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**Docket# 2023-EC\_ARC**

April 2, 2024

Caroline Thomas Jacobs, Director  
Office of Energy Infrastructure Safety  
715 P Street 20th Floor  
Sacramento, CA 95814

**SUBJECT: Southern California Edison Company's 2023 Wildfire Mitigation Plan Annual Report on Compliance (ARC) Pursuant to PUC Section 8386.3(c)(1)**

Dear Director Caroline Thomas Jacobs,

Pursuant to California Public Utilities Code (PU Code) § 8386.3(c) and Energy Safety's Compliance Guidelines issued on September 7, 2023, Southern California Edison Company (SCE) submits this annual report addressing compliance with its Wildfire Mitigation Plan (WMP) during calendar year 2023.

If you have any questions, or require additional information, please contact me at [gary.chen@sce.com](mailto:gary.chen@sce.com).

Sincerely,

//s//

Gary Chen  
Director, Safety and Infrastructure Policy, Regulatory Affairs  
Southern California Edison

## 1 INTRODUCTION

On March 27, 2023, SCE submitted its 2023-2025 WMP.<sup>1</sup> The WMP included 40 wildfire mitigation programs with implementation targets in 2023 as identified in Chapters 8 and 9 of the WMP. These programs covered the areas of grid hardening, asset inspection and repair, vegetation management, situational awareness, emergency preparedness, community outreach, and Public Safety Power Shutoffs (PSPS).

On November 30, 2023, the California Public Utilities Commission (CPUC) ratified Energy Safety's decision approving SCE's 2023-2025 WMP.<sup>2</sup> Consistent with Public Utilities Code (PUC) § 8386.3(c)(1), which states that each electrical corporation shall file with the division a report addressing the electrical corporation's compliance with the plan during the prior calendar year, SCE submits this report addressing annual compliance for the 2023 calendar year.

SCE substantially complied with its approved 2023-2025 WMP<sup>3</sup> for wildfire mitigation, meeting or exceeding 37 out of 40 year-end program targets. The italicized language in the sections below represent verbatim reproductions of the language from Compliance Guidelines<sup>4</sup> for required content for this report. SCE has organized this report into the following sections, consistent with the Compliance Guidelines:

1. Introduction
2. SCE Responses to Annual Compliance Report Requirements
  - I. Plan Objectives
  - II. 3-Year Objectives: In-Flight
  - III. 3-Year Objectives: Completed
  - IV. Targets Assessment
  - V. 2023 Change Orders
  - VI. Initiative Expenditures
3. Attachment A: SCE Q4 2023 WMP Progress Update
4. Attachment B: SCE 2023 WMP Cost Variance Explanation

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<sup>1</sup> SCE's 2023-2025 WMP is available at: <https://www.sce.com/safety/wild-fire-mitigation>.

<sup>2</sup> CPUC Final Resolution SPD-17 available at: <https://docs.cpuc.ca.gov/SearchRes.aspx?docformat=ALL&docid=521172448>.

<sup>3</sup> "Substantial compliance" is the standard for WMP compliance review. See Pub. Util. Code §§ 8386.1, 8386.3©(4), and CPUC Resolution WSD-012.

<sup>4</sup> See "Office of Energy Infrastructure Safety – Compliance Guidelines", issued September 2023, available at [Compliance Guidelines](#).

## 2 SCE RESPONSES TO ANNUAL COMPLIANCE REPORT REQUIREMENTS

### I. Plan Objectives

*a. A clear description of the electrical corporation's progress towards achieving the objectives for the three-year WMP plan cycle, as identified in its most recently approved WMP. Progress must be discussed individually for each stated objective.*

SCE Response: Below SCE has provided each Plan Objective from Section 4.2 of its approved 2023-2025 WMP. In the indentation following each Plan Objective, SCE describes its current status toward achieving the objective.

- 01 - Reduce the likelihood that objects will contact power lines and lead to an ignition by hardening most of the overhead distribution system in our high fire risk area with either covered conductor or targeted undergrounding, developing an expanded transmission grid hardening strategy, and continuing to maintain vegetation clearance distances for trees and vegetation that could potentially contact power lines.
  - SCE Response: SCE is on track to improve grid design, operations, and maintenance, and continued its progress to harden the distribution grid through execution of approximately 1,220 miles of its Covered Conductor program (SH-1) and approximately 5 miles of Targeted Undergrounding (SH-2). As of year-end 2023, approximately 58% of SCE's HFRA has been hardened. SCE also successfully executed additional hardening programs such as long span remediations, fusing mitigation, and installation of new sectionalizing devices. SCE is on track to develop its transmission hardening strategy by the end of 2025, consistent with its WMP objective. SCE met its Vegetation Management targets in 2023, reducing the likelihood of vegetation contacts resulting in ignitions.
- 02 - Reduce the likelihood that equipment will fail and lead to an ignition, by continuing to perform asset inspection initiatives that inspect over 99% of wildfire risk in our HFRA each year and by deploying new technologies that can detect when issues on the system may arise.
  - SCE Response: SCE is on track for asset inspections and completed risk-informed inspections on distribution, transmission and generation assets in HFRA representing over 99% of the modeled risk using the Integrated Wildfire Mitigation Strategy (IWMS) Risk Framework. The inspections identify issues that SCE prioritizes and addresses to reduce the potential for asset failures that could result in ignitions and wildfires. SCE continued implementation of two technology applications, InspectForce and FMP360, both of which are essential tools in the inspection process. SCE also fully launched the Distribution HFRA 360 program, following the successful pilot in 2022, to conduct asset inspection from the ground and aerial viewpoints in one visit.

- 03 - Prioritize the deployment of our mitigation initiatives to the areas that have the greatest potential to lead to the most consequential wildfire and PSPS impacts.
  - SCE Response: SCE is on track for IWMS execution and continues to use risk analysis to prioritize the deployment of mitigations based on ability to mitigate wildfire risk in the areas with potential for extreme wildfire events. SCE completed or exceeded its targets on 37 out of 40 WMP activities, and continued to apply its IWMS Risk Framework to mitigation scoping, which includes elements based on PSPS mitigation. SCE also executed mitigations such as sectionalizing devices (SH-5), which can reduce the scope of PSPS events.
  
- 04 - Improve the efficiency and effectiveness of our vegetation management activities to reduce the risk of vegetation-caused ignitions.
  - SCE Response: SCE is on track with vegetation management objectives. SCE consolidated ground inspections for its compliance vegetation clearing programs (i.e., Routine Line Clearing) and removal programs (i.e., HTMP and Dead, Dying, and Diseased Tree Removal) leading to more efficient work management of inspections. In addition, SCE expanded its remote sensing initiative for distribution assets, with its overall increase of LiDAR data helping SCE transition to more complex inspection capabilities using technology such as “auto prescriptions” and inspection location optimization in the coming years. For structure brushing, SCE continues to mature required environmental support in line with the evolution of this program. Finally, SCE implemented emergent work capabilities in Arbora, its vegetation management platform.
  
- 05 - Improve the operational efficiency and effectiveness of our wildfire mitigation initiatives by enhancing program deployment strategies, leveraging information technology solutions, and incorporating new technologies where possible.
  - SCE Response: SCE continued to improve the operational efficiency and effectiveness of its wildfire mitigation initiatives, with progress in the following areas:
    - Enhancements to Program Deployment Strategies
      - Incorporated 360 inspections into its distribution inspections approach and continued to make improvements to its situational awareness tools and vegetation management strategy.
      - Increased its use of artificial intelligence/machine learning to detect grid defects from drone inspection data.
    - Leveraging Information Tech Solutions
      - Continued deployment of technology tools such as FMP360, InspectForce, Ezy Data, and WiSDM for inspection programs and wildfire reporting.
    - Incorporating New Technologies

- Started using satellite imagery to detect vegetation encroachment.
  - Continued to develop its transmission strategy and develop a study evaluating potential transmission hardening solutions.
  - Continued deployment of emerging technologies such as Rapid Earth Fault Current Limiter (REFCL) and Transmission Open Phase Detection (TOPD).
- 06 - Continue to improve our situational awareness capabilities by enhancing weather and fire potential modeling and forecasting, which will aid PSPS decisions and wildfire mitigation deployment.
  - SCE Response: SCE is on track for situational awareness objectives and continued to install weather stations (SA-1), which provide key inputs into machine learning models. The machine learning models reduce forecasting bias by using the weather station networks to understand past forecasting errors and applying results to future predictions. SCE continues to expand its weather forecasting capabilities to additional locations for improved PSPS planning. SCE added a total of 619 new machine learning forecast locations, and new forecast variables were also trained in the machine learning algorithm. SCE continues to make important investments in fire spread modeling technology to help identify areas that are at high risk for large wildfires. SCE continued to work on a new Fire Potential Index (FPI) 2.0 to account for the diversity of fuel conditions across SCE's service area.
- 07 - Reduce the impacts of PSPS to customers, particularly those with Access and Functional Needs, through expanded customer offerings, communications, and circuit-specific strategies to minimize the need for PSPS altogether.
  - SCE Response: SCE is on track with PSPS objectives and implemented or expanded customer programs to reduce the impact of PSPS to customers. This included, for example, launching the Disability Disaster and Access Resources (DDAR) pilot to offer tailored solutions to AFN customers, increasing AFN support services and conducting targeted outreach, meeting performance targets for timely delivery of Critical Care Backup Batteries to program participants, and continuing to support and educate customers through its Customer Contact Center, newsletters, Community Based Organization (CBO) outreach, and communications. SCE also continued to deploy hardening mitigations such as circuit segmentation and playbooks so that the number of customers impacted by a PSPS is minimized.
- 08 - Maintain a comprehensive, all-hazards planning and preparedness program to: provide effective emergency response; safely and expeditiously restore service during and after a major event; and communicate effectively with customers, stakeholders, and agency partners.

- SCE Response: SCE is on track for emergency preparedness objectives and continued its mature and established range of emergency planning and preparedness activities. SCE maintained its Business Resiliency All-Hazards Emergency Operations Plan, which incorporates disaster and emergency preparedness and facilitates continuity of critical operations during emergencies. SCE conducted targeted annual training for field workers and Incident Management Team members for responding to emergencies. SCE also invested in improvements in PSPS notification and data systems.
- 09 - Deploy new technologies and updated protection device settings to improve wildfire mitigation effectiveness while balancing reliability impacts to customers.
  - SCE Response: SCE is on track for wildfire mitigation improvements and continued its Fast Curve setting advancements by upgrading to microprocessor relays at substations and by refining settings on circuits with the technology installed, based on lessons learned. SCE met or exceeded goals for other protection devices and strategies including branch line fusing, remote automatic reclosers, and TOPD. SCE also continued to make substantial progress on REFCL implementation. See response above to plan objective 05 for new information technology implementation.

## II. 3-Year Objectives: In-Flight

*b. A clear description of the electrical corporation's progress towards achieving the three-year objectives listed in the tables in Section 8 of its WMP, including all subsections, with completion dates within the recently completed compliance period. Each objective must be discussed individually and, at a minimum, include the following:*

- i. A listing of the initiative(s) and associated tracking identification numbers the electrical corporation is implementing to achieve the objective.*
- ii. Reference(s) to the WMP section(s) or appendix, including page numbers, where the details of the objective are documented and substantiated.*
- iii. The completion date listed in the approved WMP.*
- iv. A summary of the electrical corporation's progress made during the most recently completed compliance period.*

SCE Response: Please see the tables below, which are consistent with the format and numbering of the WMP tables, with a column added to provide SCE's progress update.

a. **Table 8-1 - Grid Design, Operations, and Maintenance Objectives (3-year plan)**

Objectives for Three Years (2023-2025)	Applicable Initiative(s), Tracking ID(s)	Method of Verification (i.e., program)	Completion Date	Reference (section & page #)	Progress Update
Continue to perform targeted grid hardening to minimize impact on customers by reducing the scope and frequency of PSPS.	<ul style="list-style-type: none"> <li>• WCCP (SH-1)</li> <li>• TUG (SH-2)</li> </ul>	Completion of planned targeted covered conductor and/or sectionalization devices each year (which can be through work orders, GIS maps, etc.)	December 2025	Section 8.1.2, pp. 250-257	SCE exceeded the 2023 implementation target for SH-1 by 120 miles and performed 5.39 miles for SH-2 relative to the 2023 target of 11 miles.
Continue to prioritize grid hardening deployment based on the IWMS Risk Framework	<ul style="list-style-type: none"> <li>• WCCP (SH-1)</li> <li>• TUG (SH-2)</li> <li>• REFCL (SH-17, SH-18)</li> <li>• Long Span Initiative (SH-14)</li> <li>• Tree Attachment Remediation (SH-10)</li> <li>• Remote Controlled Automatic Reclosers (SH-5)</li> <li>• CB Relays &amp; Fast Curve (SH-6)</li> <li>• Vibration Dampers (SH-16)</li> <li>• Fire Resistant Wrap Retrofit</li> <li>• Vertical Switches (SH-15)</li> <li>• Transmission IWMS</li> </ul>	Measuring how much of grid hardening mitigation deployed (e.g., number of circuit miles, number of units, number of structures, etc.) is aligned with IWMS	December 2025	Sections 8.1.2, 8.1.8 and 8.3.3, pp. 250-277, 8.1.8, pp. 331-342 and pp. 8.3.3, 467-492	SCE continued to apply the IWMS consistent with how SCE described the IWMS and its applications in the WMP. For example, approximately 87% of SCE’s covered conductor implementation in 2023 was focused in SCE’s SRA and HCA risk tiers.
Continue to deploy protection system mitigations and also refine circuit protection strategies to further reduce wildfire risk while balancing system reliability	<ul style="list-style-type: none"> <li>• Distribution Open Phase Detection</li> <li>• Transmission Open Phase Detection</li> <li>• Fast Curve</li> <li>• High Impedance Relay</li> <li>• Branch line Protection Strategy (SH-4)</li> </ul>	Validation of system updates or installations or review of pertinent outage, event, ignition, risk and/or reliability data to evaluate effectiveness.	December 2025	Sections 8.1.2, 8.1.8 and 8.3.3, pp. 250-277, 8.1.8, pp. 331-342 and pp. 8.3.3, 467-492	SCE continued implementation of protection devices and settings consistent with its plans as described in the WMP. As of year-end 2023, SCE upgraded or replaced 96 circuit breaker (CB) relay units. SCE also evaluated approximately 300 circuits for potential application of refined fast curve settings on circuit breaker relays and RAR devices on these circuits. The refined settings increase the sensitivity of fast curve enabled devices and help limit some of the customer electric service impacts associated with fast curve settings.



Objectives for Three Years (2023-2025)	Applicable Initiative(s), Tracking ID(s)	Method of Verification (i.e., program)	Completion Date	Reference (section & page #)	Progress Update
Continue evaluation of emerging technologies to determine if any should be added to the grid hardening wildfire mitigation portfolio	<ul style="list-style-type: none"> <li>• Remote Grid</li> <li>• Spacer Cable</li> </ul>	Provide report of remote grid and spacer cable that includes recommendations for plan and strategy going forward	December 2025	Section 8.1.2, pp. 274-275, 251-253	<p>As SCE continues remote grid feasibility studies, SCE will evaluate whether deployment of remote grid is feasible and cost effective compared to undergrounding for that location. SCE implemented four feasibility studies—one completed and three initiated—to evaluate whether a remote grid is a viable option.</p> <p>SCE found that spacer cables, another emerging technology, are not as economical as other alternatives that are already part of SCE’s operations (i.e., aerial bundled cable) and will not move forward with further deployments.</p>
Perform assessments of transmission hardening options and develop potential pilots/programs (contingent upon results of assessments)	<ul style="list-style-type: none"> <li>• Transmission IWMS</li> <li>• High-risk transition spans</li> </ul>	Provide report of transmission grid hardening assessment that includes recommendations for plan and strategy going forward	December 2025	Sections 8.1.2 and 8.1.3.2, p. 278, 8/1/3/2, pp. 289-293	SCE continues its efforts to analyze transmission hardening options and is on track to complete this effort by year-end 2025.
Evaluate and update the inspection form regarding distribution and transmission high fire risk-informed (HFRI) inspections to reduce time required for data capture while still capturing critical information and incorporating lessons learned of potential failure modes.	<ul style="list-style-type: none"> <li>• Inspections and Remediations <ul style="list-style-type: none"> <li>- Distribution High Fire Risk-Informed (HFRI) Inspections and Remediations (IN-1.1)</li> <li>- Transmission FRI Inspections and Remediations (IN-1.2)</li> </ul> </li> <li>• Inspection Work Management Tools <ul style="list-style-type: none"> <li>- Inspection and Maintenance Tools (IN-8)</li> <li>- Asset Defect Detection using AI/ML (IN-8)</li> </ul> </li> </ul>	Revised/new version of inspection form	December 2025	<p>Section 8.1.3.1, pp. 282-289 (IN-1.1)</p> <p>Section 8.1.3.2, pp. 289-293 (IN-1.2)</p> <p>Section 8.1.3.5, pp. 319-325 (IN-8)</p>	SCE continues to evaluate its inspection forms for clarity, completeness, and opportunities for improvement. SCE is making incremental changes based on field feedback and will continue to evaluate and update the inspection form and process through 2025.
Continue to align scope selection of inspection programs with the IWMS Risk	<ul style="list-style-type: none"> <li>• Inspections and Remediations <ul style="list-style-type: none"> <li>- Distribution HFRI Inspections and</li> </ul> </li> </ul>	Percent of overall risk inspected annually for each	December 2025	Section 8.1.3.1, pp.	SCE used IWMS for a risk-informed inspection program scope and frequency, consistent with how it described its

Objectives for Three Years (2023-2025)	Applicable Initiative(s), Tracking ID(s)	Method of Verification (i.e., program)	Completion Date	Reference (section & page #)	Progress Update
Framework	Remediations (IN-1.1) - Transmission HFRI Inspections and Remediations (IN-1.2)  - Infrared Inspection of Energized Overhead Distribution Facilities and Equipment (IN-3) - Infrared Inspection, Corona Scanning, and High-Definition Imagery of Energized Overhead Transmission Facilities and Equipment (IN-4) - Generation High Fire Risk-Informed Inspections and Remediations in HFRA (IN-5)	program		282-289 (IN-1.1)  Section 8.1.3.2, pp. 289-293 (IN-1.2)  Section 8.1.3.5, pp.297-299 (IN-3)  Section 8.1.3.6, pp. 300-302 (IN-4)  Section 8.1.3.7, pp. 303-304 (IN-5)	plans in the WMP. SCE evaluated approximately 97% of risk through HFRI inspections for both distribution and transmission structures, per Figure SCE 8-23 and Figure SCE 8-25, respectively, of SCE’s 2023-2025 WMP.
Develop and implement risk-prioritized remediations to reduce backlog of asset notifications	<ul style="list-style-type: none"> <li>• Inspections and Remediations <ul style="list-style-type: none"> <li>- Distribution HFRI Inspections and Remediations (IN-1.1)</li> <li>- Transmission HFRI Inspections and Remediations (IN-1.2)</li> </ul> </li> </ul>	Number of past due notifications and associated risk of those notifications	December 2025	Section 8.1.3.1, pp. 282-289 (IN-1.1)  Section 8.1.3.2, pp. 289-293 (IN-1.2)  ACI 23-13 (Notification Backlog)	SCE continued the efforts to prioritize notifications as described in the WMP and in its response to ACI SCE-22-15 (in the 2023-2025 WMP) and ACI SCE-23-13 (in the 2025 WMP Update). As of year-end 2023, SCE met its commitment targets discussed in ACI-22-15 with respect to the notification backlog.

**b. Table 8-12 - Vegetation Management and Inspections Implementation Objectives (10-year plan)**

Objectives for Three Years (2023-2025)	Applicable Initiative(s), Tracking ID(s)	Method of Verification (i.e., program)	Completion Date	Reference (section & page #)	Progress Update
Complete Joint-IOU Effectiveness of Expanded Clearances Study	Routine Line Clearing (VM-7, VM-8), Expanded Clearances (VM-7, VM-8)	Report from 3 <sup>rd</sup> party project manager	2025	Section 8.2.3.3.1 Expanded Clearing, pp. 46-52	SCE continues to collaborate with PG&E and SDG&E for this study, with the third-party vendor starting analysis in the first quarter 2024 upon completion of populating the common database.
Deploy consolidated inspection strategy and transition to circuits from grids	Distribution and Transmission inspections (VM-7, VM-8); Hazard Tree Management Program (HTMP) (VM-1); Dead & Dying Tree Removal (VM-4)	Documentation of percentage completion as compared to the master schedule	2025	Section 8.2.2 Vegetation Management Inspections, pp.384-408 Section 8.2.3.3.1 Expanded Clearing, pp. 412-418	SCE consolidated ground inspections for its compliance vegetation clearance work and tree removal programs. In addition, SCE continues developing the foundation for transitioning to circuits from grids for vegetation management.
Develop and implement a risk-informed process to minimize backlog	Distribution and Transmission inspections (VM-7, VM-8); HTMP (VM-1); Dead & Dying Tree Removal (VM-4)	For Routine Line Clearing, target the completion of prescribed work within 60 days of assignment for Distribution and Transmission inspections, not subject to constraints. For HTMP and Dead and Dying Tree Removal, target the completion of prescribed work within 180 days of assignment.	2025	Section 8.2.6 Open Work Orders, pp. 432-438	SCE implemented a risk-informed process for routine line clearing (i.e., VM-7 and VM-8) to refine prioritization of work using variables including aging, tree growth rate, clearance distance, and others.
Make substantial progress on evaluating remote sensing technology for vegetation inspections	(VM-9, VM-10), Satellite Technology	Develop report on progress	2025	Section 8.2.2.4 Remote Sensing Inspections, pp. 398-408	SCE met the targets for remote sensing initiatives in HFRA, having expanded the use of remote sensing for distribution assets and completing satellite-based inspections.

c. **Table 8-21 – Situational Awareness Initiative Objectives (3-year plan)**

Objectives for Three Years (2023–2025)	Applicable Initiative(s), Tracking ID(s)	Method of Verification (i.e., program)	Completion Date	Reference (section & page #)	Progress Update
<p>Increased data collection (through additional weather station deployment, explore increased collection intervals, and additional SCE HD camera deployment) to expand situational awareness of real-time conditions and refine weather models</p>	<p>Weather Stations, SA-1, HD Cameras, SA-10 Satellite &amp; Other Imaging Technology, SA-10</p>	<p>SA-1: GIS data, increase frequency of reads SA-10: Additional GIS data, data camera feed on vendor network.</p>	<p>SA-1: End of 2025 SA-10: End of 2024</p>	<p>Section 8.3.2.1.1 Weather Stations (SA-1), pp. 454-459 Section 8.3.4.1.1 (HD Cameras SA-10), pp. 492-497 Section 8.3.4.1.2 (Satellite &amp; Other Imaging Technology SA-10), pp. 494-498</p>	<p>SCE installed 10 HD cameras in blind spots within its service area where infrastructure and some wildland urban interface (WUI) areas were not visible in the existing camera viewsheds. SCE also installed 114 weather stations.  SCE invested in additional cellular modems for dual communication enhancements to collect weather data more frequently than six times per hour.</p>
<p>Expand data analysis supporting wildfire mitigation efforts, advance fire potential forecasting further, and improve modeling efforts as it relates to fire science</p>	<p>Fire Science, SA-8</p>	<p>Additional data sets, analysis results, operational products</p>	<p>Ongoing</p>	<p>Section 8.3.2.1 Existing Systems, Technologies and Procedures pp. 453-464. Section 8.3.4 Ignition Det. Sys. pp. 490-501</p>	<p>SCE continues to work on a new FPI (2.0) to account for the diversity of fuel conditions across SCE’s service area.  SCE improved its Dead Fuel Moisture models to mostly account for dry biases in the models.  SCE worked with Technosylva to obtain 2022 historical consequence data for an in-depth analysis, as well as developing a strategic plan to address the implementation of consequence information into the PSPS decision-making process.  SCE continues to work with Earth Labs in association with the University of Colorado at Boulder to develop a Vegetation Buildup Index.  SCE continued partnering with San Jose State University to help observe winds above ground level during the fall using LiDAR technology.</p>

Objectives for Three Years (2023–2025)	Applicable Initiative(s), Tracking ID(s)	Method of Verification (i.e., program)	Completion Date	Reference (section & page #)	Progress Update
Increase ability to detect issues (e.g., damage and degradation) on the electric grid prior to risk events occurring	Early Fault Detection (D&T), SA-11	Number of EFD devices deployed	Ongoing	Section 8.3.3.1.1, Radio Frequency Monitors: Early Fault Detection (EFD) (SA11), p. 469	SCE installed 77 EFD units (76 for Distribution and 1 for Transmission-EFD), performed EFD data analysis and evaluation, and provided program support. Fourteen additional T-EFD units were designed and prepared in 2023 and are planned for deployment in 2024.
Review emerging technologies to improve weather situational awareness and forecasting capabilities for potential evaluation or adoption	Weather & Fuels Modeling, SA-3	Technical report from academic or vendor work, and/or new product outputs.	Ongoing	Section 8.3.5, Weather Forecasting, pp. 499-515	<p>SCE continues to be a member of the Wildfire Interdisciplinary Research Center through San Jose State University in which various projects related to wildfire science are funded and supported for possible future operational use.</p> <p>SCE continues to partner with the University of California, Santa Barbara to devise a new method to derive more complete wind risk profiles along infrastructure during PSPS events and to develop local nowcasting techniques.</p> <p>SCE continues to evaluate its partnerships on an ongoing basis as its needs and priorities evolve.</p>
Continue to increase situational awareness and improve the accuracy of weather forecasting to help optimize the scope of PSPS events	Weather Stations, SA-1, Weather & Fuels Modeling, SA-3, Fire Science, SA-8, HD Cameras, SA-10	<p>SA-1: Continue installing new weather stations, commitment of 85. Upgrade more stations for dual comms for real-time reads capabilities.</p> <p>SA-3 and SA-8: Weather and fuel forecast output from operational systems and associated verification and/or technical reports.</p> <p>SA-10: Continued installs of HD Cameras, goal of 10, max of 20.</p>	Ongoing; annual scope	<p>Section 8.3.2.1.1 Weather Stations (SA-1), pp. 454-458</p> <p>Section 8.3.5, Weather Forecasting, pp. 499-514</p> <p>Section 8.3.2.1 Existing Systems, Technologies and Procedures pp. 453-462;</p> <p>Section 8.3.4 Ignition Det. Sys. pp. 490-497</p> <p>Section 8.3.4.1.1 (HD Cameras SA-10), p. 492-497</p>	<p>In addition to adding HD cameras and weather stations as described above, SCE expanded its Machine Learning (ML) weather forecast capability by procuring the European Centre for Medium-Range Weather Forecasts weather model output and updating its Live Fuel Moisture models by incorporating additional vegetation species.</p> <p>SCE expanded its ML forecast to 619 new forecast locations and trained new forecast variables in the ML algorithm.</p>

d. **Table 8-33 -Emergency Preparedness Initiative Objectives (3-year plan)**

Objectives for Three Years (2023-2025)	Applicable Initiative(s), Tracking ID(s)	Method of Verification (i.e., program)	Completion Date	Reference (section & page #)	<i>Progress Update</i>
Maintain a comprehensive all-hazards planning and preparedness program to provide effective emergency response and to safely and expeditiously restore service during and after a major event.	N/A	Annual Filing	Yearly	Section 8.4.2 Emergency Preparedness Plan, pp. 529-551	<p>SCE maintained its Business Resiliency All-Hazards Emergency Operations Plan, which incorporates disaster and emergency preparedness and facilitates continuity of critical operations during emergencies.</p> <p>SCE also conducted targeted annual training for field workers and Incident Management Team members on how to respond to emergencies.</p>
Provide effective and accurate communications to the public before, during and immediately following major outages and emergencies.	N/A	Activity Reporting	On-going	Section 8.4.4 Public Emergency Communication Strategy, pp. 558- 566	SCE added enhancements to the Centralized Data Platform, including analytical modeling to detect incorrectly mapped customers to assets, streamlined customer complaint data, and new climatology data for PSPS forecasts. SCE also expanded its ability to provide notifications in the customer-preferred language.

e. **Table 8-53 - Community Outreach and Engagement Initiative Objectives (3-year plan)**

Objectives for Three Years (2023-2025)	Applicable Initiative(s), Tracking ID(s)	Method of Verification (i.e., program)	Completion Date	Reference (section & page #)	Progress Update
Actively collaborating with stakeholder networks and partnerships to better understand customer, community and stakeholder specific needs and develop tailored solutions, including AFN.	Public Outreach and Education Awareness Program and Section (8.5.2) Engagement with Access and Functional Needs Populations (8.5.3)	See Tables 8-44 and 8-59	on-going	Section 8.5.2 Public Outreach and Education Awareness Program, pp. 583- 602; and Section 8.5.3 Engagement with Access and Functional Needs Populations, pp. 601-605	SCE continued partnership with 50 community-based organizations (CBOs). SCE also expanded the CBO network with an additional 20 CBOs that have an AFN focus.
Meet at least quarterly to provide updates on PSPS enhancement efforts and solicit input for improvement areas in how SCE approaches PSPS overall and provides a forum for stakeholders to propose ways to improve all aspects of PSPS	PSPS Advisory Board Meetings (Public Outreach and Education Awareness Program (8.5.2)	CPUC Quarterly Update Report  Post-meeting surveys	on-going	Section 8.5.2 Public Outreach and Education Awareness Program, pp. 583- 602	SCE hosted four wildfire community safety meetings. SCE conducts quarterly PSPS Advisory Board and PSPS Working Groups meetings with our external stakeholders to provide awareness and updates on our PSPS program efforts. SCE solicits feedback to ensure the topics are relevant and useful.

f. **Table 9-3 - PSPS Objectives (3-year plan)**

Objectives for Three Years (2023-2025)	Applicable Initiative(s), Tracking ID(s)	Method of Verification (i.e., program)	Completion Date	Reference (section & page #)	Progress Update
Re-evaluate existing PSPS windspeed thresholds using engineering-based analysis that considers, among other factors, the effectiveness of covered conductor.	N/A	Documentation demonstrating adjustments (if any) to SCE’s PSPS decision-making criteria as a result of the threshold re-evaluation	Ongoing	Appendix D: Areas for Continued Improvement, ACI, SCE-22-25 Increasing PSPS Thresholds on Hardened Circuits, p. 784-788; ACI SCE-22-26 PSPS System Damage in Consequence Modelling	SCE contracted the services of an external vendor to assess the existing PSPS windspeed threshold methodology and to explore a more predictive and data-driven model using asset and equipment failure data to derive the probability of a fault from exposure to wind. The vendor and SCE’s subject matter experts concluded that there is an insufficient amount of relevant historical failure data to adequately train an automated model. SCE will evaluate lessons learned from the effort and continue to evaluate alternative windspeed threshold models.
Perform additional grid sectionalization and automation, paired with weather stations, to reduce the scope of PSPS events	SH-5	Grid sectionalization work is reflected in SCE’s completed work orders and will be discussed in future WMP updates	Ongoing; see annual targets outlined in Table 9.5	Section 8.1.2.8 Installation of Syst. Aut. Equipment, pp. 271-273	SCE installed 114 weather stations and created 168 new circuit segments to advance sectionalization efforts and reduce potential PSPS scope. In addition, SCE raised windspeed thresholds on 86 circuit segments due to the installation of covered conductor along the entire length of the segment.
Evaluate emerging technology for potential incorporation into PSPS protocols	REFCL (SH-17, SH-18)	Discussion will be included in future WMP updates	Ongoing	Section 8.1.2.6 Emerging Grid Hardening Tech, pp. 266-269	SCE has been able to complete GFNs at two substations. SCE is analyzing the implementation and performance of this technology on its system and its potential for incorporation into PSPS protocols as SCE gains further understanding on how it can reduce the PSPS events.
Continue to increase situational awareness and improve precision of weather forecasting to help optimize the scope of PSPS events	SA-1, SA-3, SA-8, SA-10	Discussion will be included in future WMP updates	Ongoing; see annual targets outlined in Table 9.5	Section 8.3 Situational Awareness and Forecasting, pp. 445-520	SCE expanded its ML weather forecast capability by procuring the European Centre for Medium-Range Weather Forecasts weather model output and updating its Live Fuel Moisture models by incorporating additional vegetation species.  SCE added 619 machine learning forecast locations to improve PSPS planning, evaluated new ML forecasting techniques, and expanded its 40-year historical dataset.



### III. 3-Year Objectives: Completed

*c. A detailed assessment of the electrical corporation's completion of the three-year objectives listed in the tables in Section 8 of its WMP, including all subsections, with completion dates within the most recently completed compliance period. Each stated objective must be discussed individually and, at a minimum, include the following information:*

- i. A listing of the initiatives and associated tracking identification numbers the electrical corporation is implementing to achieve the objective.*
- ii. Reference(s) to the WMP section(s) or appendix, including page numbers, where the details of the objective are documented and substantiated.*
- iii. The completion date listed in the approved WMP.*
- iv. The date the electrical corporation actually completed the objective.*
- v. An explanation of how the electrical corporation utilized the identified "Method of Verification"<sup>12</sup> to assess the completion of the objective.*
- vi. A summary of the electrical corporation's assessment of progress towards completing the objective following use of the verification method identified in v above, including a listing of all evidence relied upon in the electrical corporation's assessment.*
- vii. For each objective that the electrical corporation failed to complete, a detailed explanation of what was incomplete, the reason the initiative was not completed, and associated corrective actions the electrical corporation has taken to prevent recurrence of such failures.
  - 1. If the electrical corporation did not take corrective action to prevent recurrence of such failures, it must explain its justification for such inaction.**

SCE Response: SCE did not have any three-year objectives due for completion in 2023. All of SCE's three-year objectives are underway and were discussed in the previous section.

#### IV. Targets Assessment

*d. An assessment of the electrical corporation's completion of all targets identified for each initiative listed in the tables in Section 8 of its WMP, including all subsections, with target completion dates within the most recently completed compliance period. The assessment of each target must be discussed individually and, at a minimum, include the following information:*

- i. A complete listing of all applicable targets.*
- ii. The target value and associated target units.*
- iii. The target completion date (i.e., year-end, Q2, Q3, etc.) listed in the WMP.*
- iv. The date the electrical corporation actually completed the target.*
- v. An explanation of how the electrical corporation utilized the identified "Method of Verification" to assess the completion of the target.*
- vi. A summary of the electrical corporation's assessment of completing the target following use of the verification method identified in v above, including a listing of all evidence relied upon in the electrical corporation's assessment.*
- vii. For each target that the electrical corporation failed to complete, a detailed explanation of what was incomplete, why, and associated corrective actions the electrical corporation has taken to prevent recurrence of such failures.
  - 1. If the electrical corporation did not take corrective action to prevent recurrence of such failures, it must explain its justification for such inaction.**
- viii. An explanation of whether the expected percentage risk reduction, as listed in the WMP, was achieved during the most recently completed compliance period.
  - 1. If the expected percentage risk reduction was not achieved, the electrical corporation must explain why and discuss any corrective actions it has taken as a result.*
  - 2. If the electrical corporation did not take corrective action, it must explain its justification for such inaction.**
- ix. An assessment of quality of implementation for initiatives that have a quality control/quality assurance component.*

SCE Response: In addition to Attachment A, SCE has provided items IV.i through IV.ix in the following tables, which mirror the table numbering from sections 8 and 9 of the 2023-2025 WMP. Please note the following regarding how SCE has interpreted specific items:

- *viii, risk reduction:* For programs that met their target, SCE has populated this field as "achieved" as the forecasted risk reduction was based on the program's target for 2023. For programs in which SCE did not meet the program's target, SCE has provided the requested explanation. SCE has indicated "N/A" if the program did not have a forecasted risk reduction.
- *ix, QC/QA:* SCE interprets "initiative that have a quality control/quality assurance component" as the inspection programs listed in WMP Table 8-7 – Grid Design and Maintenance QA/QC Program (WMP page 327), and the vegetation management programs listed in WMP Table 8-18 – Vegetation Management QA/QC Program (WMP page 431). For other programs, SCE has populated this field as "N/A".

a. **Table 8-3 - Grid Design, Operations, and Maintenance Targets**

Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
Covered Conductor	SH-1	Install 1,100 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	Q4	Q4	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Undergrounding Overhead Conductor	SH-2	SH-2 Convert 11 circuit miles of overhead to underground in SCE's HFRA	Q4	Not Completed	Listing of completed Work Orders	Review of completed work orders	See Note #1 at end of the table	See Note #2 at end of the table	N/A
Branch Line Protection strategy	SH-4	Install or replace fusing at 500 fuse locations that serve HFRA circuitry SCE will strive to install or replace fusing at up to 570 locations that serve HFRA circuitry, subject to resource constraints and other execution risks	Q4	Q3	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Remote Controlled Automatic Reclosers Settings Update	SH-5	SCE will install 6 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	Q4	Q4	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Circuit Breaker Relay Hardware for Fast Curve	SH-6	Replace/upgrade 75 CB relay units with fast curve settings in SCE’s HFRA SCE will strive to replace/upgrade up to 88 relay units with fast curve settings in SCE’s HFRA, subject to resource constraints and other execution risks	Q4	Q4	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A

Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
Transmission Open Phase Detection	SH-8	Install TOPD at 5 locations that serve HFRA circuitry with both alarm and trip functionality	Q4	Q4	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Tree Attachments Remediation	SH-10	Remediate 400 tree attachments in SCE's HFRA SCE will strive to complete up to 500 tree attachment remediations in SCE's HFRA, subject to resource constraints and other execution risks	Q4	Q4	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Long Span Initiative (LSI)	SH-14	Remediate 400 spans in SCE's HFRA SCE will strive to remediate up to 500 spans in SCE's HFRA, subject to resource constraints and other execution risks	Q4	Q3	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Vertical Switches	SH-15	Install 9 vertical switches in SCE's HFRA SCE will strive to install 11 vertical switches in SCE's HFRA, subject to resource constraints and other execution risks	Q4	Q4	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Vibration Damper Retrofit	SH-16	Retrofit vibration dampers on 300 structures where covered conductor is already installed in SCE's HFRA SCE will strive to retrofit vibration dampers on up to 400 structures where covered conductor is already installed in SCE's HFRA, subject to resource constraints and other execution risks	Q4	Q3	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Rapid Earth Fault Current Limiters (REFCL) (Ground Fault Neutralizer (GFN))	SH-17	SCE will complete construction of GFN at two substations (Acton and Phelan)	Q4	Not Completed	Listing of completed Work Orders	Review of completed work orders	See Note #3 at end of the table	See Note #4 at end of the table	N/A
Rapid Earth Fault Current Limiters (REFCL) – Grounding Conversion	SH-18	SCE will complete grounding conversion at one location, subject to land availability.	Q4	Q4	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A

Note 1, regarding SH-2: SCE could not complete construction of approximately 5.61 circuit miles installed and remaining miles expected to be complete by end of Q2 2024. This is based on a reduction of reported values following internal year end validation and review of completed work, as well as delays in obtaining Metropolitan Water District's agreement on amended easement language for one circuit. SCE expects the balance to be completed in 2024 to satisfy the 2023 WMP target. Based on lessons learned from 2023, SCE has increased internal resources and planning activities to better identify and resolve potential delays. SCE will also undergo a reconciliation of future projects to ensure the proper unit of measurement is utilized in reporting and seek to align on processes and controls.

Note 2, regarding SH-2: SCE will continue to perform wildfire mitigations such as vegetation management, asset inspections, protection settings, and situational awareness activities in the areas that were scoped for targeted undergrounding in 2023 but are delayed until 2024.

Note 3, regarding SH-17: SCE completed REFCL installation in one substation. Installation in the second substation was delayed due to unforeseen construction delays associated with emergent transformer replacement at the substation and material supply chain challenges. The material supply chain issues have since been resolved. The issues were unique to the substation due to its configuration and need for custom equipment and are generally not applicable as lessons learned on a broader basis. Construction of the ground fault neutralizer at the second substation is expected to be complete by the end of Q2 2024.

Note 4, regarding SH-17: In addition to existing grid hardening (e.g., covered conductor), SCE will continue to perform wildfire mitigations such as vegetation management, asset inspections, protection settings, and situational awareness activities in the portions of the circuit that did not receive REFCL protection in 2023.

**b. Table 8-4 - Asset Inspections Targets**

Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
Distribution High Fire Risk- Informed (HFRI) Inspections and Remediation s (Ground and Aerial)	IN-1.1	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)	Q4	Q4	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	Target: 95% Achieved: 94.4%
Transmission High Fire Risk- Informed (HFRI) Inspections and Remediation s (Ground and Aerial)	IN-1.2	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., AOC)	Q4	Q4	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	Target: 97% Achieved: 99.4%
Infrared Inspection of Energized Overhead Distribution Facilities and Equipment	IN-3	Inspect 5,300 distribution overhead circuit miles in HFRA	Q4	Q4	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Infrared Inspection, Corona Scanning, and High-Definition Imagery of Energized Overhead Transmission Facilities and Equipment	IN-4	Inspect 1,000 transmission overhead circuit miles in HFRA	Q4	Q3	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A

Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
Generation High Fire Risk Informed Inspections and Remediations in HFRA	IN-5	Inspect 170 generation related assets in HFRA SCE will strive to inspect 200 generation related assets in HFRA, subject to resource constraints and other execution risks	Q4	Q3	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	Target: 95% Achieved: 96.8%
Inspection and Maintenance Tools	IN-8	Complete detailed design to migrate the distribution ground inspection application to the single digital platform	Q4	Not Completed	Completed user acceptance testing, screenshots of tool enhancements	Review of user testing and tool screenshots	See Note #1 at end of the table	N/A	N/A
Transmission Conductor & Splice Assessment: Spans with LineVue	IN-9a	Will inspect 50 spans with Line Vue SCE will strive to inspect up to 75 spans with Line Vue, subject to resource constraints and other execution risks	Q4	Q3	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Transmission Conductor & Splice Assessment: Splices with X-Ray	In-9b	Will inspect 50 splices with X-Ray SCE will strive to inspect up to 75 splices with X-Ray, subject to resource constraints and other execution risks	Q4	Q3	Listing of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Wildfire Safety Data Mart and Data Management (WiSDM / Ezy)	DG-1	WiSDM: Enable semi-automated data aggregation and validations of Wildfire Data for SCE's Quarterly Data Request	Q4	WiSDM: Q2 Ezy: Q4	WiSDM: WiSDM-generated QDR Ezy: Screenshots of tool by use case	Submission of QDR using WiSDM. Review of screenshots by use case	Complete	N/A	N/A

Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
		(QDR) submission and external portal for external data sharing Ezy: Enable LIDAR data management							

Note 1, regarding IN-8: The migration of the distribution ground inspection application to a single digital platform was delayed. The delay was due to vendor resource constraints and longer than anticipated time to re-assess workflows and requirements to optimize processes and improve data quality. Final resource was onboarded in September, and SCE has completed Proof-of-Concept development and has begun the development of the Architectural Vision Document.



c. **Table 8-14 - Vegetation Management Initiative Targets**

Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
Expanded Clearances for Generation Legacy Facilities	VM-3	Perform vegetation treatment and maintenance to 50 sites SCE will strive to perform vegetation treatment and maintenance to 60 sites	Q4	Q3	Listing of all completed work orders	Review of completed work orders	Complete	Achieved	N/A
Vegetation Management Work Management Tool (Arbora)	VM-6	Enable supplemental Vegetation Management (emergent work) tree maintenance program capabilities in Arbora by end of year	Q4	Q4	System evidence of the capability to assign nonroutine work activity in work management tool	Enabled vegetation management emergent work capabilities in Arbora in December 2023	Complete	N/A	N/A

d. Table 8-15 - Vegetation Inspections Targets

Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
Hazard Tree Management Program (HTMP)	VM-1	Inspect 412 grids/circuits and prescribe mitigation for hazardous trees with strike potential within those grids in SCE's HFRA	Q4	Q4	Tracking of year-to-date completed grids/circuits for inspection and mitigation	Review of completed grids/circuits	Complete	Achieved	Target: 100% Achieved: 98.7%
Structure Brushing	VM-2	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 to PRC 4292	Q4	Q3	Listing of work orders attempted, inspected and/or completed in calendar year	Review of completed work orders	Complete	Achieved	N/A
Dead & Dying Tree Removal	VM-4	Inspect 509 grids/circuits and prescribe mitigation for dead and dying trees with strike potential within those grids/circuits	Q4	Q4	Tracking of year-to-date completed grids/circuits for inspection and mitigation	Review of completed grids/circuits	Complete	Achieved	Target: 100% Achieved: 98.8%
Detailed Inspections for the Prescription, Where Necessary and Feasible, of Expanded Vegetation Clearances from Distribution Lines in HFRA	VM-7	Inspect 770 grids within our distribution system* (see insertion above)	Q4	Q4	Listing of all completed work orders	Review of completed work orders	Complete	Achieved	RCD Target: 100% RCD Achieved: 99.7% CCD Target: 95% CCD Achieved:

Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
									98.3%
Detailed Inspections for the Prescription, Where Necessary and Feasible, of Expanded Vegetation Clearances from Transmission Lines in HFRA	VM-8	Inspect 416 circuits within our transmission system* (see insertion text above)	Q4	Q4	Listing of all completed work orders	Review of completed work orders	Complete	Achieved	RCD Target: 100% RCD Achieved: 99.9% CCD Target: 95% CCD Achieved: 99.3%
LiDAR Distribution Vegetation Inspections	VM-9	Inspect at least 1,020 HFRA circuit miles *Subject to change based on technology, program adjustments, and grid/circuits layout	Q4	Q4	Listing of all completed work orders	Review of completed work orders	Complete	Achieved	N/A
LiDAR Transmission Vegetation Inspections	VM-10	Inspect at least 1,820 HFRA circuit miles *Subject to change based on program adjustments and evolution of remote sensing technologies	Q4	Q3	Listing of all completed work orders	Review of completed work orders	Complete	Achieved	N/A

e. **Table 8-23 - Situational Awareness Initiative Targets**

Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
Weather Stations	SA-1	Install 85 weather stations in SCE's HFRA SCE will strive to install up to 95 weather stations in SCE's HFRA, subject to resource and execution constraints	Q4	Q4	List and location of installed weather stations	Review list of installation locations	Complete	Achieved	N/A
Weather and Fuels Modeling	SA-3	Equip 500 weather station locations with machine learning capabilities SCE will strive to equip up to 600 weather station locations with machine learning capabilities, subject to resource and execution constraints	Q4	Q2	List and location of weather stations equipped with machine learning capabilities	Review list of installation locations	Complete	Achieved	N/A
Fire Spread Modeling	SA-8	Complete analytics report summarizing assessment of historical consequence data for improved fire spread modeling	Q4	Q4	Final analytics report	Review final report	Complete	Achieved	N/A
High Definition (HD) Cameras	SA-10	Install 10 HD Cameras SCE will strive to install up to 20 HD Cameras, subject to resource and execution constraints	Q4	Q3	List and location of installed HD cameras	Review list of installation locations	Complete	Achieved	N/A
Early Fault Detection	SA-11	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	Q4	Q2	List of completed Work Orders	Review of completed work orders	Complete	Achieved	N/A

f. **Table 8-35 - Emergency Preparedness Initiative Targets**

Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
SCE Emergency Response Training	DEP-2	PSPS response teams are fully qualified/requalified by 7/1 annually to maintain readiness	Q4	Q2	IMT training roster	Review IMT roster	Complete	N/A	N/A
Aerial Suppression	DEP-5	Provide fire agencies with funding to support quick reaction force (QRF) program for 2023	Q4	Q1	Copy of funding agreement	Review funding agreement	Complete	Achieved	N/A
Customer Care Programs (Critical Care Backup Battery (CCBB) Program)	PSPS -2	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 * Number of calendar/business days subject to change based on customer survey feedback to inform appropriate calendar/business day measurement	Q4	Q4	Year to date list of customer enrollment and battery deliveries	Review enrollment list	Complete	Achieved	N/A

Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
Customer Care Programs (Portable Power Station and Generator Rebates)	PSPS-3	<p>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.</p> <p>* Number of calendar/business days subject to change based on customer survey feedback to inform appropriate calendar/business day measurement</p>	Q4	Q4	Year to date list of rebate claims and processing dates	Review rebate claims list	Complete	Achieved	N/A

**g. Table 8-55 - Community Outreach and Engagement Initiative Targets**

<b>Initiative Activity</b>	<b>Tracking ID</b>	<b>2023 Target &amp; Unit (ii)</b>	<b>Target Completion Date (iii)</b>	<b>Actual Completion Date (iv)</b>	<b>Method of Verification (v)</b>	<b>Target Completion Assessment Method (vi)</b>	<b>Completion Status (vii)</b>	<b>% Risk Reduction (viii)</b>	<b>Summary of QA/QC Component (If applicable) (ix)</b>
Wildfire Safety Community Meetings	DEP-1	SCE will host at least four wildfire community safety meetings by region in targeted HFRA communities based on the impact of 2022 PSPS events and ongoing wildfire mitigation activities	Q4	Q2	Link to the SCE.com site for meeting conducted and recordings posted	Review meeting list on SCE.com	Complete	N/A	N/A
Customer Research and Education	DEP-4	SCE plans to conduct at least five PSPS-related customer studies in 2023	Q4	Q4	Detailed list of surveys with supporting information	Review completed survey list	Complete	N/A	N/A

SCE has not included Table 8-56 from the 2023-2025 WMP as it contains the same initiatives as listed above in Table 8-55.

h. **Table 9-5 - PSPS Targets**

Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
Covered Conductor	SH-1	Install 1,100 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	Q4	Q4	Completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Remote Controlled Automatic Reclosers Setting Update	SH-5	SCE will install 6 RAR/RCS sectionalizing devices subject to 2022 PSPS analysis and subject to change SCE will strive to install 17 RAR/RCS sectionalizing devices subject to 2022 PSPS analysis, resource constraints and other execution risks	Q4	Q4	Completed Work Orders	Review of completed work orders	Complete	Achieved	N/A
Weather Stations	SA-1	Install 85 weather stations in SCE's HFRA SCE will strive to install up to 95 weather stations in SCE's HFRA, subject to resource and execution constraints	Q4	Q4	List and location of installed weather stations	List and location of installed weather stations	Complete	Achieved	N/A
Weather & Fuels Modeling	SA-3	Equip 500 weather station locations with machine learning capabilities SCE will strive to equip up to 600 weather station locations with machine learning capabilities, subject to resource and execution constraints	Q4	Q2	List and location of weather stations equipped with machine learning capabilities	List and location of weather stations equipped with machine learning capabilities	Complete	Achieved	N/A
Fire Spread Modeling	SA-8	Complete analytics report summarizing assessment of historical consequence data for improved fire spread modeling	Q4	Q4	Final analytics report	Final analytics report	Complete	Achieved	N/A
High Definition (HD) Cameras	SA-10	Install 10 HD Cameras SCE will strive to install up to 20 HD Cameras, subject to resource and execution constraints	Q4	Q3	List and location of installed HD	List and location of installed HD	Complete	Achieved	N/A



Initiative Activity	Tracking ID	2023 Target & Unit (ii)	Target Completion Date (iii)	Actual Completion Date (iv)	Method of Verification (v)	Target Completion Assessment Method (vi)	Completion Status (vii)	% Risk Reduction (viii)	Summary of QA/QC Component (If applicable) (ix)
					cameras	cameras			
PSPS	PSPS.No nInitiative.01	SCE will reduce PSPS scope, frequency, and duration by 14.9M minutes of customer interruption, based on applying SCE's 2023 mitigation scope to the actual PSPS deenergization locations (driven by historical weather and fuel conditions) of 2020-2022. While predicting the exogenous factors that drive future PSPS impacts is not reasonably possible, SCE will strive to keep 2023 PSPS impacts to less than 150.6M customer minutes of interruption.	Q4	Q4	Review of year-end PSPS event data.	Review of year-end PSPS event data and mitigation scope.	See Note #1 at end of the table	N/A	N/A

Note 1, regarding PSPS: If not for SCE's proactive mitigations undertaken in 2023, SCE's analysis indicates that the PSPS season would likely have led to approximately 43K more customer outages in 37 more circuit de-energizations, yielding an additional 61M CMI, assuming the same weather and fuel conditions. In fact, 22 of the 26 circuits targeted for remediations in 2023 avoided PSPS impacts altogether in 2023. Overall, SCE's 2023 PSPS season saw roughly 25M CMI, meeting the stated strive target of 150M.

## V. 2023 Change Orders

*A complete listing of all change orders requested by the electrical corporation that were approved by Energy Safety. For each change order, the electrical corporation must include a description of the change requested, the date the electrical corporation requested the change order, and the date that Energy Safety approved the requested change order.*

SCE Response: SCE did not submit a Change Order to its WMP initiatives in 2023.

## VI. Initiative Expenditures

*A list that includes the following information for each WMP initiative identified in the WMP:*

- a. Utility Initiative Tracking ID, per WMP Guidelines.*
- b. Initiative name.*
- c. Planned budget (as reported in the WMP or approved Change Order) for the compliance period.*
- d. Actual expenditure for the most recently completed compliance period.*
- e. If the difference between the actual expenditure and the planned budget is more than 10%, provide a detailed explanation of the reason or reasons for the discrepancy.*

SCE Response: Please see Attachment B.

### 3 ATTACHMENT A

SCE Q4 2023 WMP Progress Update (Updated)

# SCE's 2023-2025 Wildfire Mitigation Plan (WMP) Progress Update – Q4 2023 (Updated)

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(All data is as of ~~December 31, 2023~~ March 15, 2024)<sup>1 2</sup>

<sup>1</sup> Source: All data is as of ~~December 31, 2023~~ March 15, 2024 (+/- 5 business days). Reported numbers are subject to revision upon data validation.

<sup>2</sup> SCE is completing its data validation of 2023 WMP activities and as a result, some figures reported in the Notification have been slightly revised (redlines reflect changes known as of March 15, 2024). These revisions do not impact the status of activities and have been incorporated and noted in this updated WMP Q4 2023 Progress Update to accompany SCE's 2023 WMP Annual Report on Compliance.

# WMP Activities Summary<sup>3</sup>

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

<b>VM-1</b> Inspect 412 grids/circuits and prescribe mitigation for hazardous trees with strike potential	<b>VM-2</b> Inspect and clear (where clearance is needed) 63,700 structures	<b>VM-3</b> Perform vegetation treatment and maintenance to 50 sites
<b>VM-4</b> Inspect 509 grids/circuits and prescribe mitigation for dead and dying trees with strike potential	<b>VM-6 (Arbora)</b> Enable supplemental Vegetation Management tree maintenance program capabilities in Arbora	<b>VM-7</b> Inspect 770 grids within distribution system
<b>VM-8</b> Inspect 416 circuits within transmission system	<b>VM-9</b> Inspect at least 1,020 HFRA circuit miles	<b>VM-10</b> Inspect at least 1,820 HFRA circuit miles

## Grid Design, Operations, & Maintenance

<b>IN-1.1 (Distr. Ground and Aerial)</b> Inspect 187,000 structures in HFRA	<b>IN-1.2 (Trans. Ground and Aerial)</b> Inspect 28,000 structures in HFRA	<b>IN-3</b> Inspect 5,300 distribution overhead circuit miles in HFRA
<b>IN-5</b> Inspect 170 generation related assets in HFRA	<b>IN-8 (Inspection and Maintenance Tools)</b> Distribution Ground Inspection Application	<b>IN-4</b> Inspect 1,000 transmission overhead circuit miles in HFRA
<b>SH-1</b> Install 1,100 circuit miles of covered conductor in SCE's HFRA	<b>SH-2</b> Convert 11 circuit miles of overhead to underground in SCE's HFRA	<b>IN-9.a</b> Inspect 50 spans with Line Vue
<b>SH-4</b> Install or replace fusing at 500 fuse locations that serve HFRA circuitry	<b>SH-5</b> Install 6 RAR/RCS sectionalizing devices	<b>IN-9.b</b> Inspect 50 splices with X-Ray
<b>SH-8</b> Install TOPD at 5 locations that serve HFRA circuitry with both alarm/trip functionality	<b>SH-10</b> Remediate 400 tree attachments in SCE's HFRA	<b>SH-6</b> Replace/upgrade 75 CB relay units with fast curve settings in SCE's HFRA
<b>SH-15</b> Install 9 vertical switches in SCE's HFRA	<b>SH-16</b> Retrofit vibration dampers on 300 structures	<b>SH-12</b> Remediate 400 spans in SCE's HFRA
<b>SH-18</b> Complete grounding conversion at one location, subject to land availability	<b>SH-17</b> Complete construction of GFN at two substations (Acton and Phelan)	
<b>DG-1 (Ezy)</b> Enable LiDAR data management by end of year <b>(WiSDM)</b> Enable semi-automated data aggregation and external portal for data sharing		

## Situational Awareness & Forecasting

<b>SA-1</b> Install 85 weather stations in SCE's HFRA	<b>SA-3</b> Equip 500 weather station locations with machine learning capabilities
<b>SA-8</b> Complete analytics report summarizing assessment of historical consequence data for improved fire spread modeling	
<b>SA-10</b> Install 10 HD Cameras	<b>SA-11</b> Install Early Fault Detection (EFD) at 50 locations

## Community Outreach & Engagement







<b>DEP-1</b> Host at least four meetings	<b>DEP-4</b> Conduct at least five customer studies
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## Emergency Preparedness

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

<sup>3</sup> Source: All data is as of ~~December 31, 2023~~ March 15, 2024 (+/- 5 business days). Reported numbers are subject to revision upon data validation.

# 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

**134%**  
Installed

#### **Weather Stations (SA-1)**

Section 8.3.1.2 Page 449

**Program Target:** Install 85 weather stations in SCE's HFRA. SCE will strive to install up to 95 weather stations in SCE's HFRA, subject to resource and execution constraints.

**Status Update:** SCE met target in Q4. Program exceeded its target and a total of 114 weather stations were installed.

### High Definition (HD) Cameras

**100%**  
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:** SCE met target in Q3 to install 10 HD cameras.

### Weather and Fuels Modeling

**124%**  
Installed

#### **Weather and Fuels Modeling (SA-3)**

Section 8.3.1.2 Page 449

**Program Target:** Equip 500 weather station locations with machine learning capabilities. SCE will strive to equip up to 600 weather station locations with machine learning capabilities, subject to resource and execution constraints.

**Status Update:** SCE met target in Q2. Program exceeded its target and a total of ~~621~~ 619<sup>4</sup> weather station locations were equipped with new machine learning capabilities.

### Early Fault Detection (EFD)

**154%**  
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:** SCE met target in Q2. Program exceeded its target and a total of 77 locations were installed with EFDs.

### Fire Spread Modeling

#### **Fire Science (SA-8)**







Section 8.3.1.2 Page 449

**Program Target:** Complete analytics report summarizing assessment of historical consequence data for improved fire spread modeling.

**Status Update:** SCE met target in Q4 to complete analytics report summarizing assessment of historical consequence data for improved fire spread modeling.

<sup>4</sup> Following validation of records this activity decreased from 621 to 619 weather station locations from what was published in SCE's Q4 2023 QNL on 2.01.2024

# 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

**111%**  
Installed

#### **Covered Conductor (SH-1)**

Section 8.1.1.2 Page 238

**Program Target:** Install 1,100 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:** SCE met target in Q4. Program exceeded its target and a total of ~~1,217.36~~ 1,220.06<sup>5</sup> circuit miles of covered conductor were installed.

### Remote Controlled Automatic Reclosers Settings Update

**117%**  
Installed

#### **Remote Controlled Automatic Reclosers Settings Update (SH-5)**

Section 8.1.1.2 Page 239

**Program Target:** SCE will install 6 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:** SCE met target in Q4. Program exceeded its target and a total of 7 RAR/RCS sectionalizing devices were installed.

### Undergrounding Overhead Conductor

**78%**  
**49%**  
Installed

#### **Undergrounding Overhead Conductor (SH-2)**

Section 8.1.1.2 Page 238

**Program Target:** Convert 11 circuit miles of overhead to underground in SCE's HFRA.

**Status Update:** SCE missed the 2023 target to install 11 miles of targeted undergrounding by ~~2.46~~ 5.61 circuit miles **due to delays in obtaining Metropolitan Water District's agreement on amended easement language for one circuit. SCE also reduced the reported values following internal year-end validation and review of completed work.** A total of ~~8.54~~ 5.39<sup>6</sup> circuit miles installed and remaining miles expected to be complete by end of Q2 2024.

### Circuit Breaker Relay Fast Curve

**128%**  
Installed

#### **Circuit Breaker Relay Fast Curve (SH-6)**

Section 8.1.1.2 Page 239

**Program Target:** Replace/upgrade 75 CB relay units with fast curve settings in SCE's HFRA. SCE will strive to replace/upgrade up to 88 relay units with fast curve settings in SCE's HFRA, subject to resource constraints and other execution risks.

**Status Update:** SCE met target in Q4. Program exceeded its target and a total of 96 CB relay units were replaced/updated.

### Branch Line Protection Strategy

**113%**  
Installed

#### **Branch Line Protection Strategy (SH-4)**

Section 8.1.1.2 Page 238

**Program Target:** Install or replace fusing at 500 fuse locations that serve HFRA circuitry. SCE will strive to install or replace fusing at up to 570 locations that serve HFRA circuitry, subject to resource constraints and other execution risks.

**Status Update:** SCE met target in Q3. Program exceeded its target and a total of 563 fuse locations were installed/replaced.

### Transmission Open Phase Detection

#### **Transmission Open Phase Detection (SH-8)**

Section 8.1.1.2 Page 239

**Program Target:** Install TOPD at 5 locations that serve HFRA circuitry with both alarm and trip functionality







**Status Update:** SCE met target in Q4. TOPD installation was complete at 5 locations, commissioning was complete on 4 of the 5 locations, and the remaining location will be commissioned in 2024 once the line returns to in-service status.

<sup>5</sup> Following validation of records this activity increased from 1,217.36 to 1,220.06 circuit miles of covered conductor in HFRA from what was published in SCE's Q4 2023 QNL on 2.01.2024.

<sup>6</sup> Following validation of records this activity decreased from 8.54 to 5.39 circuit miles of targeted undergrounding installed from what was published in SCE's Q4 2023 QNL on 2.01.2024.



# 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

### Tree Attachment Remediation

141%

140%

Remediations

### Tree Attachment Remediation (SH-10)

Section 8.1.1.2 Page 240

**Program Target:** Remediate 400 tree attachments in SCE's HFRA. SCE will strive to complete up to 500 tree attachment remediations in SCE's HFRA, subject to resource constraints and other execution risks.

**Status Update:** SCE met target in Q4. Program exceeded its target and a total of ~~562~~ 560<sup>7</sup> tree attachments were remediated.

### Vibration Damper Retrofit

132%

Installed

### Vibration Damper Retrofit (SH-16)

Section 8.1.1.2 Page 241

**Program Target:** Retrofit vibration dampers on 300 structures where covered conductor is already installed in SCE's HFRA. SCE will strive to retrofit vibration dampers on up to 400 structures where covered conductor is already installed in SCE's HFRA, subject to resource constraints and other execution risks.

**Status Update:** SCE met target in Q3. Program exceeded its target and a total of 396 vibration dampers were retrofitted.

### Long Span Initiative

123%

Remediations

### Long Span Initiative (SH-14)

Section 8.1.1.2 Page 240

**Program Target:** Remediate 400 spans in SCE's HFRA. SCE will strive to remediate up to 500 spans in SCE's HFRA, subject to resource constraints and other execution risks.

**Status Update:** SCE met target in Q3. Program exceeded its target and a total of 493 spans were remediated.

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 two substations (Acton and Phelan).

**Status Update:** SCE missed 2023 target to complete construction of ground fault neutralizer (GFN) due to emergent transformer replacement and material supply challenges at one substation. Construction complete at Acton substation. Construction at Phelan substation is in progress and expected to be complete by end of Q2 2024.

### Vertical Switches

100%

Installed

### Vertical Switches (SH-15)

Section 8.1.1.2 Page 240

**Program Target:** Install 9 vertical switches in SCE's HFRA. SCE will strive to install 11 vertical switches in SCE's HFRA, subject to resource constraints and other execution.

**Status Update:** SCE met target in Q4. Program met its target to install 9 vertical switches.

REFCL  
(Grounding  
Conversion)

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

Section 8.1.1.2 Page 241

**Program Target:** SCE will complete grounding conversion at one location, subject to land availability.

**Status Update:** SCE met target in Q4 to complete grounding conversion at one location; by YE, construction of grounding conversion at Eagle Crest pole top was completed. Commissioning is pending analysis of overvoltage, which is suspected to be caused by transmission overbuild. Mitigation is in process and commissioning expected in 2024.

<sup>7</sup> Following validation of records this activity decreased from 562 to 560 remediated tree attachments from what was published in SCE's Q4 2023 QNL on 2.01.2024.

# 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

109%

Aerial

107%

### 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:** SCE met target in Q4. Program exceeded its target and a total of ~~204,167~~ 203,266<sup>8</sup> distribution ground and ~~200,674~~ 200,112<sup>9</sup> distribution aerial structures were inspected.

### Transmission Infrared Inspections

103%  
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:** SCE met target in Q3. Program exceeded its target and a total of 1,026.92 transmission overhead circuit miles were inspected.

### YTD Status

Ground

103%

Aerial

103%  
102%

### 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:** SCE met target in Q4. Program exceeded its target and a total of ~~28,908~~ 28,744<sup>10</sup> transmission ground and ~~28,824~~ 28,603<sup>11</sup> transmission aerial structures were inspected.

### Generation Inspections

132%  
Inspected

### Generation Inspections and Remediations (IN-5)

Section 8.1.1.2 Pages 243-244

**Program Target:** Inspect 170 generation related assets in HFRA. SCE will strive to inspect 200 generation related assets in HFRA subject to resource constraints and other execution risks.

**Status Update:** SCE met target in Q3. Program exceeded its target and a total of 225 generation related assets were inspected.

### Distribution Infrared Inspections

102%  
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:** SCE met target in Q4. Program exceeded its target and a total of 5,401.30 distribution overhead circuit miles were inspected.

### Inspection and Maintenance Tools

### Inspection & Maintenance Tools InspectForce (IN-8)

Section 8.1.1.2 Page 244

**Program Target:** Complete detailed design to migrate the distribution ground inspection application to the single digital platform.

**Status Update:** SCE missed 2023 target due to vendor resource constraints and longer than anticipated time to re-assess workflows and requirements to optimize processes and improve data quality. By YE, the proof-of-concept was completed, development of the Architectural Vision Document (AVD) and Solution Architecture Document (SAD) are in progress and expected to be complete by end of Q1 2024.







<sup>8</sup> Following validation of records this activity decreased from 204,167 to 203,266 distribution ground inspections from what was published in SCE's Q4 2023 QNL on 2.01.2024

<sup>9</sup> Following validation of records this activity decreased from 200,674 to 200,112 distribution aerial inspections from what was published in SCE's Q4 2023 QNL on 2.01.2024.

<sup>10</sup> Following validation of records this activity decreased from 28,908 to 28,744 transmission ground inspections from what was published in SCE's Q4 2023 QNL on 2.01.2024

<sup>11</sup> Following validation of records this activity decreased from 28,824 to 28,603 transmission aerial inspections from what was published in SCE's Q4 2023 QNL on 2.01.2024

# 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

140%

X-Ray

110%

### **Transmission Conductor & Splice Assessment: Spans with LineVue & X-Ray (IN-9)**

Section 8.1.1.2 Pages 244-245

#### **Program Target:**

- **LineVue:** Will inspect 50 spans with Line Vue. SCE will strive to inspect up to 75 spans with Line Vue, subject to resource constraints and other execution risks.
- **X-Ray:** Will inspect 50 splices with X-Ray. SCE will strive to inspect up to 75 splices with X-Ray, subject to resource constraints and other execution risks.

#### **Status Update:**

- **LineVue:** SCE met target in Q3. Program exceeded its target and a total of ~~66~~ 70<sup>12</sup> spans were inspected with LineVue.
- **X-Ray:** SCE met target in Q3. Program exceeded its target and a total of 55 splices were inspected with X-Ray.

### YTD Status

Ezy

WiSDM

### **Wildfire Safety Data Mart and Data Management (WiSDM / Ezy) (DG-1)**

Section 8.1.1.2 Pages 245

#### **Program Target:**







- **Ezy:** Enable LiDAR data management by end of year.
- **WiSDM:** Enable semi-automated data aggregation and validations of Wildfire Data for SCE's Quarterly Data Request (QDR) submission and external portal for external data sharing.

#### **Status Update:**

- **Ezy:** SCE met target in Q4 to enable LiDAR data management; all LiDAR data migration to Google cloud platform has been completed.
- **WiSDM:** SCE met target in Q2 to enable semi-automated data aggregation and validations of Wildfire Data for SCE's Quarterly Data Request (QDR) submission and external portal for external data sharing.

<sup>12</sup> Following validation of records this activity increased from 66 to 70 inspected spans from what was published in SCE's Q4 2023 QNL on 2.01.2024.

# 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

**104%**

Grids/Circuits  
Assessed

#### **Hazard Tree Management Program (VM-1)**

Section 8.2.1.2 Page 379

**Program Target:** Inspect 412 grids/circuits and prescribe mitigation for hazardous trees with strike potential within those grids in SCE's HFRA.

**Status Update:** SCE met target in Q4. Program exceeded its target and a total of 427 grids/circuits were inspected.

### Dead and Dying Tree Removal

**103%**

Circuits Inspected

#### **Dead and Dying Tree Removal (VM-4)**

Section 8.2.1.2 Page 379

**Program Target:** Inspect 509 grids/circuits and prescribe mitigation for dead and dying trees with strike potential along those circuits.

**Status Update:** SCE met target in Q4. Program exceeded its target and a total of 526 grids/circuits were inspected.

### Structure Brushing

**178%**

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 to PRC 4292.

**Status Update:** SCE met target in Q3. Program exceeded its target and a total of 113,570 structures were inspected **and cleared (where clearance is needed)**.

### VM Work Management Tool (Arbora)

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

Section 8.2.1.2 Page 378

**Program Target** Enable supplemental Vegetation Management (emergent work) tree maintenance program capabilities in Arbora by end of year.

**Status Update:** SCE met target in Q4 to enable supplemental Vegetation Management (emergent work) tree maintenance program capabilities in Arbora.

### Expanded Clearances for Legacy Facilities

**126%**

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:** SCE met target in Q3. Program exceeded its target and a total of 63 sites were treated and maintained.

# 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

105%  
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 will inspect 770 grids within our distribution system.

**Status Update:** SCE met target in Q4. Program exceeded its target and a total of 805 grids were inspected.

### LiDAR Vegetation Inspections – Distribution

104%  
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:** SCE met target in Q4. Program exceeded its target and a total of 1,065.75 circuit miles were inspected.

### Detailed Inspections: Transmission

106%  
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 will inspect 416 circuits within our transmission system.

**Status Update:** SCE met target in Q4. Program exceeded its target and a total of 440 circuits were inspected.

### LiDAR Vegetation Inspections – Transmission

116%  
Inspections

#### LiDAR Vegetation Inspections – Transmission (VM-10)







Section 8.2.1.2 Page 381

**Program Target:** SCE will inspect at least 1,820 HFRA circuit miles. Subject to change based on program adjustments and evolution of remote sensing technologies.

**Status Update:** SCE met target in Q3. Program exceeded its target and a total of ~~2,113.04~~ 2,113.03<sup>13</sup> circuit miles were inspected.

<sup>13</sup> Following validation of records this activity decreased from 2,113.04 to 2,113.03 circuit miles inspected from what was published in SCE's Q4 2023 QNL on 2.01.2024.

# 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)

96%

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.

**Status Update:** SCE met target in Q4. Program exceeded its target and 96% of customers enrolled received their battery within 30 calendar days.

### Customer Care Programs (Portable Power Station and Generator Rebates)

99%

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.

**Status Update:** SCE met target in Q4. Program exceeded its target and 99% of rebate claims were processed 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 to ensure PSPS response teams are fully qualified/re-qualified by 7/1 to maintain readiness.

### Aerial Suppression







### Aerial Suppression (DEP-5)

Section 8.4.1.2 Page 523

**Program Target:** Provide fire agencies with funding to support quick reaction force (QRF) program for 2023.

**Status Update:** SCE met target in Q1 with contracts issued at the end of 2022 and final payment provided to the agencies in January 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)**

Section 8.5.1.0 Page 579

**Program Target:** SCE will host at least four wildfire community safety meetings by region in targeted HFRA communities based on the impact of 2022 PSPS events and ongoing wildfire mitigation activities.

**Status Update:** SCE met target in Q2 by hosting four wildfire community safety meetings by region in targeted HFRA communities.

### Customer Research and Education

100%

PSPS-related customer studies

#### **Customer Research and Education (DEP-4)**

Section 8.5.1.0 Page 579

**Program Target:** SCE plans to conduct at least five PSPS-related customer studies in 2023.

**Status Update:** SCE met target in Q4 by completing 5 PSPS-related customer studies in 2023.

# WMP Activity Narratives

## Missed Target Narrative – IN-8 Inspection and Maintenance Tools

YTD Status	Not Met
YE Status	Not Met

### Activity Target

- Develop the detailed design to migrate the distribution ground inspection application to the single digital platform.



### Key Takeaways

- By YE, the proof-of-concept was completed. ~~development of the Architectural Vision Document (AVD) and Solution Architecture Document (SAD) are in progress and expected to be complete by end of Q1 2024.~~
- Q1 2024 Update: Architectural Vision Document (AVD) has been approved. Solution Architecture Document (SAD) is pending approval. Final milestone to complete development of detailed design planned for Q1/Q2 2024 (pending any revisions needed to the SAD).

### Risks or Challenges

- Missed the 2023 target to develop the detailed design to migrate distribution ground inspection application to a single digital platform due to vendor resource constraints and longer than anticipated time to re-assess workflows and requirements to optimize processes and improve data quality.
- Q1 2024 Update: Changes to the SAD may be needed; to be identified during the review/approval process.



### Actions to Improve Performance / Get Well Plan

- Final resource was onboarded in September.
- The team has completed Proof-of-Concept development and has begun the development of the Architectural Vision Document.
- Q1 2024 Update: If changes to the SAD are required, project team will prioritize resource to support completion of the work.



# WMP Activity Narratives

## Missed Target Narrative – SH-2 Undergrounding

YTD Status	Not Met
YE Status	Not Met

### Activity Target

- Convert 11 circuit miles of overhead to underground in SCE's HFRA.



### Key Takeaways

- A total of ~~8.54~~ 5.39 circuit miles installed and remaining miles expected to be complete by end of Q2 2024. This is based on a reduction of reported values following internal year end validation and review of completed work. SCE expects the balance to be completed in 2024 to satisfy the 2023 WMP target.
- Q1 2024 Update: Easement received from Metropolitan Water District as of end of February. Construction on the Tin Mine project is approximately 50% complete. The balance of the work is planned for completion in Q2 2024.

### Risks or Challenges

- Missed the 2023 target to install 11 miles of targeted undergrounding by ~~2.46~~ 5.61 circuit miles due to delays in obtaining Metropolitan Water District's (MWD) agreement on amended easement language.
- Q1 2024 Update: Material shortage of aluminum cable and possible inclement weather may delay construction completion.



### Actions to Improve Performance / Get Well Plan

- ~~Easement discussions have been escalated both within SCE and MWD, and resources have been dedicated to expedite resolution.~~
- ~~Easement expected to be completed and recorded by end of Q1 2024.~~
- Q1 2024 Update: Project team is working to address material availability and will closely monitor weather and adjust resources as needed to ensure work can continue while maintaining employee/worker safety as a priority.
- The team will undergo a reconciliation of future projects to ensure the proper unit of measurement is utilized for reporting and seek to align on processes and controls.

# WMP Activity Narratives

## Missed Target Narrative – SH-17 Rapid Earth Fault Current Limiters (REFCL)

YTD Status	Not Met
YE Status	Not Met

### Activity Target

- SCE will complete construction of GFN at two substations (Acton and Phelan).



### Key Takeaways

- Construction complete at Acton substation.
- Construction at Phelan substation is in progress and expected to be complete by end of Q2 2024
- **Q1 2024 Update:**
  - **Acton Substation: Construction completed in 2023.**
  - **Phelan Substation: Construction is in progress. Civil is currently at 97% complete, Electrical is currently at 85% complete. Construction completion planned for Q2 2024.**

### Risks or Challenges

- Missed the 2023 target to complete construction of ground fault neutralizer (GFN) due to emergent transformer replacement and material supply challenges at one substation.
- **Q1 2024 Update: Possible inclement weather and operating restrictions may delay construction completion at Phelan.**



### Actions to Improve Performance / Get Well Plan

- Material supply chain issues have since been resolved.
- **Q1 2024 Update: Project team will closely monitor weather and adjust resources as needed to ensure work can continue while maintaining employee/worker safety as a priority.**

## 4 ATTACHMENT B

### SCE 2023 WMP Cost Variance Explanation