scoping Memo) in the proceeding subsequently established Track 4 to consider funding for a third post-test year, 2024.[25] SCE followed the schedule established by the Commission and presented its forecasts for years 2021 through 2023 in 2019. The Commission issued its final decision authorizing funding for these years on August 20, 2021.[26]

On May 13, 2022, SCE filed its Track 4 request for its 2024 base revenue requirement. SCE eventually reached an uncontested settlement agreement in Track 4 with the Public Advocates Office at the California Public Utilities Commission (Cal Advocates), The Utility Reform Network (TURN), Small Business Utility Advocates (SBUA) and the Coalition of California Utility Employees (CUE). D.23-11-096 adopted the uncontested settlement.

---

22 CPUC Resolution E-4464 (May 10, 2012), at p. 7.

23 D.11-05-018, at p. 27.

24 Energy Division, Safety-Related Spending Accountability Report for Southern California Edison (May 2017), available at http:www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Safety/SCESafety-RelatedSpending.pdf.

25 *See* Amended Scoping Memo, p. 1.

26 D.21-08-036.

SCE's Track 4 request and the subsequent settlement agreement, were not based on a full bottoms-up, budget-based analysis of SCE's spending needs in 2024.[27] Rather, SCE proposed to continue the same funding mechanisms in the 2024 post-test year that the Commission adopted in Track 1 of the 2024 GRC.[28] Unless specifically prohibited by Commission precedent, statute, or other applicable restriction, SCE management has discretion to allocate authorized funds to programs and activities that are most important to effectively serve customers, including to adapt to emergent needs or react to unforeseen exogenous events. SCE manages its budgets based on the authorized revenue requirement which follows the Commission's adopted forecast of capital expenditures, O&M expenses, depreciation, escalation rates, etc. Actual costs incurred in any particular program or project may vary from what was forecast because the 2021 GRC forecast was developed in 2019, several years before the Commission authorized SCE's forecast in D. 21-08-036 and approved the Track 4 settlement agreement in D.23-11-096.[29] Moreover, SCE's programs necessarily adapt when emergent needs arise, new or better data becomes available, external factors impact SCE, unforeseen changes to the system occur, new or modified compliance requirements are introduced, etc. Thus, SCE's 2024 authorized amount is based on a forecast that was developed in 2019, rather than based on SCE's current needs or budgets. In the intervening years, conditions changed, new opportunities to improve operations and gain efficiencies were found, and additional needs emerged. In addition, SCE continued to prudently execute on wildfire mitigation work to address emergent risks consistent with its approved

---

[27] *See* Amended Scoping Memo, p. 9 ("The intent behind Track 4 is to allow SCE to update its spending budget, not relitigate policy determinations made in the Commission's Track 1 decision. As such, if a 'budget-based' attrition year mechanism is not adopted for attrition years 2022-2023 we do not expect SCE to revisit this issue in Track 4.")

[28] *See* A.19-08-013, Ex. SCE Tr. 4-03, p. 4 ("[F]or the categories of spending where the Commission in Track 1 authorized budget-based forecasts for 2021-2023 (i.e., Wildfire Mitigation and New Service Connections capital expenditures), SCE has set forth budget-based forecasts for 2024. For all the other categories of capital spending where Track 1 did not authorize a budget-based approach, SCE has not proposed one for 2024, instead simply requesting escalation. The same is true for all Operations and Maintenance (O&M) categories of spend, consistent with the Track 1 Final Decision, with the exception of two: Vegetation Management and Wildfire Mitigation O&M. Here, SCE has proposed a forecast based on 2021 last-year recorded costs[.]").

[29] SCE updated its forecasts for certain categories of spend in Track 4. *See* fn. 29, *supra*.

Wildfire Mitigation Plans, with the understanding that spending above authorized in wildfire mitigation-specific memorandum and balancing accounts will generally be subject to further reasonableness review.

In addition, this RSAR addresses an attrition year in SCE's 2021 GRC cycle. As explained in Section VII, below, the authorized spending for 2024 post-test year was established based on the settlement authorized by the Commission in D.23-11-096, and did not include a detailed examination and decision regarding the individual forecasts for all GRC activities. Hence, for certain GRC activities with capital projects with specific forecasts of expenditures during that attrition year, variances could result from the escalation percentage even where the actual expenditures align with SCE's itemized forecast. To the extent that this caused the need for a variance explanation SCE noted this in our response.

V.

SCE'S 2024 RSAR PRESENTATION AND DEMONSTRATION OF COMPLIANCE WITH D.22-10-002

Decision 22-10-002 provided additional reporting requirements and table formats that are applicable to SCE's 2024 RSAR. Table V-9 below lists the new requirements from D.22-10-002 and how SCE addressed those in this filing.

Table V-9
D.22-10-002 RSAR Requirements

Requirement	SCE Demonstration of Compliance
The IOUs shall use a single, standardized table structure for programs including canceled, deferred, or expanded programs.	SCE used the guidance in Appendix B of D.22-10-002, however due to the large amount of information required, SCE split the table up into logical sections in the written report. SCE has included letter column headings (A, B, C, etc.) in each table below that correspond to the headings in the Excel spreadsheet provided with this filing. SCE hopes that will provide parties with an easy way to track the data in each table to the full data set for each GRC activity.
The IOUs shall use hyperlinks to provide excerpted attachments, exhibits, and	SCE has included hyperlinks to our Test Year 2021 GRC and Track 4 workpapers in the accompanying

Requirement	SCE Demonstration of Compliance
chapters with every RSAR, and shall identify the page numbers of references cited. The IOUs shall include a column to the standardized table structure for the purpose of providing this information.	excel file. SCE did not include the direct hyperlinks in the written report but did include the workpaper title. SCE notes that only selected Wildfire related activities had workpapers in our Track 4 Application.
The IOUs shall provide RSAR spreadsheets to the same distribution list as the RSAR when they file the PDF.	SCE provided RSAR spreadsheets when we filed this RSAR.
The IOUs shall provide an overview of how they defined program completion status.	Additional detail on this is discussed below.
When the program lacks authorized units: (i) the IOUs shall cite workpaper activity descriptions to explain how much work was accomplished and the degree to which the goals described in GRC testimony were met. If the authorized amount deviates from the GRC workpaper, IOUs shall provide a description of the change from the workpaper; and (ii) IOUs shall explain why programs lack work unit information for each program in the RSAR when units are not provided.	For programs that did not have authorized work units SCE included a brief description of why the program lacked work unit information. For activities that did not have authorized work units and triggered a variance explanation SCE endeavored to reference sub-activities or work streams from our workpapers in the variance explanations.
When an IOU indicates a variance is the result of a forecast error, the IOU shall list the assumptions used to make forecasts and identify the assumption(s) that resulted in the forecast error.	To the extent this occurred, SCE included this in our variance explanations.
When a spending variance explanation for a program cites to another program or activity as a reason for the variance, the IOU shall disclose: (a) the name of the other program or activity (as it would be cited in the RSAR); (b) the actual costs associated with the other program or activity ("associated costs") or why actual costs associated with the other program or activity may not be provided; and (c) the authorized spending, actual spending (including or excluding associated costs), the difference in dollars (actual less authorized), and work units, regardless of RSAR thresholds for the other program or activity.	To the extent this occurred, SCE included this in our variance explanations.

Requirement	SCE Demonstration of Compliance
IOUs shall mark programs with less than five percent of authorized expenditures as either canceled or deferred. Alternatively, the IOU shall explain why the program was not marked as canceled or deferred as a separate column.	To the extent this occurred, SCE included this in our variance explanations or Status Completion Statements.
Where a positive variance is due to new activities that are in-scope to the program description (also known as emergent activities), the IOU shall explain what caused the new activity.	To the extent this occurred, SCE included this in our variance explanations.
Where an IOU incurs a positive variance because the program's scope was expanded to include new mandates, the IOU shall explain the new mandate and cite any new regulations or orders.	To the extent this occurred, SCE included this in our variance explanations
Since authorized GRC spending does not always align with RSAR program activities, variances are often explained as inaccurate forecasts or recorded elsewhere. In such cases, the IOUs shall provide enough information to explain the cause of the variance.	To the extent this occurred, SCE included this in our variance explanations
IOUs shall track programs over a full GRC cycle in the RSAR. Each program shall include the cumulative GRC imputed costs, imputed costs to date, actual costs by year, cost to date, and variance to date. IOUs shall provide a statement regarding the anticipated completion status for each line item as to whether the program is anticipated to be completed during the GRC cycle. For the last year of the GRC cycle, the completion status will summarize the entire GRC cycle and discuss any deferred or cancelled scope. If a program's variance threshold is exceeded, the IOU shall include a statement regarding the anticipated completion status. For programs that include multiple projects, the IOU's statement on the anticipated completion status in the standardized table	This RSAR covers SCE's Test Year 2021 and Post Test Years 2022 and 2023 authorized and recorded costs and work units and SCE's Track 4 2024 authorized and recorded costs. SCE followed the guideline in Appendix B of D.22-10-002 for the presentation of the requested information. For activities that triggered a variance explanation, SCE included a status completion statement that included any cancelled, deferred and/or emergent work that contributed to the variance. SCE also indicated us for each line item as to whether the program if the activity is on-going, was completed or has a finite end date.

Requirement	SCE Demonstration of Compliance
may reflect an aggregate of the projects that constitute the program. In that case, the IOU shall disclose the completion statuses of the individual projects creating the variance in the variance explanation or add the individual projects that comprise the program as separate rows.	

This is the third RSAR that included the new requirements listed above and SCE's first RSAR that summarizes a four-year GRC cycle, albeit as described above the forecasts for all four years were not part of the same GRC application. For GRC activities that have a known, finite life, SCE provided that information in the Project Life and Project year columns. If the activities did not have a defined life, or the end date is unknown, SCE marked these as "On-Going" and "Annual". SCE had to use its best judgement when completing the Forecast Scope, Schedule and Cost. For instance, even though SCE may have underspent or under-executed on a GRC activity in 2024 or to date, we may have elected to indicate the activity is still On-Target if the variance is a result of the PTYR mechanism (not budget-based) or if we are executing the work in our queue but we just have less work than we initially forecasted.

For the "Status" column, D.22-10-002, Appendix A defines the options as "Proceeding as Planned", "Deferred", "Cancelled", "Expanded", and "Emergent". SCE is opting to use "Partially Delayed" in place of Deferred.[30] Since many GRC activities are comprised of many individual projects or sub-activities where only a fraction of the work may be delayed, deferred or cancelled, SCE feels Partially Delayed better captures the status of the GRC activity. If there are no changes to the program or no variance explanation is required, SCE selected Proceeding as Planned. However, there may be instances where an activity triggered a variance explanation, but SCE still selected Proceeding as Planned. One reason for selecting that designation could be because the activity uses a historical average to forecast and therefore there would be years

[30] Per D.22-10-002, an Investor-Owned Utility (IOU) may use other terms as long as they define the additional terms clearly.

where we over/under spend compared to a forecast. If SCE is still executing the work in that activity, we consider it proceeding as planned. SCE also included a Cancelled and Completed status designation for activities that have been cancelled or completed, respectively. If an activity has an expanded scope of work compared to what was requested in the 2021 GRC or Track 4 Application or if an activity has a new sub-activity or work stream that was not forecasted as part of the 2021 GRC or Track 4, SCE noted that as "Expanded / Emergent". SCE tried to provide detail in the status completion statement or variance explanation to aid parties in our selection of status.

SCE notes that this is still a relatively new exercise (this is the third year with the new columns Forecast Scope, Forecast Schedule, Forecast Cost, Status and Completion Status and the first year ending a GRC cycle) and while SCE strived to follow the guidance above, there is some subjectivity to the selection of the information in these new columns. For this reason, we exercised our best professional judgment in populating these new columns.

VI.

APPLICABLE SAFETY, RELIABILITY, AND MAINTENANCE RELATED PROGRAMS

In D.19-04-020, the Commission directed SCE to develop a list of programs that include activities relating to safety, reliability or maintenance authorized or in effect during the applicable year.

In SCE's 2018 GRC (A.16-09-001), a risk mapping of GRC activities to risk events, outcomes and impacts was developed. This mapping:

- Examined each GRC activity,
- Identified what type of risk event was targeted for mitigation, and
- Outlined potential outcomes and impact dimensions for that risk event, using a framework consistent with SCE's Safety Modeling Assessment filing (A.15-05-002) and the guidance the Commission provided in D.16-08-018.

This mapping served as the foundation for the Energy Division's report on Safety Related Spending for 2015 submitted in connection with SCE's 2018 GRC.

Consistent with our prior reports, SCE's 2024 report utilizes the same mapping.[31] First, the safety-related programs were identified by selecting any activity that scored in the Safety Impact dimension. Then, these criteria were expanded to include programs that scored in the Reliability Impact dimension. Because the mapping does not capture a Maintenance Impact dimension, SCE manually reviewed all programs that had not scored as related to Safety or Reliability and then added any program that met the criteria specified in the January 3, 2019 Letter and D.19-04-020.

VII.

DERIVATION OF AUTHORIZED DOLLARS

On August 30, 2019, SCE filed its 2021 GRC Application requesting, among other things, an increase in its base revenue requirements for the Test Year 2021 and Post-Test Years 2022 and 2023.[32]

On August 19, 2021, the Commission adopted the 2021 GRC Track 1 Decision, which, in pertinent part, authorized a PTYR mechanism for SCE for the years 2022 and 2023. The adopted PTYR mechanism adjusts SCE's Authorized Base Revenue Requirement (ABRR) on an annual basis, in between GRC Test Years, to provide SCE with additional revenues, which the Commission determined in the 2021 GRC Final Decision were necessary for SCE to continue to provide safe and reliable service.[33]

The adopted PTYR mechanism as approved via SCE's Advice Letter (AL) 4899-E includes the escalation of O&M expenses using various escalation factors for labor, non-labor, medical, and other benefit expenses in the attrition years. The 2022 and 2023 authorized capital

---

[31] SCE has made minor revisions to the of list of programs relating to safety, reliability or maintenance since this initial analysis.

[32] SCE's base revenue requirements include the costs of operating, maintaining, and investing in SCE's generation, distribution, transmission, and general functions, and exclude costs of fuel purchasing and power procurement.

[33] 2021 GRC Track 1 Decision, p. 546.

expenditures presented in this report use a PTYR mechanism (approved in D.21-08-036) that escalates non-wildfire related capital additions except Residential and Commercial New Service Connections (NSC) at 0% from the adopted 2021 CPUC-jurisdictional levels. For wildfire related expenditures and Residential and Commercial NSCs, SCE used budget-based forecasts, consistent with D.21-08-036. For the most part, this report does not include activities whose costs are recovered outside the GRC (e.g., Charge Ready, fuel and purchased power and Energy Efficiency programs). However, this report does include FERC-jurisdictional capital and O&M which are reviewed in the GRC.

On May 13, 2022, SCE filed its Track 4 request for its 2024 base revenue requirement and served direct testimony. On December 5, 2023, the Commission issued D.23-11-096, adopting the uncontested settlement agreement proposed by Southern California Edison Company (SCE), Cal Advocates, TURN, SBUA and CUE to resolve all Track 4 issues.

AL 5180-E implemented the 2024 ABRR adopted in Track 4 and other terms of the Track 4 Settlement Agreement approved by the Commission in the Track 4 Decision (D.22-11-096). This includes:

- Updated Wildfire Management and Residential and Commercial New Service Connections (NSC) Capital;
- Updated Wildfire Management and Vegetation Management O&M;
- Updated O&M escalation rates based on S&P Global forecasts, consistent with the Track 1 O&M escalation mechanism for attrition years 2022-2023; and
- 1.5 percent escalation for 2024 non-budget-based capital.

SCE included authorized dollars and work units for RAMP controls and mitigations associated with our 2018 RAMP report in the respective O&M and/or Capital GRC activity. In some cases, a RAMP control and/or mitigation may be identical to the GRC activity, however in other instances there may be multiple RAMP controls and/or mitigations that make up a GRC

activity. Further, a GRC activity may be partially comprised of RAMP controls/mitigations and non-RAMP-related spending.[34]

[34] Refer to Appendix A for a mapping of Risk Assessment Mitigation Phase control and mitigation activities to GRC activities.

VIII.

DISTRIBUTION CATEGORY

A. Expensed Programs

1. GRC Activity and Unit Description Table

For the Distribution expense activities that are RSAR-eligible, Table VIII-10 below provides the 2021 GRC activity description, testimony and workpaper citation and indicates whether there are any RAMP controls or mitigations associated with that activity.

Table VIII-10
Distribution Expense Category Activity Description and Background Information

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Circuit Breaker Inspections and Maintenance	Includes the cost of labor, materials used, and expenses incurred in performing the inspection and maintenance of circuit breakers at distribution and transmission substations.	SCE-02 Vol: 3	WPSCE02V3 pp. 51 - 57	N/A	N/A
Dead, Dying and Diseased Tree Removal	Costs incurred to proactively remove dead, dying, and diseased trees that could fall on or contact SCE's electrical facilities.	SCE-02 Vol: 6 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE02V06A pp.161 - 167	N/A	N/A
Distribution Apparatus Inspection and Maintenance	This activity includes the costs associated with the inspection and testing of all overhead and underground distribution apparatus specialized equipment for things such as remote monitoring and control.	SCE-02 Vol: 1 Pt. 2	WPSCE02V1P2 pp. 51 - 57	N/A	N/A
Distribution Fault Anticipation	This activity includes the costs associated with rollout of Distribution Fault Anticipation devices as well as data services and analysis provided by Texas A&M.	SCE-04 Vol: 5	WPSCE04V05APt01 pp. 337 - 345	N/A	N/A
Distribution Intrusive Pole Inspections	The costs incurred for intrusive pole inspections of distribution poles. Intrusive inspections require inspectors with proper training and experience to drill into the pole's exterior to identify and measure the extent of internal decay which is typically undetectable with external observation alone. Inspectors also does a visual inspection of the exterior of the pole to check for damage.	SCE-02 Vol: 5	WPSCE02V05 pp. 31 - 32	N/A	N/A
Distribution Overhead Detail Inspections	Overhead Detail Inspections include costs for inspecting SCE's overhead distribution electrical system under GO 165 and SCE's DIMP. Activity includes the cost of labor, materials used and expenses incurred in performing overhead detail inspections. Includes related costs such as: transportation expenses; meals, traveling, lodging, and incidental expenses; division overhead; and supply and tool expense.	SCE-02 Vol: 1 Pt. 2	WPSCE02V1P2 pp. 10 - 18	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Distribution Pole Loading Assessments	The costs incurred in performing pole loading assessments on distribution poles, including pole loading calculations. Through assessments, poles that do not meet GO 95 loading, temperature and safety factor requirements or, in areas with known local conditions such as high winds and SCE's loading, will be identified for repair or replacement.	SCE-02 Vol: 5	WPSCE02V5, pp. 4-9	N/A	N/A
Distribution Pole Loading Repairs	The costs incurred to make repairs to distribution poles as part of the Pole Loading Program. Repairs involve the design and installation or modification of guy wires.	SCE-02 Vol: 5	WPSCE02V5, pp. 220-225	N/A	N/A
Distribution Preventive and Breakdown O&M Maintenance	Distribution maintenance is performed on either a planned basis or an unplanned basis. Planned maintenance work is comprised of repairs to SCE's equipment and structures recorded as Priority 2 items, primarily driven from inspection activities. These repairs can be performed by inspectors or qualified electrical workers. Planned work is referred to as preventive maintenance.	SCE-02 Vol: 1 Pt. 2	WPSCE02V1P2 pp.28 - 37	N/A	N/A
Distribution Request for Attachment Inspections	Includes cost for Pre Inspections and Final Inspections of distribution renter attachments to poles.	SCE-02 Vol: 5	WPSCE02V5, pp. 266-271	N/A	N/A
Distribution Routine Vegetation Management	Costs incurred for pre-inspections, trimming and removal of trees, expanded clearance distances, back-end quality assurance/checks; pole-brushing work, supplemental patrols, and substation-associated vegetation management work.	SCE-02 Vol: 6 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE02V06A pp. 121 - 140	N/A	N/A
Distribution Underground Detail Inspections	This activity includes costs for inspecting SCE's underground distribution electrical system under GO 165 and SCE's DIMP. Activity includes the cost of labor, materials used and expenses incurred in performing underground detail inspections. Includes related costs such as: transportation expenses; meals, traveling, lodging, and incidental expenses; division overhead; and supply and tool expense.	SCE-02 Vol: 1 Pt. 2	WPSCE02V1P2 pp.19 - 27	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Enhanced Overhead Inspections and Remediations	This activity includes the costs associated with performing Enhanced Overhead Inspections and remediation of findings across SCE's High Fire Risk Area. This includes Transmission EOI inspections, Distribution EOI Inspections, aerial inspections, Transmission and Distribution EOI repairs, the long span mitigation, vertical switches and EOI PMO costs.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCEO4VO5APt01 pp. 370 – 389 / Workpapers SCE-Tr.4-02	N/A	N/A
Fire Hazard Prevention	SCE expanded its efforts to mitigate vegetation-related wildfire risks by implementing a Hazard Tree Management Program (HTMP). HTMP assesses the site and structural condition of trees that could fall into or otherwise impact electrical facilities and potentially lead to ignitions and outages.	SCE-02 Vol: 6 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE02V 06A p. 97	N/A	N/A
Fusing Mitigation	This activity includes the costs associated with the installation of branch line fusing as well as substation class fusing within SCE's High Fire Risk Area.	SCE-04 Vol: 5	WPSCE04V05APt01 pp. 319 - 330	Wildfire	Fusing Mitigation
HFRA Sectionalizing Devices	This activity includes the costs associated with the installation of Remote Automatic Reclosers (RARs), Remote-Controlled Switches (RCSs), and replacement of relay hardware to sectionalize circuits that traverse High Fire Risk Area boundaries.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE04V05APt01 pp. 285 - 298	Wildfire	Remote-Controlled Automatic Reclosers and Fast Curve Settings
Infrared Inspection Program	This activity includes the costs associated with performing infrared inspections on High Fire Risk Area (HFRA) distribution circuits as well as infrared and corona inspections on transmission lines in HFRA.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE04V05APt01 pp. 406 - 416	Wildfire	Infrared Inspections
Load Side Support	Load Side Support is SCE's program to address power quality problems such as voltage sags, transients, voltage imbalance, and harmonics that can affect transmission and distribution systems, generators, and customer equipment. Power Quality Specialists in T&D perform investigations at all levels from generation and transmission to end-use equipment within customer facilities. Power Quality Specialists identify the cause of power quality problems and recommend solutions to customers and/or system owners.	SCE-02 Vol: 4 Pt. 2	WPSCE02V4P2ChIII-IVBkC pp.296 - 302	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Meter System Maintenance Design	Advanced Metering Operations analyzes meter and communication data to identify failed devices, issue repair orders, optimize communication performance, update firmware, and mitigate system problems. These monitoring activities help ensure customer usage data is accurate and processed for use by other SCE operational units.	SCE-02 Vol: 1 Pt. 3	WPSCE02V1P3 pp. 31 - 27	N/A	N/A
Monitoring and Operating Substations	Includes the cost of labor, materials, and expenses incurred in operating distribution and transmission substations and switching stations. Includes labor incurred for activities such as: supervising station operation; inspecting station equipment; keeping station logs and records and preparing reports on station operation; and operating switching and other station equipment. Includes related costs such as: transportation expenses; meals, traveling, lodging, and incidental expenses; division overhead; and supply and tool expense.	SCE-02 Vol: 3	WPSCE02V3 pp. 9 - 15	N/A	N/A
Other Substation Equipment Inspections and Maintenance	Includes cost of labor and materials used and expenses incurred in inspecting and maintaining substation equipment not specifically provided for in any other final cost center (FCC). Such items include cable trench covers; steel and wood pole racks; disconnect switches; auxiliary current transformers; potential transformers including bushings; lightning arrestors; potential devices and coupling capacitors; current transformers including bushings; supervisory and telemetering equipment; insulators; oil line tanks; cooling towers; direct current (DC) grounds; and mobile units.	SCE-02 Vol: 3	WPSCE02V3 pp. 79 - 85	N/A	N/A
Patrolling and Locating Trouble	Includes the costs incurred by troublemen when patrolling distribution lines to locate trouble at the request of SCE's system operators or as the result of a customer reported problem. Activities include patrolling, switching, locating the cause of the reported problem, and inspecting SCE equipment installed on customer's property, and repairs to the system to correct reported problem. Includes related costs such as:	SCE-02 Vol: 1 Pt. 2	WPSCE02V1P2 pp. 45 - 50	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	transportation expenses; meals, traveling, lodging, and incidental expenses; division overhead; and supply and tool expense.				
Relay Inspections and Maintenance	Includes the cost of labor, materials used, and expenses incurred in performing the inspection and maintenance of protection relay systems at distribution and transmission substations.	SCE-02 Vol: 3	WPSCE02V3 pp. 65 - 71	N/A	N/A
Streetlight Operations, Inspections, and Maintenance	Includes the cost of labor, materials used, and expenses incurred in the operation of street lighting and signal system equipment. Labor costs include activities for: supervising street lighting and signal systems operation; replacing lamps and incidental cleaning of glassware and fixtures; routine patrolling for lamp outages, extraneous nuisances or encroachments; testing lines and equipment; maintenance of street lighting and signal system assets; and streetlight mapping. Includes related costs such as: transportation expenses; meals, traveling, lodging, and incidental expenses; division overhead; and supply and tool expense.	SCE-02 Vol: 1 Pt. 2	WPSCE02V1P2 pp. 63 - 68	N/A	N/A
Substation - Inspections and Maintenance	Includes the cost of labor, materials used, and expenses incurred in operating transmission substations and switching stations. Includes labor incurred for activities such as: supervising station operation; adjusting station equipment where such adjustment primarily affects performance; inspecting, testing and calibrating station equipment for the purpose of checking its performance; keeping station log and records and preparing reports on station operation; and operating switching and other station equipment. Includes related costs such as: transportation expenses; meals, traveling, lodging, and incidental expenses; division overhead; and supply and tool expense.	SCE-02 Vol: 3	WPSCE02V3 pp. 100 - 106	N/A	N/A
Substation O&M Breakdown Maintenance	Includes the costs to perform unplanned breakdown maintenance, including the repair and replacement of SCE equipment and structures that are damaged or fail in service. Breakdown maintenance is typically	SCE-02 Vol: 3	WPSCE02V3 pp. 93 - 99	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	performed in response to damage caused by equipment failures, degradation, rodents, birds, or other means. Unplanned maintenance does not include costs related to failures that occur during a storm or from a claim.				
Wildfire Covered Conductor Program	Activity includes the costs associated with installation of covered conductor, installation of fire-resistant poles, and mitigation of tree attachments in SCE's High Fire Risk Area.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE04V05APt01 pp. 263 - 269	Wildfire	Wildfire Covered Conductor Program
Wildfire Vegetation Management	Costs incurred for the Hazard Tree Removal program, which proactively assesses dead, dying, and diseased trees that could fall on or contact SCE’s electrical facilities and remediates trees as appropriate to mitigate fire risks.	SCE-02 Vol: 6 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE02V06A pp. 170 - 188	Wildfire	Expanded Vegetation Management

2. GRC Activities Dollar and Unit Variance Calculations

Table VIII-11 and Table VIII-12 below provide the authorized and recorded costs, and variance and percentage change values for each distribution expense activity in terms of dollars and units. The table also indicates whether a variance explanation was triggered based on the established thresholds for each GRC activity.

Table VIII-11
Distribution Expense Category Activity Dollar Variance Calculations

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Roll-up	Project Life (years)	Project Year	2021	2022	2023	2024	Auth. Imputed Cost to Date ($)	2021	2022	2023	2024	Actual Cost to Date ($)	2021	2022	2023	2024	Cost Diff to Date ($)	2021	2022	2023	2024	% Cost Diff to Date (%)	$ Var. Expl. Required
Circuit Breaker Inspections and Maintenance	N/A	N/A	Yes	On-Going	Annual	$5,178	$5,338	$5,737	$5,967	$22,221	$5,606	$7,071	$6,161	$7,032	$25,871	$428	$1,733	$424	$1,065	$3,650	8%	32%	7%	18%	16%	No
Dead, Dying and Diseased Tree Removal	N/A	N/A	Yes	On-Going	Annual	$35,569	$36,829	$41,180	$19,119	$132,698	$16,165	$29,003	$23,962	$20,808	$89,938	($19,404)	($7,826)	($17,218)	$1,689	($42,760)	-55%	-21%	-42%	9%	-32%	No
Distribution Apparatus Inspection and Maintenance	N/A	N/A	Yes	On-Going	Annual	$6,177	$6,370	$6,830	$7,119	$26,495	$5,259	$5,213	$6,200	$7,739	$24,411	($918)	($1,157)	($630)	$620	($2,085)	-15%	-18%	-9%	9%	-8%	No
Distribution Fault Anticipation	N/A	N/A	Yes	Complete	Complete	$0	$0	$0	$134	$134	135	$513	$362	$0	$1,010	$135	$513	$362	($134)	$876	-	-	-	-100%	655%	No
Distribution Intrusive Pole Inspections	N/A	N/A	Yes	On-Going	Annual	$5,457	$5,649	$6,307	$6,439	$23,853	$5,563	$5,806	$3,959	$1,601	$16,930	$106	$157	($2,348)	($4,838)	($6,923)	2%	3%	-37%	-75%	-29%	No
Distribution Overhead Detail Inspections	N/A	N/A	Yes	On-Going	Annual	$5,198	$5,365	$5,812	$6,026	$22,401	$13,279	$12,094	$14,302	$15,764	$55,439	$8,081	$6,729	$8,490	$9,737	$33,038	155%	125%	146%	162%	147%	**Yes**
Distribution Pole Loading Assessments	N/A	N/A	Yes	Seven Years (2014 - 2021)	Completed in 2022	$1,031	$1,067	$1,191	$1,216	$4,505	$3,999	$594	($1)	$2	$4,593	$2,968	($473)	($1,191)	($1,214)	$89	288%	-44%	-100%	-100%	2%	No
Distribution Pole Loading Repairs	N/A	N/A	Yes	Eight Years (2014 - 2022)	Completed in 2023	$804	$831	$913	$940	$3,488	$5,343	$1,250	$95	$10	$6,699	$4,539	$419	($818)	($930)	$3,211	565%	50%	-90%	-99%	92%	No
Distribution Preventive and Breakdown O&M Maintenance	N/A	N/A	Yes	On-Going	Annual	$111,930	$115,682	$126,966	$130,767	$485,345	$108,181	$132,017	$113,802	$116,444	$470,443	($3,749)	$16,334	($13,164)	($14,323)	($14,902)	-3%	14%	-10%	-11%	-3%	**Yes**
Distribution Request for Attachment Inspections	N/A	N/A	Yes	On-Going	Annual	$3,111	$3,218	$3,570	$3,657	$13,556	$1,195	$1,959	$185	$10	$3,348	($1,916)	($1,260)	($3,385)	($3,647)	($10,207)	-62%	-39%	-95%	-100%	-75%	No
Distribution Routine Vegetation Management	N/A	N/A	Yes	On-Going	Annual	$108,070	$111,918	$125,325	$412,242	$757,554	$357,724	$402,596	$356,455	$444,683	$1,561,458	$249,654	$290,678	$231,130	$32,441	$803,904	231%	260%	184%	8%	106%	**Yes**
Distribution Underground Detail Inspections	N/A	N/A	Yes	On-Going	Annual	$6,669	$6,878	$7,380	$7,690	$28,617	$7,549	$8,476	$10,703	$8,176	$34,904	$880	$1,598	$3,323	$486	$6,287	13%	23%	45%	6%	22%	No
Enhanced Overhead Inspections and Remediations	N/A	N/A	Yes	On-Going	Annual	$61,592	$63,686	$70,656	$115,442	$311,377	$117,237	$115,418	$115,261	$128,056	$475,972	$55,645	$51,732	$44,604	$12,614	$164,595	90%	81%	63%	11%	53%	**Yes**
Fire Hazard Prevention	N/A	N/A	Yes	On-Going	Annual	$0	$0	$0	$425	$425	$349	$79	$595	$519	$1,542	$349	$79	$595	$95	$1,117				22%	263%	No
Fusing Mitigation	Wildfire	N/A	Yes	Complete	Complete	$1,154	$1,192	$1,296	$0	$3,642	$36	$2	$13	($13)	$38	($1,118)	($1,189)	($1,283)	($13)	($3,603)	-97%	-100%	-99%		-99%	No
HFRA Sectionalizing Devices	Wildfire	N/A	Yes	On-Going	Annual	$0	$0	$0	$0	$0	$14	$1,027	$2,904	$1,954	$5,899	$14	$1,027	$2,904	$1,954	$5,899						No
Infrared Inspection Program	N/A	Non-RAMP	No	On-Going	Annual	$3,495	$3,593	$3,965	$459	$11,512	$94	$76	$79	$188	$437	($3,401)	($3,517)	($3,887)	($271)	($11,075)	-97%	-98%	-98%	-59%	-96%	No
Infrared Inspection Program	Wildfire	Infrared Inspections	No	On-Going	Annual	$344	$354	$390	$90	$1,178	$464	$467	$575	$564	$2,070	$120	$113	$185	$474	$892	35%	32%	47%	527%	76%	No
Infrared Inspection Program	N/A	Total	Yes	On-Going	Annual	$3,840	$3,947	$4,356	$549	$12,693	$558	$543	$654	$752	$2,507	($3,282)	($3,404)	($3,703)	$203	($10,186)	-85%	-86%	-85%	37%	-80%	No
Load Side Support	N/A	N/A	Yes	On-Going	Annual	$1,362	$1,406	$1,523	$1,579	$5,870	$727	$1,060	$1,028	$1,232	$4,046	($635)	($346)	($495)	($348)	($1,823)	-47%	-25%	-32%	-22%	-31%	No
Meter System Maintenance Design	N/A	N/A	Yes	On-Going	Annual	$3,489	$3,510	$3,557	$3,590	$14,146	$3,336	$2,846	$2,840	$2,923	$11,945	($153)	($664)	($717)	($667)	($2,201)	-4%	-19%	-20%	-19%	-16%	No
Monitoring and Operating Substations	N/A	N/A	Yes	On-Going	Annual	$44,863	$46,248	$49,694	$51,691	$192,496	$43,237	$46,410	$48,947	$39,891	$178,485	($1,626)	$162	($747)	($11,800)	($14,011)	-4%	0%	-2%	-23%	-7%	**Yes**
Other Substation Equipment Inspections and Maintenance	N/A	N/A	Yes	On-Going	Annual	$1,377	$1,419	$1,517	$1,583	$5,897	$1,399	$1,478	$1,939	$1,960	$6,776	$22	$58	$422	$377	$879	2%	4%	28%	24%	15%	No
Patrolling and Locating Trouble	N/A	N/A	Yes	On-Going	Annual	$23,644	$24,386	$26,201	$27,282	$101,512	$27,315	$30,290	$35,201	$27,054	$119,860	$3,671	$5,905	$9,001	($228)	$18,348	16%	24%	34%	-1%	18%	No
Relay Inspections and Maintenance	N/A	N/A	Yes	On-Going	Annual	$3,318	$3,420	$3,664	$3,819	$14,221	$2,703	$2,184	$2,109	$1,757	$8,754	($615)	($1,236)	($1,555)	($2,061)	($5,467)	-19%	-36%	-42%	-54%	-38%	No

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Roll-up	Project Life (years)	Project Year	2021	2022	2023	2024	Auth. Imputed Cost to Date ($)	2021	2022	2023	2024	Actual Cost to Date ($)	2021	2022	2023	2024	Cost Diff to Date ($)	2021	2022	2023	2024	% Cost Diff to Date (%)	$ Var. Expl. Required
Streetlight Operations, Inspections, and Maintenance	N/A	N/A	Yes	On-Going	Annual	$6,968	$7,195	$7,823	$8,096	$30,082	$4,171	$5,665	$6,196	$3,538	$19,570	($2,797)	($1,530)	($1,627)	($4,558)	($10,512)	-40%	-21%	-21%	-56%	-35%	No
Substation - Inspections and Maintenance	N/A	N/A	Yes	On-Going	Annual	$1,320	$1,360	$1,461	$1,517	$5,657	$959	$962	$1,323	$1,178	$4,422	($361)	($397)	($137)	($339)	($1,235)	-27%	-29%	-9%	-22%	-22%	No
Substation O&M Breakdown Maintenance	N/A	N/A	Yes	On-Going	Annual	$2,591	$2,670	$2,886	$2,989	$11,136	$2,709	$2,844	$3,893	$8,300	$17,746	$118	$173	$1,007	$5,312	$6,610	5%	6%	35%	178%	59%	**Yes**
Wildfire Covered Conductor Program	N/A	N/A	Yes	On-Going	Annual	$0	$0	$0	$0	$0	$545	$1,411	$42	($700)	$1,298	$545	$1,411	$42	($700)	$1,298	-	-	-	-	-	No
Wildfire Vegetation Management	Wildfire	Expanded Vegetation Management	Yes	On-Going	Annual	$24,238	$25,107	$28,184	$38,421	$115,950	$32,432	$29,170	$17,111	$37,579	$116,291	$8,194	$4,063	($11,073)	($842)	$341	34%	16%	-39%	-2%	0%	No

Table VIII-12
Distribution Expense Category Activity Unit Variance Calculations

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Unit Description / Rationale for No Work Units	2021	2022	2023	2024	Imputed Units to Date	2021	2022	2023	2024	Actual Units to Date	2021	2022	2023	2024	Unit Diff. to Date	2021	2022	2023	2024	% Unit Diff. to Date (%)	Unit Var. Explan. Triggered?
Circuit Breaker Inspections and Maintenance	N/A	N/A	SCE forecasted this work activity using Last Year Recorded and does not have a work unit that is applicable.																					No
Dead, Dying and Diseased Tree Removal	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Distribution Apparatus Inspection and Maintenance	N/A	N/A	SCE used LYR as the forecast basis since the number of inspection and the number and type of maintenance items can verify from year-to-year																					No
Distribution Fault Anticipation	N/A	N/A	HFRA Circuits with DFA devices installed																					No
Distribution Intrusive Pole Inspections	N/A	N/A	# of Intrusive Pole Inspections	129,240	129,240	129,240	129,240	516,960	133,972	131,455	78,581	11,773	355,781	4,732	2,215	(50,659)	(117,467)	(161,179)	4%	2%	-39%	-91%	-31%	**Yes**
Distribution Overhead Detail Inspections	N/A	N/A	There are multiple work activities and non-labor costs that make up this activity making one unit infeasible.																					No
Distribution Pole Loading Assessments	N/A	N/A	# of Poles Assessments	23,000	0	0	0	23,000	17,961	317	0	0	18,278	(5,039)	317	0	0	(4,722)	-22%	-	-	-	-21%	No
Distribution Pole Loading Repairs	N/A	N/A	# of Repairs	1,620	136	0	0	1,756	1,966	351	25	1	2,343	346	215	25	1	587	21%	158%	-	-	33%	No
Distribution Preventive and Breakdown O&M Maintenance	N/A	N/A	Distribution Preventive and Breakdown O&M Maintenance costs vary year-to-year based on the required number of preventive and breakdown maintenance items that need to be repaired in each year. The complexity of each repair also contributes to the variance in year-to-year costs. Given this, SCE used recorded data with an adder for new requirements to forecast this activity.																					No
Distribution Request for Attachment Inspections	N/A	N/A	The forecast for this activity is based on a mix of work quantities and SCE labor to support this overall activity.																					No
Distribution Routine Vegetation Management	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Distribution Underground Detail Inspections	N/A	N/A	Inspection Count	167,451	167,451	167,451	167,451	669,804	173,822	172,265	187,362	163,323	696,772	6,371	4,814	19,911	(4,128)	26,968	4%	3%	12%	-2%	4%	No
Enhanced Overhead Inspections and Remediations	N/A	N/A	Unable to identify a single unit due to multiple activities in this workpaper that support capital projects.																					No
Fire Hazard Prevention	N/A	N/A	This is a sub-activity of routine vegetation management, and not forecasted on a unit basis.																					No
Fusing Mitigation	Wildfire	N/A	# of Branch Line Fuses Installed																					No
HFRA Sectionalizing Devices	Wildfire	N/A	# of RARs, RCSs and CBs replaced																					No
Infrared Inspection Program	N/A	Non-RAMP	Transmission IR and Corona Scans	3,240	3,240	3,240	1,000	10,720	1,050	1,075	1,026	1,086	4,237	(2,190)	(2,165)	(2,214)	86	(6,483)	-68%	-67%	-68%	9%	-60%	No
Infrared Inspection Program	Wildfire	Infrared Inspections	Distribution Miles Inspected	4,340	4,340	4,340	4,400	17,420	4,410	4,408	5,401	5,401	19,620	70	68	1,061	1,001	2,200	2%	2%	24%	23%	13%	**Yes**
Infrared Inspection Program	N/A	Total	Distribution and Transmission Miles Inspected	7,580	7,580	7,580	5,400	28,140	5,460	5,483	6,427	6,488	23,858	(2,120)	(2,097)	(1,153)	1,088	(4,282)	-28%	-28%	-15%	20%	-15%	**Yes**
Load Side Support	N/A	N/A	SCE forecasted using a historical average since it is appropriate when the recorded amounts "are influenced by weather or other external forces beyond control of the utility" D.89-12-057. Therefore, this is not unit based.																					No
Meter System Maintenance Design	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Monitoring and Operating Substations	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Unit Description / Rationale for No Work Units	2021	2022	2023	2024	Imputed Units to Date	2021	2022	2023	2024	Actual Units to Date	2021	2022	2023	2024	Unit Diff. to Date	2021	2022	2023	2024	% Unit Diff. to Date (%)	Unit Var. Explan. Triggered?
Other Substation Equipment Inspections and Maintenance	N/A	N/A	Each asset within this category has different inspection/maintenance requirements, which vary year to year. As a result, SCE used LYR as a basis as it represents the most recent year from the combined inspection, maintenance, and repair costs for misc. equip, and is reflective of the costs SCE will incur for those activities going forward.																					No
Patrolling and Locating Trouble	N/A	N/A	The number, type, complexity, and duration of activities can vary from year-to-year and are not possible to be forecast. SCE used LYR as its forecast basis given the uncertainty of activities.																					No
Relay Inspections and Maintenance	N/A	N/A	Since the cost for maintenance can vary based on information gathered during field inspections and the type of repair required, we apply an averaging methodology for the activity forecast.																					No
Streetlight Operations, Inspections, and Maintenance	N/A	N/A	Streetlight Inspections are performed on an annual basis for urban areas and every two years in rural areas in compliance with GO 95, however other maintenance and repair work associated with this activity is not unit based and depends on the results of the inspections.																					No
Substation - Inspections and Maintenance	N/A	N/A	Cost can vary depending on the type of repair activity and equipment in scope therefore SCE uses a five-year average and not units to forecast.																					No
Substation O&M Breakdown Maintenance	N/A	N/A	Due to fluctuating recorded costs in this activity to varying inspection cycle of equipment and maintenance requirement of the composition of equipment from year to year, SCE uses a five-year average and not units to forecast.																					No
Wildfire Covered Conductor Program	N/A	N/A	There was no associated 2021 forecast for this activity.																					No
Wildfire Vegetation Management	Wildfire	Expanded Vegetation Management	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No

3. Variance Explanations

Table VIII-13 below provides the variance explanations for those GRC activities meeting the established thresholds.

Table VIII-13
Distribution Expense Category Activity Variance Explanations

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Unit**	**Variance Explanation**
Distribution Intrusive Pole Inspections	No	No	**Yes**	In 2024 SCE underspent and under executed distribution intrusive pole inspections. This variance was driven by the need to address emergent work. SCE is still compliant with the inspection frequencies per G.O. 165 and G.O. 95.
Distribution Overhead Detail Inspections	No	**Yes**	No	In 2020 after SCE developed and filed its Test Year 2021 GRC forecasts, SCE implemented the Inspect App software solution, which included additional survey questions for each inspection to obtain additional useful information regarding the asset and its condition, and a more consistent set of information from asset to asset. While inspections have necessarily increased in cost, InspectApp has provided significant safety and reliability benefits to SCE's customers. Additional benefits include use for asset strategy, risk management, design, and field operations to make better-informed decisions on overhead assets, including those not in High Fire Risk Areas. The use of Inspect App helps ensure that questions regarding asset status and conditions are answered consistently and clearly. Accurate asset data, such as geolocation, equipment type, make, model, material type, and age are foundational for operations, predictive and risk analysis, design, and asset management. Obtaining the data also improves assessment of structure conditions and inventory. SCE notes that our 2024 recorded spend is generally in line with our TY 2025 GRC forecast (which was developed in late 2022) for calendar year 2024.
Distribution Preventive and Breakdown O&M Maintenance	**Yes**	No	No	SCE utilized historical averages to forecast this activity in our TY 2021 GRC since costs can vary year-to-year based on the required number of preventive and breakdown maintenance items that need to be repaired in each year. Further, the complexity of each repair also contributes to the variance in year-to-year costs. While SCE underspent compared to authorized in 2024, the cumulative 2021 – 2024 spend compared to authorized has a 3.1% variance overall.
Distribution Routine Vegetation Management	**Yes**	No	No	Similar to 2023, in 2024, various factors contributed to SCE's spend over authorized for GRC Activity Distribution Routine Vegetation Management work, which included, but was not limited to, increased work volume/scope, continued impact of SB 247, market pressures, and wage inflation that impacted contractor costs. Overall, SCE's total VMBA costs were less than 115% of the authorized amount in 2024 and therefore do not require a separate reasonableness review application for recovery of incremental costs.
Enhanced Overhead Inspections and Remediations	**Yes**	No	No	For Enhanced Overhead Inspections and Remediations, the main driver that led to the 2024 recorded O&M expenses being higher than authorized was the volume of distribution remediations; however, SCE notes that the overall variance is only 11% of the forecast. The 2024 forecast for distribution remediations was based on the 2021 recorded volumes, as SCE anticipated the volume of work in 2024 would be similar to that in 2021, based on known information at the time of filing our Track 4

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	$	% / $	Unit	Variance Explanation
				application in May 2022. However, the actual 2024 recorded volume of distribution remediations was higher, primarily due to an increase in the find rate. Additionally, some inspections in late 2023 required remediation work that was completed in 2024.
Infrared Inspection Program	No	No	**Yes**	SCE completed approximately 1,000 more miles of distribution HFRA inspections compared to authorized that was driven by the risk informed scope that identified the highest risk circuit miles for annual inspections and lower risk circuit miles to be inspected every other year.
Monitoring and Operating Substations	**Yes**	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. The spending for this activity is primarily related to the responsibility for monitoring and operating the transmission, sub-transmission and distribution systems within SCE's service area. SCE's underspend in 2024 was due to certain department personnel more predominantly supporting and charging time towards capital-portfolio activities resulting in lower allocation against this activity. The spending for this activity is also contingent on changes within the SCE Transmission and Distribution Capital and O&M portfolio forecasts.
Substation O&M Breakdown Maintenance	No	**Yes**	No	The authorized amount for Substation O&M Breakdown Maintenance was based on five-year average of historical recorded costs when SCE filed our TY 2021 GRC Application in August 2019. In 2024, SCE overspent the imputed authorized amount due to a higher volume of reactive maintenance that was driven by a large volume of transformer leak repairs. Additionally, breakdown maintenance is necessarily unpredictable in terms of how much work must be accomplished in a given year. This is why SCE used a five-year historical average to forecast the expenditures. As such, yearly totals can fluctuate based on the amount and magnitude of the breakdown maintenance required. In 2024, SCE experienced a higher overall number of emergent/reactive maintenance than originally forecast in the 2021 GRC.

4. Activity Status

Table VIII-14 below provides the forecast scope, schedule and cost, status and status completion statement as applicable.

Table VIII-14
Distribution Expense Category Activity Status

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Circuit Breaker Inspections and Maintenance	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC activity is on-going with no pre-defined end date.
Dead, Dying and Diseased Tree Removal	On-Going	Annual	Under	On-Target	Under	Proceeding as Planned	The GRC activity Dead, Dying and Diseased Tree Removal is on-going with no pre-defined end date. SCE is generally proceeding as planned but as noted in previous year's variance explanations, SCE estimated a higher volume of removals in our TY 2021 GRC forecast prepared in 2019 then realized over the GRC cycle likely as a result of weather conditions and a lower-than-expected prescription rate.
Distribution Apparatus Inspection and Maintenance	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC activity is on-going with no pre-defined end date.
Distribution Fault Anticipation	Complete	Complete	N/A	N/A	N/A	Completed	SCE does not currently have any additional scope for this program planned. The 2021 GRC Decision did not authorize any costs for DFA, however when the 2021 GRC Track 1 Final Decision was issued in August 2021, SCE had already scoped 25 units for completion in 2022. Given the costs already spent on those units, it was prudent for SCE to complete those installations. Further, as the 2021 GRC Track 1 Final Decision contemplated a final pilot study, it was reasonable for SCE to conduct a study analyzing the results of the pilot. It was also reasonable for SCE to incur these costs to preserve the function of existing DFA installations and determine the future direction of SCE's use of the technology. The recorded

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							expenses are to maintain existing installations as long as DFAs are operational in the field
Distribution Intrusive Pole Inspections	On-Going	Annual	On-Target	On-Target	Under	Proceeding as Planned	The Distribution Intrusive Pole Inspections is an on-going activity with no pre-defined end date. While SCE is under executing to our TY 2021 GRC forecast, SCE is still compliant with the inspection frequencies per G.O. 165 and G.O. 95 and is generally proceeding as planned.
Distribution Overhead Detail Inspections	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	The GRC Activity Distribution Overhead Detail Inspections is on-going with no pre-defined end date. The Scope and Schedule are generally proceeding as planned; however, the costs are over forecasted from our TY 2021 GRC.
Distribution Pole Loading Assessments	Seven Years (2014 - 2021)	Completed in 2022	On-Target	On-Target	On-Target	Completed	SCE completed this program in 2022.
Distribution Pole Loading Repairs	Eight Years (2014 - 2022)	Completed in 2023	On-Target	Over	Over	Completed	SCE completed this program in 2023, slightly behind schedule. However, there were some carryover costs that recorded in 2024.
Distribution Preventive and Breakdown O&M Maintenance	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	Distribution Preventive and Breakdown O&M Maintenance is on-going, with no pre-defined end date, however the work and sub-activities may vary year-over-year. As noted in our variance explanations from 2022 – 2024, the overall cycle variance is on target.
Distribution Request for Attachment Inspections	On-Going	Annual	On-Target	On-Target	Under	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned; however, SCE received few requests in 2024 which is why the recorded spend was minimal.
Distribution Routine Vegetation Management	On-Going	Annual	Over	On-Target	Over	Expanded / Emergent	The GRC Activity Distribution Routine Vegetation Management is on-going with no pre-defined end date, however the scope and sub-activities may change over time.

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Distribution Underground Detail Inspections	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	The GRC Activity Distribution Underground Detail Inspections is on-going with no pre-defined end date.
Enhanced Overhead Inspections and Remediations	On-Going	Annual	Over	On-Target	Over	Expanded / Emergent	O&M Enhanced Overhead Inspections and Remediations is on-going, with no pre-defined end date, and the work and sub-activities may vary year-over-year. As noted in our variance explanations from 2021 – 2024, SCE has expanded the program and scope which has led to the overall spend above authorized.
Fire Hazard Prevention	On-Going	Annual	N/A	N/A	N/A	Expanded / Emergent	SCE did not request funding for this activity in our TY 2021 GRC, however we did request, and were authorized funding as part of our Track 4 application covering calendar year 2024. This work involves expanded line clearing for legacy generation facilities. The planned scope was completed in 2025. This type of work may continue in the future, but in 2026 and beyond, the scope will focus on non-energized generation facilities.
Fusing Mitigation	Complete	Complete	N/A	N/A	N/A	Completed	SCE does not currently have any additional scope for this program planned.
HFRA Sectionalizing Devices	On-Going	Annual	N/A	N/A	N/A	Expanded / Emergent	SCE did not have an O&M forecast for 2021 – 2023 in our TY 2021 GRC application or in our Track 4 application. In 2018, SCE could not have foreseen the need to further refine its fast curve settings as it was just beginning to use this technology to mitigate wildfire risk on its HFRA circuits. And, as it gained experience with fast curve settings, SCE learned they could be refined to improve their performance. Further, SCE's initial plans for HFRA sectionalizing devices involved installing new devices and relocating existing ones only at the boundary of HFRA. However, in late 2019 and after it developed its 2021 GRC forecast, SCE began to consider installing additional RARs to further sectionalize its

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							circuits within and/or near HFRA boundaries and help mitigate the considerable impacts of PSPS events on customers and communities affected by PSPS events.
Infrared Inspection Program	On-Going	Annual	Under	Under	Under	Proceeding as Planned	This GRC Activity is on-going with no currently identified end date. As noted in our previous variance explanations, SCE has revisited our strategy on the transmission infrared and corona scans and has been executing to that level from 2021 - 2024**.**
Load Side Support	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	The GRC Activity Load Side Support is on-going with on pre-defined end date. SCE is generally proceeding as planned.
Meter System Maintenance Design	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned.
Monitoring and Operating Substations	On-Going	Annual	On-Target	On-Target	Under	Proceeding as Planned	The GRC activity is proceeding as planned, as it is continually responsible for monitoring and operating the transmission, sub-transmission and distribution systems within the SCE territory. The cost under-run is due to a shift in capital-portfolio activities support, re-allocating their time and cost towards other GRC activities.
Other Substation Equipment Inspections and Maintenance	On-Going	Annual	On-Target	On-Target	On-Target	On-Target	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned.
Patrolling and Locating Trouble	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned; however, SCE did experience some cost pressures as noted in our 2023 variance explanation.
Relay Inspections and Maintenance	On-Going	Annual	On-Target	On-Target	Under	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned.
Streetlight Operations,	On-Going	Annual	On-Target	On-Target	Under	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned.

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Inspections, and Maintenance							
Substation - Inspections and Maintenance	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned.
Substation O&M Breakdown Maintenance	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	Substation O&M Breakdown maintenance is an ongoing program that will remain during the GRC Cycle. SCE is generally proceeding as planned; however, breakdown maintenance is unpredictable in terms of how much work must be completed in any given year.
Wildfire Covered Conductor Program	On-Going	Annual	N/A	N/A	N/A	Expanded / Emergent	SCE did not request funding for this in our TY 2021 GRC application or Track 4 Application. This work includes covered conductor remediation work SCE performed on certain earlier-installed covered conductor projects to bring those installations up to SCE's current construction and design standards.
Wildfire Vegetation Management	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned.

B. Capital Expenditure Programs

1. GRC Activity and Unit Description Table

For the Distribution capital activities that are RSAR-eligible, Table VIII-15 provides the 2021 GRC testimony citation and activity description and indicates whether there are any RAMP controls or mitigations associated with that activity.

Table VIII-15
Distribution Capital Expenditure Category Activity Description

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
4 kV Cutovers	The 4 kV Cutover Program is the conversion, or cutover, of all circuits fed from the selected substation from the lower voltage class to a higher voltage class. The 4 kV Cutover Program is a part of the larger 4 kV Substation Elimination Program, which has the purpose of addressing equipment obsolescence, safety, and reliability.	SCE-02 Vol: 1 Pt. 1	WPSCE02V1P2 pp. 89 - 90	N/A	N/A
4 kV Cutovers - Load Growth Driven	The 4 kV Cutovers – Load Growth Driven Program addresses overloads on 4 kV circuits and substations due to load growth in areas that these circuits and substations serve. To maintain safe and reliable service to the customers that are currently served from islanded 4 kV systems, SCE plans to cutover sections of circuit or full circuits that do not have adequate operational flexibility.	SCE-02 Vol: 4 Pt. 2	WPSCE02V4P2ChII BkA pp. 332-336	N/A	N/A
4 kV Substation Eliminations	4 kV Substation Eliminations include substation equipment removal, soil remediation, and removal of associated buildings. 4 kV Substation Eliminations is a part of the larger 4 kV Substation Elimination Program which has the purpose of addressing equipment obsolescence, safety, and reliability.	SCE-02 Vol: 1 Pt. 1	WPSCE02V1P2 pp. 91 - 100	N/A	N/A
Automatic Reclosers Replacement Program	Automatic Reclosers Replacement Program includes costs associated with replacing automatic reclosers (ARs). ARs are used in distribution circuits to interrupt the supply of electricity to that portion of the circuit	SCE-02 Vol: 1 Pt. 1	WPSCE02V1P2 pp. 85 - 88	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	downstream of its location. They act similar to circuit breakers but are installed in a distribution circuit rather than a substation.				
Automation	Automation includes costs for incorporating automation equipment, technologies, and operations into our electric system which allows SCE to (1) provide system operators the flexibility to safely isolate faults, (2) safely restore additional customers more quickly following a fault, (3) reduce the number of customer outages, (4) measure load and DER behavior, and (5) manage groups of DERs. The Distribution Automation Programs will help to enable system operators to overcome masked load and DER variability concerns to safely manage a system with many DERs.	SCE-02 Vol: 4 Pt. 1	WPSCE02V4Pt1ChII BkA pp. 169 – 175	N/A	N/A
Cable Life Extension (CLE) Program	The Cable Life Extension (CLE) Program, in concert with the Cable-in-Conduit (CIC) Replacement Program, addresses the risks of radial cable failures. The CLE program performs two types of life-extension activities for CIC conductor: (1) testing and (2) injection.	SCE-02 Vol: 1 Pt. 1	WPSCE02V1P2 pp. 45 - 55	Underground Equipment Failure	Cable Replacement Programs (CIC)
Cable-in-Conduit (CIC) Replacement Program	The Cable-in-Conduit (CIC) Replacement Program proactively replaces segments of SCE's Cable-in-Conduit population that are approaching the end of their service life. The objective of the program is to reduce the number of in-service failures of CIC cable and thus drive down the number of unplanned outages for SCE customers.	SCE-02 Vol: 1 Pt. 1	WPSCE02V1P2 pp. 56 - 59	Underground Equipment Failure	Cable Replacement Programs (CIC)
Capacitor Bank Replacement Program	The Capacitor Bank Replacement Program replaces or removes failed and obsolete distribution capacitor banks and their associated	SCE-02 Vol: 1 Pt. 1	WPSCE02V1P2 pp. 77 - 80	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	capacitor switches. Capacitor banks are flagged within field inspection in order to be targeted for replacement as a part of cyclic inspections or found in field. Each capacitor bank is composed of three capacitor units, fuses, a rack, and mounting hardware.				
DER-Driven Grid Reinforcement	Capital expenditures in DER Hosting Capacity Reinforcement include the subset of projects that SCE has identified for reliability and technology pilot purposes. SCE's load growth planning process and its related DER studies have identified Grid Reinforcement projects driven by immediate capacity and other planning criteria needs.	SCE-02 Vol: 4 Pt. 1	WPSCE02V4P1ChII BkA. P. 208	N/A	N/A
Distribution Circuit Upgrades	The Distribution Circuit Upgrades Program covers forecast expenditures for work outside of the substation required to relieve heavily loaded distribution circuits and substations expected to exceed distribution planning criteria limits. This includes all work required on distribution circuits to solve distribution needs. This work enables distribution circuits to carry more electric current and/or make necessary transfers between distribution circuits and substations to mitigate situations where equipment is forecast to exceed capacity limits. Typical work includes installing new switches, upgrading cable or conductor, or installing new conductor to create circuit ties to facilitate load transfers between substations and circuits.	SCE-02 Vol: 4 Pt. 2	WPSCE02V4PT2ChI IBkA pp. 30-33	N/A	N/A
Distribution Claim	Distribution Claim includes the costs incurred by SCE to repair damage to the distribution system caused by another party. In cases where SCE is	SCE-02 Vol: 1 Pt. 2	WPSCE02V1P2 pp. 58 - 61	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	able to identify the party responsible for the damage, SCE pursues recovery of the costs to repair the damage.				
Distribution Deteriorated Pole Replacement	The costs incurred for intrusive pole inspections of distribution and transmission poles. Intrusive inspections require inspectors with proper training and experience to drill into the pole's exterior to identify and measure the extent of internal decay which is typically undetectable with external observation alone. Additionally, the inspector does a visual inspection of the exterior of the pole to check for damage.	SCE-02 Vol: 5	WPSCE02V5, pp. 147-148; 210	N/A	N/A
Distribution Fault Anticipation	This activity includes the costs associated with the rollout of Distribution Fault Anticipation devices as well as data services and analysis provided by Texas A&M.	SCE-04 Vol: 5	WPSCE-04Vol.05A, pp. 331 - 336	N/A	N/A
Distribution Plant Betterment	Distribution Plant Betterment is an activity that performs system improvements and projects to address local needs that are not covered by the Distribution Circuit Upgrades (DCU) Program. This activity can include projects to address changes in load profiles that drive local low voltage problems, new protection devices and switches needed for safety and reliability, new developments that require a single-phase circuit voltage where none exists, new street or freeway improvements that impact SCE's electric infrastructure, and more.	SCE-02 Vol: 4 Pt. 2	WPSCE02V4PT2ChI IBkbkB pp. 338-342	N/A	N/A
Distribution Pole Loading Program Pole Replacement	The costs incurred for intrusive pole inspections of distribution poles. Intrusive inspections require inspectors with proper training and experience to drill into the pole's exterior to identify and measure the extent of internal decay	SCE-02 Vol: 5	WPSCE02V5, pp. 149-150	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	which is typically undetectable with external observation alone. Additionally, the inspector does a visual inspection of the exterior of the pole to check for damage.				
Distribution Preventive and Breakdown Capital Maintenance	The maintenance activity captures the labor, equipment, and other material costs to remove and replace failed distribution equipment.	SCE-02 Vol: 1 Pt. 2	WPSCE02V1P2 pp. 38 - 43	N/A	N/A
Distribution Storm Response Capital	Distribution Storm Response Capital includes costs related to repair and replacement performed as part of a storm response on Distribution facilities.	SCE-04 Vol: 2	WPSCE04V2 pp. 44 - 45	N/A	N/A
Distribution Substation Plan (DSP) Circuits	As part of the DSP Program, new distribution circuits are required to provide new capacity outside the substation fence in areas where multiple distribution circuits in the same geographical region are expected to exceed capacity; to serve new residential or commercial developments in areas with no existing electrical infrastructure; and to relieve existing circuits projected to exceed capacity in geographically isolated areas with limited usable circuit ties to transfer load.	SCE-04 Vol: 2	WPSCE02V4PT2ChI IBkA pp. 34-41	N/A	N/A
Distribution Substation Plan Substations	SCE identifies required substation projects through the Distribution Substation Planning process when lower cost solutions, such as distribution circuit upgrades or new circuits, do not adequately address an overload. Substation projects include capacity additions or upgrades to facilities at existing substations and within the existing perimeter of the substation property, additions or upgrades that require perimeter	SCE-02 Vol: 4 Pt. 2	WPSCE02V4PT2ChI IBkbkA pp. 42-141	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	expansion of the substation property, and new substations.				
Distribution Tools and Work Equipment	The activity, Distribution Tools and Work Equipment includes purchasing portable tools and specialized test equipment used by distribution personnel when performing work on SCE's distribution grid. These expenditures are for tools or equipment costing more than $1,000.	SCE-02 Vol: 1 Pt. 2	WPSCE02V1P2 pp. 83 - 86	N/A	N/A
Distribution Transformers	SCE replaces distribution transformers when they fail in service, or when we observe deterioration during inspection or other fieldwork. Deterioration includes leaks, corrosion, and damage caused by vehicle collisions or acts of nature. In addition to the material cost for the transformer, this activity includes associated costs such as waste removal, material retirement/cleanup, material testing, and transformer coatings.	SCE-02 Vol: 1 Pt. 2	WPSCE02V1P2 pp. 92 - 107	N/A	N/A
Distribution Volt VAR Control and Capacitor Automation Program	The Programmable Capacitor Control (PCC) Replacement Program and the associated Distribution Volt VAR Control (DVVC) algorithm are implemented at SCE to allow for Conservation Voltage Regulation (CVR) to decrease energy consumption, while maintaining reliable voltage delivery to SCE customers.	SCE-02 Vol: 4 Pt. 2	WPSCE02V4PT2ChI IBkbkB pp. 352-359	N/A	N/A
Distribution Wood Pole Disposal	Distribution Wood Pole Disposal are the costs incurred when safely disposing poles that are removed from service.	SCE-02 Vol: 5	WPSCE02V5, pp. 214-215; 216 - 218	N/A	N/A
Engineering and Planning Software Tools	Engineering and Planning Software Tools support SCE in calculating the amount of DERs that the distribution system can host without triggering a distribution infrastructure upgrade, and in forecasting SCE's short-term and long-	SCE-02 Vol: 4 Pt. 1	WPSCE02V4P1ChII BkA pp. 121 - 144	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	term grid needs. E&P software tools include, Grid Connectivity Model, the Grid Analytics Application, the Long-term Planning Tool (LTPT) and System Modeling Toolset (SMT), Grid Interconnection Processing Tool and DRP External Portal. SCE's continued investments in these new E&P software tools will help resolve multiple limitations with SCE's legacy tools.				
Enhanced Overhead Inspections and Remediations	Enhanced Overhead Inspections and Remediations includes the costs associated with performing Enhanced Overhead Inspections and remediation of findings across SCE's High Fire Risk Area.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WP SCE-04 Vol. 05A, Part 1 pp. 390 – 405 / WPSCE-Tr.4-02 Track 4 Activity Forecast Request	N/A	N/A
Fusing Mitigation	Fusing Mitigation includes the costs associated with the installation of branch line fusing as well as substation class fusing within SCE's High Fire Risk Area.	SCE-04 Vol: 5	WPSCE-04Vol.05A, pp. 270 - 284	Wildfire	Fusing Mitigation
HFRA Sectionalizing Devices	The activity, HFRA Sectionalizing Devices includes the costs associated with the installation of Remote Automatic Reclosers (RARs), Remote-Controlled Switches (RCSs), and replacement of relay hardware in order to sectionalize circuits that traverse High Fire Risk Area boundaries.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE-04Vol.05A, pp. 309 - 318	Wildfire	Remote-Controlled Automatic Reclosers and Fast Curve Settings
Meter System Maintenance Design	Advanced Metering Operations analyzes meter and communication data to identify failed devices, issue repair orders, optimize communication performance, update firmware, and mitigate system problems. These monitoring activities help ensure customer usage data is accurate and processed for use by other SCE operational units.	SCE-02 Vol: 1 Pt. 3	WPSCE02V1P3 pp. 38 - 43	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
New Capacitors	The program plans installation of new capacitors on distribution circuits that have a reactive power (VAR) deficit in order to help maintain adequate power factor.	SCE-02 Vol: 4 Pt. 2	WPSCE02V4PT2ChI IBkB pp.343-348	N/A	N/A
Overhead Conductor Program (OCP)	The Overhead Conductor Program (OCP) is SCE's program to replace small overhead conductors that do not meet present standards with larger conductors, and to install protective devices to improve protection of overhead conductor.	SCE-02 Vol: 1 Pt. 1	WPSCE02V1P2 pp. 81 - 84	Contact with Energized Equipment	Overhead Conductor Program (OCP)
PCB Transformer Removal	The Polychlorinated biphenyls (PCB) Transformer Removal Program replaces distribution line transformers suspected of being contaminated with PCB oil greater than 50 parts per million (ppm). PCBs are chemicals that have dangerous effects on the environment and human health.	SCE-02 Vol: 1 Pt. 1	WPSCE02V1P2 pp. 101 - 108	N/A	N/A
Prefabrication	Each of SCE's 34 district service centers has a prefabrication operation responsible for staging material for the construction crews, assembling prepackaged kits, and properly disposing of materials removed from jobsites.	SCE-02 Vol: 1 Pt. 2	WPSCE02V1P2 pp. 87 - 91	N/A	N/A
Preventive Maintenance	This maintenance activity captures the labor, equipment, and other material costs to remove and replace assets not identified in other replacement programs, on a programmatic basis.	SCE-02 Vol: 3	WPSCE02V3 – pp. 107 - 115	N/A	N/A
PSPS Execution	PSPS Execution includes the costs associated with activities and investments that support the active execution of Public Safety Power Shutoff (PSPS) events, which includes the IMT (organized command structure and support systems) and Line Patrols, deployed prior to a PSPS event and prior to re-energizing circuits.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE04V5Pt2 pp. 55 – 58 / WPSCE-Tr.4-02 Track 4 Activity Forecast Request	Wildfire	PSPS Protocol and Support Functions

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Streetlight Maintenance and LED Conversions	SCE owns and maintains over 680,000 lights in our service territory. Most streetlights on SCE's system are concrete electroliers with High Pressure Sodium Vapor (HPSV) luminaires. SCE plans to install LED technology that is more energy efficient and requires less maintenance as compared to HPSV luminaires.	SCE-02 Vol: 1 Pt. 1	WPSCE02V1P2 p. 141	N/A	N/A
Substation Emergency Equipment	SCE maintains an inventory of equipment requiring a long lead-time for ordering, especially as infrastructure ages. When equipment and parts must be reactively replaced, SCE minimizes delays through its Emergency Equipment Program (EEP). This inventory enables SCE to reduce outage time at the substation and minimizes interruption caused by an unplanned major equipment failure.	SCE-02 Vol: 3	WPSCE02Vol. 03, pp. 250-259	N/A	N/A
Substation Equipment Replacement Program	The Substation Equipment Replacement Program (SERP) replaces substation equipment identified to exceed their protection ratings to interrupt fault current. SCE identifies substation circuit breakers projected to exceed short circuit duty interrupting capabilities by comparing each circuit breaker's short circuit duty rating with the potential fault current that circuit breaker will have to interrupt.	SCE-02 Vol: 4 Pt. 2	WPSCE02V4PT2ChI IBkbkB pp. 20-22	N/A	N/A
Substation Tools and Work Equipment	As SCE upgrades equipment inside and outside of the substation, it must also purchase new tools that are necessary for testing, commissioning, inspecting and maintaining this new equipment. Substation Tools and Work Equipment also includes the costs to replace obsolete work equipment. These tool expenditures include the	SCE-02 Vol: 3	WPSCE02Vol. 03, pp. 244-245	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	costs for acquiring and retiring portable tools and equipment whose cost exceeds $1,000.				
Underground Structure Replacements	The Underground Structure Replacement program consists of three different sub-activities; structure replacements; vault shoring; and Cover Pressure Relief and Restraint (CPRR) intended to prevent primary distribution underground electrical equipment failures that could potentially lead to a vault or manhole explosion event.	SCE-02 Vol: 1 Pt. 1	WPSCE02V1P2 pp. 64 - 76	Underground Equipment Failure	Cover Pressure Relief and Restraint (CPRR) Program
Underground Switch Replacements	The Underground Switch Replacement program removes old oil-filled underground distribution switches located in underground structures and replaces them with newer technology switches. The primary reason for SCE's program to remove old oil-filled switches is that failures of oil-filled switches can damage adjacent electrical equipment (e.g., cable, transformers, switches).	SCE-02 Vol: 1 Pt. 1	WPSCE02V1P2 pp. 60 - 63	Underground Equipment Failure	UG Oil Switch Replacement Program
Undergrounding	Undergrounding of existing overhead power lines consists of digging a continuous trench approximately 24" wide and anywhere from 36" to 62" deep, depending on number of conduits required. Vaults and manholes will be needed at regular intervals along this trench to accommodate cable pulling and electrical connections, as well as any underground equipment being relocated from the overhead system. These structures vary in size from 7'x18'x8' for the largest vaults to 5'x10'6"x7' for the smallest standard manhole.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE-04Vol.05A, pp. 346 – 350 / WPSCE-Tr.4-02 Track 4 Activity Forecast Request	N/A	N/A
Wildfire Covered Conductor Program	Wildfire Covered Conductor Program includes the costs associated with installation of covered conductors, installation of fire-resistant poles,	SCE-04 Vol: 5 / SCE-02: Direct Testimony in	WPSCE04V05APt01 pp. 247 – 262 / WPSCE-Tr.4-02	Wildfire	Wildfire Covered Conductor Program

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	and mitigation of tree attachments in SCE's High Fire Risk Area.	Support of GRC Track 4 Activity	Track 4 Activity Forecast Request		
Worst Circuit Rehabilitation (WCR)	The Worst Circuit Rehabilitation (WCR) program has two primary objectives: (1) mitigate the safety and reliability risks associated with mainline cable failures; and (2) improve the reliability performance of Worst Performing Circuits (WPCs) within the SCE system.	SCE-02 Vol: 1 Pt. 1	WPSCE02V1P2 pp. 37 - 48	Underground Equipment Failure	Worst Circuit Rehabilitation (WCR)

2. GRC Activities Dollar and Unit Variance Calculations

Table VIII-16 below provides the authorized, recorded, variance and percentage change values for each Distribution expenditure category activity in terms of dollars and units. The table also indicates whether a variance explanation was triggered based on the established thresholds for each GRC activity.

Table VIII-16
Distribution Capital Expenditure Category Activity Dollar Variance Calculations

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Roll-up	Project Life (years)	Project Year	2021	2022	2023	2024	Auth. Imputed Cost to Date ($)	2021	2022	2023	2024	Actual Cost to Date ($)	2021	2022	2023	2024	Cost Diff to Date ($)	2021	2022	2023	2024	% Cost Diff to Date (%)	$ Var. Expl. Required
4 kV Cutovers	N/A	N/A	Yes	On-Going	Annual	$10,221	$10,221	$10,221	$10,375	$41,038	$26,155	$23,505	$61,138	$47,737	$158,535	$15,934	$13,284	$50,917	$37,362	$117,497	156%	130%	498%	360%	286%	**Yes**
4 kV Cutovers - Load Growth Driven	N/A	N/A	Yes	On-Going	Annual	$19,285	$19,285	$19,285	$19,575	$77,430	$18,800	$14,818	$25,501	$15,455	$74,574	($485)	($4,467)	$6,215	($4,120)	($2,856)	-3%	-23%	32%	-21%	-4%	No
4 kV Substation Eliminations	N/A	N/A	Yes	On-Going	Annual	$3,366	$3,366	$3,366	$3,417	$13,516	$4,490	$2,235	$3,809	$1,829	$12,364	$1,124	($1,131)	$443	($1,588)	($1,152)	33%	-34%	13%	-46%	-9%	No
Automatic Reclosers Replacement Program	N/A	N/A	Yes	On-Going	Annual	$2,673	$2,673	$2,673	$2,713	$10,732	$2,239	$1,532	$1,219	$130	$5,120	($434)	($1,141)	($1,454)	($2,583)	($5,611)	-16%	-43%	-54%	-95%	-52%	No
Automation	N/A	N/A	Yes	On-Going	Annual	$36,908	$36,908	$36,908	$37,462	$148,186	$21,822	$22,736	$26,449	$20,714	$91,721	($15,086)	($14,172)	($10,459)	($16,748)	($56,465)	-41%	-38%	-28%	-45%	-38%	**Yes**
Cable Life Extension (CLE) Program	Underground Equipment Failure	Cable Replacement Programs (CIC)	Yes	On-Going	Annual	$0	$0	$0	$0	$0	$41	$66	$26	$6	$138	$41	$66	$26	$6	$138						No
Cable-in-Conduit (CIC) Replacement Program	Underground Equipment Failure	Cable Replacement Programs (CIC)	Yes	On-Going	Annual	$6,133	$6,133	$6,133	$6,225	$24,623	$6,823	$8,069	$6,955	$10,826	$32,673	$690	$1,936	$823	$4,601	$8,050	11%	32%	13%	74%	33%	No
Capacitor Bank Replacement Program	N/A	N/A	Yes	On-Going	Annual	$2,781	$2,781	$2,781	$2,823	$11,166	$3,073	$4,396	$2,546	$1,968	$11,984	$292	$1,615	($235)	($855)	$818	10%	58%	-8%	-30%	7%	No
DER-Driven Grid Reinforcement	N/A	N/A	Yes	Complete	Completed	$1,523	$1,523	$1,523	$1,546	$6,116	$405	$976	$3,154	$2,040	$6,576	($1,118)	($547)	$1,631	$494	$460	-73%	-36%	107%	32%	8%	No
Distribution Circuit Upgrades	N/A	N/A	Yes	On-Going	Annual	$44,271	$44,271	$44,271	$44,935	$177,748	$41,140	$58,939	$41,274	$43,532	$184,884	($3,131)	$14,667	($2,997)	($1,403)	$7,136	-7%	33%	-7%	-3%	4%	No
Distribution Claim	N/A	N/A	Yes	On-Going	Annual	$44,538	$44,538	$44,538	$45,207	$178,822	$42,879	$53,517	$57,269	$63,340	$217,005	($1,659)	$8,978	$12,731	$18,133	$38,183	-4%	20%	29%	40%	21%	**Yes**
Distribution Deteriorated Pole Replacement	N/A	N/A	Yes	On-Going	Annual	$213,969	$213,969	$213,969	$217,179	$859,087	$218,326	$210,776	$179,378	$153,592	$762,072	$4,357	($3,193)	($34,592)	($63,587)	($97,015)	2%	-1%	-16%	-29%	-11%	**Yes**
Distribution Fault Anticipation	N/A	N/A	Yes	Complete	Completed	$0	$0	$0	$0	$0	$8,362	$2,149	$47	$25	$10,583	$8,362	$2,149	$47	$25	$10,583						No
Distribution Plant Betterment	N/A	N/A	Yes	On-Going	Annual	$3,871	$3,871	$3,871	$3,929	$15,541	$21,226	$34,062	$26,856	$30,013	$112,156	$17,355	$30,191	$22,985	$26,084	$96,616	448%	780%	594%	664%	622%	**Yes**
Distribution Pole Loading Program Pole Replacement	N/A	N/A	Yes	Eleven Years (2014 - 2025)	Ten of Eleven	$267,436	$267,436	$267,436	$271,447	$1,073,754	$279,422	$349,308	$267,372	$86,096	$982,198	$11,986	$81,872	($63)	($185,351)	($91,556)	4%	31%	0%	-68%	-9%	**Yes**
Distribution Preventive and Breakdown Capital Maintenance	N/A	N/A	Yes	On-Going	Annual	$293,061	$293,061	$293,061	$297,457	$1,176,639	$338,638	$336,659	$431,056	$468,907	$1,575,260	$45,577	$43,598	$137,995	$171,450	$398,620	16%	15%	47%	58%	34%	**Yes**
Distribution Storm Response Capital	N/A	N/A	Yes	On-Going	Annual	$42,910	$42,910	$42,910	$43,554	$172,284	$37,599	$37,172	$73,536	$56,202	$204,510	($5,311)	($5,738)	$30,626	$12,648	$32,225	-12%	-13%	71%	29%	19%	**Yes**
Distribution Substation Plan (DSP) Circuits	N/A	N/A	Yes	On-Going	Annual	$55,432	$55,432	$55,432	$56,263	$222,559	$33,207	$47,678	$46,641	$65,490	$193,015	($22,225)	($7,754)	($8,791)	$9,227	($29,543)	-40%	-14%	-16%	16%	-13%	No
Distribution Substation Plan Substations	N/A	N/A	Yes	On-Going	Annual	$65,867	$65,867	$65,867	$66,855	$264,456	$32,483	$51,800	$42,735	$44,111	$171,129	($33,384)	($14,067)	($23,132)	($22,744)	($93,326)	-51%	-21%	-35%	-34%	-35%	**Yes**
Distribution Tools and Work Equipment	N/A	N/A	Yes	On-Going	Annual	$3,513	$3,513	$3,513	$3,565	$14,103	$1,971	$3,192	$6,230	$6,093	$17,486	($1,542)	($321)	$2,717	$2,528	$3,383	-44%	-9%	77%	71%	24%	No
Distribution Transformers	N/A	N/A	Yes	On-Going	Annual	$101,816	$101,816	$101,816	$103,343	$408,790	$97,069	$110,288	$188,214	$208,066	$603,637	($4,747)	$8,473	$86,399	$104,723	$194,847	-5%	8%	85%	101%	48%	**Yes**
Distribution Volt VAR Control and Capacitor Automation Program	N/A	N/A	Yes	On-Going	Annual	$2,595	$2,595	$2,595	$2,634	$10,419	$2,772	$1,865	$1,441	$1,852	$7,929	$177	($730)	($1,154)	($782)	($2,490)	7%	-28%	-44%	-30%	-24%	No
Distribution Wood Pole Disposal	N/A	N/A	Yes	On-Going	Annual	$4,788	$4,788	$4,788	$4,860	$19,224	$5,350	$6,494	$5,967	$6,481	$24,292	$562	$1,706	$1,179	$1,622	$5,069	12%	36%	25%	33%	26%	No

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Roll-up	Project Life (years)	Project Year	2021	2022	2023	2024	Auth. Imputed Cost to Date ($)	2021	2022	2023	2024	Actual Cost to Date ($)	2021	2022	2023	2024	Cost Diff to Date ($)	2021	2022	2023	2024	% Cost Diff to Date (%)	$ Var. Expl. Required
Engineering and Planning Software Tools	N/A	N/A	Yes	On-Going	Annual	$27,866	$27,866	$27,866	$28,284	$111,882	$24,463	$25,211	$34,504	$28,485	$112,663	($3,403)	($2,655)	$6,638	$201	$781	-12%	-10%	24%	1%	1%	No
Enhanced Overhead Inspections and Remediations	N/A	N/A	Yes	On-Going	Annual	$49,553	$43,572	$43,009	$116,658	$252,792	$135,028	$138,859	$108,915	$164,987	$547,789	$85,475	$95,287	$65,905	$48,329	$294,996	172%	219%	153%	41%	117%	**Yes**
Fusing Mitigation	Wildfire	Fusing Mitigation	Yes	Complete	Completed	$0	$0	$0	$0	$0	($479)	$56	$837	($0)	$414	($479)	$56	$837	($0)	$414						No
HFRA Sectionalizing Devices	Wildfire	Remote-Controlled Automatic Reclosers and Fast Curve Settings	Yes	On-Going	Annual	$5,334	$5,518	$0	$0	$10,852	$7,891	$17,586	$7,066	$1,621	$34,164	$2,557	$12,068	$7,066	$1,621	$23,312	48%	219%			215%	No
Meter System Maintenance Design	N/A	N/A	Yes	On-Going	Annual	$922	$922	$922	$935	$3,701	$384	$374	$813	$808	$2,378	($538)	($548)	($109)	($128)	($1,322)	-58%	-59%	-12%	-14%	-36%	No
New Capacitors	N/A	N/A	Yes	On-Going	Annual	$3,783	$3,783	$3,783	$3,840	$15,189	$3,085	$2,686	$1,940	$1,590	$9,301	($698)	($1,097)	($1,843)	($2,250)	($5,888)	-18%	-29%	-49%	-59%	-39%	No
Overhead Conductor Program (OCP)	Contact with Energized Equipment	Overhead Conductor Program (OCP)	Yes	On-Going	Annual	$72,641	$72,641	$72,641	$73,730	$291,653	$84,713	$74,101	$70,796	$67,328	$296,938	$12,072	$1,461	($1,845)	($6,402)	$5,285	17%	2%	-3%	-9%	2%	No
PCB Transformer Removal	N/A	N/A	Yes	On-Going	Annual	$1,990	$1,990	$1,990	$2,020	$7,989	$2,284	$1,498	$2,080	$2,167	$8,030	$294	($491)	$90	$148	$41	15%	-25%	5%	7%	1%	No
Prefabrication	N/A	N/A	Yes	On-Going	Annual	$22,935	$22,935	$22,935	$23,279	$92,085	$17,195	$18,665	$25,141	$23,261	$84,261	($5,740)	($4,271)	$2,205	($19)	($7,824)	-25%	-19%	10%	0%	-8%	No
Preventive Maintenance	N/A	N/A	Yes	On-Going	Annual	$48,595	$48,595	$48,595	$49,323	$195,108	$61,373	$45,692	$61,669	$56,150	$224,884	$12,778	($2,902)	$13,074	$6,827	$29,777	26%	-6%	27%	14%	15%	No
PSPS Execution	Wildfire	PSPS Protocol and Support Functions	Yes	On-Going	Annual	$756	$0	$0	$5,530	$6,286	$3,309	$5,876	$3,798	$9,271	$22,254	$2,553	$5,876	$3,798	$3,740	$15,967	338%			68%	254%	No
Streetlight Maintenance and LED Conversions	N/A	N/A	Yes	On-Going	Annual	$51,549	$51,549	$51,549	$52,323	$206,971	$45,836	$34,734	$43,304	$31,654	$155,529	($5,713)	($16,816)	($8,245)	($20,668)	($51,442)	-11%	-33%	-16%	-40%	-25%	**Yes**
Substation Emergency Equipment	N/A	N/A	Yes	On-Going	Annual	$24,704	$24,704	$24,704	$25,074	$99,186	$24,119	$16,677	$12,002	$20,847	$73,645	($585)	($8,027)	($12,702)	($4,227)	($25,541)	-2%	-32%	-51%	-17%	-26%	No
Substation Equipment Replacement Program	N/A	N/A	Yes	On-Going	Annual	$37,680	$37,680	$37,680	$38,245	$151,284	$22,908	$12,119	$7,968	$17,057	$60,051	($14,772)	($25,561)	($29,712)	($21,188)	($91,233)	-39%	-68%	-79%	-55%	-60%	**Yes**
Substation Tools and Work Equipment	N/A	N/A	Yes	On-Going	Annual	$7,741	$7,741	$7,741	$7,857	$31,081	$5,762	$8,049	$6,234	$6,621	$26,666	($1,979)	$308	($1,508)	($1,236)	($4,415)	-26%	4%	-19%	-16%	-14%	No
Underground Structure Replacements	N/A	Non-RAMP	No	On-Going	Annual	$5,265	$5,265	$5,265	$5,344	$21,139	$18,846	$13,298	$25,500	$39,940	$97,583	$13,581	$8,033	$20,235	$34,596	$76,445	258%	153%	384%	647%	362%	**Yes**
Underground Structure Replacements	N/A	Total	Yes	On-Going	Annual	$13,887	$13,887	$13,887	$14,095	$55,756	$26,453	$20,588	$33,422	$50,706	$131,168	$12,566	$6,701	$19,535	$36,611	$75,412	90%	48%	141%	260%	135%	**Yes**
Underground Structure Replacements	Underground Equipment Failure	Cover Pressure Relief and Restraint (CPRR) Program	No	On-Going	Annual	$8,622	$8,622	$8,622	$8,751	$34,617	$7,607	$7,290	$7,922	$10,766	$33,585	($1,015)	($1,332)	($700)	$2,015	($1,032)	-12%	-15%	-8%	23%	-3%	No
Underground Switch Replacements	Underground Equipment Failure	UG Oil Switch Replacement Program	Yes	On-Going	Annual	$2,705	$2,705	$2,705	$2,746	$10,860	$3,230	$4,524	$2,829	$5,812	$16,396	$525	$1,819	$124	$3,067	$5,535	19%	67%	5%	112%	51%	No
Undergrounding	N/A	N/A	Yes	On-Going	Annual	$23,047	$43,713	$45,190	$45,996	$157,946	$6,586	$29,704	$16,829	$56,753	$109,872	($16,461)	($14,008)	($28,362)	$10,757	($48,074)	-71%	-32%	-63%	23%	-30%	**Yes**
Wildfire Covered Conductor Program	Wildfire	Wildfire Covered Conductor Program	Yes	On-Going	Annual	$557,495	$580,066	$604,826	$698,699	$2,441,086	$919,542	$808,573	$805,668	$673,774	$3,207,556	$362,047	$228,507	$200,842	($24,925)	$766,471	65%	39%	33%	-4%	31%	**Yes**
Worst Circuit Rehabilitation (WCR)	Underground Equipment Failure	Worst Circuit Rehabilitation	Yes	On-Going	Annual	$7,127	$7,127	$7,127	$7,234	$28,614	$18,764	$6,049	$14,072	$30,808	$69,693	$11,637	($1,077)	$6,945	$23,574	$41,079	163%	-15%	97%	326%	144%	**Yes**

Table VIII-17
Distribution Capital Expenditure Category Activity Unit Variance Calculations

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	**RAMP Risk**	**RAMP Control / Mitigation**	**Unit Description / Rationale for No Work Units**	**2021**	**2022**	**2023**	**2024**	**Imputed Units to Date**	**2021**	**2022**	**2023**	**2024**	**Actual Units to Date**	**2021**	**2022**	**2023**	**2024**	**Unit Diff. to Date**	**2021**	**2022**	**2023**	**2024**	**% Unit Diff. to Date (%)**	**Unit Var. Explan. Triggered?**
4 kV Cutovers	N/A	N/A	# of Transformers Removed	159	159	159	159	636	393	326	300	597	1616	234	167	141	438	980	147%	105%	89%	275%	154%	**Yes**
4 kV Cutovers - Load Growth Driven	N/A	N/A	# of Transformers Removed – SCE did not provide a specific unit count in GRC testimony or workpapers for 2021.																					No
4 kV Substation Eliminations	N/A	N/A	# of 4 kV Substations Removed	3	1	1	4	9	3	1	1	2	5	0	0	0	-2	-4	0%	0%	0%	-50%	-22%	**Yes**
Automatic Reclosers Replacement Program	N/A	N/A	# of Automatic Reclosers Replaced	31	31	31	31	124	12	14	10	0	36	-19	-17	-21	-31	-88	-61%	-55%	-68%	-100%	-71%	**Yes**
Automation	N/A	N/A	This includes multiple sub-programs that vary in unit types. Therefore, providing one unit type is not feasible.																					No
Cable Life Extension (CLE) Program	Underground Equipment Failure	Cable Replacement Programs (CIC)	Cable Testing and Cable Injection, Conductor Miles																					No
Cable-in-Conduit (CIC) Replacement Program	Underground Equipment Failure	Cable Replacement Programs (CIC)	Conductor Miles Replaced	18	18	18	18	72	34	28.2	11	15.26	88.46	16	10.2	-7	-2.74	16.46	89%	57%	-39%	-15%	23%	No
Capacitor Bank Replacement Program	N/A	N/A	Capacitor Banks Replaced	70	70	70	70	280	54	86	62	24	226	-16	16	-8	-46	-54	-23%	23%	-11%	-66%	-19%	**Yes**
DER-Driven Grid Reinforcement	N/A	N/A	This activity is comprised of SCE's Sub transmission Relay Upgrade and is not unit based.																					No
Distribution Circuit Upgrades	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Distribution Claim	N/A	N/A	This activity is driven by factors outside of SCE's control and that can vary significantly from year to year. Accordingly, the capital forecast is based on historical average of recorded expenditures and is not unit based.																					No
Distribution Deteriorated Pole Replacement	N/A	N/A	# of Distribution Pole Replacements	10513	10513	10513	10513	42052	9983	9520	6094	4787	30384	-530	-993	-4419	-5726	-11668	-5%	-9%	-42%	-54%	-28%	**Yes**
Distribution Fault Anticipation	N/A	N/A	# of HFRA Circuits	0	0	0	0	0	130	25	0	0	155	130	25	0	0	155						No
Distribution Plant Betterment	N/A	N/A	As the work can vary in this activity, the forecasted spend used a historical average of completed projects and is not unit based.																					No
Distribution Pole Loading Program Pole Replacement	N/A	N/A	# of Distribution Pole Replacements	14187	14187	14187	14187	56748	11629	14306	7868	2205	36008	-2558	119	-6319	-11982	-20740	-18%	1%	-45%	-84%	-37%	**Yes**
Distribution Preventive and Breakdown Capital Maintenance	N/A	N/A	The annual costs vary from year-to-year based on the volume of preventive and breakdown maintenance items found during inspections, as well as the complexity of the required repair. Given this, SCE used recorded data to forecast this activity.																					No
Distribution Storm Response Capital	N/A	N/A	Storm events are driven by weather and other environmental factors outside of SCE's control and that can vary significantly from year to year. Accordingly, the capital forecast for Storm Response is based on a five-year average of recorded expenditures and is not unit based.																					No
Distribution Substation Plan (DSP) Circuits	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Distribution Substation Plan Substations	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Distribution Tools and Work Equipment	N/A	N/A	The variety of tool and work equipment in this category makes it infeasible to identify a single unit of measurement.																					No
Distribution Transformers	N/A	N/A	# of Distribution Transformers	21654	21654	21654	21654	86616	27161	21524	24687	20754	94126	5507	-130	3033	-900	7510	25%	-1%	14%	-4%	9%	No
Distribution Volt VAR Control and Capacitor Automation Program	N/A	N/A	# of Programmable Capacitor Controls Replaced	450	450	450	450	1800	524	216	244	277	1261	74	-234	-206	-173	-539	16%	-52%	-46%	-38%	-30%	**Yes**

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Unit Description / Rationale for No Work Units	2021	2022	2023	2024	Imputed Units to Date	2021	2022	2023	2024	Actual Units to Date	2021	2022	2023	2024	Unit Diff. to Date	2021	2022	2023	2024	% Unit Diff. to Date (%)	Unit Var. Explan. Triggered?
Distribution Wood Pole Disposal	N/A	N/A	The forecast for this activity is based on the number of pole replacements and the disposal unit cost. The unit cost is based on a five-year average. A five-year average was selected because the cost varies and is difficult to predict.																					No
Engineering and Planning Software Tools	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Enhanced Overhead Inspections and Remediations	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Fusing Mitigation	Wildfire	Fusing Mitigation	# of Current Limiting Fuses	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A``	No
HFRA Sectionalizing Devices	Wildfire	Remote-Controlled Automatic Reclosers and Fast Curve Settings	# of CB Relay Hardware for Fast Curve	34	34	0	0	68	95	117	29	11	252	61	83	29	11	184	179%	244%	-	-	271%	No
Meter System Maintenance Design	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
New Capacitors	N/A	N/A	# of New Capacitors Installed– SCE did not provide a specific unit count in GRC testimony or workpapers for 2021.																					No
Overhead Conductor Program (OCP)	Contact with Energized Equipment	Overhead Conductor Program (OCP)	Conductor Miles	367	367	367	367	1468	306	300	312	251.436	1169.436	-61	-67	-55	-115.564	-298.564	-17%	-18%	-15%	-31%	-20%	**Yes**
PCB Transformer Removal	N/A	N/A	# of PCB Contaminated Transformers Replaced	250	250	250	250	1000	202	107	106	104	519	-48	-143	-144	-146	-481	-19%	-57%	-58%	-58%	-48%	**Yes**
Prefabrication	N/A	N/A	This activity comprises multiple types of work activities, and therefore providing a single work unit is not feasible.																					No
Preventive Maintenance	N/A	N/A	These costs can vary from year to year, accordingly, the capital forecast for is based on a five-year average of recorded expenditures and is not unit based.																					No
PSPS Execution	Wildfire	PSPS Protocol and Support Functions	This activity comprises multiple types of work activities, and therefore providing a single work unit is not feasible.																					No
Streetlight Maintenance and LED Conversions	N/A	N/A	# of Streetlight Replacements and LED Conversions	76,300	76,300	76,300	76,300	305,200	63,996	32,921	37,173	34,000	168,090	-12304	-43379	-39127	-42300	-137110	-16%	-57%	-51%	-55%	-45%	**Yes**
Substation Emergency Equipment	N/A	N/A	This activity comprises multiple types of work activities, and therefore providing a single work unit is not feasible.																					No
Substation Equipment Replacement Program	N/A	N/A	# of Substation Circuit Breakers Replaced	217	217	217	217	868	188	43	75	43	349	-29	-174	-142	-174	-519	-13%	-80%	-65%	-80%	-60%	**Yes**
Substation Tools and Work Equipment	N/A	N/A	The variety of tool and work equipment in this category makes it infeasible to identify a single unit of measurement.																					No
Underground Structure Replacements	N/A	Non-RAMP	# of Underground Structure Replacements	25	25	25	25	100	33	24	39	78	174	8	-1	14	53	74	32%	-4%	56%	212%	74%	**Yes**
Underground Structure Replacements	N/A	Total	# of Underground Structure Replacements, # of CPRR Installed	383	383	383	383	1532	388	349	342	441	1520	5	-34	-41	58	-12	1%	-9%	-11%	15%	-1%	No
Underground Structure Replacements	Underground Equipment Failure	Cover Pressure Relief and Restraint (CPRR) Program	# of CPRR Installed	347	347	347	347	1388	355	325	295	363	1338	8	-22	-52	16	-50	2%	-6%	-15%	5%	-4%	No
Underground Switch Replacements	Underground Equipment Failure	UG Oil Switch Replacement Program	# of Underground Switch Replacements	24	24	24	24	96	39	26	56	62	183	15	2	32	38	87	63%	8%	133%	158%	91%	**Yes**
Undergrounding	N/A	N/A	# of Circuit Miles	6	11	11	21	49	5.5	11	5	12	33.5	-0.5	0	-6	-9	-15.5	-8%	0%	-55%	-43%	-32%	**Yes**
Wildfire Covered Conductor Program	Wildfire	Wildfire Covered Conductor Program	# of Conductor Miles Replaced with Covered Conductor	1043	1000	644	1050	3737	1427	1356	1161	758	4702	384	356	517	-292	965	37%	36%	80%	-28%	26%	**Yes**
Worst Circuit Rehabilitation (WCR)	Underground Equipment Failure	Worst Circuit Rehabilitation (WCR)	# of Conductor Miles	15	15	15	15	60	58	7.7	17	47.6	130.3	43	-7.3	2	32.6	70.3	287%	-49%	13%	217%	117%	**Yes**

3. Variance Explanations

Table VIII-18 below provides the variance explanations for those GRC activities meeting the established thresholds.

Table VIII-18
Distribution Capital Expenditure Category Activity Variance Explanations

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Units**	**Variance Explanation**
4 kV Cutovers	**Yes**	**Yes**	**Yes**	In 2024, the 4kV Cutover Program surpassed forecast costs and units due to significant overruns and rollovers from critical infrastructure replacement needs. This included costs from the Modoc Substation and several emergent projects not originally forecast. Additionally, the variance is attributed to the increased scope of work and the necessity of timely solutions for critical replacements.
4 kV Substation Eliminations	No	No	**Yes**	SCE underspent and completed less eliminations in 2024 as several projects (Maywood, Montebello, Bristol, Muscoy, Hoyt and Modoc) installation dates were deferred to 2025 due to delays in acquiring the required permits. SCE is diligently working to complete these projects in 2025 as feasible. While SCE has not fully executed all projected scope for these delayed installations, these are multi-year projects and SCE is executing the work not requiring permits, in order to minimize the impact of the in-service date delays.
Automatic Reclosers Replacement Program	No	No	**Yes**	Due to the success of the AR replacement program, all known oil-filled ARs were replaced by 2023. The program then shifted its focus to Vacuum Fault Interrupters and other outdated equipment. However, replacement equipment for Vacuum Fault Interrupters are not anticipated to be available until 2026, so SCE did not replace any units in 2024.
Automation	No	**Yes**	No	In 2024, capital expenditures for Automation were approximately $17 million below the imputed authorized amount. Recorded expenditures for Reliability-driven Distribution Automation were approximately $8.6 million lower than the authorized amount due to the installation of automation on only overhead portions of circuits and a lower number of circuits completed. SCE completed the installation of automation on 70 circuits, which was five below the 75 forecasted in the 2021 GRC. However, due to the circuit composition being primarily overhead constructed circuits, the per circuit project costs were lower than forecasted. Recorded expenditures for DER-driven Distribution Automation were approximately $1 million lower than the authorized amount due to delays in completing the Small-Scale Deployment of the overhead Remote Fault Indicator (RFI). SCE concluded the Small-Scale Deployment of the overhead RFI devices in 2023, and the padmount and underground devices in 2024. Recorded expenditures for Small-scale Deployments were approximately $3.8 million lower than the authorized amount due to fewer underground switch devices being available for installation and evaluation in 2024. SCE completed the Small-Scale Deployment of the padmount and underground RFIs in 2024. Additionally, SCE experienced vendor delays in starting the deployment and evaluation of the padmount

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Units**	**Variance Explanation**
				and underground load break switches with telemetry. These deployments are expected to conclude in 2025. Finally, recorded expenditures for DER-driven Substation Automation were approximately $3.3 million lower than the authorized amount due to SCE experiencing vendor delays in procuring substation automation equipment, which affected the initiation and completion of the installation process.
Capacitor Bank Replacement Program	No	No	**Yes**	In 2024, Capacitor Bank Replacements fell short of the forecast due to fewer units needing replacement. Detailed inspections revealed fewer units, prompting us to prudently lower our target and re-evaluate criteria for future scoping. SCE also experienced higher costs than originally forecast when we filed our TY 2021 GRC Application back in August of 2019.
Distribution Claim	No	**Yes**	No	Distribution Claims records costs based on factors outside of SCE's control. The costs to repair damages recorded to Distribution Claim vary from year to year. The events that drive the costs are variable and beyond the control of the utility. As such, totals can vary each year.
Distribution Deteriorated Pole Replacement	**Yes**	**Yes**	**Yes**	The decrease in the number of Distribution Deteriorated Pole replacement units and associated costs is primarily attributed to three key factors. First, there were a lower volume of inspections completed by SCE's Intrusive Pole Program, resulting in a lower number of poles identified for replacement. Second, the pole failure rate during the inspection phase was lower, resulting in fewer non-compliant poles requiring replacement. Third, a higher percentage of pole replacement constraints, such as environmental and engineering holds, as well as Caltrans permitting, resulted in a lower number of poles being replaced.
Distribution Plant Betterment	**Yes**	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. The TY 2021 GRC forecast which informed the 2024 authorized value was calculated using a historical average. In line with 2021 - 2023, SCE experienced a higher volume of work and spend due to greater than average distribution projects performed by the regions compared to the historical averages. For example, SCE continued to execute regional grid team work that was in excess of our TY 2021 GRC forecast. Additionally, SCE continued to spend money as part of a remote grid project and pilot projects that were also not part of our TY 2021 GRC forecast. These projects primarily focused on addressing voltage problems and related to new protection devices and switches. These projects are necessary for SCE to provide safe and reliable power. SCE notes that our 2024 recorded spend is in line with our TY 2025 GRC forecast (which was developed in late 2022) for calendar year 2024.
Distribution Pole Loading Program Pole Replacement	**Yes**	**Yes**	**Yes**	The decrease in the number of Distribution Pole Loading Program (PLP) replacement units and associated costs is primarily attributed to two key factors. First, there were a lower volume of PLP assessments that required completion compared to the GRC authorized forecast. Second, the pole failure rate during the

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	$	% / $	Units	Variance Explanation
				assessment phase was lower than forecasted, resulting in fewer non-compliant poles requiring replacement.
Distribution Preventive and Breakdown Capital Maintenance	**Yes**	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. In 2024, SCE performed two significant activities that were not included in the 2021 GRC forecast for 2024 and therefore would not be included in the 2024 imputed authorized amount: 1. Pole Related Maintenance Splice (PRMS): The PRMS activity includes splice work that is identified during pole replacement design. When the splice is beyond the one-span threshold to be considered pole replacement work, the activity is then considered preventive maintenance work. This work has been recorded to Capital Preventative Maintenance starting in mid-2020. 2. Live Front Equipment Replacement: In 2023, SCE performed analysis to identify pieces of live front equipment that were high risk to workers. SCE has continued to analyze, identify, and replace high risk live front equipment throughout 2024 under Capital Preventive Maintenance. For activities included in the 2021 GRC forecast for 2024, SCE experienced higher than anticipated escalation/inflation rates (starting in 2020 and continuing through today) than were projected in our TY 2021 GRC application.
Distribution Storm Response Capital	No	**Yes**	No	Distribution Storm Response Capital relies on a five-year average due to the volatile nature of what records to this activity. There are factors outside of SCE's control that contribute to the recorded costs for this activity. The number of storms as well as the severity of each storm can lead to variances from the forecast. For these reasons the recorded costs can overrun or underrun when compared to authorized in any given year.
Distribution Substation Plan Substations	No	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or projects for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. This is especially relevant for specific project related activities, such as Distribution Substation Plan Substations where they type of work and overall forecasted spend can vary year over year depending on load growth. Since SCE did not have a bottoms up or any forecast for 2024 in our TY 2021 GRC Application SCE feels it is more appropriate to compare our recorded spend to our TY 2025 GRC Application forecast for calendar year 2024. SCE notes that it is reasonable and not unusual for some projects that were previously requested and authorized to be delayed, extended, or continue over multiple rate case cycles. Additionally, SCE may experience emergent project needs that were not anticipated or forecasted at the time of a GRC application. In 2024, SCE experienced delays in

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Units**	**Variance Explanation**
				projects, carryover spend from previously delayed/deferred projects and spend on emergent projects, resulting in an underspend compared to an imputed authorized value and our TY 2025 GRC forecast for 2024. In 2024, SCE incurred costs associated with some projects, such as Garnett 115/33 and Hathaway 66/12, that were deferred from an earlier in service date. For example, the Hathaway project's construction start date was postponed due to delivery delays in materials. The project is subject to civil, electrical and test go back work and is scheduled to be completed by the end of 2025 (original in-service date of August 2023). In 2024, SCE also experienced some cancellations of certain projects, such as Hinson, Kramer and Vista Substations, resulting in SCE not incurring approximately $25 million that was originally forecast for these projects. SCE has revaluated these projects, and the scope was able to be absorbed into other future DSP projects. Finally, in 2024, SCE recorded approximately $9M for emergent projects that were not part of our original forecast. For example, SCE spent approximately $2.3M in North Oaks 66/16 to increase the transformer capacity and $1.5M at Soquel 66/12 to add a 12.0 kv circuit to the system. SCE notes that some of the scope of deferred or canceled project may be subsumed in these emergent projects.
Distribution Transformers	**Yes**	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. The overrun compared to the imputed authorized value is explained by the significant increase in Transformer cost-pers since SCE filed our TY 2021 GRC in August of 2019. A multitude of factors such as increased labor costs, slower production turnaround, and global supply chain constraints have all contributed to the increase in transformer costs. Although the industry has stabilized since the significant price increases experienced between 2021 and 2022, the higher cost-pers experienced have not decreased and are presently considered the current standard pricing. This has affected all transformer types, which resulted in SCE spending over authorized in 2024. Since 2021, approximate price increases have been as follows: - Overhead transformers: 2.2x price increase - Single Phase Padmount transformers: 2.5x price increase - Three Phase Padmount transformers: 2.5x price increase - Burd transformers: 2.1x price increase

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Units**	**Variance Explanation**
				- Subway transformers: 4.3x price increase SCE notes that our 2024 recorded spend is in line with our TY 2025 GRC forecast (which was developed in late 2022) for calendar year 2024 as that forecast was able to capture some of the increases in unit costs.
Distribution Volt VAR Control and Capacitor Automation Program	No	No	**Yes**	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. SCE notes that our 2024 recorded spend and recorded work units is more in line with our TY 2025 GRC forecast (which was developed in late 2022) for calendar year 2024. However, similar to 2021 – 2023, SCE underspent and executed in the DVVC program in 2024 due to some supply chain shortages of the necessary Programmable Capacitor Controls (PCCs).
Enhanced Overhead Inspections and Remediations	**Yes**	**Yes**	No	For Enhanced Overhead Inspections and Remediations, the main drivers that led to 2024 recorded Capital expenses higher than authorized were the increased cost of distribution remediations, due to unexpected inflation rates, and an increase in the volume of those remediations. SCE realized increased costs for remediations compared to the Track 4 forecasted costs that were developed in early 2022. The 2024 forecast for distribution remediations was based on 4,200 units, However, the actual 2024 recorded volume was higher at 5,436 units, primarily due to an increase in the find rate. Additionally, some inspections in late 2023 required remediation work that was completed in 2024.
Overhead Conductor Program (OCP)	No	No	**Yes**	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. SCE notes that our 2024 recorded spend and completed work units are in line with our TY 2025 GRC forecast for calendar year 2024. (Our TY 2025 GRC forecast for calendar year 2024 was developed in late 2022). The main driver for the variance between the 2024 imputed authorized values and the recorded values is the increase in the recorded unit costs compared to the forecast costs when SCE filed our TY 2021 GRC application in August 2019.
PCB Transformer Removal	No	No	**Yes**	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. SCE notes that our 2024 recorded spend and units removed is in line with our TY 2025 GRC forecast (which was developed in late 2022) for calendar year 2024. Similar to previous years, the demand for power transformers, coupled with supply chain constraints, escalated the individual cost per unit which is the cause of the higher spend per unit removed compared to the TY 2021 GRC forecast and authorized amounts.
Streetlight Maintenance and LED Conversions	**Yes**	**Yes**	**Yes**	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096.

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Units**	**Variance Explanation**
				There was an underrun in this program compared to the imputed authorized due to various reasons. There was a reduction in LED conversions due to lower-than-expected demand from cities signing up for LED conversion. Also, Streetlight breakdown costs were lower due to less work identified by districts (there was less required Street Light maintenance work performed due to the installation of more efficient LEDs). SCE notes that our 2024 recorded spend is in line with our TY 2025 GRC forecast (which was developed in late 2022) for calendar year 2024.
Substation Equipment Replacement Program	**Yes**	**Yes**	**Yes**	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. As noted in our variance explanation, the perceived underspend and execution is a result of the Post Test Year Escalation methodology. SCE's recorded spend and completed units were generally in line with our TY 2025 GRC forecast for calendar year 2024 which was developed in late 2022. However, SCE continues to experience some supply chain constraints associated with some of the higher voltage circuit breakers which prevented SCE from executing to the imputed authorized levels. SCE also experienced increased overall equipment costs compared to the unit cost forecasts developed in 2019 for the TY 2021 GRC Application.
Underground Structure Replacements	**Yes**	**Yes**	No	Following the directives outlined in Track 1 of SCE's 2021 GRC D.21-08-036, the Underground Structures Replacement Program focused on replacing structures classified as Grade D and F. As a result, SCE completed more vault replacements which have significantly higher unit costs compared to shoring and CPRR projects. This resulted in an increase in overall costs compared to authorized.
Underground Switch Replacements	No	No	**Yes**	Following the directives outlined in Track 1 of SCE's 2021 GRC D.21-08-036, the Underground Structures Replacement Program focused on replacing structures classified as Grade D and F. As a result, SCE completed more vault replacements which have significantly higher unit costs compared to shoring and CPRR projects. This resulted in an increase in overall costs compared to authorized.
Undergrounding	No	**Yes**	**Yes**	With respect to targeted undergrounding, SCE completed approximately 12 miles in 2024, which was approximately 9 miles below authorized. The primary reason for lower overall execution is due to delays in permitting, agency constraints, and some delays in a request for proposal (RFP) from contractors for the undergrounding work. However, SCE recorded approximately $11M or 23% more than authorized due to spend from rollover projects started in 2023 and spend for future projects with in-service dates beyond 2024. SCE also experienced slightly higher costs per mile of undergrounding. SCE had initially forecast $2.3M per mile, but actual costs were approximately $2.7M per mile. The higher cost per mile was due to shifting and starting some more complex projects in 2024 that were initially scheduled for 2025. The

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Units**	**Variance Explanation**
				projects scheduled for 2025 consisted of a more difficult project scope (i.e. re-routing, terrain, civil construction) resulting in a higher cost.
Wildfire Covered Conductor Program	**Yes**	No	**Yes**	SCE completed 757 out of the planned 1,050 miles in 2024, which was ~293 or 28% below authorized. The lower overall execution was driven by environmental and permit constraints, weather impacts (i.e., heat restrictions), and resource limitations due to the company reprioritizing other emergent wildfire-related work (i.e., undergrounding). Additionally, there was a lower work in progress spend due to a decrease in the initial 2025 WMP strive target amount of 850 miles to 600 miles of covered conductor. As SCE progressed in its covered conductor deployment, less scope remained for execution, and target achievement became more sensitive to constraints such as environmental reviews and permitting. Further, SCE outperformed its covered conductor WMP targets for 2022 and 2023, reducing the necessity to complete certain covered conductor miles in 2024 and 2025 . This resulted in fewer designs being completed and less construction started.
Worst Circuit Rehabilitation (WCR)	**Yes**	**Yes**	**Yes**	Beginning in 2018, SCE temporarily curtailed its underground cable replacement efforts to reallocate resources towards emergent wildfire risk mitigation activities. As wildfire activities began to stabilize, SCE was able to refocus on infrastructure replacement efforts, gradually ramping up towards historical norms starting in 2023. In 2024, we continued to accelerate the replacement of aging and degraded underground cables and components to mitigate public safety and reliability risks. SCE also experienced higher unit costs than originally estimated in the TY 2021 GRC.

4. Activity Status

Table VIII-19 below provides the forecast scope, schedule and cost, status and status completion statement as applicable.

Table VIII-19
Distribution Expenditure Category Activity Status

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
4 kV Cutovers	On-Going	Annual	Over	On-Target	Over	Expanded / Emergent	This GRC Activity is on-going with no pre-defined end date. While SCE is generally proceeding as planned, SCE has experienced external cost pressures as noted in previous variance explanations. Additionally, we have completed additional units beyond our 2021 - 2023 forecast to meet emergent needs.
4 kV Cutovers - Load Growth Driven	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
4 kV Substation Eliminations	On-Going	Annual	Under	Under	Under	Partially Delayed	The GRC Activity 4 kV Substation Eliminations is on-going with no pre-defined end date. SCE is experiencing delays in some projects as noted in our variance explanations.
Automatic Reclosers Replacement Program	On-Going	Annual	Under	On-Target	Under	Partially Delayed	The GRC Activity Automatic Reclosers Replacement Program is ongoing, but it may not constitute an indefinite program. SCE initially overestimated the number of oil-filled Automatic Reclosers (ARs) in our system during the TY 2021 GRC. By 2023, we successfully replaced all known oil-filled ARs. The program then shifted its focus to Vacuum Fault Interrupters and other outdated equipment. However, replacement equipment for Vacuum Fault Interrupters are not anticipated to be available until 2026, therefore replacements won't resume until then.
Automation	On-Going	Annual	Under	Under	Under	Partially Delayed	The GRC Activity Automation is on-going but may not continue indefinitely. Over the four-year period from 2021-2024, capital expenditures for automation were below the authorized amount. The underspend resulted from reprioritization of labor resources to other higher priority distribution work, including

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							wildfire prevention measures; lower per-circuit distribution automation costs due to installation of distribution automation exclusively on overhead circuits; delays in completing Small-Scale Deployments of overhead, underground and Padmount Remote Fault Indicators (RFIs), which also delayed the DER-driven Distribution Automation; and delays in vendor equipment for DER-driven Substation Automation projects. Each sub-activity within Automation represents on-going programs that will continue beyond 2024.
Cable Life Extension (CLE) Program	N/A	N/A	N/A	N/A	N/A	N/A	SCE did not request funding for the CLE program in our TY 2021 GRC for 2021 – 2023. This program will resume in 2025 as noted in our TY 2025 GRC Application.
Cable-in-Conduit (CIC) Replacement Program	On-Going	Annual	Over	On-Target	Over	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned, however is executing above the imputed authorized values.
Capacitor Bank Replacement Program	On-Going	Annual	Under	On-Target	On-Target	Proceeding as Planned	The Capacitor Bank Replacement Program is on-going but may not be an indefinite program. While SCE under executed in 2024, SCE is generally proceeding as planned in the GRC cycle.
DER-Driven Grid Reinforcement	Completed	Completed	Completed	Completed	Completed	Completed	SCE completed this pilot in 2023, however there were some carryover costs that recorded in 2024.
Distribution Circuit Upgrades	On-Going	Annual	On-Target	On-Target	On-Target	On-Target	This GRC Activity is on-going with no pre-defined end date.
Distribution Claim	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	The GRC Activity Distribution Claims is ongoing with no pre-defined end date. SCE is generally proceeding as planned. This activity is driven by factors outside of SCE's control and can vary significantly from year to year. Accordingly, the

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							capital forecast is based on historical averages and annual values may vary from authorized.
Distribution Deteriorated Pole Replacement	On-Going	Annual	Under	On-Target	Under	Proceeding as Planned	Distribution Deteriorated Pole Program replacements are an ongoing activity driven by SCE's routine inspection programs. This initiative will continue throughout the 2025 GRC cycle. At this time, no cancellations of the planned scope are anticipated.
Distribution Fault Anticipation	Complete	Complete	Complete	Complete	Complete	Complete	SCE does not currently have any additional scope for this program planned. The 2021 GRC Decision did not authorize any costs for DFA, however when the 2021 GRC Track 1 Final Decision was issued in August 2021, SCE had already scoped 25 units for completion in 2022. Given the costs already spent on those units, it was prudent for SCE to complete those installations. Further, as the 2021 GRC Track 1 Final Decision contemplated a final pilot study, it was reasonable for SCE to conduct a study analyzing the results of the pilot. It was also reasonable for SCE to incur these costs to preserve the function of existing DFA installations and determine the future direction of SCE's use of the technology.
Distribution Plant Betterment	On-Going	Annual	Over	On-Target	Over	Expanded / Emergent	The Plant Betterment GRC activity is on-going with no pre-defined end date, however the types of work and projects may vary from year to year. As noted in the variance explanation, SCE incurred additional work beyond the TY 2021 GRC forecast for 2021 - 2024. Additionally, SCE did experience delays in permitting from the San Bernadino National Forest needed for the Doble project which is rebuilding a 33kV distribution line.
Distribution Pole Loading Program Pole Replacement	Eleven Years (2014 - 2025)	Ten of Eleven	Under	On-Target	Under	Proceeding as Planned	SCE's Pole Loading Program (PLP) was a one-time assessment initiative conducted from 2014-2022, which has now been completed. The replacements identified through the PLP are currently ongoing and will continue throughout the 2025 GRC cycle. At this

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							time, no cancellations of the planned scope are anticipated.
Distribution Preventive and Breakdown Capital Maintenance	On-Going	Annual	Over	On-Target	Over	Expanded / Emergent	Distribution Preventive and Breakdown Capital Maintenance is on-going, with no pre-defined end date, however the work and sub-activities may vary year-over-year. As noted in our variance explanations from 2021 – 2024, SCE has expanded the program and scope which has led to the overall spend above authorized.
Distribution Storm Response Capital	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	Distribution Capital Storm Response is an ongoing activity which will continue through this GRC cycle and through ensuing GRC cycles. Many factors outside of SCE's control inform the recorded costs for this activity. The number of storms and the severity of each storm can lead to variances each year, either over or under the authorized total. Due to the volatile nature of this activity and the external factors outside of SCE's control, overruns and underruns can happen in any given year.
Distribution Substation Plan (DSP) Circuits	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Distribution Substation Plan Substations	On-Going	Annual	Under	Under	Under	Partially Delayed	The GRC Activity Distribution Substation Plan Substations is on-going with no pre-defined end date. The costs and project types will vary year to year based on grid needs assessments. Please refer to variance explanations for details on cancelled/deferred projects.
Distribution Tools and Work Equipment	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Distribution Transformers	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	The GRC activity Distribution Transformers is on-going and has no pre-defined end date. SCE is generally proceeding as planned with some unit cost pressures as described in our variance explanations.

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Distribution Volt VAR Control and Capacitor Automation Program	On-Going	Annual	Under	Under	Under	Partially Delayed	The GRC Activity Distribution Volt VAR Control and Capacitor Automation Program is on-going but may not be an indefinite program. As noted in our variance explanations, SCE is behind in our installations in the DVVC program.
Distribution Wood Pole Disposal	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Engineering and Planning Software Tools	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going but not be an indefinite program. SCE is generally proceeding as planned.
Enhanced Overhead Inspections and Remediations	On-Going	Annual	Over	On-Target	Over	Expanded / Emergent	Capital Enhanced Overhead Inspections and Remediations is on-going, with no pre-defined end date, and the work and sub-activities may vary year-over-year. As noted in our variance explanations from 2021 – 2024, SCE has expanded the program and scope which has led to the overall spend above authorized.
Fusing Mitigation	Complete	Complete	N/A	N/A	N/A	Completed	SCE does not currently have any additional scope for this program planned.
HFRA Sectionalizing Devices	On-Going	Annual	Over	On-Target	Over	Expanded / Emergent	This GRC activity is on-going with no pre-defined end date. SCE did not have a Capital forecast for 2023 in our TY 2021 GRC application which was similar for 2024 when we filed our Track 4 Application. In 2018, SCE could not have foreseen the need to further refine its fast curve settings as it was just beginning to use this technology to mitigate wildfire risk on its HFRA circuits. And, as it gained experience with fast curve settings, SCE learned they could be refined to improve their performance. Further, SCE's initial plans for HFRA sectionalizing devices involved installing new devices and relocating existing ones only at the boundary of HFRA. However, in late 2019 and after it developed its 2021 GRC forecast, SCE

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							began to consider installing additional RARs to further sectionalize its circuits within and/or near HFRA boundaries and help mitigate the considerable impacts of PSPS events on customers and communities affected by PSPS events. This was similar when SCE filed our Track 4 Application in May of 2022.
Meter System Maintenance Design	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned.
New Capacitors	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned.
Overhead Conductor Program (OCP)	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	The Overhead Conductor Program (OCP) is on-going with no pre-defined end date. SCE generally proceeded as planned from 2021 - 2024.
PCB Transformer Removal	On-Going	Annual	Under	Under	On-Target	Partially Delayed	The GRC activity PCB Transformer Removal is on-going through at least the TY 2025 GRC cycle. While SCE is generally proceeding as planned as of 2024, SCE did under execute in 2021 – 2023 as noted in our previous variance explanations.
Prefabrication	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned.
Preventive Maintenance	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned.
PSPS Execution	On-Going	Annual	Over	On-Target	Over	Emergent / Expanded	This work includes PSPS website improvements and line patrols that were not part of the TY 2021 GRC request.
Streetlight Maintenance and LED Conversions	On-Going	Annual	Under	On-Target	Under	Proceeding as Planned	The GRC Activity Streetlight Maintenance and LED Conversions is an on-going program with no predefined end date. While SCE is generally proceeding as planned, as noted in our variance explanations we are seeing a lower overall volume of work than was forecasted in August 2019 when we filed our TY 2021 GRC.

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Substation Emergency Equipment	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Substation Equipment Replacement Program	On-Going	Annual	Under	Under	Under	Proceeding as Planned	This Activity is on-going with no pre-defined end date. As noted in our variance explanation, the perceived underspend and execution is a result of the Post Test Year Escalation methodology. SCE is proceeding as generally planned with our Test Year 2021 GRC forecast.
Substation Tools and Work Equipment	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Underground Structure Replacements	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned.
Underground Switch Replacements	On-Going	Annual	Over	On-Target	Over	Proceeding as Planned	The GRC Activity Underground Switch Replacements is ongoing with no pre-defined end date currently established. While SCE is generally proceeding as planned from 2021 – 2024 we did continue to ramp up our execution of this IR program to historical norm levels.
Undergrounding	On-Going	Annual	Under	Under	Under	Partially Delayed	The TUG activity is currently ongoing; however, it may not be an indefinite program. As noted in our variance explanations, SCE under executed in scope, however SCE remains committed to executing the TUG program as a key mitigation against wildfire risk.
Wildfire Covered Conductor Program	On-Going	Annual	Over	Over	Over	Expanded / Emergent	The WCCP activity is currently ongoing, however it may not be an indefinite program. As noted in our variance explanations, SCE under executed in scope in 2024, however SCE completed more miles than authorized from 2021 – 2024 as noted in previous year's variance explanations. While SCE is executing more miles than the imputed authorized miles, SCE believes this is critical to continue to buy down

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							wildfire potential on scoped circuits within SCE's high fire risk areas.
Worst Circuit Rehabilitation (WCR)	On-Going	Annual	Over	Over	Over	Expanded / Emergent	From 2021 – 2024 SCE generally proceeding as planned, however. the overall increase in replacement efforts and recorded dollars aligns with SCE's commitment to returning to historical levels of distribution infrastructure replacement work and reducing the safety and reliability risks associated with aging and failing equipment.

IX.

TRANSMISSION CATEGORY

A. Expensed Programs

1. GRC Activity and Unit Description Table

For the Transmission expense activities that are RSAR-eligible, Table IX-20 below provides the 2021 GRC testimony citation and activity description and indicates whether there are any RAMP controls or mitigations associated with that activity.

Table IX-20
Transmission Expense Category Activity Description and Background Information

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Equipment Washing	Includes the cost of labor, materials used, and expenses incurred in performing the equipment washing activity at distribution and transmission substations.	SCE-02 Vol: 3	WPSCE02V3 pp. 86 - 92	N/A	N/A
Insulator Washing	Includes the costs of labor for proactive maintenance on transmission line insulators by washing. Insulator washing is performed by spraying high-pressure water onto insulators to remove contaminants such as salt, dirt, or automobile exhaust. Excessive contamination on an insulator reduces its ability to insulate the energized line from the grounded support structure. Excess contamination and debris can cause an energized circuit to short circuit. Includes related costs such as: transportation expenses, meals, traveling, lodging, and incidental expenses.	SCE-02 Vol: 2	WPSCE02V02A pp. 32 - 38	N/A	N/A
Monitoring Bulk Power System	Transmission and Distribution Grid Operations activities including Management and Operation of the Grid Control Center. Includes the cost of labor and other expenses incurred by SCE's centralized control centers for real time electric operations encompassing transmission and distribution systems. Activities include: execution of California Independent System Operator (CAISO) instructions regarding the operations of the SCE electrical system under CAISO operational control; develop and maintain switching procedures under CAISO purview; coordinate planned outages consistent with	SCE-02 Vol: 3	WPSCE02V3 pp.3 - 8	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	CAISO approval; and maintaining situation awareness. Includes related costs such as: transportation expenses; meals, traveling, lodging, and incidental expenses; division overhead; and supply and tool expense. Also includes Informational Technology as Grid Network Solutions is responsible for the overall health and performance of SCE's communications network and Supervisory Control and Data Acquisition (SCADA) systems used to monitor and control the company's electric grid and conduct daily business operations.				
Roads and Rights of Way	Includes the costs of labor, materials and expenses incurred in performing brushing and clearing activities to maintain transmission roads and right-of-way. Includes related costs such as: transportation expenses, meals, traveling, lodging, and incidental expenses.	SCE-02 Vol: 2	WPSCE02V02A pp. 39 - 45	N/A	N/A
Telecommunication Inspection and Maintenance	Includes the costs of labor, materials and expenses incurred in performing the following activities: telecommunication line patrols, proactive maintenance, breakdown maintenance, storm response, claims resolution and relocation activities. Includes related costs such as transportation expenses, meals, traveling, lodging, and incidental expenses.	SCE-02 Vol: 2	WPSCE02V02A pp. 46 - 54	N/A	N/A
Transformer Inspections and Maintenance	Includes the cost of labor, materials used, and expenses incurred in performing the inspection and maintenance of transformers at distribution and transmission substations.	SCE-02 Vol: 3	WPSCE02V3 pp. 58 - 64	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Transmission Intrusive Pole Inspections	The costs incurred for intrusive pole inspections of transmission poles. Intrusive inspections require inspectors with proper training and experience to drill into the pole's exterior to identify and measure the extent of internal decay which is typically undetectable with external observation alone. Inspectors also does a visual inspection of the exterior of the pole to check for damage.	SCE-02 Vol: 5	WPSCE02V5, pp. 25-32	N/A	N/A
Transmission Line Patrols	Includes the cost of labor and expenses incurred in the inspection of transmission lines. Includes labor for activities such as routine line patrolling and overhead detailed inspections. Includes related costs such as transportation expenses, meals, traveling, lodging, incidental expenses, division overhead and supply and tool expense.	SCE-02 Vol: 2	WPSCE02V02A pp. 3 - 9	N/A	N/A
Transmission Line Rating Remediation (TLRR)	Includes the cost of labor, materials used and expenses incurred to remediate line clearance discrepancies. Includes related costs such as transportation expenses, meals, traveling, lodging, and incidental expenses.	SCE-02 Vol: 2	WPSCE02V02A pp. 71 - 79	N/A	N/A
Transmission O&M Maintenance	Includes the cost of labor, materials used and expenses incurred in the maintenance of transmission lines, such as preventive, reactive and breakdown maintenance. Includes related costs such as transportation expenses, meals, traveling, lodging, incidental expenses, division overhead and supply and tool expense.	SCE-02 Vol: 2	WPSCE02V02A pp. 21 - 31	N/A	N/A
Transmission Pole Loading Assessments	The cost incurred in performing pole loading assessments on transmission poles, including pole loading calculations. Through assessments, poles that do not meet GO 95 loading, temperature and safety factor requirements or, in areas with known	SCE-02 Vol: 5	WPSCE02V5, pp. 10-15	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	local conditions such as high winds and SCE's loading, will be identified for repair or replacement.				
Transmission Pole Loading Repairs	The cost incurred to make repairs to transmission poles as part of the Pole Loading Program. Repairs involve the design and installation or modification of guy wires.	SCE-02 Vol: 5	WPSCE02V5, pp. 226-231	N/A	N/A
Transmission Request for Attachment Inspections	Costs for Pre-Inspections and Final Inspections of transmission renter attachments to poles.	SCE-02 Vol: 5	WPSCE02V5, pp. 272-277	N/A	N/A
Transmission Routine Vegetation Management	Expenses incurred for activities include pre-inspections, trimming and removal of trees, expanded clearance distances, back-end quality assurance/checks; pole-brushing work, supplemental patrols, and substation-associated vegetation management work around transmission assets	SCE-02 Vol: 6	WPSCE02V06A pp. 130 - 160	N/A	N/A
Transmission Underground Structure Inspection	SCE's underground lines and vaults require routine inspections to detect and remedy any degradation that may lead to safety hazards or system reliability issues. Inspections of the underground components, which include vaults, cable, splices, and shield arrestors, are performed at least once every three years in compliance with CPUC GO 165. Also included in this activity are SCE's Underground Service Alert (USA) location requests.	SCE-02 Vol: 2	WPSCE02V02A pp. 12 - 20	N/A	N/A

2. GRC Activities Dollar and Unit Variance Calculations

Table IX-21 and Table IX-22 below provide the authorized and recorded costs, and variance and percentage change values for each Transmission expense activity in terms of dollars and units. These tables also indicate whether a variance explanation was triggered based on the established thresholds for each GRC activity.

Table IX-21
Transmission Expense Category Activity Dollar Variance Calculations

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Roll -up	Project Life (years)	Project Year	2021	2022	2023	2024	Auth. Imputed Cost to Date ($)	2021	2022	2023	2024	Actual Cost to Date ($)	2021	2022	2023	2024	Cost Diff to Date ($)	2021	2022	2023	2024	% Cost Diff to Date (%)	$ Var. Expl. Required
Equipment Washing	N/A	N/A	Yes	On-Going	Annual	$1,381	$1,424	$1,538	$1,593	$5,936	$1,268	$1,600	$1,074	$2,353	$6,296	($113)	$177	($464)	$760	$360	-8%	12%	-30%	48%	6%	No
Insulator Washing	N/A	N/A	Yes	On-Going	Annual	$820	$844	$906	$942	$3,512	$694	$467	$278	$617	$2,056	($126)	($378)	($628)	($324)	($1,456)	-15%	-45%	-69%	-34%	-41%	No
Monitoring Bulk Power System	N/A	N/A	Yes	On-Going	Annual	$56,667	$58,164	$61,883	$64,379	$241,093	$45,294	$49,073	$54,006	$52,514	$200,886	($11,373)	($9,091)	($7,878)	($11,865)	($40,206)	-20%	-16%	-13%	-18%	-17%	**Yes**
Roads and Rights of Way	N/A	N/A	Yes	On-Going	Annual	$4,813	$4,948	$5,407	$5,524	$20,691	$6,559	$6,252	$2,640	$1,038	$16,489	$1,746	$1,304	($2,766)	($4,486)	($4,202)	36%	26%	-51%	-81%	-20%	No
Telecommunication Inspection and Maintenance	N/A	N/A	Yes	On-Going	Annual	$2,591	$2,654	$2,823	$2,936	$11,004	$4,341	$4,496	$5,772	$5,379	$19,987	$1,750	$1,842	$2,949	$2,443	$8,984	68%	69%	104%	83%	82%	No
Transformer Inspections and Maintenance	N/A	N/A	Yes	On-Going	Annual	$1,352	$1,394	$1,508	$1,561	$5,815	$1,275	$4,369	$1,659	$2,267	$9,570	($77)	$2,975	$151	$706	$3,754	-6%	213%	10%	45%	65%	No
Transmission Intrusive Pole Inspections	N/A	N/A	Yes	On-Going	Annual	$608	$625	$686	$698	$2,617	$403	$484	$253	$42	$1,182	($205)	($141)	($434)	($655)	($1,435)	-34%	-23%	-63%	-94%	-55%	No
Transmission Line Patrols	N/A	N/A	Yes	On-Going	Annual	$7,512	$7,736	$8,313	$8,627	$32,188	$4,562	$5,234	$6,993	$6,202	$22,991	($2,950)	($2,502)	($1,320)	($2,425)	($9,198)	-39%	-32%	-16%	-28%	-29%	No
Transmission Line Rating Remediation (TLRR)	N/A	N/A	Yes	On-Going	Annual	$1,861	$1,914	$2,084	$2,136	$7,995	$129	$1,055	$3,196	$3,544	$7,924	($1,732)	($859)	$1,111	$1,408	($71)	-93%	-45%	53%	66%	-1%	No
Transmission O&M Maintenance	N/A	N/A	Yes	On-Going	Annual	$21,461	$22,094	$23,817	$24,645	$92,017	$9,051	$12,427	$16,214	$15,785	$53,476	($12,410)	($9,667)	($7,603)	($8,861)	($38,541)	-58%	-44%	-32%	-36%	-42%	**Yes**
Transmission Pole Loading Assessments	N/A	N/A	Yes	Seven Years (2014 - 2021)	Completed in 2022	$109	$112	$123	$126	$470	$1,264	$89	($0)	$1	$1,353	$1,155	($24)	($123)	($125)	$883	1060%	-21%	-100%	-100%	188%	No
Transmission Pole Loading Repairs	N/A	N/A	Yes	Eight Years (2014 - 2022)	Completed in 2023	$379	$390	$423	$435	$1,627	$806	$315	$169	$109	$1,399	$427	($75)	($253)	($327)	($228)	113%	-19%	-60%	-75%	-14%	No
Transmission Request for Attachment Inspections	N/A	N/A	Yes	On-Going	Annual	$351	$361	$393	$402	$1,506	$323	$517	$146	$108	$1,094	($28)	$156	($246)	($295)	($413)	-8%	43%	-63%	-73%	-27%	No
Transmission Routine Vegetation Management	N/A	N/A	Yes	On-Going	Annual	$12,963	$13,319	$14,647	$47,662	$88,591	$42,574	$32,449	$30,302	$55,490	$160,814	$29,611	$19,130	$15,654	$7,828	$72,223	228%	144%	107%	16%	82%	No
Transmission Underground Structure Inspection	N/A	N/A	Yes	On-Going	Annual	$2,101	$2,164	$2,319	$2,413	$8,997	$2,472	$2,986	$3,417	$2,947	$11,822	$371	$822	$1,098	$534	$2,825	18%	38%	47%	22%	31%	No

Table IX-22
Transmission Expense Category Activity Unit Variance Calculations

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	**RAMP Risk**	**RAMP Control / Mitigation**	**Unit Description / Rationale for No Work Units**	**2021**	**2022**	**2023**	**2024**	**Imputed Units to Date**	**2021**	**2022**	**2023**	**2024**	**Actual Units to Date**	**2021**	**2022**	**2023**	**2024**	**Unit Diff. to Date**	**2021**	**2022**	**2023**	**2024**	**% Unit Diff. to Date (%)**	**Unit Var. Explan. Triggered?**
Equipment Washing	N/A	N/A	Equipment washing differs from site to site. Based on the unpredictable nature of the level of work activity, a five-year avg was applied to generate the forecast and is not unit based.																					No
Insulator Washing	N/A	N/A	Factors that impact the need to wash insulators are beyond SCE's control. SCE's 2021 test year forecast methodology selected as the three-year historical avg from 2016-2018 and is not unit based.																					No
Monitoring Bulk Power System	N/A	N/A	SCE used LYR recorded as the forecast basis as this amount provide the necessary funding to perform this activity going forward.																					No
Roads and Rights of Way	N/A	N/A	SCE used last recorded year to forecast and there is no associated work units.																					No
Telecommunication Inspection and Maintenance	N/A	N/A	SCE uses LYR plus adj in anticipation of incremental work required in the Test Year to support new telecommunications inspection and maintenance practices.																					No
Transformer Inspections and Maintenance	N/A	N/A	Since the cost for transformer maintenance can vary based on field inspections and the type of repair required, SCE forecasted 2021 expenses by using a four-year average of 2015-2018 recorded expenses and is not unit based.																					No
Transmission Intrusive Pole Inspections	N/A	N/A	# of Transmission Intrusive Pole Inspections	14,360	14,360	14,360	14,360	57,440	10,150	11,304	5,772	715	27,941	-4,210	-3,056	-8,588	-13,645	-29,499	-29%	-21%	-60%	-95%	-51%	**Yes**
Transmission Line Patrols	N/A	N/A	SCE uses LYR + Adjustments and is not unit based.																					No
Transmission Line Rating Remediation (TLRR)	N/A	N/A	The forecast for TLRR O&M is based on the capital work executed is not unit based.																					No
Transmission O&M Maintenance	N/A	N/A	The use of the four-year average is appropriate as a forecast basis because costs can fluctuate due to the level of required maintenance from year-to-year and is not unit based.																					No
Transmission Pole Loading Assessments	N/A	N/A	# of Transmission Pole Loading Assessments	1,600	0	0	0	1,600	2,105	45	0	-	2,150	505	45	0	-	550	32%				34%	No
Transmission Pole Loading Repairs	N/A	N/A	# of Transmission Pole Loading Repairs	224	23	23	23	293	132	23	10	6	171	-92	0	-13	-17	-122	-41%	0%	-57%	-74%	-42%	**Yes**
Transmission Request for Attachment Inspections	N/A	N/A	The forecast is based on LYR to perform the inspection and the labor to support the activity.																					No
Transmission Routine Vegetation Management	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Transmission Underground Structure Inspection	N/A	N/A	SCE used last recorded year to forecast and there are no associated work units.																					No

3. Variance Explanations

Table IX-23 below provides the variance explanations for those GRC activities meeting the established thresholds.

Table IX-23
Transmission Expense Category Activity Variance Explanations

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Unit**	**Variance Explanation**
Monitoring Bulk Power System	Yes	No	No	The underrun in Grid Network Solutions (IT) is primarily attributed to SCE labor and expenses, including delays in hiring and deferrals to 2025, as personnel were not required to support Grid Modernization initiatives since the network was not yet fully operational. Additionally, hardware maintenance costs were lower than authorized. Furthermore, SCE also experienced reduced break-fix and vehicle costs throughout 2024. Finally, SCE spent less in the Grid Control Center (GCC) due to certain department personnel more predominantly supporting and charging time towards capital-portfolio activities which resulted in lower costs being allocated to the GCC.
Transmission Intrusive Pole Inspections	No	No	**Yes**	In 2024 SCE underspent and under executed transmission intrusive pole inspections. This variance was driven by the need to address emergent work. SCE is still compliant with the inspection frequencies per G.O. 165 and G.O. 95.
Transmission O&M Maintenance	No	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. SCE's 2024 recorded is less than authorized for Transmission O&M Maintenance due to the non-HFRA Aerial Inspection program sub-activity still being included within this GRC Activity when SCE Filed its 2021 GRC Track 1 application in August 2019. However, since filing the TY 2021 GRC application, SCE did not move forward with its proposed non-HFRA Aerial Inspections Program, for which it was authorized, as resources were focused on further building out and expanding the HFRA (wildfire) aerial programs. SCE also performed other routine maintenance work which was also less than authorized due to the prioritization of implementing operational efficiencies and deferments/re-allocations per management discretion.
Transmission Pole Loading Repairs	No	No	**Yes**	SCE's Pole Loading Program (PLP) assessed poles to identify potential PLP repairs. As noted in previous RSAR's, SCE is seeing a decrease in the number of Transmission PLP repairs that can be attributed to two key factors. First, there was a lower volume of PLP assessments that required completion compared to the GRC authorized forecast. Second, as noted in the 2021 RSAR, SCE made improvements in the assessments phase to more accurately identify the need for repairs which resulted in fewer identified repairs being removed from scope during the planning phase. This resulted in a lower pole failure rate experienced during the assessment phase, leading to fewer non-compliant poles requiring repair.

4. Activity Status

Table IX-24 below provides the forecast scope, schedule and cost, status and status completion statement as applicable.

Table IX-24
Transmission Expense Category Activity Status

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Equipment Washing	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	Equipment Washing is an ongoing activity with no pre-defined end date. SCE is generally proceeding as planned.
Insulator Washing	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	Insulator Washing is an on-going activity with no pre-defined end date. SCE is generally proceeding as planned.
Monitoring Bulk Power System	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	Monitoring bulk power is an on-going activity.
Roads and Rights of Way	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Telecommunication Inspection and Maintenance	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned but is experiencing higher costs than authorized.
Transformer Inspections and Maintenance	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Transmission Intrusive Pole Inspections	On-Going	Annual	Under	On-Target	Under	Proceeding as Planned	The Transmission Intrusive Pole Inspections is an on-going activity with no pre-defined end date. While SCE is under executing to our TY 2021 GRC forecast, SCE is still compliant with the inspection frequencies per G.O. 165 and G.O. 95 and is generally proceeding as planned.
Transmission Line Patrols	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Transmission Line Rating Remediation (TLRR)	On-Going	Annual	Under	Under	Under	Partially Delayed	The TLRR O&M forecast is based on a compliance requirement for completion of all Bulk Electric System (BES) discrepancies by 2025 and all radial system discrepancies by 2030. As discussed in the variance explanation,

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							SCE is experiencing delays in certain projects.
Transmission O&M Maintenance	On-Going	Annual	Under	On-Target	Under	Proceeding as Planned	The GRC Activity Transmission O&M Maintenance is on-going with no pre-defined end date. As noted in our variance explanations, SCE did not move forward with its proposed non-HFRA Aerial Inspections Program, for which it was authorized, as resources were focused on further building out and expanding the HFRA (wildfire) aerial programs.
Transmission Pole Loading Assessments	Seven Years (2014 - 2021)	Completed in 2022	On-Target	On-Target	On-Target	Completed	SCE completed this program in 2022.
Transmission Pole Loading Repairs	Eight Years (2014 - 2022)	Completed in 2023	Completed	Completed	Completed	Completed	SCE completed this program in 2023.
Transmission Request for Attachment Inspections	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Transmission Routine Vegetation Management	On-Going	Annual	Over	On-Target	Over	Expanded / Emergent	The GRC Activity Distribution Routine Vegetation Management is on-going with no pre-defined end date, however the scope and sub-activities may change over time.
Transmission Underground Structure Inspection	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	SCE is generally proceeding as planned.

B. Capital Expenditure Programs

1. GRC Activity and Unit Description Table

For the Transmission capital activities that are RSAR-eligible, Table IX-25 below provides the 2021 GRC testimony citation and activity description and indicates whether there are any RAMP controls or mitigations associated with that activity.

Table IX-25
Transmission Capital Expenditure Category Activity Description

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Circuit Breaker Replacement	The Distribution Circuit Breaker Replacement Program replaces breakers approaching the end of their service lives. These circuit breakers are becoming increasingly unreliable, contain parts known to be problematic or unavailable and may require custom parts to be made for obsolete equipment.	SCE-02 Vol: 3	WPSCE02V3 – pp.120-146	N/A	N/A
Grid Reliability Projects	Grid Reliability Projects are planned on the portion of SCE's system under CAISO's operational control. They are developed as part of CAISO's Transmission Planning Process (TPP) and are required to support reliability and compliance with NERC, WECC, and CAISO system performance standards and criteria.	SCE-02 Vol: 4 Pt. 2	WPSCE02V4P1ChIIIBkC, pp 234-269	N/A	N/A
Monitoring Bulk Power System	Transmission and Distribution Grid Operations activities including Management and Operation of the Grid Control Center. Includes the cost of labor and other expenses incurred by SCE's centralized control centers for real time electric operations encompassing transmission and distribution systems. Activities include execution of California Independent System Operator (CAISO) instructions regarding the operations of the SCE electrical system under CAISO operational control; develop and maintain switching procedures under CAISO purview; coordinate planned outages consistent with CAISO approval; and maintaining situation awareness. Includes related costs such as: transportation expenses; meals, traveling, lodging, and incidental expenses; division overhead; and supply and tool expense. Also includes Informational Technology as Grid Network Solutions is responsible for the overall health and performance of SCE's communications	SCE-02 Vol: 3	WPSCE02V3 – pp.16 - 50	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	network and Supervisory Control and Data Acquisition (SCADA) systems used to monitor and control the company's electric grid and conduct daily business operations.				
NERC Compliance Programs	NERC Compliance Programs are the costs incurred to bring facilities into compliance with physical security standards of NERC-CIP-14.	SCE-04 Vol: 4	WPSCE04V4 pp. 41 - 47	N/A	N/A
Protection of Grid Infrastructure Assets	This program is an ongoing effort to improve the physical protection of SCE employees and assets at electric facilities to deter and protect against theft, security breaches, and other security incidents.	SCE-04 Vol: 4	WPSCE04V4 pp. 79	Physical Security	Grid Infrastructure Protection - Enhanced
Protection of Major Business Functions	This program is an ongoing effort to improve the physical protection of SCE assets and employees at non-electric facilities, such as offices and warehouses and mitigate the impact on operations resulting from theft, security breaches, and other security incidents.	SCE-04 Vol: 4	WPSCE04V4 pp. 78	Physical Security	Non-Electric Facilities/Protection of Major Business Functions
Relays, Protection and Control Replacements	The Substation Relays, Protection, and Control Replacement Program identifies and proactively replaces substation protective relays, control, automation, monitoring and event recording equipment to address equipment obsolescence, meet compliance requirements, and improve functionality.	SCE-02 Vol: 3	WPSCE02Vol. 03, pp. 190-213	N/A	N/A
Substation Capital Breakdown Maintenance	This maintenance activity captures the labor, equipment, and other material costs to remove and replace failed substation equipment.	SCE-02 Vol: 3	WPSCE02Vol. 03, pp. 116-117	N/A	N/A
Substation Claim	Substation Claim supports repair damage to the substation caused by another party. SCE seeks to recover the costs to repair the damage through making a claim against the party responsible for the damage.	SCE-02 Vol: 3	WPSCE02Vol. 03, pp. 118-119	N/A	N/A
Substation Transformer Bank Replacement	This activity planned includes the preemptive replacement of transformers approaching the end of their service lives.	SCE-02 Vol: 3	WPSCE02V3 – pg. 150-153	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Telecommunication Deteriorated Pole Replacement	This activity includes the replacement of telecommunication poles under the Deteriorate Pole Program, in compliance with GO 95.	SCE-02 Vol: 5	WPSCE02V5, pp. 153	N/A	N/A
Telecommunication Inspection and Maintenance	Includes the costs of labor, materials and expenses incurred in performing the following activities: telecommunication line patrols, proactive maintenance, breakdown maintenance, storm response, claims resolution and relocation activities. The following costs are also included transportation expenses, meals, traveling, lodging, and incidental expenses.	SCE-02 Vol: 2	WPSCE02V2 pp. 67-68	N/A	N/A
Telecommunication Pole Loading Program Replacement	This activity includes the replacement of telecommunication poles under the Pole Loading Program.	SCE-02 Vol: 5	WPSCE02V5, pp. 155	N/A	N/A
Transmission Capital Maintenance	Transmission Capital Maintenance includes the costs to remove, replace, and retire assets on a planned or reactive basis. Planned transmission capital maintenance is driven by regular equipment maintenance cycles; maintenance work identified and prioritized through overhead and underground inspection programs; and maintenance identified through observations by field personnel and other activities.	SCE-02 Vol: 2	WPSCE02V2 pp. 55-66	N/A	N/A
Transmission Claim	Transmission Claim captures the expenditures associated with casualty damage to Transmission facilities, such as cars hitting and damaging poles. Claim damage events are random and are beyond SCE's control. Claims work is performed to repair or replace damaged facilities, restore service, and return the system to normal operating conditions. The costs recorded to this activity are almost entirely in response to pole and tower damage, or wire down events caused by third parties.	SCE-02 Vol: 2	WPSCE02V2 pp. 69-70	N/A	N/A
Transmission Deteriorated Pole Replacement	The costs incurred for intrusive pole inspections of transmission poles. Intrusive inspections require inspectors with proper training and experience to drill into the pole's exterior to identify and measure the extent of internal decay which is typically	SCE-02 Vol: 5	WPSCE02V5, pp. 152; 211	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	undetectable with external observation alone. Additionally, the inspector does a visual inspection of the exterior of the pole to check for damage.				
Transmission Emergency Equipment	In this program, SCE identifies, purchases, and maintains emergency spare parts for the transmission grid. Some of this equipment has long procurement lead times, so SCE maintains an inventory on hand in order to avoid delays in responding to emergencies and outages. Examples of equipment maintained in inventory include poles, steel bundles for towers, underground cable, and overhead conductor.	SCE-02 Vol: 2	WPSCE02V2 pp. 114-115	N/A	N/A
Transmission Line Rating Remediation (TLRR)	Includes the cost of labor, materials used and expenses incurred to remediate line clearance discrepancies. Includes related costs such as transportation expenses, meals, traveling, lodging, and incidental expenses.	SCE-02 Vol: 2	WPSCE02V2 pp.104-106	N/A	N/A
Transmission Pole Loading Program Replacement	Costs incurred for the assessment of Transmission poles for compliance with safety factors.	SCE-02 Vol: 5	WPSCE02V5, pp. 154	N/A	N/A
Transmission Substation Plan (TSP)	The Transmission Substation Plan (TSP) consists of the Subtransmission Lines Plan, the A-Bank Plan and the Sub transmission VAR Plan. The Sub transmission Lines Plan provides adequate 66 kV or 115 kV line capacity in each of SCE's sub transmission networks to serve forecast peak loads at SCE's B-Substations. The A-bank Plan focuses on SCE's transmission substation capacity to ensure safe and reliable service to customers. The Sub transmission VAR Plan focuses on SCE's system reactive power need to ensure safe and reliable service to customers.	SCE-02 Vol: 4 Pt. 2	WPSCE02V4PT2ChIIBkbkB pp. 27-227	N/A	N/A
Transmission Tools and Work Equipment	Transmission Tools and Work Equipment includes costs for acquiring and retiring portable tools and work equipment that cost a minimum of $1,000. SCE purchases new tools and equipment as older tools become obsolete or there are advancements in tool technologies.	SCE-02 Vol: 2	WPSCE02V2 pp.116-117	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Transmission / Substation Storm Response Capital	Repair and replacement performed as part of a storm response on Transmission and Substation facilities.	SCE-04 Vol: 2	WPSCE04V2 pp. 46 - 48	N/A	N/A

2. GRC Activities Variance Calculations

Table IX-26 and Table IX-27 below provides the authorized, recorded, variance and percentage change values for each Transmission expenditure category activity in terms of dollars and units. The tables also indicate whether a variance explanation was triggered based on the established thresholds for each GRC activity.

Table IX-26
Transmission Capital Expenditure Category Activity Dollar Variance Calculations

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Roll -up	Project Life (years)	Project Year	2021	2022	2023	2024	Auth. Imputed Cost to Date ($)	2021	2022	2023	2024	Actual Cost to Date ($)	2021	2022	2023	2024	Cost Diff to Date ($)	2021	2022	2023	2024	% Cost Diff to Date (%)	$ Var. Expl. Required
Circuit Breaker Replacement	N/A	N/A	Yes	On-Going	Annual	$43,372	$43,372	$43,372	$44,022	$174,138	$49,218	$57,283	$55,348	$73,158	$235,007	$5,846	$13,911	$11,976	$29,136	$60,869	13%	32%	28%	66%	35%	No
Grid Reliability Projects	N/A	N/A	Yes	On-Going	Annual	$262,619	$262,619	$264,607	$268,576	$1,058,421	$203,429	$113,024	$60,013	$76,822	$453,287	($59,190)	($149,595)	($204,594)	($191,754)	($605,134)	-23%	-57%	-77%	-71%	-57%	No
Monitoring Bulk Power System	N/A	N/A	Yes	On-Going	Annual	$74,364	$74,364	$74,364	$75,479	$298,571	$84,345	$77,939	$91,140	$84,870	$338,293	$9,981	$3,575	$16,776	$9,390	$39,723	13%	5%	23%	12%	13%	No
NERC Compliance Programs	N/A	N/A	Yes	On-Going	Annual	$7,563	$7,563	$7,563	$7,676	$30,365	$934	$86	($150)	($0)	$869	($6,629)	($7,477)	($7,713)	($7,676)	($29,495)	-88%	-99%	-102%	-100%	-97%	No
Protection of Grid Infrastructure Assets	Physical Security	Grid Infrastructure Protection - Enhanced	Yes	On-Going	Annual	$28,380	$28,380	$28,380	$28,805	$113,944	$15,686	$33,813	$30,035	$39,583	$119,116	($12,694)	$5,433	$1,655	$10,778	$5,172	-45%	19%	6%	37%	5%	No
Protection of Major Business Functions	Physical Security	Non-Electric Facilities/Protection of Major Business Functions	Yes	On-Going	Annual	$13,745	$13,745	$13,745	$13,952	$55,188	$16,623	$18,334	$19,988	$25,181	$80,127	$2,878	$4,589	$6,243	$11,229	$24,939	21%	33%	45%	80%	45%	No
Relays, Protection and Control Replacements	N/A	N/A	Yes	On-Going	Annual	$75,172	$75,172	$75,172	$76,300	$301,816	$74,823	$80,464	$80,736	$94,805	$330,828	($349)	$5,292	$5,564	$18,506	$29,012	0%	7%	7%	24%	10%	No
Substation Capital Breakdown Maintenance	N/A	N/A	Yes	On-Going	Annual	$13,156	$13,156	$13,156	$13,353	$52,822	$27,475	$20,148	$26,230	$25,139	$98,993	$14,319	$6,992	$13,074	$11,786	$46,171	109%	53%	99%	88%	87%	No
Substation Claim	N/A	N/A	Yes	On-Going	Annual	$396	$396	$396	$402	$1,591	$791	$339	$521	$212	$1,862	$395	($58)	$125	($190)	$271	100%	-15%	31%	-47%	17%	No
Substation Transformer Bank Replacement	N/A	N/A	Yes	On-Going	Annual	$87,713	$87,713	$87,713	$89,028	$352,166	$53,675	$52,756	$44,530	$64,806	$215,768	($34,038)	($34,956)	($43,182)	($24,222)	($136,399)	-39%	-40%	-49%	-27%	-39%	**Yes**
Telecommunication Deteriorated Pole Replacement	N/A	N/A	Yes	On-Going	Annual	$230	$230	$230	$234	$924	$261	$148	$159	$320	$889	$31	($82)	($71)	$87	($35)	13%	-36%	-31%	37%	-4%	No
Telecommunication Inspection and Maintenance	N/A	N/A	Yes	On-Going	Annual	$3,014	$3,014	$3,014	$3,415	$12,459	$4,350	$2,921	$2,569	$4,270	$14,110	$1,336	($93)	($446)	$855	$1,651	44%	-3%	-15%	25%	13%	No
Telecommunication Pole Loading Program Replacement	N/A	N/A	Yes	Eleven Years (2014 - 2025)	Ten of Eleven	$1,124	$1,124	$1,124	$1,141	$4,513	$20	$40	($9)	$0	$51	($1,104)	($1,084)	($1,133)	($1,141)	($4,462)	-98%	-96%	-101%	-100%	-99%	No
Transmission Capital Maintenance	N/A	N/A	Yes	On-Going	Annual	$87,353	$87,353	$87,353	$88,663	$350,723	$49,697	$43,345	$35,987	$66,500	$195,529	($37,656)	($44,008)	($51,366)	($22,163)	($155,193)	-43%	-50%	-59%	-25%	-44%	No
Transmission Claim	N/A	N/A	Yes	On-Going	Annual	$3,835	$3,835	$3,835	$3,892	$15,397	$6,446	$7,400	$7,933	$8,811	$30,590	$2,611	$3,565	$4,099	$4,918	$15,193	68%	93%	107%	126%	99%	No
Transmission Deteriorated Pole Replacement	N/A	N/A	Yes	On-Going	Annual	$98,274	$98,274	$98,274	$99,748	$394,571	$90,033	$101,258	$93,198	$100,006	$384,495	($8,241)	$2,984	($5,076)	$258	($10,076)	-8%	3%	-5%	0%	-3%	**Yes**
Transmission Emergency Equipment	N/A	N/A	Yes	On-Going	Annual	$166	$166	$166	$168	$665	$0	$0	$0	$0	$0	($166)	($166)	($166)	($168)	($665)	-100%	-100%	-100%	-100%	-100%	No
Transmission Line Rating Remediation (TLRR)	N/A	N/A	Yes	On-Going	Annual	$136,614	$136,614	$136,614	$138,663	$548,506	$93,182	$98,285	$52,515	$34,700	$278,682	($43,432)	($38,330)	($84,099)	($103,963)	($269,824)	-32%	-28%	-62%	-75%	-49%	No
Transmission Pole Loading Program Replacement	N/A	N/A	Yes	Eleven Years (2014 - 2025)	Ten of Eleven	$43,910	$43,910	$43,910	$44,568	$176,298	$26,864	$32,398	$20,677	$7,904	$87,843	($17,046)	($11,512)	($23,232)	($36,665)	($88,455)	-39%	-26%	-53%	-82%	-50%	**Yes**
Transmission Substation Plan (TSP)	N/A	N/A	Yes	On-Going	Annual	$89,283	$89,283	$89,283	$90,622	$358,472	$112,885	$40,737	$8,485	$22,685	$184,792	$23,602	($48,547)	($80,798)	($67,938)	($173,680)	26%	-54%	-90%	-75%	-48%	No
Transmission Tools and Work Equipment	N/A	N/A	Yes	On-Going	Annual	$1,426	$1,426	$1,426	$1,448	$5,726	$788	$1,083	$1,886	$826	$4,583	($638)	($344)	$460	($622)	($1,144)	-45%	-24%	32%	-43%	-20%	No
Transmission / Substation Storm Response Capital	N/A	N/A	Yes	On-Going	Annual	$6,193	$6,193	$6,193	$6,286	$24,865	$7,724	$13,837	$9,305	$4,284	$35,150	$1,531	$7,644	$3,112	($2,002)	$10,285	25%	123%	50%	-32%	41%	No

Table IX-27
Transmission Capital Expenditure Category Activity Unit Variance Calculations

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	**RAMP Risk**	**RAMP Control / Mitigation**	**Unit Description / Rationale for No Work Units**	**2021**	**2022**	**2023**	**2024**	**Imputed Units to Date**	**2021**	**2022**	**2023**	**2024**	**Actual Units to Date**	**2021**	**2022**	**2023**	**2024**	**Unit Diff. to Date**	**2021**	**2022**	**2023**	**2024**	**% Unit Diff. to Date (%)**	**Unit Var. Explan. Triggered?**
Circuit Breaker Replacement	N/A	N/A	2.4 kV - 500 kV Substation Circuit Breakers Replaced	205	205	205	205	820	187	199	121	224	731	-18	-6	-84	19	-89	-9%	-3%	-41%	9%	-11%	No
Grid Reliability Projects	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Monitoring Bulk Power System	N/A	N/A	The forecast is based on LYR to perform the inspection and the labor to support the activity and therefore providing one work unit is not feasible.																					No
NERC Compliance Programs	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Protection of Grid Infrastructure Assets	Physical Security	Grid Infrastructure Protection - Enhanced	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Protection of Major Business Functions	Physical Security	Non-Electric Facilities/Protection of Major Business Functions	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Relays, Protection and Control Replacements	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Substation Capital Breakdown Maintenance	N/A	N/A	The cost incurred to replace failed substation equipment in substation breakdown maintenance can be expected to fluctuate from year-to-year due to uncontrolled factors, such as weather. Following guidance from D.89-12-057, the CPUC stated that for those activities which have significant fluctuations in recorded expenses from year-to-year, an average of recorded expenses is appropriate.																					No
Substation Claim	N/A	N/A	Because claim expenditures are outside of SCE's control and vary significantly from year-to-year, SCE uses a five-year average to forecast these expenditures and are not unit based.																					No
Substation Transformer Bank Replacement	N/A	N/A	# of Substation Transformers Replaced	47	37	35	35	154	30	21	25	19	95	-17	-16	-10	-16	-59	-36%	-43%	-29%	-46%	-38%	**Yes**
Telecommunication Deteriorated Pole Replacement	N/A	N/A	The forecast is based on LYR to perform the inspection and the labor to support the activity and therefore providing one work unit is not feasible.																					No
Telecommunication Inspection and Maintenance	N/A	N/A	SCE use LYR to forecast this work and is therefore not unit based.																					No
Telecommunication Pole Loading Program Replacement	N/A	N/A	The forecast is based on LYR to perform the inspection and the labor to support the activity and therefore providing one work unit is not feasible.																					No
Transmission Capital Maintenance	N/A	N/A	This includes multiple sub-programs that vary in unit types. Therefore, providing one unit type is not feasible.																					No
Transmission Claim	N/A	N/A	Because claim expenditures are outside of SCE's control and vary significantly from year-to-year, SCE uses a five-year average to forecast these expenditures and are not unit based.																					No
Transmission Deteriorated Pole Replacement	N/A	N/A	# of Transmission Pole Replacements	3570	3570	3570	3570	14280	3145	2837	2091	2008	10081	-425	-733	-1479	-1562	-4199	-12%	-21%	-41%	-44%	-29%	**Yes**
Transmission Emergency Equipment	N/A	N/A	SCE forecasts emergency equipment costs based on management judgment of the estimated incremental costs to maintain inventory at current levels, which includes the rotation of inventory, such as cable, with finite shelf-life. This is not unit based.																					No
Transmission Line Rating Remediation (TLRR)	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Transmission Pole Loading Program Replacement	N/A	N/A	# of Transmission Pole Replacements	1598	1598	1598	1598	6392	783	795	390	143	2111	-815	-803	-1208	-1455	-4281	-51%	-50%	-76%	-91%	-67%	**Yes**
Transmission Substation Plan (TSP)	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Transmission Tools and Work Equipment	N/A	N/A	Because these expenditures can vary significantly from year-to-year, SCE uses historical average to forecast these expenditures and are not unit based																					No
Transmission / Substation Storm Response Capital	N/A	N/A	Because these expenditures are outside of SCE's control and vary significantly from year-to-year, SCE uses a five-year average to forecast these expenditures and are not unit based.																					No

3. Variance Explanations

Table IX-28 below provides the variance explanations for those GRC activities meeting the established thresholds.

Table IX-28
Transmission Capital Expenditure Category Activity Variance Explanations

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Unit**	**Variance Explanation**
Circuit Breaker Replacement	**Yes**	**Yes**	No	The variance in 2024 compared to the imputed authorized values is driven by several key factors. First, SCE experienced costs for installation of deferred units from previous years in 2024. Second, as mentioned in previous years, SCE is seeing increased equipment costs of over 250% from the time SCE filed our TY 2021 GRC application in August 2019. Lastly, SCE did see increases in labor costs which all are contributing to higher spend.
Grid Reliability Projects	**Yes**	**Yes**	No	SCE notes that most projects in Grid Reliability are FERC jurisdictional. The Grid Reliability Projects 2024 recorded costs were below authorized due to continued delays with the Riverside Transmission Reliability Project (RTRP). In 2024, the CPUC denied the City of Norco's Petition for Modification to underground a portion of the project. SCE also experienced delays in other projects such as the Cerritos Channel Transmission Line Relocation Project, Annual Transmission Reliability Assessment (ATRA) Protection Upgrades, the Lugo 500 kV Substation Breaker Installation Project, and the Pardee-Sylmar No.1 & No.2 230 kV Line Rating Increase Project. These projects were delayed for various reasons including licensing, permitting, outage availability, and/or delays with pre-cursor projects. Lower expenditures on these projects was partially offset by higher incurred 2024 costs on Eldorado-Lugo-Mohave and Laguna Bell-Mesa 230 kV, which was due to delays in prior years shifting more work to 2024. SCE also had emergent projects that incurred recorded costs that were not included in its forecast, though the overall recorded amount for these emergent projects was less than $1M total.
Protection of Grid Infrastructure Assets	No	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. The 2024 overspend compared to the imputed authorized value from the TY 2021 GRC for the Protection of Grid Infrastructure is attributable to several interrelated drivers. First, a portion of the 2024 expenditures reflects costs for deferred projects and programs from the 2021–2023 period, necessary to meet baseline security objectives for preexisting Tier 2 sites. Secondly, when preparing the 2021 GRC in 2019, SCE forecasted the need to upgrade four Tier 2 sites scheduled for 2020-2023. However, the Tier Program experienced a substantial increase in critical workload following the reclassification of additional substations to Tier 2 and Tier 3. This added an additional nine Tier 2 sites due to their elevated their risk profiles and operational priority which is consistent with SCE's TY 2025 GRC forecast. Third, the 2024 authorized amount was established based on planning assumptions

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	$	% / $	Unit	Variance Explanation
				and unit cost estimates from 2019, which did not account for subsequent changes in program scope, increased risk profile, or implementation complexity. Lastly, prevailing market conditions led to escalations in labor and material costs beyond those originally forecasted in our TY 2021 GRC, further contributing to the cost variance. The confluence of these factors resulted in a year-end expenditure exceeding the authorized amount for this programmatic area.
Protection of Major Business Functions	No	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision 23-11-096. SCE notes that our 2024 recorded spend is more in line with our TY 2025 GRC forecast (which was developed in late 2022) for calendar year 2024. The 2024 overspend variance for the Protection of Major Business Function is primarily due to unanticipated emergent work at our service centers required to address critical system vulnerabilities identified during the reporting period. These activities were not included in SCE's TY 2021 GRC forecast which was filed in August 2019. The TY 2021 GRC forecast did not reflect the current risk environment, the emergence of new security technology measures, or the increased operational complexity of modernizing legacy systems. In addition, labor and material costs escalated materially beyond the initial TY 2021 GRC projections due to ongoing supply chain pressures and labor market constraints. Collectively, these technical and market-driven factors contributed to actual expenditures exceeding the imputed authorized amount for this activity in 2024.
Relays, Protection and Control Replacements	No	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. The variance is attributable to additional work required at satellite substations that connect to the primary originating substation at which Substation Automaton System (SAS) and relays that were installed and beyond what was forecasted in our TY 2021 GRC application. Additionally, there were recorded costs in 2024 from carryover projects from previous years and overall increased material costs above what was forecasted in our TY 2021 GRC.
Substation Capital Breakdown Maintenance	No	**Yes**	No	The authorized amount for Substation Capital Breakdown Maintenance was based on five-year average of historical recorded costs when SCE filed our TY 2021 GRC Application in August of 2019. SCE notes that our 2024 recorded spend is in line with our TY 2025 GRC forecast (which was developed in late 2022) for calendar year 2024. In 2024, SCE overspent the imputed authorized amount from the TY 2021 GRC due to a higher volume of reactive maintenance that can vary year over year. Additionally, breakdown maintenance, like reactive

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Unit**	**Variance Explanation**
				maintenance, is necessarily unpredictable in terms of how much work must be accomplished in a given year. This is why SCE used a five-year historical average to forecast the expenditures. As such, yearly totals can fluctuate based on the amount and magnitude of the breakdown maintenance required. In 2024, SCE experienced a higher overall number of emergent/reactive maintenance than originally forecast in the 2021 GRC.
Substation Transformer Bank Replacement	**Yes**	**Yes**	**Yes**	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. SCE notes that our 2024 recorded spend is in line with our TY 2025 GRC forecast (which was developed in late 2022) for calendar year 2024. However fewer replacements were completed due to supply chain constraints for substation transformers and Fire Climate Zone (FCZ) constraints which impacts SCE's ability to work in certain areas. Additionally, SCE is seeing increased equipment costs of over 250% compared to the forecast developed back in 2019 for our TY 2021 GRC.
Transmission Capital Maintenance	**Yes**	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. Similarly, to 2021 – 2023 the variance from 2024 imputed authorized to recorded in the Transmission Capital Maintenance Program is primarily due to underspend in sub-activities for SCE's Transmission Corrosion Program and Tower Maintenance. SCE experienced resource constraints and delays in its process of onboarding consulting services, impacting the start of planned mitigation work. Additionally, the activities housed in SCE's Transmission Infrastructure Replacement Program also experienced scheduling delays due to permitting and construction schedule challenges. SCE is continuing its ongoing efforts to address the backlog of Transmission Capital Maintenance work. SCE is addressing the backlog of work by prioritizing preventive and reactive work identified through overhead and underground inspection programs to proactively replace obsolete or aging equipment and structures. SCE notes that the 2024 recorded spend is more generally aligned with our TY 2025 GRC application forecast for calendar year 2024 that was developed in late 2022.
Transmission Deteriorated Pole Replacement	No	No	**Yes**	The decrease in the number of Transmission Deteriorated Pole replacements is primarily attributed to three key factors. First, there were a lower volume of inspections completed by SCE's Intrusive Pole Program, resulting in a lower number of poles identified for replacement. Second, the pole failure rate during the inspection phase was lower, resulting in fewer non-compliant poles that needed replacement. Third, a higher percentage of pole replacement constraints, such as environmental and engineering holds, as well as Caltrans permitting, resulted in a lower number of poles being replaced.

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Unit**	**Variance Explanation**
Transmission Line Rating Remediation (TLRR)	**Yes**	**Yes**	No	SCE remains committed to making progress on all projects within the TLRR Portfolio. Most projects and associated costs under the TLRR Program are FERC-jurisdictional. SCE presents the program capital expenditures as total company since projects or programs are not necessarily 100% CPUC or 100% FERC. Providing the total company dollar amount enables a review of the entire program costs as opposed to a partial project or program spend. TLRR projects can fall under the exemptions listed in General Order (GO) 131D (GO-131E) while others will require full permitting and become licensing projects. To address Energy Division's feedback on our 2021 RSAR, we continue to communicate that progress in quarterly letters to the CPUC Safety Enforcement Division (SED) and in semi-annual letters to WECC. SCE continued to experience project delays in the TLRR Portfolio resulting in 2024 recorded to be less than authorized. Several projects in the TLRR Portfolio were delayed while SCE assessed the root cause of a material failure. The delayed projects were reinitiated in late 2023, which resulted in the deferral of construction to 2025. In addition, SCE's TLRR projects that require licensing continued to experience delays related to the licensing and permitting process. The licensing and permitting delays continue to impact Eagle Mountain-Blythe 161 kV subtransmission project, Ivanpah-Control 115kV subtransmission project, Gorman-Kern River 66kV subtransmission project, Control Silver Peak 55kV subtransmission project and Eldorado-Lugo-Pisgah 220 kV transmission project.
Transmission Pole Loading Program Replacement	**Yes**	**Yes**	**Yes**	The decrease in the number of Transmission Pole Loading Program (PLP) replacements and its associated costs compared to authorized is primarily attributed to two key factors. First, there was a lower volume of PLP assessments that required completion compared to the GRC authorized forecast. Second, there was a lower pole failure rate experienced during the inspection phase, resulting in fewer non-compliant poles requiring replacement.
Transmission Substation Plan (TSP)	**Yes**	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or projects for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. This is especially relevant for specific project related activities, such as Transmission Substation Plan (TSP) where the type of work and overall forecasted spend can vary year over year depending on load growth. Since SCE did not have a bottoms up or any forecast for 2024 in our TY 2021 GRC Application SCE feels it is more appropriate to compare our recorded spend to our TY 2025 GRC Application forecast for calendar year 2024. SCE notes that it is reasonable and not unusual for some projects that were previously requested and authorized to be delayed, extended, or continue over multiple rate case cycles. Additionally, SCE may experience emergent project needs that were not anticipated or forecasted at the time of a GRC application. In 2024, SCE experienced delays in projects, carryover spend from previously delayed/deferred projects and spend on emergent projects,

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	$	% / $	Unit	Variance Explanation
				resulting in an underspend compared to an imputed authorized value and our TY 2025 GRC forecast for 2024. In 2024, SCE incurred some underspend due to deferrals of certain projects. The Kramer-Holgate ($3.5M delayed from June 2024 to May 2025) and Mesa-Narrows ($3.3M delayed from June 2025 to February 2026) projects were delayed due to outage constraints impacting constructability. The Oasis - Palmdale - Quartz Hill 66 kV Subtransmission Line reconductor ($6.3M) and Del Sur - Lancaster - Riteaid 66 kV Line Reconductor/Rebuild ($10.9 million) were also both delayed from June 2024 to June 2026 due to delays in permitting. Additionally, SCE canceled the Rector project which was scheduled to be completed in conjunction with some substation infrastructure replacement work ($4.1M forecasted spend for Rector in TSP in 2024). The load growth scope for that now canceled project was able to be subsumed in other emergent TSP projects that had approximately $282,000 in spend in 2024. In 2024, SCE also recorded approximately $6M for emergent projects that were not part of our original forecast. For example, SCE spent approximately $3M on a Santa Barbara: 230kV N-2 Line Contingency System and upgrading the Irvine 66/12 (D) switchracks, all associated circuit breakers and installing a new Mechanical Electrical Equipment Room (MEER) system.

4. Activity Status

Table IX-29 below provides the forecast scope, schedule and cost, status and status completion statement as applicable.

Table IX-29
Transmission Expenditure Category Activity Status

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Circuit Breaker Replacement	On-Going	Annual	Under	Under	Under	Partially Delayed	The GRC activity Circuit Breaker Replacement is an on-going activity with no pre-defined end date. As noted in our variance explanations, SCE is seeing an increase in unit costs and some delays in replacing circuit breakers due to on-going supply chain issues.
Grid Reliability Projects	On-Going	Annual	Under	Under	Under	Partially Delayed	The GRC Activity Grid Reliability Projects is on-going with no pre-defined end date. As discussed in the variance explanation, SCE is experiencing delays in completing certain projects within its Grid Reliability Projects portfolio as discussed in our annual variance explanations.
Monitoring Bulk Power System	On-Going	Annual	On-Target	On-Target	Under	Proceeding as Planned	Monitoring bulk power is an on-going activity. The key contributing factors to the underrun are unfilled vacancies and the capitalization of hardware maintenance.
NERC Compliance Programs	Completed	Completed	Completed	Completed	Completed	Completed	SCE completed the initial program as discussed in our TY 2021 GRC testimony in 2022.
Protection of Grid Infrastructure Assets	On-Going	Annual	Over	Under	On-Target	Expanded / Emergent	The GRC Activity Protection of Grid Infrastructure Assets is on-going with no pre-defined end date. While SCE is generally proceeding as planned, however as noted we have had to defer some projects and have experienced additional emergent work which has resulted in SCE spending near authorized from 2021 – 2024.
Protection of Major Business Functions	On-Going	Annual	Over	On-Target	Over	Expanded / Emergent	The GRC Activity Protection of Major Business Functions is on-going with no pre-defined end date, however the type or work in this activity may vary year over year. As noted in our variance explanation, SCE did encounter emergent work

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							that was not part of our original TY 2021 GRC forecast.
Relays, Protection and Control Replacements	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	The GRC Activity Relays, Protection and Control Replacements is on-going with no predefined end date. The overspending the GRC cycle was driven by additional work on satellite substations and overall increased material costs.
Substation Capital Breakdown Maintenance	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	Substation Capital Breakdown Maintenance is an on-going program that will continue through the GRC cycle. SCE is generally proceeding as planned; however, we experienced a higher volume of reactive and breakdown maintenance compared to the TY 2021 GRC authorized.
Substation Claim	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Substation Transformer Bank Replacement	On-Going	Annual	Under	Under	Under	Partially Delayed	The Substation Transformer Bank Replacement is on-going with no pred-defined end date. As noted in our variance explanations, SCE replaced fewer units than authorized due to supply chain and FCZ constraints.
Telecommunication Deteriorated Pole Replacement	On-Going	Annual	Under	On-Target	On-Target	Proceeding as Planned	Transmission Deteriorated Pole Program replacements are an ongoing activity driven by SCE's routine inspection programs. This initiative will continue throughout the 2025 GRC cycle. At this time, no cancellations of the planned scope are anticipated.
Telecommunication Inspection and Maintenance	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Telecommunication Pole Loading Program Replacement	Eleven Years (2014 - 2025)	Ten of Eleven	Under	On-Target	Under	Proceeding as Planned	SCE's Pole Loading Program (PLP) was a one-time assessment initiative conducted from 2014-2022, which has now been completed. The replacements identified through the PLP are currently ongoing and will continue throughout the 2025 GRC cycle. At this time, no cancellations of the planned scope are anticipated

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Transmission Capital Maintenance	On-Going	Annual	Under	Under	Under	Partially Delayed	The GRC Activity Transmission Capital Maintenance is on-going with no pre-defined end date. SCE's Transmission Corrosion Program and Tower Maintenance are experiencing some delays as noted in our variance explanations
Transmission Claim	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Transmission Deteriorated Pole Replacement	On-Going	Annual	Under	On-Target	On-Target	Proceeding as Planned	Transmission Deteriorated Pole Program replacements are an ongoing activity driven by SCE's routine inspection programs. This initiative will continue throughout the 2025 GRC cycle. At this time, no cancellations of the planned scope are anticipated.
Transmission Emergency Equipment	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	While SCE has spent less than 5% of authorized, SCE does not consider this program cancelled. This spend is driven by emergency spare usage and replacement, and based on general averages; however, the spend is not always linear, and SCE did not require replacement of spare parts in 2021 - 2024. However, that does not mean SCE may not require replacement parts in future years.
Transmission Line Rating Remediation (TLRR)	On-Going	Annual	Under	Under	Under	Partially Delayed	The TLRR Capital forecast is based on a compliance requirement for completion of all Bulk Electric System (BES) discrepancies by 2025 and all radial system discrepancies by 2030. As discussed in the variance explanation, SCE is experiencing delays in certain projects.
Transmission Pole Loading Program Replacement	Eleven Years (2014 - 2025)	Ten of Eleven	Under	On-Target	Under	Proceeding as Planned	SCE's Pole Loading Program (PLP) was a one-time assessment initiative conducted from 2014-2022, which has now been completed. The replacements identified through the PLP are currently ongoing and will continue throughout the 2025 GRC cycle. At this time, no cancellations of the planned scope are anticipated
Transmission Substation Plan (TSP)	On-Going	Annual	Under	Under	Under	Partially Delayed	The GRC Activity TSP is on-going with no pre-defined end date. The costs and project types will

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							vary year to year based on grid needs assessments. Please refer to variance explanations for details on cancelled/deferred projects.
Transmission Tools and Work Equipment	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Transmission/Substation Storm Response Capital	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.

X.

GENERATION CATEGORY

A. Expensed Programs

1. GRC Activity and Unit Description Table

For the Generation expense activities that are RSAR-eligible, Table X-30 below provides the 2021 GRC testimony citation and activity description and indicates whether there are any RAMP controls or mitigations associated with that activity.

Table X-30
Generation Expense Category Activity Description

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Catalina - Diesel	Catalina Generation's O&M expenses are for ongoing operations and maintenance activities necessary for the operation of the generators and connected electrical systems. These activities include miscellaneous expenses such as minor spare parts, general and administrative support staff, automotive repair, tools, and compliance reporting. Labor costs include SCE employees who work at the Pebbly Beach Generating Station and at other locations. Non-labor costs include repair parts, chemicals, supplies, contracts and various miscellaneous expenses needed to operate and maintain Catalina's generation units.	SCE-05 Vol: 1	WPSCE05V1BkB pp. 210 - 216	N/A	N/A
Hydro	The expenses include costs for operating and maintaining SCE's Hydro generating units and associated reservoirs, dams, waterways, and miscellaneous Hydro facilities. Work activities are presented in three main categories: (1) Water for Power and Rents, (2) Hydro Operations, and (3) Hydro Maintenance. These expenses are necessary for SCE's Hydro generation to provide reliable service at low cost, maintain safe operations for employees and the public, and comply with applicable laws and regulations.	SCE-05 Vol: 1	WPSCE05V1BkA pp. 5 - 11	N/A	N/A
Mountainview	The Mountainview Operations GRC activity comprises all labor and non-labor expenses that record as operations-related expenses. These activities include operation supervision and engineering, general expenses, miscellaneous other power generation expenses, and rentals. The Mountainview Maintenance	SCE-05 Vol: 1	WPSCE05V1BkB pp. 167 - 180	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	work activity includes all labor, non-labor, and other expenses (e.g., the GE Contractual Service Agreement costs) associated with maintaining and repairing the power island and all general plant maintenance-related expenses.				
Palo Verde	This activity includes expenses related to materials for the Palo Verde nuclear generation station which are not specifically provided for or are not readily assignable to other nuclear generation operation accounts.	SCE-05 Vol: 1	WPSCE05V1BkB pp. 256 - 296	N/A	N/A
Peakers	Includes costs for SCE employees who routinely work at the Peaker locations and support provided to the plant by employees who work at other locations. Non-labor includes costs to repair parts, chemicals, supplies, contracts, and numerous other items needed to operate and maintain the Peaker plants. This also includes costs for interconnection fees that SCE pays to be connected to the bulk power grid.	SCE-05 Vol: 1	WPSCE05V1BkB pp. 194 - 200	N/A	N/A
Solar	Maintenance: Labor and non-labor expenses incurred in the maintenance of rooftop solar photovoltaic program projects. Operations: Labor and non- labor expenses incurred in the operation of rooftop solar photovoltaic program projects.	SCE-05 Vol: 1	WPSCE05V1BkB pp. 235 - 252	N/A	N/A

2. GRC Activities Dollar and Unit Variance Calculations

Table X-31 and Table X-32 below provide the authorized and recorded costs, and variance and percentage change values for each Generation expense activity in terms of dollars and units. These tables also indicate whether a variance explanation was triggered based on the established thresholds for each GRC activity.

Table X-31
Generation Expense Category Activity Variance Dollar Calculations

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Roll -up	Project Life (years)	Project Year	2021	2022	2023	2024	Auth. Imputed Cost to Date ($)	2021	2022	2023	2024	Actual Cost to Date ($)	2021	2022	2023	2024	Cost Diff to Date ($)	2021	2022	2023	2024	% Cost Diff to Date (%)	$ Var. Expl. Required
Catalina - Diesel	N/A	N/A	Yes	On-Going	Annual	$5,667	$5,876	$6,363	$6,595	$24,501	$6,133	$5,625	$6,605	$6,176	$24,539	$466	($251)	$242	($420)	$38	8%	-4%	4%	-6%	0%	No
Hydro	N/A	N/A	Yes	On-Going	Annual	$43,601	$45,169	$49,018	$50,563	$188,352	$45,313	$41,245	$52,898	$55,868	$195,325	$1,712	($3,924)	$3,879	$5,306	$6,973	4%	-9%	8%	10%	4%	No
Mountainview	N/A	N/A	Yes	On-Going	Annual	$29,402	$30,574	$33,370	$34,441	$127,786	$20,514	$29,478	$26,561	$40,981	$117,534	($8,888)	($1,096)	($6,808)	$6,540	($10,252)	-30%	-4%	-20%	19%	-8%	No
Palo Verde	N/A	N/A	Yes	On-Going	Annual	$72,249	$75,449	$83,237	$85,474	$316,409	$73,401	$75,076	$79,747	$89,752	$317,976	$1,152	($373)	($3,490)	$4,278	$1,567	2%	0%	-4%	5%	0%	No
Peakers	N/A	N/A	Yes	On-Going	Annual	$7,957	$8,262	$8,984	$9,291	$34,495	$8,728	$8,104	$7,983	$9,012	$33,827	$771	($158)	($1,001)	($280)	($667)	10%	-2%	-11%	-3%	-2%	No
Solar	N/A	N/A	Yes	On-Going	Annual	$1,389	$1,444	$1,575	$1,626	$6,034	$1,381	$1,358	$1,398	$496	$4,633	($8)	($86)	($177)	($1,130)	($1,401)	-1%	-6%	-11%	-70%	-23%	No

Table X-32
Generation Expense Category Activity Variance Unit Calculations

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	**RAMP Risk**	**RAMP Control / Mitigation**	**Unit Description / Rationale for No Work Units**	**2021**	**2022**	**2023**	**2024**	**Imputed Units to Date**	**2021**	**2022**	**2023**	**2024**	**Actual Units to Date**	**2021**	**2022**	**2023**	**2024**	**Unit Diff. to Date**	**2021**	**2022**	**2023**	**2024**	**% Unit Diff. to Date (%)**	**Unit Var. Explan. Triggered?**
Catalina - Diesel	N/A	N/A	Unable to identify a single unit due to multiple activities for supporting this Generation activity.																					No
Hydro	N/A	N/A	Unable to identify a single unit due to multiple activities for supporting this Generation activity.																					No
Mountainview	N/A	N/A	Unable to identify a single unit due to multiple activities for supporting this Generation activity.																					No
Palo Verde	N/A	N/A	Unable to identify a single unit due to multiple activities for supporting this Generation activity.																					No
Peakers	N/A	N/A	Unable to identify a single unit due to multiple activities for supporting this Generation activity.																					No
Solar	N/A	N/A	Unable to identify a single unit due to multiple activities for supporting this Generation activity.																					No

3. Variance Explanations

SCE did not have any Generation Expense GRC activities that meet the variance threshold in 2024.

4. Activity Status

Table X-33 below provides the forecast scope, schedule and cost, status and status completion statement as applicable.

Table X-33
Generation Expense Category Activity Status

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Catalina - Diesel	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Hydro	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Mountainview	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. As mentioned in our 2023 RSAR SCE did defer some work to 2024 - 2025, however overall, we are generally proceeding as planned.
Palo Verde	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Peakers	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Solar	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.

B. Capital Expenditure Programs

1. GRC Activity and Unit Description Table

For the Generation capital activities that are RSAR-eligible, Table X-34 below provides the 2021 GRC testimony citation and activity description and indicates whether there are any RAMP controls or mitigations associated with that activity.

Table X-34
Generation Capital Expenditure Category Activity Description

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Catalina - Diesel	Labor and non-labor expenses necessary to operate and maintain Catalina's generation and ancillary equipment. Also includes home office support expenses. Projects include Catalina Repower and a 2.4 kV switchyard upgrade.	SCE-05 Vol: 1	WPSCE05V1BkB, pp. 217-225	N/A	N/A
Hydro - Dams and Waterways	Dams and Waterways projects include the rebuilding of reservoirs, flowlines, or flumes, installing flow measurement equipment, replacing valves, and installing debris removal equipment or fish screens.	SCE-05 Vol: 1	WPSCE05V1BkB, pp. 217-225	Hydro Asset Failure	Dam Surface Protection, Instrumentation / Communication Enhancements, Low Level Outlet Improvements, Seepage Mitigation, Seismic Retrofit and Spillway Remediation and Improvement
Hydro - Decommissioning	Due to contractual obligations and proposed U.S. Forest Service requirements, SCE anticipates it will be required to do significant construction work on the San Gorgonio facilities before turning the project over to the local water agencies.	SCE-05 Vol: 1	WPSCE-05V1, Book A, pp. 109-194 and Book B, pp. 2-162	N/A	N/A
Hydro - Electrical Equipment	Control systems, circuit protection, and transformers wear out over time and require replacement at the Hydro facilities. Larger projects in this category typically involve complete replacement of excitation equipment, high voltage plant circuit breakers, transformers, or automation work. Excitation	SCE-05 Vol: 1	WPSCE-05V1, Book A, pp. 86-98	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	equipment provides the power to a generator's field windings, which is necessary to produce output power. Plant circuit breakers are large devices that protect and disconnect Hydro facilities from the transmission network. Step-up transformers convert the Hydro plant voltage to that of the transmission network or grid. Automation equipment is used to remotely or efficiently control processes at powerhouses and ancillary facilities.				
Hydro - Prime Movers	SCE Hydro operates seventy-six generating units at thirty-five powerhouses. Water turbines convert the flow of high-pressure water into rotary motion or mechanical energy, which the generators convert into electrical power. The high-pressure water and rotary motion cause wear and tear on the turbine units. The heat created by a generator when producing electrical power also causes wear and tear on the generator bearings and windings. If timely repairs are not performed when warranted, unit failure is inevitable. Therefore, turbines and generators receive annual maintenance and inspections.	SCE-05 Vol: 1	WPSCE-05V1, Book A, pp. 31-65	N/A	N/A
Hydro - Relicensing	Hydro - Relicensing executes the requirements of FERC relicensing and new license implementation projects, including Minimum Instream Flow Upgrades and Campground Infrastructure Refurbishments/Replacements.	SCE-05 Vol: 1	WPSCE-05V1, Book A, pp. 16-30	N/A	N/A
Hydro - Structures and Grounds	Hydro - Structures and Grounds involves needed work related to various structures including the powerhouses, roofs, cranes, heating ventilation and air conditioning, and to infrastructure including roads, bridges, paving, fencing and gates, fire and water systems, and wastewater projects. The major projects	SCE-05 Vol: 1	WPSCE-05V1, Book A, pp. 98-108	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	in this category are replacing high-pressure piping, completing road and bridge improvements, and installing dam safety video surveillance equipment.				
Mountainview	Includes SCE's planned capital expenditures for Mountainview that support reliable service, compliance with applicable laws and regulations, and safe operations for employees and the public.	SCE-05 Vol: 1	WPSCE-05V1, Book B, pp. 181-192	N/A	N/A
Palo Verde	The activity, Palo Verde includes expenses related to materials used and expenses incurred for Palo Verde which are not specifically provided for or are not readily assignable to other nuclear generation operation accounts.	SCE-05 Vol: 1	WPSCE-05V1, Book B, pp. 263-264	N/A	N/A
Peakers	SCE's planned capital expenditures for the Peaker plants that support reliable service, compliance with applicable laws and regulations, and safe operations for employees and the public.	SCE-05 Vol: 1	WPSCE-05V1, Book B, pp. 201-208	N/A	N/A
Protection of Generation Assets	This activity includes the costs to implement security measures such as access control, alarms, surveillance, and perimeter protections at Generation assets, such as dams and peaker facilities.	SCE-04 Vol: 4	WPSCE04V4 pp. 80	Physical Security	Protection of Generation Capabilities
Solar	Maintenance: Labor and non-labor expenses incurred in the maintenance of rooftop solar photovoltaic program (SPVP) projects. Operations: Labor and non-labor expenses incurred in the operation of rooftop solar photovoltaic program (SPVP) projects.	SCE-05 Vol: 1	WPSCE-05V1, Book B, pp. 253-255	N/A	N/A

2. GRC Activities Dollar and Unit Variance Calculations

Table X-35 and Table X-36 below provide the authorized, recorded, variance and percentage change values for each Generation expenditure category activity in terms of dollars and units. These tables also indicate whether a variance explanation was triggered based on the established thresholds for each GRC activity.

Table X-35
Generation Capital Expenditure Category Activity Dollar Variance Calculations

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	RAM P Risk	RAMP Control / Mitigation	Roll -up	Project Life (years)	Project Year	2021	2022	2023	2024	Auth. Imputed Cost to Date ($)	2021	2022	2023	2024	Actual Cost to Date ($)	2021	2022	2023	2024	Cost Diff to Date ($)	2021	2022	2023	2024	% Cost Diff to Date (%)	$ Var. Expl. Required
Catalina - Diesel	N/A	N/A	Yes	On-Going	Annual	$2,048	$2,048	$2,048	$2,079	$8,223	($444)	$398	$90	$1,272	$1,316	($2,492)	($1,650)	($1,958)	($807)	($6,907)	-122%	-81%	-96%	-39%	-84%	No
Hydro - Dams and Waterways	Hydro Asset Failure	Dam Surface Protection	No	On-Going	Annual	$0	$0	$0	$0	$0	$1,207	$347	$176	$759	$2,489	$1,207	$347	$176	$759	$2,489						No
Hydro - Dams and Waterways	Hydro Asset Failure	Instrumentation / Communication Enhancements	No	On-Going	Annual	$250	$250	$250	$254	$1,004	$237	$421	$0	$8	$666	($13)	$171	($250)	($246)	($338)	-5%	68%	-100%	-97%	-34%	No
Hydro - Dams and Waterways	Hydro Asset Failure	Low Level Outlet Improvements	No	On-Going	Annual	$0	$0	$0	$0	$0	$3,596	$1,342	$1,267	$5,366	$11,571	$3,596	$1,342	$1,267	$5,366	$11,571						No
Hydro - Dams and Waterways	Hydro Asset Failure	Non-RAMP	No	On-Going	Annual	$5,937	$5,937	$5,937	$6,026	$23,837	$8,059	$9,782	$0	$0	$17,841	$2,122	$3,845	($5,937)	($6,026)	($5,996)	36%	65%	-100%	-100%	-25%	No
Hydro - Dams and Waterways	Hydro Asset Failure	Seepage Mitigation	No	On-Going	Annual	$3,900	$3,900	$3,900	$3,958	$15,658	$0	$0	$0	$0	$0	($3,900)	($3,900)	($3,900)	($3,958)	($15,658)	-100%	-100%	-100%	-100%	-100%	No
Hydro - Dams and Waterways	Hydro Asset Failure	Seismic Retrofit	No	On-Going	Annual	$0	$0	$0	$0	$0	$0	$109	$0	$49	$158	$0	$109	$0	$49	$158						No
Hydro - Dams and Waterways	Hydro Asset Failure	Spillway Remediation and Improvement	No	On-Going	Annual	$2,500	$2,500	$2,500	$2,537	$10,037	$1,345	$1,758	$2,200	$4,435	$9,738	($1,155)	($742)	($300)	$1,897	($300)	-46%	-30%	-12%	75%	-3%	No
Hydro - Dams and Waterways	N/A	Total	Yes	On-Going	Annual	$12,587	$12,587	$12,587	$12,776	$50,536	$14,443	$13,759	$11,659	$30,354	$70,216	$1,856	$1,173	($928)	$17,579	$19,680	15%	9%	-7%	138%	39%	**Yes**
Hydro - Decommissioning	N/A	N/A	Yes	On-Going	Annual	$418	$418	$418	$424	$1,678	$586	$32,777	$6,559	$12,714	$52,635	$168	$32,359	$6,141	$12,290	$50,958	40%	7745%	1470%	2898%	3038%	**Yes**
Hydro - Electrical Equipment	N/A	N/A	Yes	On-Going	Annual	$3,533	$3,533	$3,533	$3,586	$14,184	$9,776	$9,115	$10,542	$9,350	$38,783	$6,243	$5,583	$7,009	$5,764	$24,599	177%	158%	198%	161%	173%	No
Hydro - Prime Movers	N/A	N/A	Yes	On-Going	Annual	$10,004	$10,004	$10,004	$10,154	$40,166	$4,198	$1,054	$4,659	$4,943	$14,854	($5,806)	($8,950)	($5,345)	($5,211)	($25,312)	-58%	-89%	-53%	-51%	-63%	No
Hydro - Relicensing	N/A	N/A	Yes	On-Going	Annual	$15,310	$15,310	$15,310	$15,539	$61,468	$6,731	$6,453	$8,466	$16,224	$37,875	($8,579)	($8,856)	($6,843)	$685	($23,593)	-56%	-58%	-45%	4%	-38%	No
Hydro - Structures and Grounds	N/A	N/A	Yes	On-Going	Annual	$3,203	$3,203	$3,203	$3,251	$12,860	$6,647	$2,051	$4,928	$7,554	$21,180	$3,444	($1,152)	$1,725	$4,303	$8,320	108%	-36%	54%	132%	65%	No
Mountainview	N/A	N/A	Yes	On-Going	Annual	$6,595	$6,595	$6,595	$6,694	$26,478	$4,760	$9,551	$10,998	$15,717	$41,026	($1,835)	$2,956	$4,403	$9,023	$14,547	-28%	45%	67%	135%	55%	No
Palo Verde	N/A	N/A	Yes	On-Going	Annual	$37,212	$37,212	$37,212	$37,770	$149,405	$35,851	$34,429	$38,475	$41,149	$149,904	($1,361)	($2,782)	$1,264	$3,379	$499	-4%	-7%	3%	9%	0%	No
Peakers	N/A	N/A	Yes	On-Going	Annual	$0	$0	$0	$0	$0	$9,937	$2,299	$642	$1,180	$14,058	$9,937	$2,299	$642	$1,180	$14,058						No
Protection of Generation Assets	Physical Security	Protection of Generation Capabilities	Yes	On-Going	Annual	$3,288	$3,288	$3,288	$3,337	$13,201	$1,061	$1,613	$2,157	$642	$5,473	($2,227)	($1,675)	($1,131)	($2,695)	($7,728)	-68%	-51%	-34%	-81%	-59%	No
Solar	N/A	N/A	Yes	On-Going	Annual	$102	$102	$102	$104	$411	$16	$707	$9,723	$10,828	$21,275	($86)	$605	$9,621	$10,724	$20,864	-84%	591%	9396%	10318%	5080%	**Yes**

Table X-36
Generation Capital Expenditure Category Activity Unit Variance Calculations

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	**RAMP Risk**	**RAMP Control / Mitigation**	**Unit Description / Rationale for No Work Units**	**2021**	**2022**	**2023**	**2024**	**Imputed Units to Date**	**2021**	**2022**	**2023**	**2024**	**Actual Units to Date**	**2021**	**2022**	**2023**	**2024**	**Unit Diff. to Date**	**2021**	**2022**	**2023**	**2024**	**% Unit Diff. to Date (%)**	**Unit Var. Explan. Triggered?**
Catalina - Diesel	N/A	N/A	These workpapers are comprised of multiple projects and types of projects that vary in size and scope, and therefore providing a single work unit is not feasible																					No
Hydro - Dams and Waterways	Hydro Asset Failure	Dam Surface Protection	These workpapers are comprised of multiple projects and types of projects that vary in size and scope, and therefore providing a single work unit is not feasible																					No
Hydro - Dams and Waterways	Hydro Asset Failure	Instrumentation / Communication Enhancements																						No
Hydro - Dams and Waterways	Hydro Asset Failure	Low Level Outlet Improvements																						No
Hydro - Dams and Waterways	Hydro Asset Failure	Non-RAMP																						No
Hydro - Dams and Waterways	Hydro Asset Failure	Seepage Mitigation																						No
Hydro - Dams and Waterways	Hydro Asset Failure	Seismic Retrofit																						No
Hydro - Dams and Waterways	Hydro Asset Failure	Spillway Remediation and Improvement																						No
Hydro - Dams and Waterways	N/A	Total	These workpapers are comprised of multiple projects and types of projects that vary in size and scope, and therefore providing a single work unit is not feasible																					No
Hydro - Decommissioning	N/A	N/A	These workpapers are comprised of multiple projects and types of projects that vary in size and scope, and therefore providing a single work unit is not feasible																					No
Hydro - Electrical Equipment	N/A	N/A	These workpapers are comprised of multiple projects and types of projects that vary in size and scope, and therefore providing a single work unit is not feasible																					No
Hydro - Prime Movers	N/A	N/A	These workpapers are comprised of multiple projects and types of projects that vary in size and scope, and therefore providing a single work unit is not feasible																					No
Hydro - Relicensing	N/A	N/A	These workpapers are comprised of multiple projects and types of projects that vary in size and scope, and therefore providing a single work unit is not feasible																					No
Hydro - Structures and Grounds	N/A	N/A	These workpapers are comprised of multiple projects and types of projects that vary in size and scope, and therefore providing a single work unit is not feasible																					No
Mountainview	N/A	N/A	These workpapers are comprised of multiple projects and types of projects that vary in size and scope, and therefore providing a single work unit is not feasible																					No
Palo Verde	N/A	N/A	This activity is comprised of multiple projects and types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Peakers	N/A	N/A	This activity is comprised of multiple projects and types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Protection of Generation Assets	Physical Security	Protection of Generation Capabilities	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Solar	N/A	N/A	These workpapers are comprised of multiple projects and types of projects that vary in size and scope, and therefore providing a single work unit is not feasible																					No

3. Variance Explanations

Table X-37 below provides the variance explanations for those GRC activities meeting the established thresholds.

Table X-37
Generation Capital Expenditure Category Activity Variance Explanations

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Unit**	**Variance Explanation**
Hydro - Dams and Waterways	No	Yes	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. SCE's 2021 GRC did not forecast projects or costs for the 2024 calendar year; rather the 2024 GRC Activity authorized amount of $12.776 million presented above is based on an escalation of the $12.292 million 2021 CPUC-authorized GRC cost approval for the Hydro – Dams and Waterways GRC Activity. As SCE explained during the discovery phase of the 2025 GRC proceeding, in 2023, Southern California experienced multiple atmospheric rivers, the greatest snowpack/snowmelt in recorded history and a hurricane event. Each of these unexpected weather-driven events had major impacts on most of SCE's dam safety-related projects which are located at high elevations. Some of SCE's dams remained snowed-in and inaccessible until mid-August, while many of the reservoirs remained at full capacity until after Labor Day. Furthermore, the atmospheric rivers experienced during the earlier part of 2023 negatively impacted many dam access roads, requiring repair work and limiting SCE's access to the projects following snowmelt. At higher elevation, winter conditions oftentimes begin in mid-October, therefore the highly unusual conditions experienced in 2023 prevented SCE from 1) beginning construction at most high elevation projects planned for 2023, and 2) conducting critical field investigations to inform projects that were forecasted to begin construction in 2024 and beyond. The delayed field investigations also delayed other aspects of the projects such as obtaining the necessary approvals/permits from state and federal agencies by approximately one year. Deferring most of the in-progress work planned in 2023 by one

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Unit**	**Variance Explanation**
				year subsequently had cascading impacts on other dam safety related projects planned for 2024 and beyond. In addition to the aforementioned weather-driven events that delayed many 2023 projects into 2024 and subsequent years, SCE had two emergent Dams and Waterways projects with exceptional recorded costs. These two projects, the Dam 7 Fishwater Generator and the Big Creek Canyon Repave, between them had total recorded costs of $15.781 million. These projects and work deferred from 2023 to 2024 led to higher spending than the historical levels forecast in the 2021 GRC.
Hydro - Decommissioning	No	Yes	No	Pursuant to contractual obligations and FERC license responsibilities, SCE is required to repair and maintain the water conveyance system as part of the decommissioning process. In the 2021 GRC Final Decision, the CPUC approved $0.408 million annually for SCE to address the required repair and maintenance. The 2024 GRC Activity authorized cost of $0.424 million is based on an escalation of the 2021 GRC authorized cost. This CPUC authorized amount was consistent with recorded capital expenditures to repair and maintain the System but did not cover physical decommissioning activities at San Gorgonio because the timeline for decommissioning activities was unclear at the time due to water rights disputes between the U.S. Forest Service (USFS) and local Participating Entities. Then in 2020 the Apple Fire burned through the San Gorgonio watershed and caused significant damage to the water conveyance system, rendering it inoperable, and stopped the delivery of water to the Participating Entities. In 2021, SCE obtained approval from FERC and other resource agencies to reconstruct a section of the water conveyance system from the South Fork Diversion to Raywood Flat (referred to as Flowline No. 1 Phase 1). The reconstruction of this section of flowline was conducted in 2022 and restored a portion of the water delivery (per the Participating Entities water rights) to the San Gorgonio River. In 2023, spring runoff from significant storm events and tropical storm Hillary in August caused extensive erosion in the San Gorgonio watershed and damaged the water conveyance system, which included the complete removal of the East Fork Diversion and severe road damage that restricted access to the project area and prevented access at some locations.

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Unit**	**Variance Explanation**
				SCE's recorded costs in 2024 were to resume the necessary physical decommissioning work (including road and water conveyance system repairs), which was exacerbated by the 2023 winter storms and tropical storm Hillary. Thus the 2024 recorded cost was higher than the authorized amount for repair and maintenance under the 2021 GRC final decision.
Solar	No	Yes	No	SCE started decommissioning Solar Photovoltaic Program (SPVP) sites that were not part of our TY 2021 GRC forecast, which the 2024 authorized is based on. While SCE has reasonably operated and maintained its SPVP assets, as demonstrated in the Commission's annual ERRA review of operations, the assets have undergone significant wear and tear since the first solar plant entered service in 2008 and recent wiring and component failures have caused hotspots and localized roof fires on occupied buildings. As noted in our TY 2025 GRC, SCE has determined that decommissioning the SPVP sites is the least cost option. Further, de-energization of the solar systems, followed by removal of the infrastructure, will remove the identified risks associated with the current conditions and is the least-cost option for customers. The decommissioning of the SPVP sites is the driver for the recorded spending over the imputed authorized amount for 2024.

4. Activity Status

Table X-38 below provides the forecast scope, schedule and cost, status and status completion statement as applicable.

Table X-38
Generation Expenditure Category Activity Status

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Catalina - Diesel	On-Going	Annual	Under	Under	Under	Partially Delayed	This GRC activity is on-going with no pre-defined end date, but the work may vary on annual basis. While SCE spent less than authorized, SCE does not consider this program cancelled. SCE requested one project associated with this GRC activity in the TY 2021 GRC (PBGS Resurface Paving Project) which has been delayed to later years.
Hydro - Dams and Waterways	On-Going	Annual	Over	Over	Over	Partially Delayed	The GRC activity Hydro - Dams and Waterways is on-going with no pre-defined end date. SCE provided details on deferred and emergent projects in our variance explanation.
Hydro - Decommissioning	On-Going	Annual	Over	Over	Over	Expanded / Emergent	The GRC Activity Hydro – Decommissioning is on-going with no pre-defined end date. Physical decommissioning work has been delayed as SCE, the Participating Entities (PEs) and the US Forest Service are evaluating and negotiating an alternative alignment for the water conveyance system that includes reconstruction of the East Fork Diversion, rebuilding Flowline 1, directional drilling and an underground pipeline. Prior to resuming further physical decommissioning activities the Participating Entities must obtain a right

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							of way from the US Forest Service for the revised alignment. SCE anticipates that physical decommissioning activities to reconstruct the water conveyance system and then transfer the system to the PEs under the US Forest Service right-of-way will require approximately 4 years to complete. Commencement of these activities will be contingent on the PEs obtaining the US Forest Service right-of-way construction activities and renegotiating and revising the Transfer Agreement with SCE.
Hydro - Electrical Equipment	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC activity is on-going with no pre-defined end date, but the work may vary on annual basis. SCE completed emergent projects necessary to preserve equipment reliability and safety.
Hydro - Prime Movers	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC activity is on-going with no pre-defined end date, but the work may vary on annual basis. SCE did experience some project delays due to weather conditions prohibiting work.
Hydro - Relicensing	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC activity is on-going with no pre-defined end date, but the work may vary on annual basis. SCE did experience some project delays due to weather conditions prohibiting work.
Hydro - Structures and Grounds	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC activity is on-going with no pre-defined end date, but the work may vary on annual basis. SCE completed

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							emergent projects necessary to preserve equipment reliability and safety.
Mountainview	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC activity is on-going with no pre-defined end date, but the work may vary on annual basis. SCE completed emergent projects necessary to preserve equipment reliability and safety.
Palo Verde	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC activity is on-going with no pre-defined end date, but the work may vary on annual basis. SCE completed emergent projects necessary to preserve equipment reliability and safety.
Peakers	On-Going	Annual	Over	Over	Over	Expanded / Emergent	This GRC activity is on-going with no pre-defined end date, but the work may vary on annual basis. SCE did not request capital expenses in the TY of our 2021 GRC, however as noted in previous RSAR's SCE forecasted and completed projects in later years that were necessary to preserve equipment reliability and safety.
Protection of Generation Assets	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	This GRC activity is on-going with no pre-defined end date, but the work may vary on annual basis.
Solar	On-Going	Annual	Over	Over	Over	Expanded / Emergent	SCE started decommissioning Solar Photovoltaic Program (SPVP) sites that were not part of our TY 2021 GRC forecast. SCE anticipates that the decommissioning activities will continue through 2028, however this may be extended if necessary.

XI.

OTHER CATEGORY

A. Expensed Programs

1. GRC Activity and Unit Description Table

For the Other expense activities that are RSAR-eligible, Table XI-39 below provides the 2021 GRC testimony citation and activity description and indicates whether there are any RAMP controls or mitigations associated with that activity.

Table XI-39
Other Expense Category Activity Description

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
All Hazards Assessment, Mitigation and Analytics	All Hazards, Assessment, Mitigation & Analytics - includes cost to assess and mitigate hazards such as seismic, climate change, severe weather and other hazards.	SCE-04 Vol: 1	WPSCE04V1 pp.8 - 20	Climate Change and Building Safety	Climate Adaptation & Severe Weather and Seismic Building Safety Program
Cyber Software License and Maintenance	Expenses incurred for licensing and ongoing maintenance of Cyber Security software.	SCE-04 Vol: 3	WPSCE04V3 pp. 143 - 150	Cyber Attack	Data Protection, Grid Modernization Cybersecurity, Interior Protection, Perimeter Defense and SCADA Cybersecurity
Cybersecurity Delivery and IT Compliance	Expenses associated with delivering cybersecurity services and monitoring compliance with key cybersecurity related regulations.	SCE-04 Vol: 3	WPSCE04V3 pp. 21 - 27	Cyber Attack	Data Protection, Grid Modernization Cybersecurity, Interior Protection, Perimeter Defense and SCADA Cybersecurity
Develop and Manage Policy and Initiatives	The Develop and Manage Policy and Initiatives activity consists of work performed within the Regulatory Affairs organization. The work includes activities that support SCE's management of the regulatory work required to support and implement energy, environmental, and wildfire mitigation policies, as well as other	SCE-06 Vol: 6	WPSCE06V6 pp. 1 - 6	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	policies instituted by state, federal, and local agencies.				
Distribution Storm Response O&M	Distribution Storm - Includes the costs to patrol for and repair storm related damages and toxic waste disposal for distribution lines and facilities. Storm damage can be the result of severe weather conditions such as rain, wind, lightning, and by natural disasters such as earthquakes and forest fires. The storm costs included in this account are: switching, locating and isolating trouble on the system, removal of debris from lines or equipment, and securing damaged sites until repairs have been completed. Includes related costs such as: transportation expenses; meals, traveling, lodging, and incidental expenses; division overhead; and supply and tool expense.	SCE-04 Vol: 2	WPSCE04V2 pp. 23 - 29	N/A	N/A
Education, Safety and Operations	The Education, Safety and Operations consists of work performed within the Local Public Affairs (LPA) organization. LPA is responsible for managing and directing external engagement with government officials, staff, businesses, and local community stakeholders representing 185 cities, 15 counties, and 13 Native American tribes in the SCE service territory. The activities covered include outreach and education related to electric safety, emergency response communications (including wildfire mitigation programs), capital infrastructure projects, operations	SCE-06 Vol: 6	WPSCE06V6 pp. 7 - 12	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	impacting local communities, reliability issues, and education on state-mandated policy initiatives such as energy efficiency, renewable energy sources, distributed generation, transportation electrification, community resiliency, and other programs.				
Emergency Preparedness and Response	Costs incurred to maintain expertise and provide direct support to the company and Service territory for emergency management preparedness, response and recovery operations.	SCE-04 Vol: 2	WPSCE04V2 pp. 11 - 22	Climate Change	Emergency Management and Fire Management
Employee and Contractor Safety	Includes all costs associated with salaries, expenses, and consultant services of personnel engaged of Employee and Contractor Safety activities.	SCE-06 Vol: 4	WPSCE06V4 pp. 54 - 60	Employee, Contractor and Public Safety	Contractor Safety Program and Industrial Ergonomics
Enhanced Situational Awareness	Expenses incurred to support the Situational Awareness Center.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE04V5Pt2 pp. 59 – 70 / WPSCE-Tr.4-02 Track 4 Activity Forecast Request	N/A	N/A
Environmental Management and Development	Includes all costs associated with salaries and expenses in Environmental Services for the management and oversight of environmental programs. This activity involves administrative and general activities regarding environmental matters and issues that affect company operations.	SCE-06 Vol: 4	WPSCE06V4 pp. 3 - 9	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Environmental Programs	Includes all costs associated with salaries and expenses for distribution, transmission, generation, and hazardous waste environmental programs, including the expenses associated with the maintenance and monitoring of the San Dieguito Wetlands and Wheeler North Reef Mitigation Projects.	SCE-06 Vol: 4	WPSCE06V4 pp. 10 - 16	N/A	N/A
Ethics and Compliance	Includes all costs associated with salaries and expenses to maintain the effectiveness of SCE's Ethics & Compliance (E&C) program. E&C incorporates and reinforces the Company's core values of Safety, Integrity, Excellence, Respect, Continuous Improvement and Teamwork. The goal of the Program is to facilitate and sustain a culture where acting ethically and obeying the law is the expected and everyday course of action for employees and the Company's business partners.	SCE-06 Vol: 4	WPSCE06V4 pp. 47 - 53	N/A	N/A
External Communications	This activity consists of external communications to help customers and the public stay safe around electrical infrastructure and to understand company and regulatory actions that affect them directly.	SCE-03 Vol: 2	WPSCE03V2 pp. 21 - 26	Contact with Energized Equipment	Public Outreach
Facility and Land Operations	Facility and Land Operations Business Planning Activities (BPA's) include: Facility Asset Management, Business Planning, Corporate Real Estate (CRE) Project Management, Camp Edison, Forestry Management, and Acquire/Dispose of Land Rights. Facility Asset Management activities	SCE-06 Vol: 5	WPSCE06V5BKA.pdf pp. 234 - 239	Building Safety, Employee, Contractor and Public Safety	Electrical Inspections, Fire Life Safety Portfolio Assessment and Office Ergonomics - Core Program

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	are focused on providing a safe and productive environment for employees, visitors, and customers at SCE facilities. Business Planning activities entail strategic planning and transactional activities including leasing for the SCE facility portfolio. CRE Project Management is responsible for overseeing large capital projects in the SCE facility portfolio. Camp Edison includes operating and maintaining the campground facility and infrastructure. Forestry management operations include activities such as vegetation management, timber harvesting (thinning), wildfire prevention, reforestation and rehabilitation, protection of natural resources. Acquire/Dispose of Land Rights manages and coordinates requests for third party use of SCE land and land rights, including those rights associated with the relocation and removal of SCE facilities.				
Fire Science and Advanced Modeling	Fire Science and Advanced Modeling - includes cost for gathering and integration of science and technology to support wildfire mitigation across the SCE service territory. The sub-activities are: Advanced Modeling Computer Hardware, Fuel Sampling Program, Remote Sensing Satellite, etc.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE04V5Pt2 pp. 59 – 70 / WPSCE-Tr.4-02 Track 4 Activity Forecast Request	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Grid Mod Cybersecurity	Expenses incurred in providing Cybersecurity capabilities for the Grid Mod program.	SCE-04 Vol: 3	WPSCE04V3 pp. 116 - 122	Cyber Attack	Grid Modernization Cybersecurity
Organizational Support	This activity includes the labor and contract costs associated with change management support for EOI, PSPS, and other wildfire management activities.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE04V05APt01 pp. 351 – 359/ N/A	N/A	N/A
Physical Security	Security Technology, Operations and Maintenance includes two sub-activities: (1) Project Management Office and (2) Break-fix and Preventive Maintenance. The Project Management Office (PMO) implements standards for management of physical security projects and tracks and prioritizes physical security projects from initiation through completion. Break-fix and preventive maintenance activities include monitoring and repairing all Physical Access Control Systems (PACS) for both NERC and Non-NERC sites. Beyond PACS, there are four major types of security systems and equipment in use at SCE: access control, intrusion detection, perimeter protection, and video surveillance systems. The Workforce Protection and Insider Threat program includes: (1) security officer services, both at office buildings and in the	SCE-04 Vol: 4	WPSCE04V4 pp. 25 - 36	Physical Security	Asset Protection, Insider Threat Program Enhancement - Information Analysis – Base

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	field, including emergency backup of security officers and on-demand services, (2) centralized alarm monitoring and call/dispatch via the Edison Security Operations Center, (3) badging office, (4) background investigations, (5) Insider Threat program, (6) governance and compliance of security programs, and (7) administrative and general functions.				
Planning, Continuity and Governance	Costs incurred to develop and maintain emergency and contingency plans, maintain continuity of operations, and governance over compliance programs related to emergency management, response and recovery.	SCE-04 Vol: 1	WPSCE04V1 pp. 1 - 7	N/A	N/A
PSPS Customer Support	Technology investments to improve the PSPS programs and protocols.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE04V05A pp. 2 – 18 / Workpapers SCE-Tr.4-02	Wildfire	PSPS Protocol and Support Functions
PSPS Execution	PSPS Execution includes costs incurred in maintaining the capability of monitoring conditions for the activation of a planned outage on circuits with an elevated risk of wildfire, along with certain costs incurred in activation and deactivation of these planned outages.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC	WPSCE04V05A pp. 29 – 54 / Workpapers SCE-Tr.4-02	Wildfire	PSPS Protocol and Support Functions

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
		Track 4 Activity			
Public Safety	Includes all costs associated with salaries, expenses, and consultant services of personnel engaged of Public Safety activities.	SCE-06 Vol: 4	WPSCE06V4 pp. 61 - 67	N/A	N/A
Safety Activities - Transmission & Distribution	The cost of labor, materials used, and expenses incurred to develop and deliver safety programs to distribution and transmission personnel. Also includes the seat-time (labor costs) for employees to attend safety events and trainings and non-labor costs related to event attendance such as transportation expenses, meals, travel, lodging, and incidental expenses, as well as division overhead.	SCE-06 Vol: 4	WPSCE06V4 pp. 75 - 81	Employee, Contractor and Public Safety	Safety Controls
Safety Culture Transformation	Includes all costs associated with salaries, expenses, and consultant services of personnel engaged of Safety Culture Transformation activities. Costs relating with seat-time for employees to attend Safety Culture training sessions were excluded from this activity.	SCE-06 Vol: 4	WPSCE06V4 pp. 68 - 74	Employee, Contractor and Public Safety	Safety Culture Transformation
Software Maintenance and Replacement	The Software Maintenance and Replacement O&M work activity includes SCE labor and non-labor costs required to maintain SCE's operating software assets through on-premise license, cloud, subscription, and maintenance agreements. Operating Software includes operating systems, business intelligence systems, database management systems, cross-system integration tools, IT monitoring tools and end-user productivity and	SCE-06 Vol: 1 Pt. 2	WPSCE06V01Pt01A pp. 34 - 40	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	collaboration software which enable business applications to take advantage of the underlying hardware features and functions.				
Technology Delivery	This activity includes SCE labor and non-labor to plan and implement capital software projects. It also includes costs for project management, post go-live stabilization, and change management expenses. Lastly, the activity includes O&M software project costs that are expensed (typically less than $250,000).	SCE-06 Vol: 1 Pt. 2	WPSCE06V01Pt01A pp. 9 - 21	N/A	N/A
Technology Infrastructure Maintenance and Replacement	The Technology Infrastructure Maintenance and Replacement activity provides support of business applications and services for SCE's: (1) data center infrastructure, (2) end user computing maintenance, and (3) technology adoption. Support for SCE's data centers involves procuring, installing, and maintenance of all enterprise data center hardware infrastructure. End user computing maintenance covers the performance management of SCE's Service Desk that resolves approximately 204,000 service tickets per year as well as management of SCE's smart phone plans, tablet cellular data, air cards, printers, plotters, laptops and desktops, and AV for teleconference rooms across the Company. technology adoption handles retirement of computer, storage, network, and operating software assets and the replacement of these assets with hardware and operating software that may be more	SCE-06 Vol: 1 Pt. 2	WPSCE06V01Pt01A pp. 34 - 40	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	operationally efficient with improved price performance to leverage new technologies such as the cloud.				
Telecommunication Storm Response O&M	Includes the costs to patrol for and repair storm related damages and toxic waste disposal for Telecommunication lines and facilities. Storm damage can be the result of severe weather conditions such as rain, wind, lightning, and by natural disasters such as earthquakes and forest fires. The storm costs included in this account are: switching, locating and isolating trouble on the system, removal of debris from lines or equipment, and securing damaged sites until repairs have been completed. Includes related costs such as: transportation expenses; meals, traveling, lodging, and incidental expenses; division overhead; and supply and tool expense.	SCE-04 Vol: 2	WPSCE04V2 pp. 37 - 43	N/A	N/A
Training and Development	This activity is composed of training and development programs for employees such as job skills, compliance, leadership, and safety training. Costs within these activities include labor to develop, deliver, and attend (seat-time) the training as well as expenses for materials, transportation, meals, travel, lodging, incidentals and division overheads.	SCE-06 Vol: 3 Pt. 1	WPSCE06V3Pt1BkB, pp. 127-132	Physical Security, Employee, Contractor and Public Safety	Asset Protection, Insider Threat Program Enhancement - Information Analysis – Base and Safety Culture Transformation
Training Delivery and Development - Transmission and Distribution	The cost of labor, materials used, and expenses incurred to develop and deliver training to transmission personnel.	SCE-06 Vol: 3 Pt. 1	WPSCE06V3Pt1BkB pp. 127 - 135	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Training Seat-Time - Transmission and Distribution	This activity is composed of the seat-time (labor costs) for employees to attend training and informational meetings for distribution employees. Non-labor costs include related costs such as transportation expenses, meals, travel, lodging, and incidental expenses, as well as division overhead.	SCE-06 Vol: 3: Pt. 1	WPSCE06V3Pt1BkB pp. 136 - 144	N/A	N/A
Training, Drills and Exercises	Costs incurred for the training of employee, conducting drills and exercises, for the Company's response capabilities for various hazards, such as earthquakes, wildfires, and cyber-attacks.	SCE-04 Vol: 2	WPSCE04V2 pp. 1 - 10	Building Safety	Emergency Management and Facility Emergency Management Program
Transmission Pole Loading Work Order Related Expense	Expenses incurred for work that must be done when capital additions or replacements are being performed. These activities do not qualify for capitalization according to standard accounting guidelines.	SCE-02 Vol: 2	WPSCE02V02A	N/A	N/A
Transmission/Substation Storm Response O&M	Includes the costs to patrol for and repair storm related damages and toxic waste disposal for Transmission lines and substation facilities. Storm damage can be the result of severe weather conditions such as rain, wind, lightning, and by natural disasters such as earthquakes and forest fires. The storm costs included in this account are: switching, locating and isolating trouble on the system, removal of debris from lines or equipment, and securing damaged sites until repairs have been completed. Includes related costs such as: transportation expenses; meals, traveling, lodging, and incidental expenses;	SCE-04 Vol: 2	WPSCE04V2 pp. 30 - 26	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	division overhead; and supply and tool expense.				

2. GRC Activities Dollar and Unit Variance Calculations

Table XI-40 and Table XI-41 below provide the authorized and recorded costs, and variance and percentage change values for each Other expense activity in terms of dollars and units. These tables also indicate whether a variance explanation was triggered based on the established thresholds for each GRC activity.

Table XI-40
Other Expense Category Activity Dollar Variance Calculations

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Roll-up	Project Life (years)	Project Year	2021	2022	2023	2024	Auth. Imputed Cost to Date ($)	2021	2022	2023	2024	Actual Cost to Date ($)	2021	2022	2023	2024	Cost Diff to Date ($)	2021	2022	2023	2024	% Cost Diff to Date (%)	$ Var. Expl. Required
All Hazards Assessment, Mitigation and Analytics	Building Safety	Seismic Building Safety Program	No	On-Going	Annual	$2,749	$2,800	$2,973	$3,077	$11,599	$1,634	$1,298	$862	$290	$4,083	($1,115)	($1,502)	**($2,111)**	**($2,788)**	($7,516)	-41%	-54%	-71%	-91%	-65%	No
All Hazards Assessment, Mitigation and Analytics	Climate Change	Climate Adaptation & Severe Weather	No	On-Going	Annual	$882	$898	$954	$987	$3,722	$766	$940	$1,080	$273	$3,059	($116)	$42	**$126**	**($714)**	($663)	-13%	5%	13%	-72%	-18%	No
All Hazards Assessment, Mitigation and Analytics	N/A	Non-RAMP	No	On-Going	Annual	$562	$572	$609	$630	$2,374	$4,067	$1,276	$895	$1,123	$7,361	$3,505	$703	**$286**	**$493**	$4,987	624%	123%	47%	78%	210%	No
All Hazards Assessment, Mitigation and Analytics	N/A	Total	Yes	On-Going	Annual	$4,194	$4,272	$4,536	$4,695	$17,697	$6,467	$3,514	$2,836	$1,686	$14,503	$2,273	($758)	**($1,699)**	**($3,009)**	($3,193)	54%	-18%	-37%	-64%	-18%	No
Cyber Software License and Maintenance	Cyber Attack	Data Protection	No	On-Going	Annual	$180	$183	$194	$201	$758	$117	$397	$814	$1,121	$2,449	($63)	$214	**$620**	**$920**	$1,691	-35%	117%	319%	458%	223%	No
Cyber Software License and Maintenance	Cyber Attack	Grid Modernization Cybersecurity	No	On-Going	Annual	$2,100	$2,136	$2,266	$2,342	$8,844	$1,363	$488	$814	$1,121	$3,787	($737)	($1,647)	**($1,452)**	**($1,222)**	($5,058)	-35%	-77%	-64%	-52%	-57%	No
Cyber Software License and Maintenance	Cyber Attack	Interior Protection	No	On-Going	Annual	$1,089	$1,108	$1,175	$1,215	$4,586	$707	$488	$814	$1,121	$3,131	($382)	($619)	**($361)**	**($94)**	($1,456)	-35%	-56%	-31%	-8%	-32%	No
Cyber Software License and Maintenance	Cyber Attack	Non-RAMP	No	On-Going	Annual	$0	$0	$0	$0	$0	$528	$0	$0	$0	$528	$528	$0	**$0**	**$0**	$528						No
Cyber Software License and Maintenance	Cyber Attack	Perimeter Defense	No	On-Going	Annual	$2,496	$2,538	$2,693	$2,784	$10,512	$1,620	$877	$1,425	$1,962	$5,884	($876)	($1,661)	**($1,268)**	**($823)**	($4,628)	-35%	-65%	-47%	-30%	-44%	No
Cyber Software License and Maintenance	Cyber Attack	SCADA Cybersecurity	No	On-Going	Annual	$139	$141	$150	$155	$585	$90	$99	$204	$280	$673	($49)	($42)	**$54**	**$125**	$88	-35%	-30%	36%	81%	15%	No
Cyber Software License and Maintenance	N/A	Total	Yes	On-Going	Annual	$6,004	$6,106	$6,479	$6,697	$25,286	$4,425	$2,351	$4,071	$5,604	$16,451	($1,579)	($3,756)	**($2,407)**	**($1,093)**	($8,834)	-26%	-62%	-37%	-16%	-35%	No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Data Protection	No	On-Going	Annual	$3,716	$3,815	$4,063	$4,234	$15,829	$1,908	$3,213	$3,806	$3,808	$12,735	($1,808)	($602)	**($257)**	**($426)**	($3,094)	-49%	-16%	-6%	-10%	-20%	No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Grid Modernization Cybersecurity	No	On-Going	Annual	$4,497	$4,617	$4,917	$5,124	$19,156	$2,396	$3,240	$3,754	$3,781	$13,171	($2,101)	($1,377)	**($1,163)**	**($1,343)**	($5,985)	-47%	-30%	-24%	-26%	-31%	No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Interior Protection	No	On-Going	Annual	$3,839	$3,942	$4,198	$4,374	$16,353	$1,955	$3,090	$3,654	$3,636	$12,335	($1,884)	($851)	**($544)**	**($739)**	($4,018)	-49%	-22%	-13%	-17%	-25%	No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Non-RAMP	No	On-Going	Annual	$2,859	$2,936	$3,126	$3,258	$12,178	$7,003	$2,594	$158	$3	$9,758	$4,144	($342)	**($2,968)**	**($3,254)**	($2,420)	145%	-12%	-95%	-100%	-20%	No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Perimeter Defense	No	On-Going	Annual	$4,332	$4,448	$4,737	$4,936	$18,453	$3,511	$6,623	$7,159	$6,714	$24,007	($821)	$2,175	**$2,422**	**$1,778**	$5,554	-19%	49%	51%	36%	30%	No
Cybersecurity Delivery and IT Compliance	Cyber Attack	SCADA Cybersecurity	No	On-Going	Annual	$3,370	$3,460	$3,685	$3,840	$14,355	$1,751	$1,173	$1,450	$1,362	$5,736	($1,619)	($2,287)	**($2,235)**	**($2,478)**	($8,619)	-48%	-66%	-61%	-65%	-60%	No
Cybersecurity Delivery and IT Compliance	N/A	Total	Yes	On-Going	Annual	$22,613	$23,218	$24,726	$25,767	$96,324	$18,523	$19,933	$19,981	$19,304	$77,741	($4,090)	($3,285)	**($4,745)**	**($6,463)**	($18,583)	-18%	-14%	-19%	-25%	-19%	**Yes**
Develop and Manage Policy and Initiatives	N/A	N/A	Yes	On-Going	Annual	$16,730	$17,233	$18,385	$19,201	$71,548	$14,469	$16,021	$17,255	$16,002	$63,746	($2,261)	($1,212)	**($1,131)**	**($3,198)**	($7,802)	-14%	-7%	-6%	-17%	-11%	No
Distribution Storm Response O&M	N/A	N/A	Yes	On-Going	Annual	$14,424	$14,917	$16,469	$16,910	$62,720	$12,580	$14,936	$15,395	$15,515	$58,426	($1,844)	$19	**($1,074)**	**($1,395)**	($4,293)	-13%	0%	-7%	-8%	-7%	No
Education, Safety and Operations	N/A	N/A	Yes	On-Going	Annual	$7,736	$7,958	$8,481	$8,852	$33,028	$5,898	$6,193	$6,438	$6,063	$24,591	($1,838)	($1,765)	**($2,044)**	**($2,790)**	($8,437)	-24%	-22%	-24%	-32%	-26%	No
Emergency Preparedness and Response	Climate Change	Emergency Management	No	On-Going	Annual	$2,068	$2,124	$2,262	$2,358	$8,811	$2,367	$1,657	$2,706	$2,954	$9,684	$299	($466)	**$444**	**$596**	$873	14%	-22%	20%	25%	10%	No
Emergency Preparedness and Response	Climate Change	Fire Management	No	On-Going	Annual	$613	$630	$671	$700	$2,614	$728	$1,400	$188	$773	$3,089	$115	$770	**($484)**	**$73**	$475	19%	122%	-72%	11%	18%	No

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Roll-up	Project Life (years)	Project Year	2021	2022	2023	2024	Auth. Imputed Cost to Date ($)	2021	2022	2023	2024	Actual Cost to Date ($)	2021	2022	2023	2024	Cost Diff to Date ($)	2021	2022	2023	2024	% Cost Diff to Date (%)	$ Var. Expl. Required
Emergency Preparedness and Response	N/A	Total	Yes	On-Going	Annual	$2,862	$2,940	$3,131	$3,264	$12,196	$3,095	$3,058	$2,894	$3,727	$12,773	$233	$118	**($237)**	**$463**	$577	8%	4%	-8%	14%	5%	No
Employee and Contractor Safety	Employee, Contractor and Public Safety	Contractor Safety Program	No	On-Going	Annual	$200	$205	$218	$227	$850	$40	$8	$50	$51	$149	($160)	($197)	**($168)**	**($176)**	($702)	-80%	-96%	-77%	-78%	-83%	No
Employee and Contractor Safety	Employee, Contractor and Public Safety	Industrial Ergonomics	No	On-Going	Annual	$15	$15	$16	$17	$64	$0	$0	$0	$0	$0	($15)	($15)	**($16)**	**($17)**	($64)	-100%	-100%	-100%	-100%	-100%	No
Employee and Contractor Safety	N/A	Non-RAMP	No	On-Going	Annual	$4,396	$4,506	$4,796	$4,991	$18,690	$14,982	$12,745	$9,674	$6,358	$43,759	$10,586	$8,238	**$4,878**	**$1,367**	$25,069	241%	183%	102%	27%	134%	No
Employee and Contractor Safety	N/A	Total	Yes	On-Going	Annual	$4,611	$4,727	$5,031	$5,235	$19,604	$15,022	$12,745	$9,724	$6,408	$43,898	$10,411	$8,018	**$4,694**	**$1,172**	$24,294	226%	170%	93%	22%	124%	No
Enhanced Situational Awareness	Wildfire	N/A	Yes	On-Going	Annual	$3,786	$3,857	$4,095	$5,078	$16,815	$5,411	$5,534	$8,455	$9,827	$29,228	$1,625	$1,677	**$4,360**	**$4,750**	$12,413	43%	43%	106%	94%	74%	No
Environmental Management and Development	N/A	N/A	Yes	On-Going	Annual	$10,569	$10,865	$11,576	$12,074	$45,084	$13,041	$16,531	$15,243	$15,076	$59,891	$2,472	$5,666	**$3,668**	**$3,001**	$14,806	23%	52%	32%	25%	33%	No
Environmental Programs	N/A	N/A	Yes	On-Going	Annual	$18,358	$19,040	$21,048	$21,586	$80,032	$14,082	$15,163	$15,702	$18,359	$63,307	($4,276)	($3,876)	**($5,346)**	**($3,227)**	($16,725)	-23%	-20%	-25%	-15%	-21%	No
Ethics and Compliance	N/A	N/A	Yes	On-Going	Annual	$15,283	$15,666	$16,673	$17,350	$64,971	$12,829	$12,936	$14,655	$13,771	$54,191	($2,454)	($2,730)	**($2,017)**	**($3,579)**	($10,780)	-16%	-17%	-12%	-21%	-17%	No
External Communications	Contact with Energized Equipment	Public Outreach	No	On-Going	Annual	$6,821	$6,960	$7,394	$7,665	$28,839	$6,051	$5,558	$5,583	$5,466	$22,658	($770)	($1,402)	**($1,810)**	**($2,199)**	($6,181)	-11%	-20%	-24%	-29%	-21%	No
External Communications	N/A	Non-RAMP	No	On-Going	Annual	$5,155	$5,260	$5,588	$5,793	$21,795	$5,513	$5,581	$5,006	$5,653	$21,753	$358	$322	**($582)**	**($140)**	($43)	7%	6%	-10%	-2%	0%	No
External Communications	N/A	Total	Yes	On-Going	Annual	$11,976	$12,220	$12,982	$13,457	$50,635	$11,563	$11,139	$10,589	$10,867	$44,159	($413)	($1,080)	**($2,392)**	**($2,590)**	($6,476)	-3%	-9%	-18%	-19%	-13%	No
Facility and Land Operations	Building Safety	Electrical Inspections	No	On-Going	Annual	$1,628	$1,661	$1,768	$1,818	$6,875	$1,020	$1,481	$1,474	$0	$3,975	($608)	($180)	**($294)**	**($1,818)**	($2,900)	-37%	-11%	-17%	-100%	-42%	No
Facility and Land Operations	Building Safety	Fire Life Safety Portfolio Assessment	No	On-Going	Annual	$179	$183	$194	$200	$756	$12	$17	$17	$0	$46	($167)	($166)	**($177)**	**($200)**	($710)	-93%	-91%	-91%	-100%	-94%	No
Facility and Land Operations	Employee, Contractor and Public Safety	Office Ergonomics - Core Program	No	On-Going	Annual	$50	$51	$54	$56	$211	$0	$0	$0	$0	$0	($50)	($51)	**($54)**	**($56)**	($211)	-100%	-100%	-100%	-100%	-100%	No
Facility and Land Operations	N/A	Non-RAMP	No	On-Going	Annual	$59,815	$61,010	$64,961	$66,811	$252,597	$54,205	$60,850	$60,548	$61,757	$237,360	($5,610)	($161)	**($4,413)**	**($5,053)**	($15,237)	-9%	0%	-7%	-8%	-6%	No
Facility and Land Operations	N/A	Total	Yes	On-Going	Annual	$61,672	$62,904	$66,977	$68,885	$260,439	$55,237	$62,348	$62,038	$61,757	$241,380	($6,435)	($557)	**($4,939)**	**($7,128)**	($19,058)	-10%	-1%	-7%	-10%	-7%	No
Fire Science and Advanced Modeling	N/A	N/A	Yes	On-Going	Annual	$4,135	$4,205	$4,462	$5,156	$17,958	$5,770	$7,477	$6,716	$4,588	$24,551	$1,635	$3,272	**$2,255**	**($569)**	$6,593	40%	78%	51%	-11%	37%	No
Grid Mod Cybersecurity	Cyber Attack	Grid Modernization Cybersecurity	Yes	On-Going	Annual	$652	$665	$706	$732	$2,755	$627	$762	$850	$506	$2,745	($25)	$97	**$143**	**($225)**	($10)	-4%	15%	20%	-31%	0%	No
Organizational Support	N/A	N/A	Yes	On-Going	Annual	$3,484	$3,555	$3,815	$7,407	$18,262	$10,653	$8,181	$3,508	$1,376	$23,717	$7,169	$4,626	**($308)**	**($6,031)**	$5,455	206%	130%	-8%	-81%	30%	**Yes**
Physical Security	Physical Security	Asset Protection and Insider Threat Program Enhancement - Information Analysis - Base	Yes	On-Going	Annual	$24,995	$25,511	$27,106	$28,106	$105,717	$21,826	$21,575	$22,420	$23,371	$89,191	($3,169)	($3,936)	**($4,686)**	**($4,735)**	($16,526)	-13%	-15%	-17%	-17%	-16%	No
Planning, Continuity and Governance	N/A	N/A	Yes	On-Going	Annual	$1,436	$1,480	$1,578	$1,649	$6,143	$838	$842	$937	$779	$3,396	($598)	($637)	**($641)**	**($870)**	($2,746)	-42%	-43%	-41%	-53%	-45%	No
PSPS Customer Support	Wildfire	PSPS Protocol and	Yes	On-Going	Annual	$13,833	$14,286	$15,818	$18,840	$62,777	$33,981	$29,026	$35,506	$28,333	$126,846	$20,148	$14,740	**$19,688**	**$9,494**	$64,069	146%	103%	124%	50%	102%	**Yes**

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Roll -up	Project Life (years)	Project Year	2021	2022	2023	2024	Auth. Imputed Cost to Date ($)	2021	2022	2023	2024	Actual Cost to Date ($)	2021	2022	2023	2024	Cost Diff to Date ($)	2021	2022	2023	2024	% Cost Diff to Date (%)	$ Var. Expl. Required
		Support Functions																								
PSPS Execution	Wildfire	PSPS Protocol and Support Functions	Yes	On-Going	Annual	$14,938	$15,425	$16,633	$40,741	$87,737	$41,677	$35,216	$55,511	$63,369	$195,772	$26,739	$19,790	$38,878	$22,628	$108,035	179%	128%	234%	56%	123%	**Yes**
Public Safety	N/A	N/A	Yes	On-Going	Annual	$655	$674	$718	$750	$2,797	$531	$424	$481	$536	$1,973	($124)	($250)	($237)	($213)	($824)	-19%	-37%	-33%	-28%	-29%	No
Safety Activities - Transmission & Distribution	Employee, Contractor and Public Safety	Safety Controls	No	On-Going	Annual	$2,266	$2,338	$2,533	$2,624	$9,761	$0	$0	$0	$0	$0	($2,266)	($2,338)	($2,533)	($2,624)	($9,761)	-100%	-100%	-100%	-100%	-100%	No
Safety Activities - Transmission & Distribution	N/A	Non-RAMP	No	On-Going	Annual	$15,680	$16,178	$17,525	$18,157	$67,540	$7,700	$10,551	$15,559	$15,545	$49,355	($7,980)	($5,627)	($1,965)	($2,612)	($18,185)	-51%	-35%	-11%	-14%	-27%	No
Safety Activities - Transmission & Distribution	N/A	Total	Yes	On-Going	Annual	$17,946	$18,516	S	$20,781	$57,243	$7,700	$10,551	$15,559	$15,545	$49,355	($10,246)	($7,965)		($5,236)	($23,447)	-57%	-43%		-25%	-41%	**Yes**
Safety Culture Transformation	Employee, Contractor and Public Safety	Safety Culture Transformation	Yes	On-Going	Annual	$2,413	$2,463	$2,617	$2,714	$10,207	$1,800	$2,325	$2,885	$2,584	$9,593	($613)	($138)	$268	($130)	($614)	-25%	-6%	10%	-5%	-6%	No
Software Maintenance and Replacement	N/A	N/A	Yes	On-Going	Annual	$102,261	$104,123	$110,530	$114,377	$431,291	$84,098	$101,807	$105,737	$116,901	$408,544	($18,163)	($2,316)	($4,792)	$2,524	($22,747)	-18%	-2%	-4%	2%	-5%	No
Technology Delivery	N/A	N/A	Yes	On-Going	Annual	$11,920	$12,187	$12,957	$13,455	$50,519	$6,403	$8,265	$8,381	$24,249	$47,298	($5,517)	($3,922)	($4,576)	$10,794	($3,221)	-46%	-32%	-35%	80%	-6%	**Yes**
Technology Infrastructure Maintenance and Replacement	N/A	N/A	Yes	On-Going	Annual	$23,055	$23,660	$25,401	$26,281	$98,398	$20,140	$21,754	$24,193	$22,510	$88,597	($2,915)	($1,907)	($1,208)	($3,771)	($9,801)	-13%	-8%	-5%	-14%	-10%	No
Telecommunication Storm Response O&M	N/A	N/A	Yes	On-Going	Annual	$23	$23	$25	$26	$97	$122	$21	$91	$51	$286	$99	($2)	$66	$25	$189	430%	-8%	267%	97%	194%	No
Training and Development	Employee, Contractor and Public Safety	Safety Culture Transformation	No	On-Going	Annual	$3,956	$4,052	$4,316	$4,484	$16,808	$1,223	$1,551	$2,875	$3,158	$8,807	($2,733)	($2,501)	($1,441)	($1,326)	($8,001)	-69%	-62%	-33%	-30%	-48%	No
Training and Development	N/A	Non-RAMP	No	On-Going	Annual	$16,268	$16,661	$17,749	$18,439	$69,117	$14,274	$15,878	$15,569	$14,790	$60,511	($1,994)	($784)	($2,180)	($3,649)	($8,606)	-12%	-5%	-12%	-20%	-12%	No
Training and Development	N/A	Total	Yes	On-Going	Annual	$20,428	$20,922	$22,287	$23,154	$86,791	$15,509	$17,455	$18,473	$17,948	$69,386	($4,919)	($3,467)	($3,814)	($5,206)	($17,405)	-24%	-17%	-17%	-22%	-20%	**Yes**
Training and Development	Physical Security	Asset Protection	No	On-Going	Annual	$21	$22	$23	$24	$89	$5	$11	$12	$11	$39	($16)	($11)	($11)	($13)	($50)	-76%	-49%	-50%	-53%	-57%	No
Training and Development	Physical Security	Insider Threat Program Enhancement - Information Analysis - Base	No	On-Going	Annual	$183	$187	$200	$207	$778	$7	$16	$17	$17	$58	($176)	($171)	($182)	($191)	($720)	-96%	-91%	-91%	-92%	-93%	No
Training Delivery and Development - Transmission and Distribution	N/A	N/A	Yes	On-Going	Annual	$18,899	$19,501	$21,219	$21,216	$80,836	$14,409	$15,824	$20,428	$20,469	$71,130	($4,490)	($3,677)	($792)	($747)	($9,706)	-24%	-19%	-4%	-4%	-12%	No
Training Seat-Time - Transmission and Distribution	N/A	N/A	Yes	On-Going	Annual	$28,301	$29,186	$31,515	$31,407	$120,409	$18,954	$21,234	$33,335	$27,850	$101,373	($9,347)	($7,952)	$1,820	($3,558)	($19,036)	-33%	-27%	6%	-11%	-16%	No
Training, Drills and Exercises	Building Safety	Emergency Management	No	On-Going	Annual	$2,100	$2,150	$2,286	$2,376	$8,912	$1,199	$1,343	$1,478	$1,202	$5,222	($901)	($807)	($808)	($1,174)	($3,690)	-43%	-38%	-35%	-49%	-41%	No
Training, Drills and Exercises	Building Safety	Facility Emergency Management Program	No	On-Going	Annual	$260	$266	$283	$294	$1,103	$645	$804	$839	$919	$3,208	$385	$538	$556	$625	$2,104	148%	202%	197%	212%	191%	No
Training, Drills and Exercises	N/A	Total	Yes	On-Going	Annual	$2,359	$2,415	$2,568	$2,669	$10,011	$1,844	$2,147	$2,318	$2,121	$8,430	($515)	($268)	($251)	($548)	($1,582)	-22%	-11%	-10%	-21%	-16%	No
Transmission Pole Loading Work Order Related Expense	N/A	N/A	Yes	On-Going	Annual	$278	$286	$315	$319	$1,197	$19	$1,296	$665	$197	$2,176	($259)	$1,010	$350	($122)	$979	-93%	354%	111%	-38%	82%	No
Transmission/Substation Storm Response O&M	N/A	N/A	Yes	On-Going	Annual	$2,092	$2,152	$2,341	$2,402	$8,987	$1,119	$2,813	$3,818	$3,741	$11,490	($973)	$660	$1,477	$1,339	$2,503	-47%	31%	63%	56%	28%	No

Table XI-41
Other Expense Category Activity Unit Variance Calculations

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	**RAMP Risk**	**RAMP Control / Mitigation**	**Unit Description / Rationale for No Work Units**	**2021**	**2022**	**2023**	**2024**	**Imputed Units to Date**	**2021**	**2022**	**2023**	**2024**	**Actual Units to Date**	**2021**	**2022**	**2023**	**2024**	**Unit Diff. to Date**	**2021**	**2022**	**2023**	**2024**	**% Unit Diff. to Date (%)**	**Unit Var. Explan. Triggered?**
All Hazards Assessment, Mitigation and Analytics	Building Safety	Seismic Building Safety Program	Unable to identify a single unit due to multiple activities supporting this activity																					No
All Hazards Assessment, Mitigation and Analytics	Climate Change	Climate Adaptation & Severe Weather																						No
All Hazards Assessment, Mitigation and Analytics	N/A	Non-RAMP																						No
All Hazards Assessment, Mitigation and Analytics	N/A	Total																						No
Cyber Software License and Maintenance	Cyber Attack	Data Protection	Unable to identify a single unit due to multiple activities supporting this activity.																					No
Cyber Software License and Maintenance	Cyber Attack	Grid Modernization Cybersecurity																						No
Cyber Software License and Maintenance	Cyber Attack	Interior Protection																						No
Cyber Software License and Maintenance	Cyber Attack	Non-RAMP																						No
Cyber Software License and Maintenance	Cyber Attack	Perimeter Defense																						No
Cyber Software License and Maintenance	Cyber Attack	SCADA Cybersecurity																						No
Cyber Software License and Maintenance	N/A	Total																						No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Data Protection	Unable to identify a single unit due to multiple activities supporting this activity.																					No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Grid Modernization Cybersecurity																						No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Interior Protection																						No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Non-RAMP																						No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Perimeter Defense																						No
Cybersecurity Delivery and IT Compliance	Cyber Attack	SCADA Cybersecurity																						No
Cybersecurity Delivery and IT Compliance	N/A	Total																						No
Develop and Manage Policy and Initiatives	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Distribution Storm Response O&M	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Education, Safety and Operations	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	**RAMP Risk**	**RAMP Control / Mitigation**	**Unit Description / Rationale for No Work Units**	**2021**	**2022**	**2023**	**2024**	**Imputed Units to Date**	**2021**	**2022**	**2023**	**2024**	**Actual Units to Date**	**2021**	**2022**	**2023**	**2024**	**Unit Diff. to Date**	**2021**	**2022**	**2023**	**2024**	**% Unit Diff. to Date (%)**	**Unit Var. Explan. Triggered?**
Emergency Preparedness and Response	Climate Change	Emergency Management	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Emergency Preparedness and Response	Climate Change	Fire Management																						No
Emergency Preparedness and Response	N/A	Total																						No
Employee and Contractor Safety	Employee, Contractor and Public Safety	Contractor Safety Program	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Employee and Contractor Safety	Employee, Contractor and Public Safety	Industrial Ergonomics																						No
Employee and Contractor Safety	N/A	Non-RAMP																						No
Employee and Contractor Safety	N/A	Total																						No
Enhanced Situational Awareness	Wildfire	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Environmental Management and Development	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Environmental Programs	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Ethics and Compliance	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement																					No
External Communications	Contact with Energized Equipment	Public Outreach	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
External Communications	N/A	Non-RAMP																						No
External Communications	N/A	Total																						No
Facility and Land Operations	Building Safety	Electrical Inspections	The variety of projects in this category makes it infeasible to identify a single unit of measurement.																					No
Facility and Land Operations	Building Safety	Fire Life Safety Portfolio Assessment																						No
Facility and Land Operations	Employee, Contractor and Public Safety	Office Ergonomics - Core Program																						No
Facility and Land Operations	N/A	Non-RAMP																						No
Facility and Land Operations	N/A	Total																						No
Fire Science and Advanced Modeling	N/A	N/A	The variety of projects in this category makes it infeasible to identify a single unit of measurement.																					No
Grid Mod Cybersecurity	Cyber Attack	Grid Modernization Cybersecurity	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Organizational Support	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Planning, Continuity and Governance	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
PSPS Customer Support	Wildfire	PSPS Protocol and Support Functions	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
PSPS Execution	Wildfire	PSPS Protocol and Support Functions	PSPS Execution is comprised of several sub-activities that are not unit based and will be unable to identify a single unit due to multiple activities in this workpaper.																					No
Public Safety	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	**RAMP Risk**	**RAMP Control / Mitigation**	**Unit Description / Rationale for No Work Units**	**2021**	**2022**	**2023**	**2024**	**Imputed Units to Date**	**2021**	**2022**	**2023**	**2024**	**Actual Units to Date**	**2021**	**2022**	**2023**	**2024**	**Unit Diff. to Date**	**2021**	**2022**	**2023**	**2024**	**% Unit Diff. to Date (%)**	**Unit Var. Explan. Triggered?**
Safety Activities - Transmission & Distribution	Employee, Contractor and Public Safety	Safety Controls	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Safety Activities - Transmission & Distribution	N/A	Non-RAMP																						No
Safety Activities - Transmission & Distribution	N/A	Total																						No
Safety Culture Transformation	Employee, Contractor and Public Safety	Safety Culture Transformation	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Software Maintenance and Replacement	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Technology Delivery	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Technology Infrastructure Maintenance and Replacement	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Telecommunication Storm Response O&M	N/A	N/A	Storm events are driven by weather and other environmental factors outside of SCE's control and that can vary significantly from year to year. Accordingly, the capital forecast for Storm Response is based on a five-year average of recorded expenditures and is not unit based.																					No
Training and Development	Employee, Contractor and Public Safety	Safety Culture Transformation	The variety of non-labor activities in this category makes it infeasible to identify a single unit of measurement.																					No
Training and Development	N/A	Non-RAMP																						No
Training and Development	N/A	Total																						No
Training and Development	Physical Security	Asset Protection																						No
Training and Development	Physical Security	Insider Threat Program Enhancement - Information Analysis - Base																						No
Training Delivery and Development - Transmission and Distribution	N/A	N/A	The variety of non-labor activities in this category makes it infeasible to identify a single unit of measurement. (																					No
Training Seat-Time - Transmission and Distribution	N/A	N/A	The variety of non-labor activities in this category makes it infeasible to identify a single unit of measurement.																					No
Training, Drills and Exercises	Building Safety	Emergency Management	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Training, Drills and Exercises	Building Safety	Facility Emergency Management Program	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No

3. Variance Explanations

Table XI-42 below provides the variance explanations for those GRC activities meeting the established thresholds.

Table XI-42
Other Expense Category Activity Variance Explanations

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Unit**	**Variance Explanation**
Cybersecurity Delivery and IT Compliance	No	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. SCE notes that our 2024 recorded spend is in line with our TY 2025 GRC forecast (which was developed in late 2022) for calendar year 2024.
Organizational Support	No	**Yes**	No	At the time of filing SCE's Track 4 Application, SCE forecasted $4.88M (in 2022$s) for Safety Oversight Support and $2.02M (in 2022$s) for Wildfire Organizational Support. However, after filing SCE decided to in-source the third-party Safety Oversight to capture an annual cost savings of ~$2.1M by 2025. Since SCE is insourcing this work, it is recording to overheads, not O&M expenses, since the work is now applying to all of T&D and not just wildfire work. The 2024 recorded dollars for the GRC Activity Organizational Support do not have the overhead amounts for this work, which is the driver for the variance in underspending. To be clear, SCE is still conducting the Safety Oversight Support work, but it is not recording to O&M as initially forecast when we filed our Track 4 Application in May 2022.
PSPS Customer Support	No	**Yes**	No	SCE's 2024 incremental spending on PSPS Customer Support was driven by new requirements adopted by the Legislature and/or Commission for sub-activities, such as the Disability Disaster & Access Resources (DDAR) program and Access and Functional Needs (AFN) enhancements, after SCE prepared and submitted its 2021 GRC Track 4. Additionally, the software licensing fees associated with the Incident Management Teams Customer Notification activity is another factor for spending over authorized since they were not part of SCE's 2021 recorded spending which was the basis for the Track 4 authorized amount. These licensing fees were not in effect until after SCE filed our Track 4 testimony in May 2022.
PSPS Execution	**Yes**	**Yes**	No	SCE's cost related to aerial suppression contracted resources, known as the Quick Reaction Force (QRF), are included within the GRC activity PSPS Execution for the 2021 GRC period. Similar to 2021 - 2023, SCE spent more than authorized for PSPS Execution primarily due to approximately $36 million in aerial suppression costs in 2024 (approximately $19 million over authorized). These costs were not forecasted or included in SCE's 2021 GRC but are important to SCE's wildfire mitigation efforts. At the time of filing SCE's Track 4 testimony in May 2022 for calendar year 2024, SCE had not yet moved to year-round QRF coverage, and SCE's forecast was based on 2021 recorded amounts for the QRF. This is the cause for the spending over authorized.
Safety Activities - Transmission & Distribution	No	**Yes**	No	The underrun of $5.236 million compared to authorized was caused by the following two reasons: First, the imputed 2024 authorized of $20.781 million was calculated using numbers from the 2021 GRC Application, which was developed in 2019 and did not take into account changes to the way SCE holds its

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Unit**	**Variance Explanation**
				safety meetings in a post COVID-19 environment. In addition, as described in the 2025 GRC for this activity, the Functional Movement System (FMS) Program, which was completed in 2018, also contributed to the underspend in this GRC Activity. Second, SCE employees who participate in activities described in this GRC Activity have been, and will continue to operate, under a hybrid schedule. Under this model, Safety Activities (e.g. Safety Meetings and Stand-Downs, Safety Congress meetings, Safety Forums, etc.) are now occurring both virtually and in-person. Virtual events do not incur as much expense compared to in-person meetings, as a result the recorded spend for this GRC Activity was less than authorized.
Technology Delivery	**Yes**	**Yes**	No	The 2024 variance for the activity Technology Delivery is driven due to a write-off expense associated with cancellation of the Scheduling Re-Platform Project that would have otherwise been recorded as an expenditure under the OU Capitalized Software activity The project was cancelled while still under the design phase as SCE determined in due course that a SAP product that is within the scope of SCE's NextGen program, would meet or exceed the same objectives with a more integrated and simplified architecture that also aligned with SCE's design principles. As a result, SCE cancelled the Scheduling Re-Platform and incurred this corresponding write-off expense in the Technology Delivery GRC activity that was not anticipated within SCE's GRC. As discussed in SCE's NextGen ERP Application testimony (see A.25-03-009), SCE also assumes the forecast expenditure for Scheduling Re-Platform will be approved in SCE's 2025 GRC. To prevent double-recovery, SCE has included an adjustment to reduce the forecast cost of the Scheduling Re-Platform project from SCE's NextGen ERP Program forecast by reflecting it as a credit in SCE's proposed NextGen ERP Balancing Account.
Training and Development	No	**Yes**	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. SCE notes that our 2024 recorded spend is generally in line with our TY 2025 GRC forecast (which was developed in late 2022) for calendar year 2024. The reduction in spending compared to the imputed authorized values is partially related to the shift towards e-learning and transitioning instruction design work in-house, reducing reliance on contractors, while maintaining essential corporate compliance and safety training.

4. Activity Status

Table XI-43 below provides the forecast scope, schedule and cost, status and status completion statement as applicable.

Table XI-43
Other Expense Category Activity Status

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
All Hazards Assessment, Mitigation and Analytics	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Cyber Software License and Maintenance	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Cybersecurity Delivery and IT Compliance	On-Going	Annual	On-Target	On-Target	Under	Proceeding as Planned	The GRC Activity Cybersecurity Delivery and IT Compliance is on-going with no pre-defined end date and is generally proceeding as planned.
Develop and Manage Policy and Initiatives	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Distribution Storm Response O&M	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Education, Safety and Operations	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Emergency Preparedness and Response	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Employee and Contractor Safety	On-Going	Annual	Over	On-Target	Over	Emergent	This GRC Activity is on-going with no pre-defined end date. SCE is spending above authorized driven by essential COVID costs and/or associated requirements from Cal/OSHA, California Department of Public Health, and local requirements, which were not included in GRC authorized. However, the impact of those costs subsided over the GRC cycle.
Enhanced Situational Awareness	On-Going	Annual	Over	On Target	Over	Emergent / Expanded	The GRC Activity is on-going but may not be an indefinite program. SCE is generally proceeding as planned, however SCE incurred incremental spend because of the need for increased weather stations, HD camera deployment, and necessary staffing relative to SCE's estimates in 2019 when the 2021 GRC was prepared. These incremental costs

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							emerged because of lessons learned and experience gained with these sub-activities after the 2021 GRC submission.
Environmental Management and Development	On-Going	Annual	On Target	On Target	On Target	Proceeding as Planned	The Environmental Services Business Planning Element (BPE) includes two on-going GRC activities: Environmental Management & Development and Environmental Programs. On an annual basis SCE may allocate more staff to one of the activities to address the required workload. Overall, the two activities together through the GRC are spending within 2% of authorized.
Environmental Programs	On-Going	Annual	On Target	On Target	On Target	Proceeding as Planned	
Ethics and Compliance	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
External Communications	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Facility and Land Operations	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Fire Science and Advanced Modeling	On-Going	Annual	Over	On Target	Over	Expanded / Emergent	The GRC Activity Fire Science and Advanced Modeling is on-going but may not be an indefinite program. After SCE prepared its 2021 GRC forecast in 2019, it determined it had to expand its modeling and analytics capabilities further than it had originally anticipated. SCE learned, through its experience implementing its wildfire mitigation portfolio, it needed more granular and more accurate weather, fuels, fire spread modeling, and fire potential forecasts to more effectively deploy mitigations, such as detailed asset inspections and PSPS. Accordingly, SCE developed new products, such as the fuels index and fire behavior matrix, and engaged in partnerships with academic institutions.
Grid Mod Cybersecurity	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Organizational Support	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	The GRC Activity Organizational Support is on-going however it may not be an indefinite program

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
							and the sub-activities may vary from year to year. As noted in our variance explanation SCE is proceeding as planned from a work perspective, however some of the work is being charged to overheads and expense.
Physical Security	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Planning, Continuity and Governance	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
PSPS Customer Support	On-Going	Annual	Over	Over	Over	Expanded / Emergent	The GRC Activity PSPS Customer Support is currently ongoing, with no pre-defined end date. However, the scope and sub-activities may change year over year. As noted in our variance explanations, SCE has expanded the work under this activity since filing our TY 2021 GRC application.
PSPS Execution	On-Going	Annual	Over	Over	Over	Expanded / Emergent	The GRC Activity PSPS Execution is currently ongoing, with no pre-defined end date. As noted in our variance explanations, SCE has expanded the work under this activity since filing our TY 2021 GRC application.
Public Safety	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Safety Activities - Transmission & Distribution	On-Going	Annual	Under	Under	Under	Proceeding as Planned	The GRC Activity Safety Activities - T&D is an on-going activity with no predefined end date. SCE is generally proceeding as planned; however, as noted in previous variance explanations, COVID did impact some of the work in this activity. However, that impact has subsided and as noted in our variance explanation, SCE is monitoring the balance between in person and virtual meetings.
Safety Culture Transformation	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Software Maintenance and Replacement	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Technology Delivery	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	The GRC Activity Technology Delivery is on-going with no predefined end date. The activity captures primarily labor for the teams implementing capital software projects as well as O&M for capital project implementations both of which are proceeding as planned within the 4 year GRC cycle.
Technology Infrastructure Maintenance and Replacement	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	The GRC Activity Technology Infrastructure is an ongoing GRC activity with no pre-defined end date, however the underlying work may vary from year to year.
Telecommunication Storm Response O&M	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned. Storm events are driven by weather and other environmental factors outside of SCE's control and that can vary significantly from year to year. Accordingly, the capital forecast for Storm Response is based on a five-year average and SCE is currently experiencing costs above that average but the overall work is proceeding as planned
Training and Development	On-Going	Annual	On-Target	On-Target	Under	Proceeding as Planned	The GRC Activity Training and Development is on-going with no pre-defined end date. SCE is generally proceeding as planned
Training Delivery and Development - Transmission and Distribution	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Training Seat-Time - Transmission and Distribution	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Training, Drills and Exercises	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.
Transmission Pole Loading Work Order Related Expense	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Transmission/Substation Storm Response O&M	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date and is generally proceeding as planned.

B. Capital Expenditure Programs

1. GRC Activity and Unit Description Table

For the Other capital activities that are RSAR-eligible, Table XI-44 below provides the 2021 GRC testimony citation and activity description and indicates whether there are any RAMP controls or mitigations associated with that activity.

Table XI-44
Other Capital Expenditure Category Activity Description

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Air Operations	Aircraft Operations includes capital supporting aircraft components, overhauls, tools and helicopter lease buyouts. Aircraft plays a critical role in SCE's system reliability by gathering critical information about electric infrastructure situated in locations that are remote and present significant challenges for access by traditional means. Their use also mitigates safety risks to workers and damages to vehicles and equipment that would otherwise be employed to inspect infrastructure at such locations.	SCE-06 Vol: 5	WPSCE06V5BKC pp. 10 - 17	N/A	N/A
All Hazards Assessment, Mitigation and Analytics	All Hazards, Assessment, Mitigation & Analytics includes costs to assess and mitigate hazards such as seismic events, climate change, severe weather and other hazards.	SCE-04 Vol: 1	WPSCE04V1 pp. 21 - 40	Building Safety	Seismic Building Safety Program
Asset Reliability Risk Analytics	Asset Reliability Risk Analytics includes costs for predicting wildfire risk of an asset in order to prioritize work repairs and replacements to minimize wildfire ignitions.	SCE-04 Vol: 5	N/A - SCE did not request any expenditures in 2021	N/A	N/A
Climate Adaptation and Severe Weather	SCE's Climate Adaptation and Severe Weather Program involves a cross functional team coordinated by the Business Resiliency department to facilitate and develop a consistent approach across the company to analyze climate hazards, identify and implement adaptive measures. Program activities also include analyzing and assessing climate change impacts and related climate science and data to develop a foundational	SCE-04 Vol: 1	WPSCE04V1 pp. 41 - 42	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	understanding of those impacts and how to address those impacts.				
Communications	SCE's new Communications System is a mission-critical component of the Grid Modernization Program. It provides the essential capability to communicate cyber-securely and in real-time between grid devices (including DERs), distribution substations, and SCE's operations control centers. This communications capability is a direct enabler for various grid management functions, including real-time situational awareness, analyzing and resolving grid reliability issues, and integrating and controlling DERs. SCE's new communications system will also enable secure integration with DER aggregators and other 3rd parties, which will support the use of DERs to provide reliability services to the distribution system. The Communications Program includes four components: (1) FAN: The new wireless radio network that will replace SCE's aging NetComm system. (2) Distribution System Efficiency Enhancement Program (DSEEP): Support of SCE's NetComm system to ensure it supports SCE's communications needs until the new FAN is fully deployed, (3) CSP: The computing platform that enables secure communication between the operations control centers, substation equipment, and distribution circuit devices and (4) WAN: The fiber optic cable that provides the crucial communications link between the FAN, CSP, substations and SCE's operations control centers.	SCE-02 Vol: 4 Pt. 1	WPSCE02V4P1ChIIBkA pp. 145 -160	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Communications Equipment	Communication Equipment includes emergency satellite phone systems at all SCE-owned and contracted generation station locations in its portfolio. Integration of these emergency phone systems allows SCE to contact personnel at critical generation resources facilitating a quick response to emergencies. Specialized communication data links are installed at every generation resource to meet contractual obligations and CAISO telemetry requirements.	SCE-05 Vol: 2	WPSCE05V2, pp. 7-8	N/A	N/A
CRE Project Management	CRE Project Management includes large capital projects in the SCE facility portfolio including infrastructure upgrades, facility repurpose, and substation reliability upgrades.	SCE-06 Vol: 5	WPSCE06V5BKA, pp. 235 - 241	Employee Safety	Office Ergonomics (CORE Program)
Cybersecurity Delivery and IT Compliance	This activity includes expenditures associated with delivering cybersecurity services that consists of multiple layers of protection and proactive vulnerability testing to prevent unauthorized access and control of SCE systems, as well as monitoring compliance with key cybersecurity related regulations. This activity also includes expenditures related to SCE's ongoing cybersecurity five capital programs: (1) Perimeter Defense (2) Interior Defense (3) Data Protection (4) SCADA Cybersecurity (5) NERC CIP Compliance.	SCE-04 Vol: 3	WPSCE04V3 pp. 86 - 96	Cyber Attack	Data Protection, Interior Protection, Perimeter Defense and SCADA Cybersecurity
Enhanced Situational Awareness	This activity includes costs associated with the Situational Awareness Center, primarily to improve SCE's ability to monitor weather and forest situations by deploying new weather stations and high definition cameras.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE04V5Pt2 pp. 71 – 77 / WPSCE-Tr.4-02 Track 4 Activity Forecast Request	Wildfire / Climate Change	Situational Awareness

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Environmental Programs	This activity involves securing and demolishing wells no longer in use in accordance with applicable environmental, safety, regulatory, and engineering standards. SCE developed the Well Decommission Program in 2013 to address the environmental, health and safety requirements for the safety of the public and protection of the environment. It also includes programmatic permits.	SCE-06 Vol: 4	WPSCE06V4 pp. 17 - 22	N/A	N/A
Facility Asset Management	The Facility Capital Management Program includes expenditures for periodic updates to building systems that are either past their useful life (e.g., HVAC, roof), or modifications due to regulatory or compliance requirements (e.g. fire systems).	SCE-06 Vol: 5	WPSCE06V5BkB, pp. 179 - 214	Building Safety	Fire Life Safety Portfolio Assessment, Electrical Inspections
Fire Science and Advanced Modeling	Fire Science and Advanced Modeling includes costs for gathering and the integration of science and technology to support wildfire mitigation across the SCE service territory. The sub-activities are: Advanced Modeling Computer Hardware, Fuel Sampling Program, Remote Sensing Satellite, etc.	SCE-04 Vol: 5 / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	WPSCE04V5Pt2 pp. 93 - 101 / WPSCE-Tr.4-02 Track 4 Activity Forecast Request	N/A	N/A
Fleet Asset Management	Fleet Asset Management (FAM) includes the planning and strategy of vehicle replacements, dispositions and additions, and the design and delivery of SCE fleet vehicle assets, fleet telematics administration, and vehicle rentals. FAM covers both long- and short-term planning for the fleet and evaluates the impact of financial, design and regulatory requirements to support SCE's fleet needs accordingly. This includes annual vehicle replacements and additions planned through real-time evaluation of organizational	SCE-06 Vol: 5	WPSCE06V5BKC pp. 20 -22	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	requirements. These efforts also manage emerging vehicle resource needs and disposal of vehicles when they have reached the end of useful life or are rendered obsolete by regulation. The FAM team also includes several technical and engineering functions. This unit creates, maintains, and updates vehicle specifications, incorporates work method requirements, prescribes safety standards, fleet electrification options, and fuel efficiency and emissions goals, and addresses regulatory compliance requirements in vehicle designs. The team also analyzes product failures and ways to mitigate such failures, and works with vehicle manufacturers to deliver useful and dependable products and solutions to SCE.				
Fleet Operations and Maintenance	Fleet Operations and Maintenance (FOM) performs maintenance, repairs, and fueling tasks to uphold the safety and dependability of SCE's vehicles and equipment and comply with applicable regulations. FOM manages SCE's 41 vehicle maintenance facilities supporting approximately 6,100 vehicles and equipment. FOM also includes the Crane Operations unit, which plays an integral role in constructing and maintaining SCE's infrastructure. Crane Operations provides 24-hour support for SCE crews throughout our 50,000 square mile service territory. This is accomplished with five SCE-owned cranes and a network of external crane vendors to serve the territory. FOM operates under a "fit to need" model, which optimizes the types and capabilities of cranes owned by SCE for work assignment to maximize SCE crane utilization and	SCE-06 Vol: 5	WPSCE06V5BKC pp. 23 - 24	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	minimize use of typically higher cost external vendors.				
Grid Management System	SCE's Grid Management System (GMS) is an advanced software platform that will integrate multiple systems designed to manage our increasingly dynamic grid. It will replace the legacy DMS, which was deployed in 2010, has exceeded its useful life, and is no longer supported by the vendor. The GMS will also replace the existing OMS to provide an integrated grid management functionality. The Advanced Distribution Management System (ADMS), as one of the GMS systems, will provide combined DMS/OMS functionality.	SCE-02 Vol: 4 Pt. 1	WPSCE02V4P1ChIIBkA pp. 161 - 168	N/A	N/A
Grid Mod Cybersecurity	Cybersecurity programs related to the implementation of the Grid Modernization Program. This includes addressing the comprehensive security and data protection needs of all new infrastructure and application assets being added through the program including the following: Field Area Network (FAN), Common Substation Platform (CSP), Wide Area Network (WAN), Grid Management System (GMS), DRP External Portal (DRPEP), and Grid Interconnection Processing Tool (GIPT). This work addresses the critical need for modern and robust cybersecurity measures and controls by detecting, isolating, fixing or removing, and restoring electric distribution grid systems and devices as quickly and efficiently as possible. The program seeks to accomplish this through a combination of infrastructure, applications, and threat intelligence initiatives.	SCE-04 Vol: 3	WPSCE04V3 pp. 123 - 126	Cyber Attack	Grid Modernization Cybersecurity

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Laboratory Operations	The Grid Technology Laboratories allow SCE to safely evaluate, test, and pilot new and emerging technologies that support SCE in complying with public policies such as modernizing the grid, providing clean energy, enabling customer choice, and integrating distributed resources. The facilities also provide a means to test newer versions of existing technologies to support increased operating capabilities when we are replacing equipment that has reached the end of its lifecycle. SCE maintains and operates test facilities at three locations in southern California: the Westminster Test Facility in Westminster, the Pomona Test Facility in Pomona, and the Equipment Demonstration and Evaluation Facility (EDEF) located in Westminster.	SCE-02 Vol: 4 Pt. 1	WPSCE02V4P1ChIII-IVBkB pp. 8 - 29	N/A	N/A
Oil Containment Diversion System	The goal of this program is to prevent oil from reaching navigable waters and adjoining shorelines, and to contain discharges of oil. Maintaining/repairing these containment/security structures is the responsibility of the site manager.	SCE-02 Vol: 3	WPSCE02V3 – pp. 246 - 247	N/A	N/A
PSPS Customer Support	Technology investments to improve the PSPS programs and protocols.	N/A / SCE-02: Direct Testimony in Support of GRC Track 4 Activity	SCE did not request any capital associated with this activity in the TY 2021 GRC./ WPSCE-Tr.4-02 Track 4 Activity Forecast Request	Wildfire	PSPS Protocol and Support Functions
Software Maintenance and Replacement	The Software Maintenance and Replacement work activity maintains SCE's operating software assets through on-premise license, cloud, subscription, and maintenance agreements. Operating Software includes operating systems, business intelligence systems, database management systems, cross-	SCE-06 Vol: 1 Pt. 1	WPSCE06V01Pt01A pp. 43 - 47, 68 - 74	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
	system integration tools, IT monitoring tools and end-user productivity and collaboration software which enable business applications to take advantage of the underlying hardware features and functions.				
Substation Switchrack Rebuild	This capital activity relates to rebuilding existing substation racks based on conditions found in the field, as well as through various analyses including structural and seismic analysis. A substation switchrack is the skeletal/structural system used to support substation assets such as circuit breakers, disconnects, and conductors.	SCE-02 Vol: 3	WPSCE02V3 pp. 171 - 173	N/A	N/A
Technology Infrastructure Maintenance and Replacement	The Technology Infrastructure Maintenance and Replacement activity includes expenditure for: (1) data center infrastructure, (2) end user computing maintenance, and (3) technology adoption. Support for SCE's data centers involves procuring, installing, and maintenance of all enterprise data center hardware infrastructure. End user computing maintenance covers the performance management of SCE's Service Desk that resolves approximately 204,000 service tickets per year as well as management of SCE's smart phone plans, tablet cellular data, air cards, printers, plotters, laptops and desktops, and AV for teleconference rooms across the Company. Technology adoption relates to retirement of computer, storage, network, and operating software assets and the replacement of these assets with hardware and operating software that may be more operationally efficient with improved price performance to leverage new technologies such as the cloud.	SCE-06 Vol: 1 Pt. 1	WPSCE06V01Pt01A pp. 82 - 88, 92 - 105, 125 - 127	N/A	N/A

A	B	C	D	G	H
GRC Activity	**GRC 2021 Activity Description**	**GRC Testimony Location**	**GRC Workpaper Reference**	**RAMP Risk**	**RAMP Control/Mitigation**
Technology Solutions	Costs incurred for capitalized software solutions in support of OU work efforts at SCE.	SCE-06 Vol: 1 Pt. 2	WPSCE06V01Pt02A pp. 10 - 228	Physical Security	Non-Electric Facilities/Protection of Major Business Functions, Protection of Generation Capabilities

2. GRC Activities Variance Calculations

Table XI-45 and Table XI-46 below provide the authorized, recorded, variance and percentage change values for each Other expenditure category activity in terms of dollars and units. These tables also indicate whether a variance explanation was triggered based on the established thresholds for each GRC activity.

Table XI-45
Other Capital Expenditure Category Activity Dollar Variance Calculations

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	**RAMP Risk**	**RAMP Control / Mitigation**	**Roll-up**	**Project Life (years)**	**Project Year**	**2021**	**2022**	**2023**	**2024**	**Auth. Imputed Cost to Date ($)**	**2021**	**2022**	**2023**	**2024**	**Actual Cost to Date ($)**	**2021**	**2022**	**2023**	**2024**	**Cost Diff to Date ($)**	**2021**	**2022**	**2023**	**2024**	**% Cost Diff to Date (%)**	**$ Var. Expl. Required**
Air Operations	N/A	N/A	Yes	On-Going	Annual	$798	$798	$798	$810	$3,204	$870	$1,176	$1,760	$6,529	$10,335	$72	$378	$962	$5,719	$7,131	9%	47%	121%	706%	223%	No
All Hazards Assessment, Mitigation and Analytics	Building Safety	Seismic Building Safety Program	No	On-Going	Annual	$5,369	$5,369	$5,369	$5,450	$21,557	$3,761	$10,194	$15,222	$16,684	$45,861	($1,608)	$4,825	$9,853	$11,234	$24,304	-30%	90%	184%	206%	113%	**Yes**
All Hazards Assessment, Mitigation and Analytics	N/A	Non-RAMP	No	On-Going	Annual	$29,267	$29,267	$29,267	$29,706	$117,507	$26,052	$22,178	$22,134	$20,931	$91,295	($3,215)	($7,089)	($7,133)	($8,775)	($26,212)	-11%	-24%	-24%	-30%	-22%	No
All Hazards Assessment, Mitigation and Analytics	N/A	Total	Yes	On-Going	Annual	$34,636	$34,636	$34,636	$35,156	$139,064	$29,813	$32,372	$37,356	$37,614	$137,156	($4,823)	($2,264)	$2,720	$2,459	($1,908)	-14%	-7%	8%	7%	-1%	No
Asset Reliability Risk Analytics	N/A	N/A	Yes	Complete d	Complete d	$0	$0	$0	$0	$0	$1,161	$0	$0	$0	$1,161	$1,161	$0	$0	$0	$1,161						No
Climate Adaptation and Severe Weather	N/A	N/A	Yes	On-Going	Annual	$1,393	$1,393	$1,393	$1,414	$5,592	$72	$571	$1,246	$4,644	$6,533	($1,321)	($821)	($147)	$3,230	$941	-95%	-59%	-11%	229%	17%	No
Communications	N/A	N/A	Yes	On-Going	Annual	$74,107	$74,107	$74,107	$75,219	$297,539	$15,086	$27,643	$62,336	$70,375	$175,440	($59,021)	($46,464)	($11,771)	($4,843)	($122,099)	-80%	-63%	-16%	-6%	-41%	No
Communications Equipment	N/A	N/A	Yes	On-Going	Annual	$1,398	$1,398	$1,398	$1,419	$5,612	$676	$688	$593	$847	$2,803	($722)	($710)	($805)	($572)	($2,809)	-52%	-51%	-58%	-40%	-50%	No
CRE Project Management	Employee Safety	Office Ergonomics (CORE Program)	No	On-Going	Annual	$2,512	$2,512	$2,512	$2,550	$10,086	$1,975	$2,622	$2,936	$2,319	$9,852	($537)	$110	$424	($231)	($233)	-21%	4%	17%	-9%	-2%	No
CRE Project Management	N/A	Non-RAMP	No	On-Going	Annual	$81,563	$81,563	$81,563	$82,786	$327,475	$46,537	$44,850	$73,949	$87,640	$252,976	($35,026)	($36,712)	($7,614)	$4,853	($74,499)	-43%	-45%	-9%	6%	-23%	No
CRE Project Management	N/A	Total	Yes	On-Going	Annual	$84,075	$84,075	$84,075	$85,336	$337,561	$48,512	$47,472	$76,886	$89,959	$262,829	($35,563)	($36,603)	($7,189)	$4,622	($74,732)	-42%	-44%	-9%	5%	-22%	No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Data Protection	No	On-Going	Annual	$8,776	$8,776	$8,776	$8,908	$35,236	$7,153	$10,767	$13,123	$13,748	$44,790	($1,623)	$1,991	$4,347	$4,840	$9,555	-18%	23%	50%	54%	27%	No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Interior Protection	No	On-Going	Annual	$8,302	$8,302	$8,302	$8,427	$33,333	$13,065	$5,172	$11,569	$20,478	$50,283	$4,763	($3,130)	$3,267	$12,052	$16,951	57%	-38%	39%	143%	51%	**Yes**
Cybersecurity Delivery and IT Compliance	Cyber Attack	Non-RAMP	No	On-Going	Annual	$5,610	$5,610	$5,610	$5,694	$22,524	$71	$2,157	$105	$2,202	$4,535	($5,539)	($3,453)	($5,505)	($3,492)	($17,989)	-99%	-62%	-98%	-61%	-80%	No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Perimeter Defense	No	On-Going	Annual	$38,479	$38,479	$38,479	$39,056	$154,493	$31,083	$46,395	$38,867	$26,004	$142,350	($7,396)	$7,916	$388	($13,052)	($12,144)	-19%	21%	1%	-33%	-8%	**Yes**
Cybersecurity Delivery and IT Compliance	Cyber Attack	SCADA Cybersecurity	No	On-Going	Annual	$2,613	$2,613	$2,613	$2,652	$10,491	$2,290	$2,342	$392	$2,744	$7,768	($323)	($271)	($2,221)	$91	($2,723)	-12%	-10%	-85%	3%	-26%	No
Cybersecurity Delivery and IT Compliance	N/A	Total	Yes	On-Going	Annual	$63,779	$63,779	$63,779	$64,736	$256,073	$53,663	$66,833	$64,056	$65,175	$249,727	($10,116)	$3,054	$277	$439	($6,346)	-16%	5%	0%	1%	-2%	No
Enhanced Situational Awareness	Wildfire	Situational Awareness	Yes	On-Going	Annual	$0	$0	$0	$2,023	$2,023	$5,607	$3,514	$2,170	$2,171	$13,462	$5,607	$3,514	$2,170	$147	$11,438				7%	565%	No
Environmental Programs	N/A	N/A	Yes	On-Going	Annual	$1,721	$1,721	$1,721	$1,747	$6,910	$429	$839	$1,185	$1,784	$4,237	($1,292)	($882)	($536)	$37	($2,673)	-75%	-51%	-31%	2%	-39%	No
Facility Asset Management	Building Safety	Electrical Inspections	No	On-Going	Annual	$1,000	$1,000	$1,000	$1,015	$4,015	$1,942	$2,814	$888	$1,629	$7,273	$942	$1,814	($112)	$614	$3,258	94%	181%	-11%	61%	81%	No
Facility Asset Management	Building Safety	Fire Life Safety Portfolio Assessment	No	On-Going	Annual	$1,000	$1,000	$1,000	$1,015	$4,015	$688	$1,549	$1,086	$190	$3,513	($312)	$549	$86	($825)	($502)	-31%	55%	9%	-81%	-13%	No
Facility Asset Management	N/A	Non-RAMP	No	On-Going	Annual	$56,042	$56,042	$56,042	$56,883	$225,009	$65,635	$74,098	$58,636	$49,125	$247,493	$9,593	$18,056	$2,594	($7,758)	$22,485	17%	32%	5%	-14%	10%	No
Facility Asset Management	N/A	Total	Yes	On-Going	Annual	$58,042	$58,042	$58,042	$58,913	$233,038	$68,265	$78,461	$60,610	$50,943	$258,279	$10,223	$20,419	$2,568	($7,969)	$25,241	18%	35%	4%	-14%	11%	No
Fire Science and Advanced Modeling	N/A	N/A	Yes	On-Going	Annual	$1,129	$0	$0	$2,046	$3,175	$2,340	$766	$291	$189	$3,587	$1,211	$766	$291	($1,857)	$411	107%			-91%	13%	No
Fleet Asset Management	N/A	N/A	Yes	On-Going	Annual	$2,190	$2,190	$2,190	$2,223	$8,794	$1,444	$938	$1,958	$1,544	$5,884	($746)	($1,252)	($232)	($679)	($2,910)	-34%	-57%	-11%	-31%	-33%	No
Fleet Operations and Maintenance	N/A	N/A	Yes	On-Going	Annual	$512	$512	$512	$520	$2,056	$510	$521	$525	$575	$2,131	($2)	$9	$13	$56	$76	0%	2%	3%	11%	4%	No
Grid Management System	N/A	N/A	Yes	On-Going	Annual	$43,633	$43,633	$43,633	$44,288	$175,187	$67,704	$50,137	$33,452	$39,129	$190,422	$24,071	$6,504	($10,181)	($5,159)	$15,235	55%	15%	-23%	-12%	9%	No
Grid Mod Cybersecurity	Cyber Attack	Grid Modernization Cybersecurity	Yes	On-Going	Annual	$46,330	$46,330	$46,330	$47,025	$186,015	$35,256	$29,018	$42,190	$42,483	$148,947	($11,074)	($17,312)	($4,141)	($4,542)	($37,068)	-24%	-37%	-9%	-10%	-20%	No

A	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
						Authorized Imputed Annual Cost ($000s)					Actual Annual Cost ($000s)					Annual Cost Difference ($000s)					Annual Percent Cost Difference (%)					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Roll-up	Project Life (years)	Project Year	2021	2022	2023	2024	Auth. Imputed Cost to Date ($)	2021	2022	2023	2024	Actual Cost to Date ($)	2021	2022	2023	2024	Cost Diff to Date ($)	2021	2022	2023	2024	% Cost Diff to Date (%)	$ Var. Expl. Required
Laboratory Operations	N/A	N/A	Yes	On-Going	Annual	$2,227	$2,227	$2,227	$2,260	$8,940	$1,937	$3,778	$10,620	$4,329	$20,664	($290)	$1,551	$8,393	$2,069	$11,724	-13%	70%	377%	92%	131%	No
Oil Containment Diversion System	N/A	N/A	Yes	On-Going	Annual	$403	$403	$403	$410	$1,619	$1,162	$699	$840	$253	$2,955	$759	$296	$437	($156)	$1,335	188%	73%	108%	-38%	82%	No
PSPS Customer Support	Wildfire	PSPS Protocol and Support Functions	Yes	On-Going	Annual	$0	$0	$0		$0	$11,217	$13,266	$8,835	$0	$33,319	$11,217	$13,266	$8,835		$33,319						No
Software Maintenance and Replacement	N/A	N/A	Yes	On-Going	Annual	$62,012	$62,012	$62,012	$62,942	$248,977	$88,583	$55,377	$71,571	$71,191	$286,722	$26,571	($6,635)	$9,559	$8,250	$37,745	43%	-11%	15%	13%	15%	No
Substation Switchrack Rebuild	N/A	N/A	Yes	On-Going	Annual	$80,517	$80,517	$80,517	$81,725	$323,275	$37,216	$61,284	$85,045	$97,702	$281,247	($43,301)	($19,233)	$4,528	$15,977	($42,028)	-54%	-24%	6%	20%	-13%	No
Technology Infrastructure Maintenance and Replacement	N/A	N/A	Yes	On-Going	Annual	$78,139	$78,139	$78,139	$79,311	$313,727	$62,535	$65,743	$89,922	$95,688	$313,888	($15,604)	($12,396)	$11,783	$16,377	$161	-20%	-16%	15%	21%	0%	**Yes**
Technology Solutions	N/A	Non-RAMP	No	On-Going	Annual	$96,783	$96,783	$96,783	$98,235	$388,584	$113,627	$129,288	$127,650	$185,066	$370,565	$16,844	$32,505	$30,867	($98,235)	($18,020)	17%	34%	32%	-100%	-5%	**Yes**
Technology Solutions	N/A	Total	Yes	On-Going	Annual	$100,350	$100,350	$100,350	$101,856	$402,906	$113,627	$129,288	$127,650	$185,066	$555,630	$13,277	$28,938	$27,299	$83,210	$152,724	13%	29%	27%	82%	38%	**Yes**
Technology Solutions	Physical Security	Non-Electric Facilities/ Protection of Major Business Functions	No	Cancelled	Cancelled	$2,543	$2,543	$2,543	$2,581	$10,210	$0	$0	$0	$0	$0	($2,543)	($2,543)	($2,543)	($2,581)	($10,210)	-100%	-100%	-100%	-100%	-100%	No
Technology Solutions	Physical Security	Protection of Generation Capabilities	No	Cancelled	Cancelled	$1,024	$1,024	$1,024	$1,039	$4,111	$0	$0	$0	$0	$0	($1,024)	($1,024)	($1,024)	($1,039)	($4,111)	-100%	-100%	-100%	-100%	-100%	No

Table XI-46
Other Capital Expenditure Category Activity Unit Variance Calculations

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	RAMP Risk	RAMP Control / Mitigation	Unit Description / Rationale for No Work Units	2021	2022	2023	2024	Imputed Units to Date	2021	2022	2023	2024	Actual Units to Date	2021	2022	2023	2024	Unit Diff. to Date	2021	2022	2023	2024	% Unit Diff. to Date (%)	Unit Var. Explan. Triggered?
Air Operations	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
All Hazards Assessment, Mitigation and Analytics	Building Safety	Seismic Building Safety Program	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
All Hazards Assessment, Mitigation and Analytics	N/A	Non-RAMP																						No
All Hazards Assessment, Mitigation and Analytics	N/A	Total																						No
Asset Reliability Risk Analytics	N/A	N/A	N/A - SCE did not request any expenditures in 2021																					No
Climate Adaptation and Severe Weather	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Communications	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Communications Equipment	N/A	N/A	Communication Units	32	32	32	32	128	19	14	20	15	68	-13	-18	-12	-17	-60	-41%	-56%	-38%	-53%	-47%	**Yes**
CRE Project Management	Employee Safety	Office Ergonomics (CORE Program)	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
CRE Project Management	N/A	Non-RAMP																						No
CRE Project Management	N/A	Total																						No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Data Protection	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Interior Protection																						No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Non-RAMP																						No
Cybersecurity Delivery and IT Compliance	Cyber Attack	Perimeter Defense																						No
Cybersecurity Delivery and IT Compliance	Cyber Attack	SCADA Cybersecurity																						No
Cybersecurity Delivery and IT Compliance	N/A	Total																						No
Enhanced Situational Awareness	Wildfire	Situational Awareness	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Environmental Programs	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement																					No
Facility Asset Management	Building Safety	Electrical Inspections	The variety of projects in this category makes it infeasible to identify a single unit of measurement.																					No
Facility Asset Management	Building Safety	Fire Life Safety Portfolio Assessment																						No
Facility Asset Management	N/A	Non-RAMP																						No
Facility Asset Management	N/A	Total																						No
Fire Science and Advanced Modeling	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No

A	G	H	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
				Imputed Units					Actual Units					Annual Unit Difference					Annual Unit Percent Difference					
GRC Activity	**RAMP Risk**	**RAMP Control / Mitigation**	**Unit Description / Rationale for No Work Units**	**2021**	**2022**	**2023**	**2024**	**Imputed Units to Date**	**2021**	**2022**	**2023**	**2024**	**Actual Units to Date**	**2021**	**2022**	**2023**	**2024**	**Unit Diff. to Date**	**2021**	**2022**	**2023**	**2024**	**% Unit Diff. to Date (%)**	**Unit Var. Explan. Triggered?**
Fleet Asset Management	N/A	N/A	This activity comprises multiple different work activities and providing one work unit is not feasible.																					No
Fleet Operations and Maintenance	N/A	N/A	This activity comprises multiple different work activities and providing one work unit is not feasible.																					No
Grid Management System	N/A	N/A	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Grid Mod Cybersecurity	Cyber Attack	Grid Modernization Cybersecurity	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Laboratory Operations	N/A	N/A	This activity comprises multiple different work activities and different laboratories and providing one work unit is not feasible.																					No
Oil Containment Diversion System	N/A	N/A	Forecast is driven by weather and other environmental factors outside of SCE's control and that can vary significantly from year to year. Accordingly, the capital forecast is based on a five-year average of recorded expenditures and is not unit based.																					No
PSPS Customer Support	Wildfire	PSPS Protocol and Support Functions	This activity comprises multiple different work activities and different laboratories and providing one work unit is not feasible.																					No
Software Maintenance and Replacement	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Substation Switchrack Rebuild	N/A	N/A	# of Substation Switchrack Rebuilds	3	3	3	3	12	0	0	3	4	7	-3	-3	0	1	-5	-100%	-100%	0%	33%	-42%	**Yes**
Technology Infrastructure Maintenance and Replacement	N/A	N/A	The variety of work activities in this category makes it infeasible to identify a single unit of measurement.																					No
Technology Solutions	N/A	Non-RAMP	This activity comprises multiple projects or types of projects that vary in size and scope, and therefore providing a single work unit is not feasible.																					No
Technology Solutions	N/A	Total																						No
Technology Solutions	Physical Security	Non-Electric Facilities/Protection of Major Business Functions																						No
Technology Solutions	Physical Security	Protection of Generation Capabilities																						No

3. Variance Explanations

Table XI-47 below provides the variance explanations for those GRC activities meeting the established thresholds.

Table XI-47
Other Capital Expenditure Category Activity Variance Explanations

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Units**	**Variance Explanation**
Communications Equipment	No	No	Yes	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. As a scheduling coordinator, SCE enters into contracts to provide scheduling coordinator services to meet the CAISO and CPUC requirements for investor-owned utility load serving entities. Similar to 2021 – 2023, SCE was the scheduling coordinator for a smaller number of new resources than when SCE filed its TY 2021 GRC application. SCE notes that our 2024 recorded spend is in line with our TY 2025 GRC forecast (which was developed in late 2022) for calendar year 2024.
Substation Switchrack Rebuild	No	No	Yes	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. The variance in 2024 compared to the imputed authorized values is driven by several key factors. First, SCE experienced costs for installation of deferred units from previous years in 2024 (Crown, Cabazon and Dalton). Second, as mentioned in previous years, SCE is seeing increased equipment and labor costs from the time SCE filed our TY 2021 GRC application in August 2019 for certain projects, such as Lighthipe, Gavilan, and Moneta. Lastly, SCE has deferred some installation dates for some projects due to material delays (Arcadia, Pearl, Marion and Graham); these are multi-year projects and SCE is executing the work to minimize impact to the in-service dates.
Technology Infrastructure Maintenance and Replacement	No	Yes	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. SCE believes it is more appropriate to compare the 2024 recorded costs to our TY 2025 forecast for calendar year 2024 (which was developed in late 2022). SCE's recorded spending for the sub-activities End User Computing Maintenance, Services, & Replacement and Technology Adoption were in line with our TY 2025 forecast. The recorded spending was above the imputed authorized value for these sub-activities for the following reasons:

A	AF	AG	BC	BI
	Variance Explanation Trigger			
GRC Activity	**$**	**% / $**	**Units**	**Variance Explanation**
				End User – While spending is in line with the TY 2025 GRC forecast, SCE is experiencing increasing needs in the business for rugged and high-performance devices, as well as enterprise programs and OU needs (such as Corporate Real Estate projects, Windows 11 Refresh projects, and Wildfire Initiatives), which have driven the purchase of thousands of new devices, monitors, and audio-visual equipment. *Technology Adoption* - While spending is in line with the TY 2025 GRC forecast, the higher recorded expenditures compared to the imputed authorized value is due to the need to complete the migration of the Data Center Data platform to the Cloud Data Platform as discussed in our TY 2025 GRC Application. This growth in SCE's Cloud platforms will require enhanced disaster recovery and business resiliency strategies, as well as greater automation, cost management, compliance, and identity governance. SCE did record less than our TY 2025 GRC forecast for the sub-activity Data Center Infrastructure due to the postponement of certain hardware refreshes that SCE still has available vendor support.
Technology Solutions	Yes	Yes	No	As discussed above in Section IV, the 2024 authorized value was not based on SCE's anticipated spend or needs for 2024. Instead, it was derived from SCE's TY 2021 GRC authorization for calendar year 2021 with escalation per Decision D.23-11-096. SCE overspent its imputed authorized amount in 2024 due to the need to support high-priority business capabilities in the NextGen ERP project, which recorded $72.4 million in 2024, and was not contemplated in the portfolio-based spending allocation developed in the 2021 GRC.[1] NextGen ERP serves as a roadmap to enhance business processes, improve application functionality, and provide advanced tools for employees. It drives ERP transformation by streamlining and modernizing processes and systems across the ERP landscape. The project will deliver a fully integrated, accessible, and governed data foundation across Operations and Finance, leveraging SAP's cloud and AI-enabled platforms for continuous innovation.

4. Activity Status

Table XI-48 below provides the forecast scope, schedule and cost, status and status completion statement as applicable.

Table XI-48
Other Expenditure Category Activity Status

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Air Operations	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned, however has overspent compared to authorized.
All Hazards Assessment, Mitigation and Analytics	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Asset Reliability Risk Analytics	Completed	Completed	Completed	Completed	Completed	Completed	SCE completed the work for this activity in 2021.
Climate Adaptation and Severe Weather	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Communications	On-Going	Annual	On-Target	On-Target	Under	Proceeding as Planned	This GRC activity is on-going however, it may not be an indefinite program. As noted in our previous variance explanations, the under-authorized spend is due to SCE's decision in mid-2020 to select Private LTE (PLTE) technology as the solution for the new Field Area Network (FAN) instead of the Mesh Radio Network (MRN) technology.
Communications Equipment	On-Going	Annual	Under	On-Target	Under	Proceeding as Planned	The GRC Activity Communications Equipment is on-going with no pre-defined end date. SCE is generally proceeding as planned, however as noted in our variance explanations, the lower of number or executed units can be attributed to a reduced number of contracts entering into the SCE portfolio, where SCE is the scheduling coordinator, and achieving CAISO commercial operation within the calendar year.
CRE Project Management	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Cybersecurity Delivery and IT Compliance	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Enhanced Situational Awareness	On-Going	Annual	Over	Over	Over	Expanded / Emergent	This GRC is on-going with no pre-defined end date. SCE incurred incremental spend in 2021 - 2024 because of the need for increased weather stations, HD camera deployment, and necessary staffing relative to SCE's estimates in 2019 when the 2021 GRC was prepared. These incremental costs emerged because of lessons learned and experience gained with these sub-activities after the 2021 GRC submission.
Environmental Programs	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Facility Asset Management	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Fire Science and Advanced Modeling	On-Going	Annual	Over	On-Target	Over	Expanded / Emergent	This GRC Activity is on-going with no pre-defined end date. SCE purchased additional weather model ensemble analytics and data transfer for visualization to build, test, and implement data transfer software from SCE High-Performance Computing Clusters (HPCC) to the Google cloud platform (GCP).
Fleet Asset Management	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Fleet Operations and Maintenance	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Grid Management System	On-Going	Annual	Under	Under	Under	Partially Delayed	This GRC activity is on-going however, it may not be an indefinite program. As noted in our variance explanation, SCE is experiencing some delays with the deployment of GMS. Please refer to variance explanation for additional details.
Grid Mod Cybersecurity	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	**Project Life**	**Project Year**	**Scope**	**Schedule**	**Cost**	**Status**	**Status Completion Statement**
Laboratory Operations	On-Going	Annual	Over	On-Target	Over	Expanded / Emergent	The GRC Activity Laboratory Operations is on-going with no pre-defined end date. SCE completed additional work at our laboratories and started work on some of the Capital Pilot projects discussed in our TY 2025 GRC Application.
Oil Containment Diversion System	On-Going	Annual	On-Target	On-Target	Over	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date. SCE is generally proceeding as planned. The forecast for this work is driven by weather and other environmental factors outside of SCE's control and that can vary significantly from year to year. Accordingly, the capital forecast is based on a five-year average and SCE is currently experiencing costs above the historical averages.
PSPS Customer Support	On-Going	Annual	Over	Over	Over	Expanded / Emergent	SCE did not request any capital associated with PSPS Customer Support in the TY 2021 GRC. SCE made enhancements and improvements in the Customer Notifications space that was not requested in the TY 2021 GRC. The scope of this works included the PSPS Incident Commander Dashboard, Operational Data and GIS improvement, and Customer Notifications Enhancements.
Software Maintenance and Replacement	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	This GRC Activity is on-going with no pre-defined end date.
Substation Switchrack Rebuild	On-Going	Annual	Under	Under	Under	Partially Delayed	The GRC Activity Substation Switchrack Rebuild is an on-going activity with no pre-defined end date. As noted in SCE's variance explanations, challenges resulted from some delays and deferrals.
Technology Infrastructure Maintenance and Replacement	On-Going	Annual	On-Target	On-Target	On-Target	Proceeding as Planned	The GRC Activity Technology Infrastructure is an ongoing GRC activity with no pre-defined end date, however the underlying work may vary from year to year.
Technology Solutions	On-Going	Annual	Over	On-Target	Over	Expanded / Emergent	The GRC activity Technology Solutions is on-going and doesn't have a pre-defined end date. While SCE

A	J	K	BD	BE	BF	BG	BH
			Forecast				
GRC Activity	Project Life	Project Year	Scope	Schedule	Cost	Status	Status Completion Statement
							is generally proceeding as planned, as noted in our variance explanation, SCE had additional spend on the NextGen ERP project that was not part of the original forecast.

XII.

SAFETY, RELIABILITY & MAINTENANCE SPENDING RECORDED IN NON-GRC BALANCING OR MEMORANDUM ACCOUNTS

A. Background

Consistent with the April 10, 2020 guidance from Energy Division, SCE has excluded the balancing and memorandum account costs from the comparison of 2024 authorized and recorded safety, reliability and maintenance capital and O&M costs presented in Chapters VIII to XI. As further requested by Energy Division, SCE is identifying the balancing or memorandum accounts where the spending for those programs is recorded, the recorded year balances, and the disposition of any request for cost recovery. Table XII-49 below lists the beginning and ending balances in each applicable balancing and memorandum account and the associated cost-recovery mechanism.

Table XII-49
Balancing and Memorandum Account Revenue Requirement Balance
as of December 31, 2024[35] [36]

Balancing / Memorandum Account	***2024 Beginning Balance***	***2024 Ending Balance***	***Mechanism for Disposition***
Mobilehome Park Master Meter Balancing Account (MMMBA)	$0	$0 ($23.177 million prior to transfer)	December 31 transfer to BRRBA-D for recovery in 1/1 rate change
2017 CEMA Events	$15.021 million	$22.467 million	Standalone Application
2018 CEMA Events	$42.677 million	$56.097 million	Standalone Application
2019 CEMA Events	$2.015 million	$1.473 million	Standalone Application
2020 CEMA Events	$363.530 million	$66.709 million	Standalone Application
2021 CEMA Events	$5.293 million	$21.315 million	Standalone Application
2022 CEMA Events	$1.150 million	$3.710 million	Standalone Application
2023 CEMA Events	$55.414 million	$123.235 million	Standalone Application
2024 CEMA Events	$0	$9.707 million	Standalone Application

B. MMMBA: Mobilehome Park Master Meter Balancing Account

On March 13, 2014, the Commission issued D.14-03-021. This decision adopted a three-year "living pilot" program to incentivize voluntary conversions of master-metered service to direct service at mobile home parks (MHP) and authorized the creation of a balancing account for recording MHP program costs. On July 9, 2014, SCE submitted Advice 3072-E to establish the Mobilehome Park Master Meter Balancing Account (MMMBA) where the incremental costs associated with the conversion of the master-metered service would be recorded. Incremental costs include the incremental revenue requirement associated with "to the meter" costs

[35] Please note that these amounts are preliminary and subject to change prior to SCE submitting its application for recovery of these costs.

[36] The ending balances include some CEMA events for which SCE has already sought cost recovery, but the proceedings are currently pending before the Commission.

capitalized and placed in service upon system cutover to direct utility service and incremental O&M start-up costs such as customer outreach, administrative expenses, and other ongoing costs to implement the three-year pilot program. The MMMBA also records the incremental revenue requirement for the regulatory asset associated with "beyond the meter" costs incurred. The regulatory asset is amortized over a ten-year period, earning a rate of return at SCE's currently authorized rate of return. SCE submits an advice letter in the fourth quarter of each year concerning the operation of the MMMBA. SCE transfers the year-end MMMBA balance to the distribution sub-account of the Base Revenue Requirement Balancing Account (BRRBA) to be collected from customers in distribution rates.

SCE submitted Advice 5443-E on December 19, 2024 addressing the operation of the MMMBA in 2024. Table XII-50 below provides the 2024 recorded O&M and capital expenditures associated with the MHP conversion pilot program. Table XII-50 also summarizes the expenses and capital revenue requirement for 2024 for the MHP conversion pilot program.

Table XII-50
2024 O&M Expense and Capital Revenue Requirement for Mobile Home Parks

Activity	O&M Expense	Capital Expenditure	Ratemaking Account
Mobile Home Park	$0.214 million	$59.746 million	MMMBA

C. CEMA Events – Fires and Heat Waves

SCE's Catastrophic Event Memorandum Account (CEMA) tracks the costs of restoring service and repairing apparatus and facilities after a defined catastrophic event or the costs of complying with government orders issued in connection with a catastrophic event. The costs recorded in the CEMA are shown below in Table XII-51. In Resolution E-3238 dated July 24, 1991, the Commission authorized SCE to establish a CEMA to record costs associated with: (1) restoring utility service to its customers; (2) repairing, replacing, or restoring damaged utility facilities; and (3) complying with governmental agency orders from declared disasters. SCE plans to file a CEMA cost recovery application in the future that seeks recovery of costs recorded

in the CEMA for winter storms and fire storms that are incremental to SCE' GRC authorized storm activity.

Table XII-51
2024 O&M Expense and Capital Expenditures Recorded for CEMA Events – (Total Company)

Activity	O&M Expense	Capital Expenditure
CEMA Storm Events[37]	$72.6 million	$89.5 million

[37] Please note that these amounts are preliminary and subject to change prior to SCE submitting its application for recovery of these costs.

Appendix A

Risk Mitigation Mapping

RAMP to GRC Activity Mapping

SCE 2021 GRC Activity	SCE 2021 Exhibit	SCE 2021 Volume	SCE 2018 RAMP Risk	SCE 2018 RAMP ID	SCE 2018 RAMP Control / Mitigation Name
External Communications	3	2	Contact with Energized Equipment	C2	Public Outreach
Cable Life Extension (CLE) Program	2	1	Underground Equipment Failure	C2	Cable Replacement Programs (CIC)
Cable-in-Conduit (CIC) Replacement Program	2	1	Underground Equipment Failure	C2	Cable Replacement Programs (CIC)
Overhead Conductor Program (OCP)	2	1	Contact with Energized Equipment / Wildfire	C1 / C1a	Overhead Conductor Program (OCP)
Underground Structure Replacements	2	1	Underground Equipment Failure	M1	Cover Pressure Relief and Restraint (CPRR) Program
Underground Switch Replacements	2	1	Underground Equipment Failure	C3	UG Oil Switch Replacement Program
Worst Circuit Rehabilitation (WCR)	2	1	Underground Equipment Failure	C1	Cable Replacement Programs (WCR)
Expanded Wildfire Vegetation Management	2	6	Wildfire	M5	Expanded Vegetation Management
Recognition	6	3	Employee, Contractor & Public Safety	C1	Safety Controls
Talent Solutions	6	3	Physical Security	C4	Asset Protection
Training and Development	6	3	Employee, Contractor & Public Safety	M1a	Safety Culture Transformation (Core Program)
Training and Development	6	3	Physical Security	C4	Asset Protection
Training and Development	6	3	Physical Security	M1a	Insider Threat Program Enhancement & Information Analysis - Base
Technology Solutions	6	1. Pt. 2	Physical Security	C2	Protection of Generation Capabilities
Technology Solutions	6	1. Pt. 2	Physical Security	C3b	Non-Electric Facilities/Protection of Major Business Functions - Enhanced
Facility & Land Operations	6	5	Building Safety	M1	Fire Life Safety Portfolio Assessment
Facility & Land Operations	6	5	Building Safety	M2	Electrical Inspections
Facility & Land Operations	6	5	Employee, Contractor & Public Safety	M3a	Office Ergonomics (Core Program)
Workers' Compensation	6	2	Employee, Contractor & Public Safety	C1	Safety Controls
Safety Activities - T&D	6	4	Employee, Contractor & Public Safety	C1	Safety Controls
Employee and Contractor Safety	6	4	Employee, Contractor & Public Safety	C2	Contractor Safety Program
Safety Culture Transformation	6	4	Employee, Contractor & Public Safety	M1a	Safety Culture Transformation (Core Program)
Employee and Contractor Safety	6	4	Employee, Contractor & Public Safety	M2	Industrial Ergonomics
Hydro	5	1	Hydro Asset Safety	C1	Seismic Retrofit
Hydro	5	1	Hydro Asset Safety	C2	Dam Surface Protection
Hydro	5	1	Hydro Asset Safety	C3	Spillway Remediation and Improvement
Hydro	5	1	Hydro Asset Safety	C4	Low Level Outlet Improvements
Hydro	5	1	Hydro Asset Safety	C5	Seepage Mitigation
Hydro	5	1	Hydro Asset Safety	C6	Instrumentation / Communication Enhancements
All Hazards Assessment, Mitigation & Analytics	4	1	Building Safety	C1	Seismic Building Safety Program
All Hazards Assessment, Mitigation & Analytics	4	1	Climate Change	M1	Climate Adaptation & Severe Weather
Cybersecurity Delivery and IT Compliance	4	3	Cyber Attack	C1a	Perimeter Defense
Cybersecurity Delivery and IT Compliance	4	3	Cyber Attack	C2a	Interior Protection
Cybersecurity Delivery and IT Compliance	4	3	Cyber Attack	C3a	Data Protection
Cybersecurity Delivery and IT Compliance	4	3	Cyber Attack	C4a	SCADA Cybersecurity

SCE 2021 GRC Activity	SCE 2021 Exhibit	SCE 2021 Volume	SCE 2018 RAMP Risk	SCE 2018 RAMP ID	SCE 2018 RAMP Control / Mitigation Name
Cybersecurity Delivery and IT Compliance	4	3	Cyber Attack	C5a	Grid Modernization Cybersecurity
Cyber Software License & Maint	4	3	Cyber Attack	C1a	Perimeter Defense
Cyber Software License & Maint	4	3	Cyber Attack	C2a	Interior Protection
Cyber Software License & Maint	4	3	Cyber Attack	C3a	Data Protection
Cyber Software License & Maint	4	3	Cyber Attack	C4a	SCADA Cybersecurity
Cyber Software License & Maint	4	3	Cyber Attack	C5a	Grid Modernization Cybersecurity
Grid Mod Cybersecurity	4	3	Cyber Attack	C5a	Grid Modernization Cybersecurity
Emergency Preparedness & Response	4	2	Climate Change	C1	Emergency Mgmt.
Emergency Preparedness & Response	4	2	Climate Change	C2	Fire Mgmt.
Training, Drills and Exercises	4	2	Building Safety	C2	Facility Emergency Management Program
Training, Drills and Exercises	4	2	Climate Change	C1	Emergency Mgmt.
Protection of Generation Assets	4	4	Physical Security	C2	Protection of Generation Capabilities
Protection of Grid Infrastructure Assets	4	4	Physical Security	C1b	Grid Infrastructure Protection - Enhanced
Protection of Major Business Functions	4	4	Physical Security	C3b	Non-Electric Facilities/Protection of Major Business Functions - Enhanced
Physical Security	4	4	Physical Security	C4	Asset Protection
Physical Security	4	4	Physical Security	M1a	Insider Threat Program Enhancement & Information Analysis - Base
Fusing Mitigation	4	5	Wildfire	M8	Fusing Mitigation
HFRA Sectionalizing Devices	4	5	Wildfire	M2	Remote-Controlled Automatic Reclosers and Fast Curve Settings
Infrared Inspections	4	5	Contact with Energized / Wildfire Equipment	M4	Infrared Inspections
PSPS Protocol Support Functions	4	5	Wildfire	M3	PSPS Protocol and Support Functions
Situational Awareness	4	5	Wildfire / Climate Change	M7 / M2a	Enhanced Situational Awareness
Wildfire Covered Conductor Program	4	5	Contact with Energized Equipment / Wildfire	M5 / M1	Wildfire Covered Conductor Program
Wildfire Covered Conductor Program	4	5	Wildfire	C2	FR3 Overhead Distribution Transformer
Wildfire Covered Conductor Program	4	5	Wildfire	M9	Fire Resistant Poles (M1 Scope)