## DATA REQUEST SET ED-SCE-2024 RSAR-003

To: Energy Division
Prepared by: Erin McElrath
Job Title: Business Performance Management, Advisor
Received Date: 6/27/2025

**Response Date: 7/15/2025** 

## **Question 01-04 Distribution Preventive and Breakdown Capital Maintenance:**

- 1. PRMS and Live Front Replacements
- a. What are the actual spending and work units for PRMS and live front replacements individually?
  - b. If the work units are not available, please explain why.
- 2. Are there any other activities contributing to the spending under "Distribution Preventive and Breakdown Capital Maintenance"? If so, what are the actual spending amounts and work units associated with those activities?
- 3. What escalation/inflation rates were assumed in the 2021 forecast compared to what was experienced?
- 4. How much of the total variance is attributable to PRMS, live-front replacements, and inflation, respectively?

Туре	Line of Business	Spending Category - GRC Activity	2024 Annual Cost Difference (\$000)	2024 Annual Percent Cost Difference	2024 Annual Unit Percent Difference
Capital	Distribution	Distribution Preventive and Breakdown Capital Maintenance	\$171,450	58%	Not Provided

# Response to Question 01-04 Distribution Preventive and Breakdown Capital Maintenance:

- 1. PRMS and Live Front Replacements
  - a. What are the actual spending and work units for PRMS and live front replacements individually?
    - i. **SCE Response**:
      - 1. **PRMS**: SCE spent approximately \$41.2 million for 278 completed Work Orders.
      - 2. <u>Live Front</u>: SCE spent approximately \$21.3 million for 310 completed structures.
  - b. If the work units are not available, please explain why.
    - i. **SCE Response:** See response to part a above.
- 2. Are there any other activities contributing to the spending under "Distribution Preventive and Breakdown Capital Maintenance"? If so, what are the actual spending amounts and

work units associated with those activities?

a. <u>SCE Response:</u> See the table below that provides additional activity spending, work units where appliable compared to the imputed authorized amount.

\$1000's	Recorded	Authorized	Recorded Less Authorized	Work Unit Notes
Distribution Capital Breakdown Maintenance	\$205,818	\$145,760	\$60,058	
Priority Notifications	\$205,818	\$145,760	\$60,058	8,069 completed notifications
Distribution Capital Preventive Maintenance	\$256,061	\$143,516	\$112,545	
PRMS	\$41,200	\$0	\$41,200	278 completed work orders
Live Front	\$21,300	\$0	\$21,300	310 completed structures
Priority Notifications	\$193,562	\$143,516	\$50,045	6,336 completed notifications
Remove Idle Facilities	\$7,027	\$8,181	(\$1,154)	
Totals	\$468,907	\$297,457	\$171,450	

- 3. What escalation/inflation rates were assumed in the 2021 forecast compared to what was experienced?
  - a. SCE Response: As stated in Section IV of the RSAR and reiterated in prior data request responses, SCE did not forecast calendar year 2024 in its Test Year (TY) 2021 General Rate Case, because when SCE filed that Application, the Commission's Rate Case Plan (RCP) only covered three years (i.e., 2021-2023). During the pendency of that proceeding, the RCP was amended to add a fourth year to the GRC cycle. This led to what is known as "Track 4" of SCE's TY 2021 GRC. Additionally, as previously noted, SCE's Track 4 request for 2024 was not based on identified needs or a bottom-up analysis, except for wildfire mitigation and new service connections. Accordingly, SCE did not provide any numerical forecasts in our Track 4 application for other activities. For the purposes of the 2024 RSAR, variance explanations were developed by comparing recorded values to imputed authorized values—these were derived from the TY 2021 GRC decision for calendar year 2021 and escalated by 1.5% above the 2023 authorized values in accordance with the Track 4 Decision for capital, and updated on S&P Global forecasts for O&M. Therefore, SCE does not have a 2021 GRC CPUC-submitted forecast for calendar year 2024 that included escalation rates from the time we filed our forecast back in August 2019 that can be used for direct comparison for categories of spend outside of wildfire mitigation and new services connections capital.
- 4. How much of the total variance is attributable to PRMS, live-front replacements, and inflation, respectively?
  - a. <u>SCE Response</u>: As noted above, SCE did not have a forecasted inflation rate for 2024 to directly compare to and is not able to provide a full dollar for dollar reconciliation over the imputed authorized value in the requested buckets. However, PRMS and live front equipment were not part of the request and were therefore not authorized. Therefore, the numbers discussed in part a can be considered spending over authorized values.

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## DATA REQUEST SET ED-SCE-2024 RSAR-003

To: Energy Division
Prepared by: Lauren N Huson
Job Title: Project Manager
Received Date: 6/27/2025

**Response Date: 7/15/2025** 

## **Question 01-03 Distribution - 4 kV Cutovers:**

- 1. Forecast Assumption
  - a. What were the original specific forecast assumptions that led to inaccurate variance forecasts?
- b. Why were the Modoc Substation and several emergent projects not included in the original forecast?
  - c. What are the emergent projects?
- 2. Increased Scope of Work
  - a. What is meant by the "increased scope of work"?
  - b. How was this increase measured or quantified?
- 3. Of the total cost overrun, how much is attributable to the Modoc Substation and emergent projects versus the increased scope of work?

Туре	Line of Business	Spending Category - GRC Activity	2024 Annual Cost Difference (\$000)	2024 Annual Percent Cost Difference	2024 Annual Unit Percent Difference
Capital	Distribution	4 kV Cutovers	\$37,362	360%	275%

## **Response to Question 01-03 Distribution - 4 kV Cutovers:**

- 1. Forecast Assumption
  - a. What were the original specific forecast assumptions that led to inaccurate variance forecasts?
    - i. SCE Response: SCE does not believe that we had inaccurate variance forecasts; we simply executed more work and the work was more costly due to inflation. As stated in Section IV of the RSAR and reiterated in prior data request responses, SCE did not forecast calendar year 2024 in its Test Year (TY) 2021 General Rate Case, because when SCE filed that Application, the Commission's Rate Case Plan (RCP) only covered three years (i.e., 2021-2023). During the pendency of that proceeding, the RCP was amended to add a fourth year to the GRC cycle. This led to what is known as "Track 4" of SCE's TY 2021 GRC. Additionally, as previously noted, SCE's Track 4 request for 2024 was not based on identified needs or a bottom-up analysis, except for wildfire mitigation and new service connections. Accordingly, SCE did not provide any numerical forecasts in our Track 4 application for other activities. For the purposes of the 2024 RSAR, variance explanations

were developed by comparing recorded values to <u>imputed</u> authorized values—these were derived from the TY 2021 GRC decision for calendar year 2021 and escalated by 1.5% above the 2023 authorized values in accordance with the Track 4 Decision for capital, and updated on S&P Global forecasts for O&M. Therefore, SCE does not have a specific CPUC-submitted forecast for calendar year 2024 that can be used for direct comparison for spending categories/GRC activities outside of wildfire mitigation and new services connections capital (like 4 kV Cutovers).

- b. Why were the Modoc Substation and several emergent projects not included in the original forecast?
  - i. <u>SCE Response</u>: See response to part a above. Additionally, it is common for emergent needs to arise. For example, a storm drain failure under the Modoc substation created an emergent need to remedy the situation. There were also previously deferred projects, such as the Hoyt Substation, that were completed in 2024 and that could no longer be deferred.
- c. What are the emergent projects?
  - i. <u>SCE Response:</u> As indicate above the Modoc substation was an emergent project along with the Hoyt substation which itself contributed four additional projects.
- 2. Increased Scope of Work
  - a. What is meant by the "increased scope of work"?
    - i. **SCE Response:** We executed more 4 kV Cutovers projects as demonstrated by the over execution compared to authorized work units compared to authorized in 2024 and over the GRC cycle (2021 2024).
  - b. How was this increase measured or quantified?
    - i. <u>SCE Response:</u> number of 4 kV recorded cutovers completed number of 4kv authorized cutovers
- 3. Of the total cost overrun, how much is attributable to the Modoc Substation and emergent projects versus the increased scope of work?
  - a. <u>SCE Response</u>: In 2024, SCE recorded approximately \$15M for the Modoc substation and \$11.8M for the Hoyt substation.

## DATA REQUEST SET ED-SCE-2024 RSAR-003

To: Energy Division
Prepared by: Daniel Komula
Job Title: Senior Advisor
Received Date: 6/27/2025

**Response Date: 7/15/2025** 

## **Question 01-02 - Distribution Plant Betterment:**

- 1. Regional Grid Team Work
  - a. What specific activities is the Regional Grid team responsible for?
  - b. What metrics or measurements were used to assess their work?
  - c. How does 2024 actual workload compare to what was forecasted for 2024?
- 2. Remote Grid Project and pilot projects
  - a. How much of the variance is attributable to the Remote Grid Project and pilot projects?
- b. Why were these projects not included in the TY 2021 GRC forecast, and what led SCE to prioritize them?

Type	Line of Business	Spending Category - GRC Activity	2024 Annual Cost Difference (\$000)	2024 Annual Percent Cost Difference	2024 Annual Unit Percent Difference
Capital	Distribution	Distribution Plant Betterment	\$26,084	664%	Not Provided

## **Response to Question 01-02 - Distribution Plant Betterment:**

- 1. Regional Grid Team Work
  - a. What specific activities is the Regional Grid team responsible for?
    - i. <u>SCE Response:</u> 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. 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.
  - b. What metrics or measurements were used to assess their work?

- i. <u>SCE Response:</u> For purposes of the RSAR SCE does not understand the question. SCE does not have any formal metrics or measurements to assess the work.
- c. How does 2024 actual workload compare to what was forecasted for 2024?
  - i. SCE Response: As stated in Section IV of the 2024 RSAR and reiterated in prior data request responses, SCE did not forecast calendar year 2024 in its Test Year (TY) 2021 General Rate Case, because when SCE filed that Application, the Commission's Rate Case Plan (RCP) only covered three years (i.e., 2021-2023). During the pendency of that proceeding, the RCP was amended to add a fourth year to the GRC cycle. This led to what is known as "Track 4" of SCE's TY 2021 GRC. Additionally, as previously noted, SCE's Track 4 request for 2024 was not based on identified needs or a bottom-up analysis, except for wildfire mitigation and new service connections. Accordingly, SCE did not provide any numerical forecasts in our Track 4 application for other activities. For the purposes of the 2024 RSAR, variance explanations were developed by comparing recorded values to imputed authorized values—these were derived from the TY 2021 GRC decision for calendar year 2021 and escalated by 1.5% above the 2023 authorized values in accordance with the Track 4 Decision for capital, and updated S&P Global forecasts for O&M. Therefore, SCE does not have a 2021 GRC CPUCsubmitted forecast for calendar year 2024 that can be used for direct comparison for categories of spend outside of wildfire mitigation and new services connections capital.
- 2. Remote Grid Project and pilot projects
  - a. How much of the variance is attributable to the Remote Grid Project and pilot projects?
    - i. <u>SCE Response:</u> As noted above we do not have a specific forecast for calendar year 2024. However, SCE spent \$4.8M on the Remote Grid pilots.
  - b. Why were these projects not included in the TY 2021 GRC forecast, and what led SCE to prioritize them?
    - i. SCE Response: SCE appropriately uses management discretion to fund our operating units across the wide spectrum of our business needs to prudently and cost-effectively provide safe, reliable, clean and affordable electricity to customers. This approach can and does encompass responding to emergent needs that may differ from the programs authorized on a forecast basis in a GRC. It is natural to have emergent needs, especially given the Test Year (TY) 2021 GRC forecasts from 2021 2023 were developed in early 2019. The Remote Grid pilots were identified in 2021 after SCE could not successfully identify a path to restore/upgrade service through traditional projects due to environmental and wildfire risks. SCE filed Advice Letter 4573-E in August 2021 for Remote Grid pilots. The CPUC approved the

Advice Letter in Resolution E-5189 in February 2022. Therefore, the costs for the Remote Grid pilots were not known or contemplated at the time that the forecasts were developed in 2019.

## DATA REQUEST SET ED-SCE-2024 RSAR-003

To: Energy Division
Prepared by: Daniel Komula
Job Title: Senior Advisor
Received Date: 6/27/2025

**Response Date: 7/15/2025** 

#### **Question 01-03 - WCR:**

- 1. Forecast Assumption
  - a. What assumptions in the 2021 forecast did not align with the actual 2024 costs?
  - b. What unit costs were assumed versus what was experienced?
- c. What was the forecasted volume of cable replacements compared to the actual volume in 2024?
  - d. What labor rates or labor costs were forecasted in 2021, and what were the actuals in 2024?
- 2. The term "accelerated replacement" is vague.
- a. How many feet, miles, or projects of cable were actually replaced in 2024? Please also provide comparable replacement data for previous years to illustrate the acceleration.
- 3. Was there any expansion in the scope of work, or was this a catch-up effort to address prior delays?

Type	Line of Business	Spending Category - GRC Activity	2024 Annual Cost Difference (\$000)	2024 Annual Percent Cost Difference	2024 Annual Unit Percent Difference
Capital	Distribution	Worst Circuit Rehabilitation (WCR)	\$23,574	326%	217%

## **Response to Question 01-03 - WCR:**

- 1. Forecast Assumption
  - a. What assumptions in the 2021 forecast did not align with the actual 2024 costs?
    - i. SCE Response: As stated in Section IV of the RSAR and reiterated in prior data request responses, SCE did not forecast calendar year 2024 in its Test Year (TY) 2021 General Rate Case, because when SCE filed that Application, the Commission's Rate Case Plan (RCP) only covered three years (i.e., 2021-2023). During the pendency of that proceeding, the RCP was amended to add a fourth year to the GRC cycle. This led to what is known as "Track 4" of SCE's TY 2021 GRC. Additionally, as previously noted, SCE's Track 4 request for 2024 was not based on identified needs or a bottom-up

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analysis, except for wildfire mitigation and new service connections. Accordingly, SCE did not provide any numerical forecasts in our Track 4 application for other activities. For the purposes of the 2024 RSAR, variance explanations were developed by comparing recorded values to <a href="imputed">imputed</a> authorized values—these were derived from the TY 2021 GRC decision for calendar year 2021 and escalated by 1.5% above the 2023 authorized values in accordance with the Track 4 Decision for capital, and updated on S&P Global forecasts for O&M. Therefore, SCE does not have a specific CPUC-submitted forecast for calendar year 2024 that can be used for direct comparison for spending categories/GRC activities outside of wildfire mitigation and new services connections capital (like WCR).

b. What unit costs were assumed versus what was experienced?

## i. SCE Response:

- Authorized unit cost was approximately \$475k/conductor mile.
- The 2024 recorded unit cost was approximately \$647k/conductor mile.
- c. What was the forecasted volume of cable replacements compared to the actual volume in 2024?
  - i. <u>SCE Response</u>: See our response to part a above. However, as noted in the RSAR the imputed authorized units in 2024 were 15 conductor miles and SCE completed 47.6 conductor miles in 2024.
- d. What labor rates or labor costs were forecasted in 2021, and what were the actuals in 2024?
  - i. <u>SCE Response:</u> See our response to part a above. SCE does not have a specific labor cost forecast for 2024, however SCE notes that overall inflation rates have significantly increased since we filed our TY 2021 GRC application in August of 2019.
- 2. The term "accelerated replacement" is vague.
  - a. How many feet, miles, or projects of cable were actually replaced in 2024? Please also provide comparable replacement data for previous years to illustrate the acceleration.
    - i. <u>SCE Response:</u> The number of conductor miles replaced per year is provided in the RSAR including 2021 2023 in Table VIII-17 and are shown below.

Year 1 -	Year 2 -	Year 3	Year 4 -
2021	2022	- 2023	2024
58	8	17	

- b. Was there any expansion in the scope of work, or was this a catch-up effort to address prior delays?
  - i. SCE Response: SCE does not consider the program to be "delayed", instead

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as noted in our explanation beginning in 2018, SCE temporarily curtailed its underground cable replacement efforts to reallocate resources towards emergent wildfire risk mitigation activities. In 2023, SCE was able to refocus on infrastructure replacement efforts, gradually ramping up towards historical norms. In 2024, we continued to accelerate the replacement of conductor similar to our latest forecast in the TY 2025 GRC.

## DATA REQUEST SET ED-SCE-2024 RSAR-003

To: Energy Division
Prepared by: Lauren N Huson
Job Title: Project Manager
Received Date: 6/27/2025

**Response Date: 7/15/2025** 

## **Question 01-02 - Automatic Reclosers Replacement Program:**

- 1. Oil-Filled Automatic Reclosers
- a. What specific assumption(s) led to the overestimated number of oil-filled Automatic Reclosers (ARs) during the TY 2021 GRC?
  - b. Does SCE have any plans to improve the accuracy of its forecasts in future GRCs?
- 2. Vacuum Fault Interrupter
  - a. Why did SCE decide to shift costs to the replacement of Vacuum Fault Interrupters?
  - b. What is the expected impact of this program on safety and reliability?
- c. Was this program included in SCE's TY 2021 forecast? If not, why was it excluded at the time, and what led SCE to shift its focus to it later?
  - d. Why are the replacement Vacuum Fault Interrupters not expected to be available until 2026?

Туре	Line of Business	Spending Category - GRC Activity	2024 Annual Cost Difference (\$000)	2024 Annual Percent Cost Difference	2024 Annual Unit Percent Difference
Capital	Distribution	Automatic Reclosers Replacement Program	-\$2,583	-95%	-100%

## Response to Question 01-02 - Automatic Reclosers Replacement Program:

- 1. Oil-Filled Automatic Reclosers
  - a. What specific assumption(s) led to the overestimated number of oil-filled Automatic Reclosers (ARs) during the TY 2021 GRC?
    - i. SCE Response: SCE used the best available information at the time we filed our TY 2021 GRC application in 2019. Upon further review and through the execution of the program SCE realized that we had overestimated the number of oil-filled automatic reclosers in our system. Further, as stated in Section IV of the RSAR and reiterated in prior data request responses, SCE did not forecast calendar year 2024 in its Test Year (TY) 2021 General Rate Case, because when SCE filed that Application, the Commission's Rate Case Plan (RCP) only covered three years (i.e., 2021-2023). During the pendency of that proceeding, the RCP was amended to add a fourth year to the GRC

cycle. This led to what is known as "Track 4" of SCE's TY 2021 GRC. Additionally, as previously noted, SCE's Track 4 request for 2024 was not based on identified needs or a bottom-up analysis, except for wildfire mitigation and new service connections. Accordingly, SCE did not provide any numerical forecasts in our Track 4 application for other activities. For the purposes of the 2024 RSAR, variance explanations were developed by comparing recorded values to imputed authorized values—these were derived from the TY 2021 GRC decision for calendar year 2021 and escalated by 1.5% above the 2023 authorized values in accordance with the Track 4 Decision for capital, and updated S&P Global forecasts for O&M. Therefore, SCE does not have a specific CPUC-submitted forecast for calendar year 2024 that can be used for direct comparison for spending categories/GRC activities outside of wildfire mitigation and new services connections capital (like the Automatic Reclosers Replacement Program).

- b. Does SCE have any plans to improve the accuracy of its forecasts in future GRCs?
  - <u>SCE Response:</u> SCE continually strives to improve the accuracy of our forecasting and our data quality and availability. Further, SCE continually evaluates which CPUC-approved forecasting methodology is more appropriate (e.g. Last Year Recorded, Averaging, Itemized).
- 2. Vacuum Fault Interrupter
  - a. Why did SCE decide to shift costs to the replacement of Vacuum Fault Interrupters?
    - i. SCE Response: SCE notes that authorized funds are generally not traceable between programs. Subject to that explanation, as noted in our variance explanation in GRC testimony, by 2023 SCE had successfully replaced all known oil-filled ARs in our system. As noted in our TY 2025 GRC testimony, the design of Vacuum Fault Interrupters (VFIs) have undergone extensive changes since first introduced to the SCE system. Many of the oldest VFIs are no longer manufactured, cannot be repaired, or are of obsolete design. If not replaced, the VFI may not operate properly to isolate system faults. Bringing the equipment up to present standards will decrease the risk of in-service failures and downstream ignitions or outage risks. Obsolete and oil-filled ARs and VFIs are targeted due to these factors.
  - b. What is the expected impact of this program on safety and reliability?
    - i. <u>SCE Response</u>: SCE has not performed a quantitative analysis of the safety and reliability risks; however, failures of oil-filled switching equipment can be violent. Violent failures of oil-filled switching equipment can damage adjacent electrical equipment. Property damage and injuries to the public or SCE personnel can also result from violent oil switching equipment failures. Additionally, the failure of these protective devices to operate when required may increase safety risk due to failures of downstream equipment. In other words, these devices also have a protective function in clearing faults

promptly and effectively, mitigating associated safety concerns.

ARs are designed to open before the substation circuit breaker or nearest upstream protection device. They isolate faults to a specific section of the line, thus reducing the number of customers that experience an outage. VFIs also improve the system's reliability by preventing a fault on a small section of the circuit from creating a larger outage. Currently, SCE does not categorize specific switch outage data. However, ARs and VFIs do contribute to service interruptions and can potentially impact customers.

- c. Was this program included in SCE's TY 2021 forecast? If not, why was it excluded at the time, and what led SCE to shift its focus to it later?
  - i. <u>SCE Response:</u> The automatic recloser program was included in our TY 2021 GRC application; however, at the time of filing in August 2019 the forecast consisted of replacing oil-filled reclosers. As noted above, SCE has now pivoted to replacing Vacuum Fault Interrupters. The Vacuum Fault Interrupters were not included in the TY 2021 forecast due to our forecast at the time showing we would have more Oil Filled ARs to replace. In our 2025 GRC, we noted the reduced forecast for Oil Filled ARs and the shift to VFIs.
- d. Why are the replacement Vacuum Fault Interrupters not expected to be available until 2026?
  - i. <u>SCE Response:</u> While SCE's variance explanation may have inadvertently implied these materials were not available until 2026, instead SCE's internal plans are to begin ramping up the program in that year.

## DATA REQUEST SET ED-SCE-2024 RSAR-003

To: Energy Division
Prepared by: Erin McElrath
Job Title: Advisor
Received Date: 6/27/2025

**Response Date: 7/15/2025** 

## **Question 01-05 - Enhanced Overhead Inspections and Remediations:**

- 1. What is the anticipated cost forecast for next year, in terms of what has been authorized compared to what SCE is predicting?
- 2. What was the find rate assumed in the 2024 forecast versus the actual find rate?
- 3. What factors have caused the volume of distribution remediations to increase?
- 4. How many inspections in 2023 were carried over for remediation work into 2024?
- 5. How does SCE prioritize various remediation projects?
- a. For the spending listed here, what are the priority levels that were prioritized in this variance spending?

Туре	Line of Business	Spending Category - GRC Activity	2024 Annual Cost Difference (\$000)	2024 Annual Percent Cost Difference	2024 Annual Unit Percent Difference
O&M	Distribution	Enhanced Overhead Inspections and Remediations	\$12,614	11%	Not Provided

## Response to Question 01-05 - Enhanced Overhead Inspections and Remediations:

- 1. What is the anticipated cost forecast for next year, in terms of what has been authorized compared to what SCE is predicting?
  - a. **SCE Response:** SCE forecasts for 2025 2028 are still pending approval from the CPUC in our Test Year 2025 GRC Application.
- 2. What was the find rate assumed in the 2024 forecast versus the actual find rate?
  - a. <u>SCE Response:</u> SCE utilized our last recorded year find rate from 2021 in our Track 4 forecast development. The recorded find rate in 2021 was 8.5%. The actual find rate in 2024 was 21.1%.
- 3. What factors have caused the volume of distribution remediations to increase?
  - a. <u>SCE Response:</u> A number of factors have caused the volume of distribution remediations to increase. The main factors are an increased find rate compared to 2021, which was 8.5% in 2021 and increased to 16.4% in 2023 and 21.1% in 2024. SCE has also increased the number of annual inspections performed, which went

from approximately 170k in 2021 to approximately 200k in 2023 and 2024.

- 4. How many inspections in 2023 were carried over for remediation work into 2024?
  - a. <u>SCE Response:</u> SCE would like to clarify the statement, "Additionally, some inspections in late 2023 required remediation work that was completed in 2024" that we included in our 2024 RSAR. As noted above, SCE experienced an increased find rate in 2023 and 2024 compared to 2021 and performed additional inspections, both of which resulted in a larger overall remediation work effort in 2024 and contributed to the spending over authorized in 2024. For example, SCE completed approximately 56,000 distribution P2 notifications in HFRA in 2024 compared to approximately 42,000 in 2023.
- 5. How does SCE prioritize various remediation projects?
  - a. For the spending listed here, what are the priority levels that were prioritized in this variance spending?
    - i. <u>SCE Response:</u> SCE follows the CPUC stated priority level classifications and remediation timelines as directed by G.O. 95. Please see table below for compliance timeframes for each specific priority level.

Priority Level	Remediation Due Date	
1	21 days	
2	6 months if in Tier 3 (Extreme)	
	12 months if in Tier 2 (Elevated)	
3	5 years	

## DATA REQUEST SET ED-SCE-2024 RSAR-003

To: Energy Division
Prepared by: Nikki Chamberlain
Job Title: Senior Manager
Received Date: 6/27/2025

**Response Date: 7/15/2025** 

## **Question 01-07 Substation O&M Breakdown Maintenance:**

- 1. What factors caused the increased number of transformer leak repairs in 2024?
- 2. Is the increase in transformer leaks (and other failures) indicative of equipment coming up on endof-life that would require a larger capital replacement program? Or are these issues simply servicerelated issues that coincidentally happened around the same time?
- 3. Are there other factors that caused the overspend?
- 4. What other equipment failure modes or replacements were significant drivers of spending in this program?
- 5. Moving forward, how can SCE account for fluctuations when utilizing a longer-term historical forecast?
- 6. With an increased need for repairs, has SCE experienced any backlog?
- 7. What specific actions, if any, is SCE taking to reduce the number of transformer leak repairs in future years?

Туре	Line of Business	Spending Category - GRC Activity	2024 Annual Cost Difference (\$000)	2024 Annual Percent Cost Difference	2024 Annual Unit Percent Difference
O&M	Distribution	Substation O&M Breakdown Maintenance	\$5,312	178%	Not Provided

## Response to Question 01-07 Substation O&M Breakdown Maintenance:

- 1. What factors caused the increased number of transformer leak repairs in 2024?
  - a. SCE Response: Due to the unpredictable nature of this activity, depending on inspection results and the type of equipment, the number of leaks can vary year over year. Additionally, SCE notes that there has been an increased focus on monitoring and maintaining equipment with environmental impacts which is driving rigorous remediation of active oil leaks in transformers, as replacement is normally not feasible due to the lack of supply of new Transformers and components.

    Additionally, SF<sub>6</sub> Circuit Breaker leakage remediations often include extensive, time-consuming repairs when replacing the circuit breaker may not be feasible.

These examples of unplanned, reactive maintenance typically incur significant labor, tooling, and material costs.

- 2. Is the increase in transformer leaks (and other failures) indicative of equipment coming up on end-of-life that would require a larger capital replacement program? Or are these issues simply service-related issues that coincidentally happened around the same time?
  - a. **SCE Response:** See response to question 1 above.
- 3. Are there other factors that caused the overspend?
  - a. <u>SCE Response</u>: Substation O&M Breakdown Maintenance is unplanned and emergent work. Recorded variances are due to year-to-year variability in equipment breakdown. The variances reflect the emergent nature of this work. Also see our response to Question 5 below.
- 4. What other equipment failure modes or replacements were significant drivers of spending in this program?
  - a. <u>SCE Response:</u> Substation O&M Breakdown Maintenance covers breakdown and reactive repairs on all major and minor equipment types and their components (including Circuit Breakers, Relays, DC Systems, Disconnects, Cable) and is typically performed in response to damage caused by equipment fatigue, component failures, degradation, rodents, birds, acts of nature, etc.
- 5. Moving forward, how can SCE account for fluctuations when utilizing a longer-term historical forecast?
  - a. SCE Response: Recorded costs for this activity fluctuate due to the unknown frequency of failure. In D.89-12-057, and subsequently in D.04-07-022, the Commission stated that if recorded expenses have significant fluctuations from year to year, or expenses are influenced by external forces beyond the utility's control, then using an average of recorded costs is appropriate as a forecasting methodology. SCE will continue to review the best forecast methodology as it relates to each activity and the number of historical years to utilize as applicable.

Further, as stated in Section IV of the RSAR and reiterated in prior data request responses, SCE did not forecast calendar year 2024 in its Test Year (TY) 2021 General Rate Case, because when SCE filed that Application, the Commission's Rate Case Plan (RCP) only covered three years (i.e., 2021-2023). During the pendency of that proceeding, the RCP was amended to add a fourth year to the GRC cycle. This led to what is known as "Track 4" of SCE's TY 2021 GRC.

Additionally, as previously noted, SCE's Track 4 request for 2024 was not based on identified needs or a bottom-up analysis, except for wildfire mitigation and new service connections. Accordingly, SCE did not provide any numerical forecasts in our Track 4 application for other activities. For the purposes of the 2024 RSAR, variance explanations were developed by comparing recorded values to imputed authorized values—these were derived from the TY 2021 GRC decision for calendar year 2021 and escalated by 1.5% above the 2023 authorized values in accordance

with the Track 4 Decision for capital, and updated on S&P Global forecasts for O&M. Therefore, SCE does not have a 2021 GRC CPUC-submitted forecast for calendar year 2024 that can be used for direct comparison for categories of spend outside of wildfire mitigation and new services connections capital.

- 6. With an increased need for repairs, has SCE experienced any backlog?
  - a. <u>SCE Response:</u> SCE does not necessarily see this as a long-term sustained increase in the need for repairs. As noted above in response to part 2, this work can fluctuate year over year. SCE adheres to appropriate time frames to repair or replace transformers.
- 7. What specific actions, if any, is SCE taking to reduce the number of transformer leak repairs in future years?
  - a. <u>SCE Response:</u> To reduce the number of repairs on substation transformers, SCE has implemented several proactive measures, including the Substation Infrastructure Replacement (Sub IR) Program and Substation Capital Maintenance. These programs focus on replacing substation equipment and structures that have poor health indices, are aged, or are obsolete, thereby mitigating public safety and reliability risks associated with in-service equipment failures.

Additionally, SCE continuously reviews and updates engineering standards to ensure they meet the highest quality and safety benchmarks. By working closely with manufacturers, SCE addresses potential manufacturing defects through rigorous testing of components before deployment, ensuring high-quality production standards.

Despite these proactive measures, reactive repairs will still be necessary from time to time. However, these efforts significantly reduce the frequency and severity of such repairs, enhancing the overall reliability and safety of SCE's substation infrastructure.

## DATA REQUEST SET ED-SCE-2024 RSAR-003

To: Energy Division
Prepared by: Erin McElrath
Job Title: Business Performance Management, Advisor
Received Date: 6/27/2025

**Response Date: 7/15/2025** 

## **Question 01-05 Distribution Preventive and Breakdown O&M Maintenance:**

- 1. Please provide the specific reasons that led to an underspend in 2024.
- 2. How will forecasts for next year change?
- 3. How can SCE increase accuracy in forecasting with each repair? (i.e. what is the current process in place to forecast? are different projects grouped into categories?)
- 4. What historical averages were used to forecast this activity?
- 5. How much of the underspend can be attributed to preventive maintenance versus breakdown maintenance?

Туре	Line of Business	Spending Category - GRC Activity	2024 Annual Cost Difference (\$000)	2024 Annual Percent Cost Difference	2024 Annual Unit Percent Difference
O&M	Distribution	Distribution Preventive and Breakdown O&M Maintenance	\$14,323	-11%	Not Provided

## Response to Ouestion 01-05 Distribution Preventive and Breakdown O&M Maintenance:

- 1. Please provide the specific reasons that led to an underspend in 2024.
  - a. SCE Response: As stated in Section IV of the RSAR and reiterated in prior data request responses, SCE did not forecast calendar year 2024 in its Test Year (TY) 2021 General Rate Case, because when SCE filed that Application, the Commission's Rate Case Plan (RCP) only covered three years (i.e., 2021-2023). During the pendency of that proceeding, the RCP was amended to add a fourth year to the GRC cycle. This led to what is known as "Track 4" of SCE's TY 2021 GRC. Additionally, as previously noted, SCE's Track 4 request for 2024 was not based on identified needs or a bottom-up analysis, except for wildfire mitigation and new service connections. Accordingly, SCE did not provide any numerical forecasts in our Track 4 application for other activities. For the purposes of the 2024 RSAR, variance explanations were developed by comparing recorded values to imputed authorized values—these were derived from the TY 2021 GRC decision for calendar year 2021 and escalated by 1.5% above the 2023 authorized values in accordance

with the Track 4 Decision for capital, and updated S&P Global forecasts for O&M. Therefore, SCE does not have a specific CPUC-submitted forecast for calendar year 2024 that can be used for direct comparison for spending categories/GRC activities outside of wildfire mitigation and new services connections capital (like Distribution Preventive and Breakdown Maintenance). However, as noted in our variance explanation, SCE utilized a historical average to forecast this activity 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. Additionally, SCE notes that over the four-year cycle SCE was within 4% of authorized.

- 2. How will forecasts for next year change?
  - a. **SCE Response:** SCE forecasts for 2025 2028 are still pending approval from the CPUC. As noted in out TY 2025 GRC Application, we continued to use historical averages along with recorded costs, which the CPUC has agreed is an appropriate forecasting methodology when the costs can vary year over year.
- 3. How can SCE increase accuracy in forecasting with each repair? (i.e. what is the current process in place to forecast? are different projects grouped into categories?)
  - a. <u>SCE Response</u>: SCE notes that our 2021 2024 recorded to authorized variance was less than 4%, which SCE believes proves that our forecasting methodology is appropriate. However, SCE continues to evaluate the appropriateness of our forecasting methods. In our TY 2025 GRC, SCE forecasted based on an itemized forecast based on historical averages with several different components. Table II-2 provides a breakdown of each component of the Test Year 2025 forecast along with the methodology used and the total.

# Distribution Preventive and Breakdown Maintenance O&M Cost Forecast Breakdown (Constant 2022 \$000)

Activity	Methodology	2023	2024	2025
Preventive Non-High Fire P2 Notifications	Two -year Average of Units x 2022 Unit Cost	\$37,435	\$37,435	\$37,435
Preventive Non-High Fire P2 Notifications (Veg)	2021 Completed Units x 2022 Unit Cost	\$6,379	\$6,379	\$0
Preventive High Fire Remaining on Base	Two-year Average Recorded Costs	\$1,287	\$1,287	\$1,287
Preventive Standalone P3 Notifications	Projected units x 2022 Unit Cost	\$317	\$4,715	\$4,564
Preventive P9	Two-year Average of Recorded Costs	\$3,761	\$3,761	\$3,761
Preventive Final Cost Center	Two-year Average of Recorded Costs	\$4,040	\$4,040	\$4,040
Preventive B-Material Costs	Three-year Average of Recorded Costs	\$6,137	\$6,137	\$6,137
Breakdown Non-High Fire P2 Notifications	Two-year Average of Units x 2022 Unit Cost	\$53,102	\$53,102	\$53,102
Graffiti Removal	Two-year Average of Recorded Costs	\$559	\$559	\$559
Preventive Transformer Maintenance	Two-year Average of Recorded Costs	\$1,106	\$1,106	\$1,106
Employee Led Efficiency Savings	Total Efficiency Savings	\$0	\$0	(\$921)
Employee Compensation Program	Changes to Employee Compensation Program	\$0	\$0	\$1,516
Total		\$114,122	\$118,521	\$112,585

- 4. What historical averages were used to forecast this activity?
  - a. <u>SCE Response:</u> SCE forecasted our 2021 Test Year request (which was developed in late 2018/2019) using a four-year average of 2014 to 2017 recorded costs.
     However, as noted throughout these data request responses, calendar year 2024 was not directly forecasted in our TY 2021 GRC or our Track 4 application.
- 5. How much of the underspend can be attributed to preventive maintenance versus breakdown

## maintenance?

a. <u>SCE Response:</u> See our response to part a above. However, using the imputed authorized values SCE spent approximately \$8.3 million over authorized for breakdown maintenance and \$23.7 million under authorized for preventive maintenance in 2024.

\$Millions	2024 Imputed Authorized	2024 Recorded	Recorded Less Authorized
Distribution O&M Breakdown Maintenance	\$44.5	\$52.9	\$8.3
Distribution O&M Preventive Maintenance	\$84.5	\$60.8	(\$23.7)
Graffiti Removal	\$0.9	\$0.5	(\$0.4)
Preventive Transformer Maintenance	\$0.9	\$2.2	\$1.3
Totals	\$131	\$116	(\$14)

## DATA REQUEST SET ED-SCE-2024 RSAR-003

To: Energy Division
Prepared by: Jason Zarraga
Job Title: Advisor
Received Date: 6/27/2025

**Response Date: 7/15/2025** 

## **Question 01 - 03 Safety Activities - Transmission Distribution:**

- 1. Please explain how the FMS Program relates to this Spending Category and provide details on how it related to the underspend.
- 2. How much did the FMS contribute to the underspend?
- 3. What is the difference in the cost in safety meetings before and after COVID-19?

## Response to Question 01 - 03 Safety Activities - Transmission Distribution:

The Functional Movement Screenings (FMS), a vendor delivering a therapeutic exercise program, was identified in SCE's RAMP filing as a control aimed at reducing the frequency and severity of minor injuries (e.g., strains, sprains, soft-tissue injuries, etc.) to SCE field employees. This program improved the physical performance of the employees, assisting them with the basic movement functions needed for their job. FMS used a customized stretching and muscle stabilizing sequence individualized or prescribed for each employee. This was designed to help employees' physical performance by targeting improvement in the basic movement functions of their job. Assessments of participants provided measurable success and facilitated sustainability of the exercise program.

At the time of developing our Test Year (TY) 2021 General Rate Case (GRC) application in early 2019, SCE was still utilizing the FMS program and had forecasted \$2.2 million per year throughout the GRC cycle. However, in 2019, the level of participation in the FMS program began experiencing a decrease in utilization. In late 2019, after the 2021 GRC had already been filed, some SCE teams decided to reduce or end their participation in the program. During the COVID-19 pandemic, SCE decided to permanently discontinue the program.

- 2. The discontinuation of the FMS Program in late 2019 contributed approximately \$2.2 million in underspending compared to the imputed authorized value for 2024. See the response to Question 1 for additional information.
- 3. Prior to COVID-19, safety meetings were held primarily in person. During, and after the end of COVID-19 restrictions, some meetings are still held in a virtual environment. SCE does not keep track of the exact costs associated with hosting safety meetings at a per-meeting level to respond to this question. However, holding a meeting virtually instead of in-person naturally

saves SCE certain expenses associated with travel time, personnel lodging, catering, and mileage expenses.

## DATA REQUEST SET ED-SCE-2024 RSAR-003

To: Energy Division
Prepared by: Aye Thwe
Job Title: Bus Ops Anlys, Sr Advisor
Received Date: 6/27/2025

**Response Date: 7/15/2025** 

## **Question 01-04 Distribution Intrusive Pole Inspections:**

- 1. Please provide more details on the emergent work that took priority over the distribution intrusive pole inspections.
- 2. How did SCE prioritize the emergent work over the intrusive pole inspections?
- 3. What were the steps and measures taken to remain compliant with the inspection frequencies per G.O. 165 and G.O. 95?
- 4. How does SCE plan to address the remaining pole inspections?

Туре	Line of Business	Spending Category - GRC Activity	2024 Annual Cost Difference (\$000)	2024 Annual Percent Cost Difference	2024 Annual Unit Percent Difference
O&M	Distribution	Distribution Intrusive Pole Inspections	-\$4,838	-75%	-91%

## **Response to Question 01-04 Distribution Intrusive Pole Inspections:**

- 1. Please provide more details on the emergent work that took priority over the distribution intrusive pole inspections.
  - a. <u>SCE Response</u>: SCE does not "shift funds" between programs or activities on a one-to-one basis. Instead, SCE appropriately uses management discretion to fund our operating units across the wide spectrum of our business needs to prudently and cost-effectively provide safe, reliable, clean and affordable electricity to customers. This approach can and does encompass responding to emergent needs that may differ from the programs authorized on a forecast basis in a GRC. There is no logical way from an accounting perspective to "tie" underspending in one program to overspending in another program. However, SCE notes that we have continued to prioritize wildfire mitigation efforts.
- 2. How did SCE prioritize the emergent work over the intrusive pole inspections?
  - a. **SCE Response:** See response to 1 above.
- 3. What were the steps and measures taken to remain compliant with the inspection

frequencies per G.O. 165 and G.O. 95?

- a. <u>SCE Response:</u> SCE currently adheres to General Order (G.O.) compliance requirements. Previously SCE inspected at a frequency greater than the G.O. requirement. SCE made the decision to decrease the frequency of inspections while remaining compliant with G.O. guidelines.
- 4. How does SCE plan to address the remaining pole inspections?
  - a. <u>SCE Response:</u> SCE does not have "remaining pole inspections." The Intrusive Pole Inspection Program is a compliance program with due dates to complete inspections based on G.O. requirements. SCE will continue to remain compliant with G.O. guidelines.