

August 1, 2024

Docket# 2024-SCs

OFFICE OF ENERGY INFRASTRUCTURE SAFETY OF THE CALIFORNIA NATURAL RESOURCES
AGENCY

SUBJECT: Southern California Edison Company's Quarterly Notification Pursuant to Public Utilities Code Section 8389(e)(7) Regarding the Implementation of Its Approved Wildfire Mitigation Plan and Its Safety Culture Assessment Recommendations

Southern California Edison Company (SCE) submits this Notification, which includes discussion of the implementation of our 2023-2025 Wildfire Mitigation Plan (WMP),¹ recommendations of the most recent safety culture assessment, a statement of the recommendations of its board of directors' safety committee² (Committee) during meetings that occurred during 2023 and the first quarter of 2024, and a summary of the implementation of Committee recommendations in the second quarter of 2024 from previous meetings.

PURPOSE

The purpose of this Notification is to comply with the provisions of Public Utilities Code (PUC) Section 8389(e)(7), established by California Assembly Bill (AB) 1054 as amended by AB 148.

BACKGROUND

AB 1054 was signed into law by Governor Newsom on July 12, 2019, and AB 148 was signed into law on July 22, 2021. Section 8389(e)(7), which was added to the PUC by AB 1054 as amended by AB 148, reads:

The Director of the Office of Energy Infrastructure Safety shall issue a safety certification to an electrical corporation if the electrical corporation provides documentation of the following: ... The electrical corporation is implementing its approved wildfire mitigation plan. The electrical corporation shall file a notification of implementation of its wildfire mitigation plan with the office and an information-only submittal with the commission on a quarterly basis that details the implementation of both its approved wildfire

¹ Public Utilities Code Section 8389 requires a quarterly notification detailing the implementation of an electric corporation's approved WMP. SCE is reporting on the implementation of its 2023-2025 WMP, which was submitted to the Office of Energy Infrastructure Safety (Energy Safety) on March 27, 2023.

² SCE's board of directors' safety committee is known as the Safety and Operations Committee of the Board of Directors and referred to herein as the "Committee."

mitigation plan and recommendations of the most recent safety culture assessments by the commission and office, and a statement of the recommendations of the board of directors' safety committee meetings that occurred during the quarter. The notification and information-only submittal shall also summarize the implementation of the safety committee recommendations from the electrical corporation's previous notification and submission. If the office has reason to doubt the veracity of the statements contained in the notification or information-only submittal, it shall perform an audit of the issue of concern. The electrical corporation shall provide a copy of the information-only submittal to the office.³

SCE provides the required information below:

(1) Quarterly Information-Only Submittal to the CPUC

SCE is simultaneously submitting this quarterly notification to the California Public Utilities Commission as an information-only submittal via email to Executive Director Rachel Peterson at rachel.peterson@cpuc.ca.gov; Forest Kaser at forest.kaser@cpuc.ca.gov; Simon Baker at simon.baker@cpuc.ca.gov; Danjel Bout at danjel.bout@cpuc.ca.gov; Eric Wu at eric.wu@cpuc.ca.gov and Leslie Palmer at leslie.palmer@cpuc.ca.gov.

(2) Implementation of Wildfire Mitigation Plan

On March 27, 2023, SCE submitted its 2023-2025 WMP. The WMP included discussion of 2023 programs and activities, as well as successes and lessons learned from 2022. For 2024, SCE is tracking 37 specific wildfire-related activities, including grid hardening, enhanced inspection and repair programs, continuation of robust vegetation management, increased situational awareness and response, and augmented activities for Public Safety Power Shutoff (PSPS) resilience and community engagement, particularly for underrepresented groups and access and functional needs customers.

In Attachment A (SCE's 2023-2025 Wildfire Mitigation Plan Progress Update – Q2 2024), SCE presents detailed information about the implementation status of each of these wildfire-related mitigation activities. As referenced in Attachment A, SCE is currently on track to substantially meet the 2024 year-end targets set forth in its WMP. Five of the 37 activities have been completed. Eight activities are showing as behind plan due to several factors including permitting delays and material shortages. However, SCE has implemented plans to address these factors and expects to meet year-end targets for three of these activities. Five of these activities are at risk of not meeting year-end targets (an increase from three activities reported behind in Q1):

- SH-1 (Covered Conductor): At-risk of not meeting year-end target due to multiple constraints on projects; recovery plan in progress.

³ Pub. Util. Code § 8389(e)(7).

- SH-2 (Targeted Undergrounding): At-risk of not meeting year-end target due to multiple constraints on projects.
- SH-17 (Rapid Earth Fault Current Limiter (REFCL) Ground Fault Neutralizer (GFN): At-risk of not meeting year-end target due to schedule impacts associated with long-lead materials.
- SH-18 (REFCL-Grounding Conversion): At-risk of not meeting year-end target due to delays with securing locations for grounding conversions.
- IN-8 (Inspection & Maintenance Tools InspectForce): At-risk of not meeting year-end target due to additional efforts to evaluate costs and integration with related IT efforts.

(3) Implementation of Objectives

SCE identified 53 objectives in the 2023-2025 WMP submitted March 27, 2023. There are three objective types: (1) Chapter 4.2 objectives⁴ that provide an overview for objectives and are high level objectives that were provided in the context of SCE’s overall WMP strategy and portfolio; (2) Three-year objectives that are included in the tables⁵ at the beginning of Chapters 8 and 9; and (3) Ten-year objectives that follow the 3-year objectives tables⁶ in Chapter 8 & 9. As of June 30, 2024, all 53 objectives are on track.

(4) Implementation of Most Recent Safety Culture Assessment

Energy Safety issued the 2023 Safety Culture Assessment (SCA) Report for SCE on March 22, 2024. The SCA was conducted by the National Safety Council, Energy Safety’s third-party administrator. As discussed in more detail below, SCE has been addressing the five findings and recommendations of its most recent SCA report.⁷ Below SCE describes how it has implemented actions to address these findings and recommendations in Q2.

1. *Continue to build SCE’s capacity as a learning organization (Recommendation 3.1): SCE should build its capacity as a learning organization. It should take a proactive approach to incorporating feedback to improve organizational processes. It should also take steps to increase workers’ psychological safety to improve the quantity and*

⁴ See Southern California Edison Company’s 2023-2025 Wildfire Mitigation Plan, filed March 27, 2023, [TN11952-2_20230327T125844_20230327_SCE_2023_WMP_RO.pdf, pp. 20-21](#)

⁵ SCE WMP, Table 8-1, pp. 231-233, Table 8-12, p. 375, Table 8-21, p. 446, Table 8-33, p.520, Table 8-53, p. 576, Table 9-3, p. 615.

⁶SCE WMP, Table 8-02, pp. 234-235, Table 8-13, p. 376, Table 8-22, p. 447, Table 8-34, p.521, Table 8-54, p. 577, Table 9-4, p. 616.

⁷ Energy Safety initiated its 2023 Safety Culture Assessment (SCA) process for electrical corporations on June 26, 2023. SCE partnered with Energy Safety and National Safety Council (NSC), its third-party administrator, to complete the management self-assessment and workforce safety culture survey. SCE filed comments on the draft report on March 8, 2024, received its final 2023 SCA report on March 22, 2024, and submitted a Letter Acceptance of 2023 Safety Culture Assessment Report on April 24, 2024.

quality of safety event (near-miss and hazard) reports, by:

- a. Focus on improving safety-enabling systems such as the investigation and root cause analysis of incidents.*
- b. Offer more opportunities for frontline workers and contractors to discuss lessons learned from safety events (near-misses and hazards) to foster psychological safety (i.e., a sense of safety that allows workers to feel empowered to speak up).*
- c. Measure frontline leaders' progress on implementing training concepts such as coaching conversations to provide accountability and allow SCE to evaluate its improvement through learning and refine actions as needed.*
- d. Develop and implement a plan to increase the quantity and quality of safety event (near-miss and hazard) reports submitted by frontline employees. The effectiveness of an event investigation depends on the quality of the information reported about the event.*

Addressing this recommendation, in Q2 SCE:

- a. The implementation of the Environmental, Health, Safety, and Quality (EHSQ) Information Management System has been pivotal in enhancing safety practices across the enterprise. The system has significantly improved the reporting, tracking, and management of frontline employees' observations by enabling users to report Safety Observations, Critical Observable Actions, Focused Observations, and Energy-Based Observations (EBO).⁸ This comprehensive platform, which boasts a user-friendly interface for reporting observations, will be instrumental in fostering organizational learning. Our focus on high-energy hazards, most likely to result in Serious Injury or Fatality (SIF), is central to the EHSQ's approach. The EBO process is crucial in identifying whether direct controls are in place for each observed high-energy hazard and ensures that for every high-energy hazard, there is a corresponding control measure to reduce the probability of a SIF occurrence. Such observations can prompt on-site coaching and problem-solving, enhancing safety performance in real time, and will foster broader industry learning as the process matures. This emphasis on learning and improvement is a testament to our commitment to a robust safety culture.
- b. Continued to share lessons learned via SCE's Weekly Incident Report. This weekly update provides opportunities for frontline workers and contractors to discuss lessons

⁸ The output of an EBO is a High Energy Control Assessment (HECA), an industry standardized tool that evaluates the extent to which high hazard risks are controlled.

learned from completed safety incidents evaluations, initial learnings from pending evaluations and tips for prevention. Prior to the weekly report, SCE conducted Contractor Safety Forums 2-3 times a year to discuss lessons learned and best practices. Shifting to a weekly cadence showed significant improvement in driving ongoing learning dialog. SCE will continue to evaluate for opportunities for improvement.

- c. Implemented Human and Organizational Performance (HOP) learning sessions within the Transmission organization. These monthly learning sessions are led by frontline leaders and employees who are active members of the North American Transmission Forum and focus on sharing best practices and lessons learned from events across the industry. This approach ensures that we are integrating HOP organizational learning principles into the culture of our organizations who perform high hazard work.
- d. Commenced user testing for the second phase of the EHSQ system. Testing modules include Incident Management, aimed to enhance incident reporting and investigation processes, and Corrective and Preventative Actions, which focuses on implementing measures to prevent the recurrence of incidents.

2. Strengthen Safety Communications Between Leadership and Frontline Workers (Recommendation 3.2): SCE should continue efforts to improve safety communications between leadership and frontline workers, by:

- a. Consider deploying an incident management team liaison to the field during incidents to be a part of monitoring and service restoration to better understand the frontline workers' experiences.*
- b. Continue to implement measures to increase organizational learning through regular cross-departmental topic-specific safety listening sessions.*

Addressing this recommendation, SCE continues to improve communications between frontline workers and our PSPS operations. In Q2 SCE:

- a. Continued the implementation of "Roundtable" sessions to five locations, exceeding the planned four locations for the quarter. These "Roundtable" sessions were designed to share PSPS and safety-related information, as well as solicit concerns and feedback. Overall, participants were engaged, great questions were raised, and positive feedback was received.
- b. Currently, SCE's Incident Management Team (IMT) maintains constant communication with field personnel during incidents through various channels. First, certain IMT personnel have roles dedicated to directly communicating with field and switching center personnel during an event. Second, designated leaders or supervisors at the district level act as liaisons between the IMT and field personnel. Third, periodically,

senior leaders from PSPS and Operations travel out to the field during PSPS incidents to communicate and elicit feedback from field and customer support personnel. When this recommendation was first raised in 2022, SCE considered deploying additional liaison positions to the field during IMT incidents on top of the communication channels and liaisons described above but ultimately determined that further touchpoints were unnecessary and redundant to what was already in place. Further, SCE determined that deploying liaisons at the start of an IMT incident was much less efficient than directly communicating with field personnel already in place, given the enormous amount of territory an incident could cover and the uncertainty of which circuits would ultimately be impacted. When the recommendation was renewed in 2023, SCE revisited the issue and came to the same determination.

3. *Improve Training for Frontline Workers on New Technologies Related to Wildfire Mitigation (Recommendation 3.3): SCE should increase training for frontline workers on wildfire suppression and the installation and operation of new technologies related to wildfire mitigation, including REFCL devices, by:*
 - a. *Continue to improve its training for frontline workers, particularly concerning wildfire suppression and the installation and operation of new technologies related to wildfire mitigation (e.g., REFCL devices).*
 - b. *Increasing training options to include more hands-on and less computer-based delivery.*

Addressing this recommendation, in Q2 SCE:

- a. Completed initial REFCL training to 100% of all impacted SCE locations for impacted job classifications and will continue to expand in-person REFCL training throughout 2025.

SCE is continuing to evaluate the overall strategy and best solutions as it relates to improvement of wildfire suppression training for frontline workers and plans to decide upon options for continuous improvement by Q4 2024.

- b. Provided site specific in-person just-in-time training to impacted personnel at Acton Substation. This training can take place when the Ground Fault Neutralizer is put into service. The same approach is planned for Phelan Substation prior to year-end 2024.
4. *Mitigate risk exposure posed by interactions with the public (Recommendation 3.4): SCE should continue to recognize and take action to mitigate the risk exposure posed by interactions with the public by:*
 - a. *Continue to recognize and take action to mitigate the risk exposure posed by interactions with the public.*

- b. Continue to track these incidents and further strengthen its strategy for managing risk exposure posed by interactions with the public.*

Addressing this recommendation in Q2, SCE:

- a. Continued implementing the improved process for inspectors and vendors to request customer contact information to set an inspection appointment with customers to gain access to their property after repeated failed attempts. SCE is currently evaluating enhancement options to the GIS system that would provide visibility to customer contact information for inspectors and contractors within the GIS tool.

SCE provides in-person presentations and a property access safety video in English and Spanish for employees and contractors, demonstrating techniques to deescalate a potentially threatening situation. These materials reinforce best practices to avoid hostile encounters and tips to de-escalate conflict.

- b. SCE's efforts appear to be having positive effects in reported assault/threat cases in 2023 compared to 2022 (76 compared to 113), however there was a slight increase in reported assault/threat cases in Q1 & Q2 of 2024 compared to the same timeframe in 2023 (38 compared to 33).

5. Increase Engagement in Workforce Survey (Recommendation 3.5): SCE should increase engagement on the safety culture assessment within the workforce supporting wildfire mitigation initiatives, by:

- a. Must employ a more robust communication strategy that involves senior leadership to promote the survey.*
- b. Must consider ways to diversify the tactics for soliciting survey responses from the workforce.*

Addressing both recommendations a and b in Q2, SCE:

- a. & b. Implemented a communication plan to ensure leadership continues to actively promote workforce survey engagement. SCE provided field employees with handheld devices to better facilitate completion of online surveys in the field.

(5) Recommendations of the Safety and Operations Committee

The Committee had one meeting during the second quarter of 2024, on April 24. During this meeting, the Committee focused on wildfire and safety issues in the following categories: Wildfire Safety, Public Safety and Worker Safety, among other topics.

Each of these areas are addressed below. In addition to regular Committee meetings each quarter, the Committee Chair meets regularly with SCE management to discuss wildfire and worker safety issues, and visits with teams in the field.

a. Wildfire Safety

The Committee received a report on the status of 2024 wildfire mitigation plan targets, including requests to the Commission to adjust targets in certain areas and the reasons for the proposed adjustments. The report also covered challenges in meeting goals for targeted undergrounding and REFCL and actions being taken to address the challenges, including setting up a dedicated targeted undergrounding team. The Committee also was told about the lessons learned from benchmarking with other utilities. The Committee and management also discussed aluminum conductor corrosion potential and preventative replacement strategy.

b. Public Safety

The Committee received a report on the public safety incidents that have occurred in 2024, which included a discussion of the trends identified as a result of the incidents and investigations into causation. The report also covered public safety focus areas, including contact with energized equipment, idle facilities, and underground equipment failure. The report also included a discussion of the risks relating to these focus areas and actions planned and taken to address the risks. The Committee and management discussed prioritizing addressing facilities in high fire risk areas and other risk mitigation actions.

c. Worker Safety

The Committee received a report on the status of the safety roadmap, which included prioritization and high energy control assessments, communications regarding safety observations and priorities and worker training and targeted human and systems initiatives driving the 2024 safety work plan. The Committee and management discussed benchmarking with others in the industry. The report also covered induction risk and the causes of induction hazards. The Committee and management discussed measures to mitigate induction risk, including worker training plans, formalized work practices and personal protective equipment.

d. Committee Recommendations

In addition to discussing the wildfire, worker, and public safety topics during its second quarter meeting, the Committee made the following recommendations:

1. Recommended that management provide a report on high and low energy

serious injuries and fatalities (SIFs), as well as potential impacts of future changes to the EEI SIF definition.

2. Recommended that management provide an update on leader safety talent reviews in Distribution Organizational Unit.

e. Completed Management Responses to Committee Recommendations

In response to the Committee's recommendations in prior meetings, management provided the following responses during the second quarter meeting, the details of which are described above or were pending from prior meetings:

- Recommendation (Q4 2023): The Committee recommended that management provide additional details on the implementation of its 2024 worker safety roadmap.

Management response: The Committee received information on the implementation of the 2024 worker safety roadmap at its February and April 2024 meetings as part of the worker safety reports.

- Recommendation (Q1 2024): The Committee recommended that management provide additional details on recent serious injuries and identify lessons learned and actions being taken in response.

Management response: The Committee received information on recent serious injuries and identify lessons learned and actions being taken in response at its April 2024 meeting as part of the worker safety report.

- Recommendation (Q1 2024): The Committee recommended that management provide an update on covered conductor corrosion and the proactive replacement strategy.

Management response: The Committee received an update on covered conductor corrosion and the replacement strategy at its April 2024 meeting as part of the wildfire safety report.

f. Pending Management Responses to Committee Recommendations

The following recommendations were made by the Committee in past meetings. Management is actively working to address these and will provide an update at future meetings.

- Recommendation (Q3 2023): The Committee recommended that management share Association of Edison Illuminating Companies safety work practices benchmarking as it becomes available at a future meeting.
- Recommendation (Q3 2023): The Committee recommended that management provide an update on the third-party review of all technical training programs for lineworkers as the assessment is completed at a future meeting.

The Committee has one regular Q3 2024 meeting scheduled for August 21, 2024, which will be summarized in the next quarterly notification letter. Additional meetings will be scheduled as appropriate.

CONCLUSION

For questions, please contact Jennifer Kline at (626) 484-0304 or at jennifer.kline@sce.com.

Southern California Edison Company

/s/ Connor J. Flanigan

Connor J. Flanigan

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CJF:jk:cm Enclosures

SCE's 2023-2025 Wildfire Mitigation Plan (WMP) Progress Update – Q2 2024¹

¹ All data is as of June 30, 2024 (+/- 5 business days). Reported numbers are subject to revision upon data validation.

Energy for What's AheadSM



WMP Activities Summary²

Inactive
 Under Review
 Complete
 On-Track
 Behind Plan, Likely to Meet Year-end Target
 Behind Plan, At-Risk of Not Meeting Year-end Target

Vegetation Management & Inspections

| | | |
|--|---|---|
| VM-1 Inspect 408 grids/circuits* | VM-2 Inspect and clear 63,700 structures | VM-3 Perform vegetation treatment and maintenance to 50 sites |
| VM-4 Inspect 485 grids/circuits* | VM-6 Monitor stabilization of Arbora and develop plan to enable VM maintenance programs | VM-7 (Distribution) Inspect 770 grids* |
| VM-8 (Transmission) Inspect 416 circuits* | VM-9 (Distribution) Inspect 1,020 HFRA circuit miles | VM-10 (Transmission) Inspect 1,500 HFRA circuit miles |

Grid Design, Operations, & Maintenance

| | | |
|---|---|--|
| IN-1.1 (Distribution Ground and Aerial) Inspect 187,000 structures | IN-1.2 (Transmission Ground and Aerial) Inspect 28,000 structures | IN-3 Inspect 5,300* distribution overhead circuit miles |
| | | IN-4 Inspect 1,000 transmission overhead circuit miles |
| IN-5 Inspect 160 generation related assets | IN-8 Execute approved designs for distribution ground and InspectCam capabilities | IN-9.a Inspect 25 spans with Line Vue |
| SH-1 Install 1,050 circuit miles of covered conductor | SH-2 Convert 16 circuit miles of overhead to underground | IN-9.b Inspect 50 splices with X-Ray |
| SH-5 Install 5 RAR/RCS sectionalizing devices | SH-6 Replace/upgrade 10 CB relay units with fast curve settings | SH-8 Retrofit TOPD at 5 locations with trip capabilities |
| SH-10 Remediate 500 tree attachments | SH-14 Remediate 1,000 spans | SH-16 Retrofit vibration dampers on 500 structures |
| SH-17 Complete construction of GFN at one substation | | SH-18 Target four locations for grounding conversion |

Situational Awareness & Forecasting

| | |
|---|---|
| SA-1 Install 50 weather stations | SA-3 Equip 200 weather station locations with machine learning capabilities |
| SA-8 Complete plan on future improvements | |
| SA-10 Install 10 HD Cameras | SA-11 Install Early Fault Detection (EFD) at 50 locations |

Community Outreach & Engagement

| | |
|--|---|
| DEP-1 Host at least two meetings | DEP-4 Conduct at least three customer studies |
|--|---|

Emergency Preparedness

| | |
|--|---|
| PSPS-2 85% of batteries delivered within 30 calendar days | PSPS-3 85% of rebates processed within 30 business days |
| DEP-2 PSPS response teams fully qualified/re-qualified by 7/1 annually | DEP-5 Provide fire agencies with funding to support QRF program |

² Information marked with an * denotes changes from the WMP filing that were submitted in the Errata dated April 6, 2023.

WMP Activities Summary

 Inactive  Under Review  Complete  On-Track  Behind Plan, Likely to Meet Year-end Target  Behind Plan, At-Risk of Not Meeting Year-end Target

Situational Awareness Activities

Weather Stations

52%
Installed

Weather Stations (SA-1)

Section 8.3.1.2 Page 449

Program Target: Install 50 weather stations in SCE's HFRA. SCE will strive to install up to 55 weather stations in SCE's HFRA, subject to resource and execution constraints.

Status Update: As of Q2, SCE completed installation of 26 weather stations in HFRA.

High Definition (HD) Cameras

0%
Installed

High Definition (HD) Cameras (SA-10)

Section 8.3.1.2 Page 449

Program Target: Install 10 HD Cameras. SCE will strive to install up to 20 HD Cameras, subject to resource and execution constraints.

Status Update: As of Q2, SCE has not installed any HD cameras. Activity is off track due to FAA permit delays affecting installs of the first four cameras. Activity is expected to return to on-track performance in Q3.

Weather and Fuels Modeling

Weather and Fuels Modeling (SA-3)

Section 8.3.1.2 Page 449

Program Target: Equip 200 weather station locations with machine learning capabilities. SCE will strive to equip up to 300 weather station locations with machine learning capabilities, subject to resource and execution constraints.

Status Update: In Q2, SCE's vendor delivered validation report providing insight to new machine learning model performance.

Early Fault Detection (EFD)

38%
Installed

Early Fault Detection (EFD) (SA-11)

Section 8.3.1.2 Pages 449-450

Program Target: Install Early Fault Detection (EFD) at 50 locations. SCE will strive to install EFD at up to 100 locations, subject to resource constraints and other execution risks.

Status Update: As of Q2, SCE completed installation of 19 EFDs.

Fire Spread Modeling

Fire Science (SA-8)

Section 8.3.1.2 Page 449

Program Target: Provide vendor with analytics report and work with the vendor to complete a plan on future improvements.

Status Update: In Q2, SCE finalized strategic plan on path forward with vendor.

WMP Activities Summary

Inactive
 Under Review
 Complete
 On-Track
 Behind Plan, Likely to Meet Year-end Target
 Behind Plan, At-Risk of Not Meeting Year-end Target

Grid Design and System Hardening

Covered Conductor

29%
Installed

Covered Conductor (SH-1)

Section 8.1.1.2 Page 238

Program Target: Install 1,050 circuit miles of covered conductor in SCE's HFRA. SCE will strive to install up to as many as 1,200 circuit miles of covered conductor in SCE's HFRA, subject to resource constraints and other execution risks.

Status Update: As of Q2, SCE completed installation of 305.24 circuit miles of covered conductor in HFRA. Activity is off track due to multiple constraints on projects. Activity is at-risk of not meeting YE target.

Undergrounding Overhead Conductor

0%
removed³

Undergrounding Overhead Conductor (SH-2)

Section 8.1.1.2 Page 238

Program Target: Convert 16 circuit miles of overhead to underground in SCE's HFRA. SCE will strive to convert up to 20 miles of overhead to underground in SCE's HFRA, subject to resource constraints and other execution risks.

Status Update: As of Q2, SCE completed removal of 0.47 overhead miles in support of targeted underground in HFRA. Activity is off track due to multiple constraints on projects. Activity is at-risk of not meeting YE target.

Remote Controlled Automatic Reclosers Settings Update

0%
Installed

Remote Controlled Automatic Reclosers Settings Update (SH-5)

Section 8.1.1.2 Page 239

Program Target: SCE will install 5 RAR/RCS sectionalizing devices subject to 2022 PSPS analysis and subject to change. SCE will strive to install up to 17 RAR/RCS sectionalizing devices subject to 2022 PSPS analysis, resource constraints and other execution risks.

Status Update: Activity is scheduled to begin in Q3.

Circuit Breaker Relay Fast Curve

60%
Installed

Circuit Breaker Relay Fast Curve (SH-6)

Section 8.1.1.2 Page 239

Program Target: Replace/upgrade 10 CB relay units with fast curve settings in SCE's HFRA.

Status Update: As of Q2, SCE completed replacement/upgrade of 6 CB relays with fast curve settings in HFRA.

Transmission Open Phase Detection

Transmission Open Phase Detection (SH-8)

Section 8.1.1.2 Page 239

Program Target: Retrofit TOPD at 5 locations with trip capabilities where alarm mode was previously deployed and that serve HFRA circuitry

Status Update: As of Q2, SCE continued development of the final design for the 5 locations.

Tree Attachment Remediation

1%
Remediations

Tree Attachment Remediation (SH-10)

Section 8.1.1.2 Page 240

Program Target: Remediate 500 tree attachments in SCE's HFRA. SCE will strive to complete up to 600 tree attachment remediations in SCE's HFRA, subject to resource constraints and other execution risks.

Status Update: As of Q2, SCE remediated 5 tree attachments in HFRA. Activity is off track due to aerial cable material shortage which has since been resolved. Activity is expected to return to on-track performance in Q4.

³ The first 5.61 miles removed this year will count toward the 2023 missed target.

WMP Activities Summary

 Inactive  Under Review  Complete  On-Track  Behind Plan, Likely to Meet Year-end Target  Behind Plan, At-Risk of Not Meeting Year-end Target

Grid Design and System Hardening

Long Span Initiative

66%

Remediations

Long Span Initiative (SH-14)

Section 8.1.1.2 Page 240

Program Target: Remediate 1,000 spans in SCE's HFRA. SCE will strive to remediate up to 1,200 spans in SCE's HFRA, subject to resource constraints and other execution risks.

Status Update: As of Q2, SCE remediated 661 spans in HFRA.

REFCL
(Grounding
Conversion)

Rapid Earth Fault Current Limiters (REFCL) (Grounding Conversion) (SH-18)

Section 8.1.1.2 Page 241

Program Target: SCE will target four locations for grounding conversion, subject to land availability.

Status Update: As of Q2, SCE is at-risk of not meeting YE target due to delays with securing locations for grounding conversions.

Vibration Damper Retrofit

79%

Installed

Vibration Damper Retrofit (SH-16)

Section 8.1.1.2 Page 241

Program Target: Retrofit vibration dampers on 500 structures where covered conductor is already installed in SCE's HFRA. SCE will strive to retrofit vibration dampers on up to 600 structures where covered conductor is already installed in SCE's HFRA, subject to resource constraints and other execution risks.

Status Update: As of Q2, SCE retrofit vibration dampers on 394 structures in HFRA.

REFCL
(Ground Fault
Neutralizer)

Rapid Earth Fault Current Limiters (REFCL) (Ground Fault Neutralizer) (SH-17)

Section 8.1.1.2 Page 241

Program Target: SCE will complete construction of GFN at one substation (Banducci).

Status Update: As of Q2, SCE is at-risk of not meeting YE target to complete construction of GFN at one substation due to long lead times to obtain materials needed to complete work.

WMP Activities Summary

Inactive
 Under Review
 Complete
 On-Track
 Behind Plan, Likely to Meet Year-end Target
 Behind Plan, At-Risk of Not Meeting Year-end Target

Asset Management and Inspections

YTD Status

Ground

54%

Aerial

54%

Distribution HFRI Ground / Aerial Inspections and Remediations (IN-1.1)

Section 8.1.1.2 Page 242

Program Target: Inspect 187,000 structures in HFRA. SCE will strive to inspect up to 217,000 structures in HFRA. This target includes HFRI inspections, compliance due structures in HFRA and emergent risks identified during the fire season (e.g., AOCs).

Status Update: As of Q2, SCE completed 101,909 ground and 100,846 aerial inspections in HFRA.

Transmission Infrared Inspections

82%

Targeted Circuits Inspected

Infrared Inspection, Corona Scanning and High-Definition (HD) Imagery of Transmission facilities and equipment (IN-4)

Section 8.1.1.2 Page 243

Program Target: Inspect 1,000 transmission overhead circuit miles in HFRA.

Status Update: As of Q2, SCE completed inspections of 816.30 transmission circuit miles in HFRA.

YTD Status

Ground

72%

Aerial

58%

Transmission HFRI Ground / Aerial Inspections and Remediations (IN-1.2)

Section 8.1.1.2 Page 242

Program Target: Inspect 28,000 structures in HFRA. SCE will strive to inspect up to 29,500 structures in HFRA. This target includes HFRI inspections, compliance due structures in HFRA and emergent risks identified during the fire season (e.g., AOCs).

Status Update: As of Q2, SCE completed 20,286 ground and 16,109 aerial inspections in HFRA.

Generation Inspections

75%

Inspected

Generation Inspections and Remediations (IN-5)

Section 8.1.1.2 Pages 243-244

Program Target: Inspect 160 generation related assets in HFRA. SCE will strive to inspect 190 generation related assets in HFRA subject to resource constraints and other execution risks.

Status Update: As of Q2, SCE completed inspections of 120 generation related assets in HFRA.

Distribution Infrared Inspections

67%

Targeted Circuits Inspected

Infrared Inspection of Energized Overhead Distribution Facilities and Equipment (IN-3)

Section 8.1.1.2 Page 243

Program Target: Inspect 5,300* distribution overhead circuit miles in HFRA.

Status Update: As of Q2, SCE completed inspections of 3,553.48 distribution circuit miles in HFRA.

Inspection and Maintenance Tools

Inspection & Maintenance Tools InspectForce (IN-8)

Section 8.1.1.2 Page 244

Program Target: Execute the approved designs/recommendations for incorporating distribution ground and InspectCam capabilities into single digital platform.

Status Update: As of Q2, SCE is conducting requirements gathering that incorporates distribution ground and InspectCam capabilities in single digital platform. Activity is off track due to additional efforts to evaluate costs and integration with related IT efforts. Activity is at-risk of not meeting YE target.

WMP Activities Summary

 Inactive  Under Review  Complete  On-Track  Behind Plan, Likely to Meet Year-end Target  Behind Plan, At-Risk of Not Meeting Year-end Target

Asset Management and Inspections

YTD Status

LineVue

132%

X-Ray

124%

Transmission Conductor & Splice Assessment: Spans with LineVue & X-Ray (IN-9)^{4, 5}

Section 8.1.1.2 Pages 244-245

Program Target:

- **IN-9.a:** Will inspect 25 spans with Line Vue. SCE will strive to inspect up to 50 spans with Line Vue, subject to resource constraints and other execution risks.
- **IN-9.b:** Will inspect 50 splices with X-Ray. SCE will strive to inspect up to 100 splices with X-Ray, subject to resource constraints and other execution risks.

Status Update:

- **IN-9.a:** SCE met target in Q2. Program exceeded its target and a total of 33 spans were inspected with LineVue.
- **IN-9.b:** SCE met target in Q2. Program exceeded its target and a total of 62 splices were inspected with X-Ray.

⁴ Per SCE's proposed revision to the target as submitted to OEIS on Nov 1, 2023.

⁵ Per SCE's proposed revision to the target as submitted to OEIS on Nov 1, 2023.

WMP Activities Summary

 Inactive  Under Review  Complete  On-Track  Behind Plan, Likely to Meet Year-end Target  Behind Plan, At-Risk of Not Meeting Year-end Target

Vegetation Management and Inspections

HTMP

61%

Circuits Assessed

Hazard Tree Management Program (VM-1)

Section 8.2.1.2 Page 379

Program Target: Inspect 408 grids/circuits* and prescribe mitigation for hazardous trees with strike potential within those grids in SCE's HFRA.

Status Update: As of Q2, SCE completed inspections on 247 grids in SCE's HFRA.

Dead and Dying Tree Removal

66%

Circuits Inspected

Dead and Dying Tree Removal (VM-4)

Section 8.2.1.2 Page 379

Program Target: Inspect 485 grids/circuits* and prescribe mitigation for dead and dying trees with strike potential along those circuits.

Status Update: As of Q2, SCE completed inspections of 320 grids/circuits.

Structure Brushing

43%

Structures Cleared

Structure Brushing (VM-2)

Section 8.2.1.2 Page 379

Program Target Inspect and clear (where clearance is needed) 63,700 structures,* with the exception of structures for which there are customer access or environmental constraints.

SCE will strive to inspect and clear (where clearance is needed) 135,200 structures,* with the exception of structures for which there are customer access or environmental constraints. These structures are in addition to poles subject.

Status Update: As of Q2, SCE completed inspections and cleared (where clearance is needed) 27,426 structures in HFRA. Activity is off track due to delays with vendor onboarding and environmental reviews. Activity is expected to return to on-track performance in Q3 2024.

VM Work Management Tool (Arbora)

VM Work Management Tool (Arbora) (VM-6)

Section 8.2.1.2 Page 378

Program Target Monitor stabilization of Arbora and develop plan and begin execution of plan to enable additional VM maintenance programs.

Status Update: As of Q2, SCE finalized stabilization metrics for VM maintenance programs.

Expanded Clearances for Legacy Facilities

80%

Expanded Clearances Performed

Expanded Clearances for Legacy Facilities (VM-3)

Section 8.2.1.2 Page 378

Program Target: Perform vegetation treatment and maintenance to 50 sites. SCE will strive to perform vegetation treatment and maintenance to 60 sites.

Status Update: As of Q2, SCE performed vegetation treatment and maintenance at 40 sites.

WMP Activities Summary

 Inactive  Under Review  Complete  On-Track  Behind Plan, Likely to Meet Year-end Target  Behind Plan, At-Risk of Not Meeting Year-end Target

Vegetation Management and Inspections

Detailed Inspections: Distribution

56%
Inspections

Detailed inspections and management practices for vegetation clearances around Distribution electrical lines, and equipment (VM-7)

Section 8.2.1.2 Page 380

Program Target: SCE plans to inspect 770* grids within our distribution system.

Status Update: As of Q2, SCE completed inspection of 434 grids.

LiDAR Vegetation Inspections – Distribution

59%
Inspections

LiDAR Vegetation Inspections – Distribution (VM-9)

Section 8.2.1.2 Page 380

Program Target: SCE will inspect at least 1,020 HFRA circuit miles. Subject to change based on technology, program adjustments, and grid/circuits layout.

Status Update: As of Q2, SCE completed inspection of 603.37 circuit miles.

Detailed Inspections: Transmission

69%
Inspections

Detailed inspections and management practices for vegetation clearances around Transmission electrical lines, and equipment (VM-8)

Section 8.2.1.2 Page 380

Program Target: SCE plans to inspect 416 circuits within our transmission system.

Status Update: As of Q2, SCE completed inspection of 288 grids.

LiDAR Vegetation Inspections – Transmission

149%
Inspections

LiDAR Vegetation Inspections – Transmission (VM-10)

Section 8.2.1.2 Page 381

Program Target: SCE will inspect at least 1,500 HFRA circuit miles. Subject to change based on program adjustments and evolution of remote sensing technologies.

Status Update: SCE met target in Q2. Program exceeded its target and a total of 2,238.02 circuit miles were inspected.

WMP Activities Summary

 Inactive  Under Review  Complete  On-Track  Behind Plan, Likely to Meet Year-end Target  Behind Plan, At-Risk of Not Meeting Year-end Target

Emergency Preparedness

Customer Care Programs (Critical Care Backup Battery (CCBB) Program)

100%
On-Time Deployments

Customer Care Programs (Critical Care Backup Battery (CCBB) Program) (PSPS-2)

Section 8.4.1.2 Page 523

Program Target: Complete 85% of battery deliveries to eligible customers within 30 calendar days* of program enrollment, subject to customer availability, reschedule requests and battery supply constraints. Strive to complete 90% of battery deliveries to eligible customers within 45 calendar days of program enrollment, subject to customer availability, reschedule requests and battery supply constraints.⁶

Status Update: As of Q2, 100% of customers enrolled received their battery within 30 calendar days.

Customer Care Programs (Portable Power Station and Generator Rebates)

100%
On-Time Rebates Processed

Customer Care Programs (Portable Power Station and Generator Rebates) (PSPS-3)

Section 8.4.1.2 Page 525

Program Target: Process 85% of all rebate claims within 30 business days* of receipt from website vendor; excluding website related delays and subject to receiving all required customer information. Strive to process 90% of all rebate claims within 45 business days of receipt from website vendor; excluding website related delays and subject to receiving all required customer information.⁷

Status Update: As of Q2, 100% of rebate claims submitted were processed and distributed within 30 business days.

SCE Emergency Responder Training

SCE Emergency Responder Training (DEP-2)

Section 8.4.1.2 Page 523

Program Target: PSPS response teams are fully qualified/re-qualified by 7/1 annually to maintain readiness.

Status Update: SCE met target in Q2, all PSPS response teams are fully qualified/re-qualified by 7/1 annually to maintain readiness.

Aerial Suppression

Aerial Suppression (DEP-5)⁸

Section 8.4.1.2 Page 523

Program Target: Provide fire agencies with funding to support quick reaction force (QRF) program for 2024.

Status Update: SCE met target in Q1. Contracts were issued at the end of 2023 and final payment was provided to the agencies in January 2024.

⁶ Number of calendar/business days subject to change based on customer survey feedback.

⁷ Number of calendar/business days subject to change based on customer survey feedback.

⁸ Per SCE's proposed revision to the target as submitted to OEIS on Nov 1, 2023.

WMP Activities Summary

 Inactive  Under Review  Complete  On-Track  Behind Plan, Likely to Meet Year-end Target  Behind Plan, At-Risk of Not Meeting Year-end Target

Community Outreach & Engagement

**Wildfire Safety
Community
Meetings**
100%
Safety Meetings

Wildfire Safety Community Meetings (DEP-1)⁹

Section 8.5.1.0 Page 579

Program Target: SCE will host at least two wildfire community safety meetings by region in targeted HFRA communities based on the impact of 2023 PSPS events and ongoing wildfire mitigation activities.

Status Update: SCE met target in Q2, SCE hosted two wildfire community safety meetings by region in targeted HFRA communities.

**Customer
Research and
Education**

Customer Research and Education (DEP-4)

Section 8.5.1.0 Page 579

Program Target: SCE plans to conduct at least three PSPS-related customer studies in 2024.

Status Update: As of Q2, SCE completed one PSPS related customer study.

⁹ SCE's proposed revision to the target as submitted to OEIS on Nov 1, 2023.

WMP Activity Narratives

Off-Track Narrative – IN-8 Inspection and Maintenance Tools: InspectForce

| | |
|------------|-------------|
| YTD Status | Behind Plan |
| YE Outlook | At-Risk |

Activity Target

- Execute the approved designs / recommendations for incorporating distribution ground and InspectCam capabilities into single digital platform.



Key Takeaways

- Off track due to additional efforts to evaluate costs and integration with related IT efforts.

Risks or Challenges

- This goal remains at risk due to a reassessment of the project costs and benefits.
- SCE may determine reassessed costs outweigh benefits, resulting in work stoppage.



Actions to Improve Performance / Get Well Plan

- SCE continues to reassess costs of this project. Estimated completion of cost reassessment by late July. SCE IT team is moving forward elements of the project (such as requirements gathering) not directly dependent on the cost and integration evaluation.

WMP Activity Narratives

Off-Track Narrative – SH-1 Covered Conductor (WCCP and Non-WCCP)

| | |
|------------|-------------|
| YTD Status | Behind Plan |
| YE Outlook | At-Risk |

Activity Target

- Install 1,050 circuit miles of covered conductor in SCE’s HFRA.
- SCE will strive to install up to as many as 1,200 circuit miles of covered conductor in SCE’s HFRA, subject to resource constraints and other execution risks subject to resource constraints and other execution risks



Key Takeaways

- Off track by 43% (305.24 circuit miles installed vs 533 planned YTD) due to impacts associated with multiple constraints on projects.
- A total of 305.24 circuit miles have been installed against a plan of 425 YTD.
 - 298.41 WCCP.
 - 6.83 Non-WCCP.
- Activity is at-risk of not meeting year-end target.

Risks or Challenges

- Several projects are currently constrained by bird nesting season which limits and/or restricts work in those impacted areas.
- Other projects are pending rights checks for potential easements and/or permits which are necessary prerequisites before construction can begin.



Actions to Improve Performance / Get Well Plan

- Recovery plan is in progress.
- Working with partners to review scope and develop execution strategy for each region.
- Meeting weekly with environmental counterparts to work to resolve constraints.
- Increasing focus on closing out work in SCE system of record as soon as the work order is field complete.

WMP Activity Narratives

Off-Track Narrative – SH-2 Undergrounding

| | |
|------------|-------------|
| YTD Status | Behind Plan |
| YE Outlook | At-Risk |

Activity Target

- Convert 16 circuit miles of overhead to underground in SCE's HFRA.
- SCE will strive to convert up to 20 miles of overhead to underground in SCE's HFRA, subject to resource constraints and other execution risks.



Key Takeaways

- Off track by 100% (0.47 circuit miles converted vs 0 planned YTD) due to impacts associated with multiple constraints on projects such as permitting and obtaining easements or permissions from landowners. Note: the first 5.61 miles removed in 2024 will count toward 2023 target due to previous missed target.
- Activity is at-risk of not meeting year-end target.

Risks or Challenges

- Scope for 2024 execution is affected by multiple constraints including environmental, permitting, and easements.
- Lack of contingency scope that can be brought in for 2024 target.



Actions to Improve Performance / Get Well Plan

- Continue to work with partner organizations to address constraints.
- Review 2024 projects for material demands and confirm availability.
- Newly established strike team created to review targeted undergrounding processes.
- Project-specific meetings to continue to support execution pace.

WMP Activity Narratives

Off-Track Narrative – SH-10 Tree Attachment Remediation

| | |
|------------|-------------|
| YTD Status | Behind Plan |
| YE Outlook | On Track |

Activity Target

- Remediate 500 tree attachments in SCE’s HFRA.
- SCE will strive to complete up to 600 tree attachment remediations in SCE’s HFRA, subject to resource constraints and other execution risks.



Key Takeaways

- Off track by 98% (5 tree attachments remediated vs 230 planned YTD) due to aerial cable material shortage which has since been resolved.

Risks or Challenges

- Decreased execution window in San Joaquin region due to material delays.



Actions to Improve Performance / Get Well Plan

- Escalated material concern with aerial cable manufacturer.
- The manufacturer has committed to increased aerial cable delivery volumes to provide enough material for projects in San Joaquin Region.
- With material supply challenges resolved, project team is shifting focus to execution.

WMP Activity Narratives

Off-Track Narrative – SH-17 Rapid Earth Fault Current Limiters (REFCL)

| | |
|------------|----------|
| YTD Status | On Track |
| YE Outlook | At-Risk |

Activity Target

- SCE will complete construction of GFN at one substation (Banducci).



Key Takeaways

- Activity is meeting internal plan YTD but is at risk of not completing construction of GFN at one substation due to long lead times to obtain materials needed to complete work.

Risks or Challenges

- Long lead materials will delay construction start until Q4.
- Vendor drawings, which must be received before project design can be initiated, were delayed.



Actions to Improve Performance / Get Well Plan

- Design in progress.
- Ground bank ordered in Q4 of 2023, expected delivery early Q1 of 2025; working with supplier to reduce further delay.

WMP Activity Narratives

| | |
|------------|----------|
| YTD Status | On Track |
| YE Outlook | At-Risk |

Off-Track Narrative – SH-18 Rapid Earth Fault Current Limiters (REFCL) (Grounding Conversion)

Activity Target

- SCE will target four locations for grounding conversion, subject to land availability.
- SCE will strive to target up to 6 locations for grounding conversion, subject to land availability.



Key Takeaways

- Activity is meeting internal plan YTD but is at risk for completing grounding conversion at four locations due to delays with securing locations for grounding conversions.

Risks or Challenges

- Continued delays with land acquisition are impacting design initiation for projects and will impact year-end goals.



Actions to Improve Performance / Get Well Plan

- 2 of 4 locations constrained by land acquisition and customer easement delays, working with land acquisition team to perform outreach and seek agreements.
- Long lead material on order (expected late Q3 2024).

WMP Activity Narratives

Off-Track Narrative – VM-2 Structure Brushing

| | |
|------------|-------------|
| YTD Status | Behind Plan |
| YE Outlook | On Track |

Activity Target

- Inspect and clear (where clearance is needed) 63,700 structures** with the exception of structures for which there are customer access or environmental constraints.

** These structures are in addition to poles subject to PRC 4292.



Key Takeaways

- Off track by 8% (27,426 inspected vs 29,870 planned YTD) due to delays with vendor onboarding and environmental reviews.
- New contracts/Program is expected to return to on-track performance in Q3.

Risks or Challenges

- PRC 4292 Compliance and Area of Concern (AOC) Summer goals share competing deadlines of 6/30 which may affect VM-2 performance.



Actions to Improve Performance / Get Well Plan

- Contractors with lower productivity due to the onboarding delays have developed Catch Up Plans to get back on track.

WMP Activity Narratives

Off-Track Narrative – SA-10 High Definition (HD) Cameras

| | |
|------------|-------------|
| YTD Status | Behind Plan |
| YE Outlook | On Track |

Activity Target

- Install 10 HD Cameras.
- SCE will strive to install up to 20 HD Cameras, subject to resource and execution constraints.



Key Takeaways

- Off track by 100% (0 installed vs 4 planned YTD) due to FAA permit delays affecting installs of the first four cameras.
- Four installs (2 sites with 2 cameras at each site) were planned for installation in June; installation was delayed due to FAA and LA County completing their amendment of the master lease agreement requested by the FAA.
- Activity is expected to return to on-track performance in Q3.

Risks or Challenges

- Completion of the FAA and LA County amendment of the master lease agreement may delay obtaining the permits necessary for camera installation.



Actions to Improve Performance / Get Well Plan

- Installations are expected to be completed in July once amendment is resolved.
- Next installation is scheduled in September and is currently on-track.
- As a mitigation, an additional two sites have been identified and are currently being evaluated by vendor.