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November 1, 2023

Docket# 2023-SCs

OFFICE OF ENERGY INFRASTRUCTURE SAFETY OF THE CALIFORNIA NATURAL RESOURCES AGENCY

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

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

PURPOSE

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

BACKGROUND

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

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

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

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

directors safety committee meetings that occurred during the quarter. The notification and information-only submittal shall also summarize the implementation of the safety committee recommendations from the electrical corporation's previous notification and submission.³ If the office has reason to doubt the veracity of the statements contained in the notification or information-only submittal, it shall perform an audit of the issue of concern. The electrical corporation shall provide a copy of the information-only submittal to the office.⁴

SCE provides the required information below:

(1) Quarterly Information-Only Submittal to the CPUC

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

(2) Implementation of Wildfire Mitigation Plan

On March 27, 2023, SCE submitted its 2023-2025 WMP. The WMP included discussion of 2023 programs and activities, as well as successes and lessons learned from 2022. For 2023, SCE is tracking 40 specific wildfire-related activities, including grid hardening, enhanced inspection and repair programs, continuation of robust vegetation management, increased situational awareness and response, and augmented activities for Public Safety Power Shutoff (PSPS) resilience and community engagement, particularly for underrepresented groups and access and functional needs customers.

In Attachment A (SCE's 2023-2025 Wildfire Mitigation Plan Progress Update – Q3 2023), SCE presents detailed information about the implementation status of each of these wildfire-related mitigation activities. As referenced in Attachment A, SCE is currently on track to substantially meet the 2023 year-end targets set forth in its WMP. Thirty of the 40 WMP activities are on track or completed. Ten activities are behind year-to-date plan due to several factors including inclement weather and access related constraints, material shortages, permitting delays, and resource availability. Of these ten activities, 6 are expected to meet year-end program targets, and 3 are at risk of not meeting year-end targets. Mitigations plans are in place to facilitate substantial completion. One activity, SH-2, will not meet its year-end target due to constraints associated with easement agreements. SCE expects to complete the

³ SCE is simultaneously submitting this quarterly notification to the California Public Utilities Commission as an information-only submittal via email to Rachel Peterson, Forest Kaser, Simon Baker, Danjel Bout, Eric Wu, and Leslie Palmer.

⁴ Pub. Util. Code § 8389(e)(7).

remaining SH-2 project early in 2024 with risk reduction measures such as overhead inspections and vegetation management continuing until full project completion.

(3) Implementation of Most Recent Safety Culture Assessment

Energy Safety issued the 2022 SCA Report for SCE on May 8, 2023. The SCA was conducted by the National Safety Council, Energy Safety's third-party administrator. As discussed in more detail below, SCE is addressing the four findings and recommendations of its most recent SCA report.⁵ SCE has implemented actions to address these findings and recommendations and will continue to strive towards continuous improvement in these areas.

- 1. Continue to build SCE's capacity as a learning organization (Recommendation 3.1): SCE should build its capacity as a learning organization, taking a proactive approach to incorporating feedback to improve organizational processes, by:
 - Focusing on improving safety-enabling systems such as incident investigation and root cause analysis.
 - Increasing the quality of incident and near-miss reports submitted by frontline workers.
 - Increasing opportunities for frontline workers and contractors to discuss lessons learned from safety events.
 - Developing an action plan to ensure that frontline leaders are implementing training concepts such as coaching conversations.

Addressing this recommendation, in Q3 SCE:

- a. Continued to prepare for the implementation of the Environmental Health and Safety Information Management System, which will be used for reporting, tracking, and managing work-related injuries and incidents on a single platform. This system is scheduled to go-live in Q1 2024.
- b. Continued to share lessons learned via SCE's Weekly Incident Report, which provides more opportunities for frontline workers to discuss lessons learned from completed safety incidents evaluations, initial learnings from pending evaluations and tips for prevention. SCE is creating a consolidated contractor and SCE employee report that expands the range of learnings provided to our workers.
- c. Targeted to complete Human and Operational Performance (HOP) training for Grid Operations by Q2 2024. The HOP training and sustainability efforts will help frontline

⁵ Energy Safety initiated its 2022 Safety Culture Assessment (SCA) process for electrical corporations on July 22, 2022. SCE partnered with Energy Safety and National Safety Council (NSC), its third-party administrator, to complete the management self-assessment and workforce safety culture survey. SCE received its 2022 SCA report on May 8, 2023 and submitted a Letter Acceptance of 2022 Safety Culture Assessment Report on June 21, 2023.

leaders implement training concepts such as coaching conversations grounded in HOP principles. Substation Construction and Maintenance completed HOP training in 2022 and sustainably efforts continue to gradually create a learning organization.

Continued the Expanded Cause Evaluations approach, which focuses on obtaining learnings and insights from safety incidents. Cause Evaluators are trained in HOP and use HOP principles when performing evaluations and facilitating Learning Teams.

2. Optimize safety communications between leadership and frontline workers (Recommendation 3.2): SCE should optimize its safety communications between leadership and frontline workers by considering deploying an incident management team liaison to the field during incidents and implementing regular crossdepartmental topic-specific listening sessions to develop better understanding of frontline issues and recognize workers' accomplishments.

Addressing this recommendation, SCE continues to improve communications between frontline workers and our PSPS operations. In Q3 SCE:

- a. Continued to advance safety culture through more effective learning by holding several in-person "Roundtable" sessions designed to share PSPS and safety-related information, as well as solicit concerns and feedback. Our most recent visits were to Arrowhead, Live Oak and Covina. The meetings have been well received. In addition to continuously updating the PSPS Resources Portal based on feedback we received, these discussions have resulted in taking several actions, including requesting additional reviews of circuit segments and creating reference guides to ensure frontline workers have the tools and resources they need during an activation. We continue to schedule these meetings as PSPS priorities allow.
- b. Updated the PSPS Resource page with additional useful resources including role-based quick reference guides, designed to provide step-by-step instructions for individual roles during a PSPS activation.
 - 3. Mitigate risk exposure posed by interactions with the public (Recommendation 3.3): SCE should continue to recognize and take action to mitigate the risk exposure posed by interactions with the public by:
 - Focusing on encouraging frontline workers to report these incidents.
 - Continuing to track incidents and further developing its strategy for managing this risk exposure.
 - Improving bilingual support resources for Spanish-speaking vegetation management crews to assist with de-escalation.

Addressing this recommendation in Q3, though there was a slight uptick in reported assault/threat cases in Q3 compared to Q2 (19 versus 16), cumulative Q1-Q3 2023 cases were 40% lower compared to Q1-Q3 2022 (49 versus 83). In Q3, SCE:

- a. Is exploring further enhancements to streamline and reduce customer interactions prior to conducting the work, such as the UASidekick airspace awareness tool, Low Altitude Authorization and Notification Capability (LAANC). LAANC allows drone pilots to request airspace clearing in restricted flight areas, as well as provides customer contact information so crews are able to make contact with customers prior to work execution. For Red List customers⁶, crews are aware of the location from the GIS Map Layer provided so they may request SCE Corporate Security assistance.
- b. Provided a property access safety video in English and Spanish for SCE employees and contractors in efforts to improve bilingual resources for Spanish speaking crews.
 - 4. Improve training for frontline workers on new technologies related to wildfire mitigation (Recommendation 3.4): SCE should improve its training for frontline workers on new technologies related to wildfire mitigation, in particular rapid earth fault current limiter (REFCL) devices.

Addressing this recommendation four, in Q3 SCE:

 a. Continued delivering training to frontline workers for Rapid Earth Fault Current Limiters (REFCL) with enhanced training materials that provide content tailored to the specific audience. REFCL detects and reduces ground fault energy before an ignition can occur. In-Person training is in flight; approximately 25% of identified impacted employees have been trained to-date, targeting 100% trained by year-end 2023.

(4) <u>Recommendations of the Safety and Operations Committee</u>

The Committee had one meeting during the third quarter of 2023, on August 23, 2023. During this meeting, the Committee focused on wildfire and safety issues in the following categories: Wildfire Safety, Worker Safety, and Public Safety, among other topics.

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

a. Wildfire Safety

At its regular August meeting, the Committee received a report on weather and fuels conditions in SCE's service area in advance of peak wildfire season. The Committee also received a report

⁶ Red list customers are those flagged as "hostile customers".

on two recent PSPS events with minimal impacts on non-residential customers. The Committee and management discussed the continued utilization of PSPS to mitigate wildfire risk. The Committee received an update on the specific conductor failures experienced on one transmission line, the root cause analysis, mitigations in place, and ongoing review of alternative technologies. The Committee received a report on the Pacific Gas and Electric changes to vegetation management programs and discussed how that compares to SCE's vegetation management protocols. The Committee and management discussed Wildfire Mitigation Plan activities, areas currently behind, factors contributing to delays, and plans for catching up to targets.

Mr. O'Toole and Mr. Powell reported to the Committee on the AB 1054-required board-level reporting of safety to the Commission, summarizing the key areas of focus and the engagement with the Commissioners and the Director of the Office of Energy Infrastructure Safety.

b. Worker Safety

At its regular August meeting, the Committee received an update on worker safety performance, including trends on Serious Injuries and Fatalities (SIFs) and Days Away, Restrictions, and Transfers (DARTs), noting where measures are behind target for the annual corporate goals. The Committee also received an update on communications with employees about lessons learned, work practices and asset management to mitigate the risks identified in connection with the January 2023 troubleman fatality.

The Committee received a report on components of the safety work plan, technical training, including the cadence and effectiveness of refresher training, and prioritization of clarifying work practices and procedures. The Committee also received a report on high-risk asset replacement plans.

The Committee received an update on the safety district deep dive reviews in the Distribution organization, including safety performance improvements in SIFs and DARTs in the four pilot districts that have implemented the reviews the longest.

c. Public Safety

At its regular August meeting, the Committee received an overview of the public safety risk register, highlighting areas of focus, including car-hit-pole and wire down incidents. The Committee also received an update on areas of opportunity for additional data collection and analysis to advance public safety mitigations. The Committee was provided an update on lessons learned from hazard tree and covered conductor programs, and the impact of early 2023 rain and snowstorms.

d. Committee Recommendations

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

- 1. Recommended that management provide additional analysis of safety observation data and correlating safety performance improvements.
- 2. Recommended that management provide a review of contractor management areas of focus for improvement.
- 3. Recommended that management share Association of Edison Illuminating Companies (AEIC) safety work practices benchmarking as it becomes available at a future meeting.
- 4. Recommended that management provide an update on the third-party review of all technical training programs for lineworkers as the assessment is completed at a future meeting.

e. Completed Management Responses to Committee Recommendations

In response to the Committee's recommendations in prior meetings, management provided the following responses during the Q3 meeting, the details of which are described above or were pending from prior meetings:

• <u>Recommendation (Q4 2022)</u>: The Committee recommended that management followup with the Committee on work practices in underground vaults.

<u>Management response</u>: The Committee received follow-up information on work practices in underground vaults at its February 2023 and April 2023 meetings. This was meant to be included in the response noted in the Q1 2023 QNL but was not explicitly stated and upon review, we noted that the topic was also covered in the Q2 2023 meeting in April 2023.

• <u>Recommendation (Q4 2022)</u>: The Committee recommended that management followup with the Committee on the trend of underground equipment failures.

<u>Management response</u>: The Committee received follow-up information on underground equipment failure (and wire down) trends and the impact of mitigations at their February 2023 meeting as was noted in the Q1 2023 QNL.

• <u>Recommendation (Q2 2023)</u>: The Committee recommended that management provide an update on the effectiveness and cadence of refresher technical training for line workers.

<u>Management response</u>: The Committee received an update on effectiveness and cadence of refresher technical training for line workers in the Worker Safety report at its August 2023 meeting.

• <u>Recommendation (Q1 2023)</u>: The Committee recommended that management continue to report on prioritization of life-critical areas of focus for worker safety.

<u>Management response</u>: The Committee received information on life-critical areas of focus for worker safety in the Worker Safety report at its August 2023 meeting and management will continue to provide such information in the Worker Safety reports going forward.

• <u>Recommendation (Q4 2022)</u>: The Committee recommended that management provide additional information regarding severity of employee injuries across classifications (e.g., SIF, DART, etc.).

<u>Management response</u>: The Committee received information regarding the results of the research done on the impact of injury severity on the decrease of Workers' Compensation financial reserves and the conclusion that such decrease is not correlated with injury rates or severity of injuries in the Worker Safety report at its August 2023 meeting.

f. Pending Management Responses to Committee Recommendations

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

• None.

The Committee has two regular Q4 2023 meetings scheduled for October 25, and December 13, 2023, which will be summarized in the next quarterly notification letter. Additional meetings will be scheduled as appropriate.

CONCLUSION

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

Southern California Edison Company

<u>/s/ Connor J. Flanigan</u> Connor J. Flanigan

CC: Wildfire and Safety Performance Section, <u>SafetyPolicyDivision@cpuc.ca.gov</u> Eric Wu, Ph.D., P.E., Program and Project Supervisor, <u>Eric.Wu@cpuc.ca.gov</u>

CJF:jk:cm Enclosures

SCE's 2023-2025 Wildfire Mitigation Plan (WMP) Progress Update – Q3 2023

(All data is as of September 30, 2023)¹

¹ Source: All data is as of September 30, 2023 (+/- 5 business days). Reported numbers are subject to revision upon data validation.



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WMP Activities Summary²



Grid Design, Operations, & Maintenance **Vegetation Management & Inspections** IN-3 **VM-1** Inspect 5,300 distribution VM-2 Inspect 412 grids/circuits and VM-3 overhead circuit miles in Inspect and clear (where prescribe mitigation for Perform vegetation treatment IN-1.1 IN-1.2 HFRA clearance is needed) 63,700 hazardous trees with and maintenance to 50 sites (Distr. Ground and Aerial) (Trans. Ground and Aerial) structures strike potential Inspect 187,000 structures in Inspect 28,000 structures in HFRA IN-4 HFRA Inspect 1,000 transmission VM-4 VM-6 (Arbora) overhead circuit miles in Inspect 509 grids/circuits and **Enable supplemental VM-7 HFRA** prescribe mitigation for dead Vegetation Management tree Inspect 770 grids within and dying trees with strike maintenance program distribution system capabilities in Arbora IN-8 (Inspection and potential IN-5 IN-9.a Maintenance Tools) Inspect 170 generation Inspect 50 spans with Line Distribution Ground related assets in HFRA Vue Inspection Application **VM-8** VM-9 VM-10 Inspect at least 1,820 HFRA Inspect 416 circuits within Inspect at least 1,020 HFRA SH-1 SH-2 transmission system circuit miles circuit miles IN-9.b Install 1,100 circuit miles of Convert 11 circuit miles of Inspect 50 splices with covered conductor in SCE's overhead to underground in X-Ray HFRA SCE's HFRA SH-6 Situational Awareness SH-4 **Community Outreach** SH-5 Install or replace fusing at 500 Replace/upgrade 75 CB relay Install 6 RAR/RCS & Forecasting & Engagement fuse locations that serve HFRA units with fast curve settings sectionalizing devices in SCE's HFRA circuitry DEP-1 DEP-4 SA-3 SA-1 Host at least four Conduct at least five Equip 500 weather Install 85 weather customer studies meetings SH-8 station locations SH-10 SH-14 stations in SCE's Install TOPD at 5 locations with machine Remediate 400 tree Remediate 400 spans in SCE's HFRA that serve HFRA circuitry with learning capabilities attachments in SCE's HFRA **HFRA** both alarm/trip functionality **Emergency Preparedness** SA-8 Complete analytics report summarizing assessment PSPS-2 PSPS-3 **SH-17** SH-15 SH-16 Complete construction of 85% of batteries 85% of rebates of historical consequence data for improved fire Retrofit vibration dampers on Install 9 vertical switches in delivered within 30 processed within 30 GFN at two substations spread modeling SCE's HFRA 300 structures (Acton and Phelan) calendar days business days DG-1 SA-11 DEP-2 SH-18 DEP-5 SA-10 Install Early Fault PSPS response teams Provide fire agencies Complete grounding (Ezy) Enable LiDAR data management by end of year Install 10 HD conversion at one location. (WiSDM) Enable semi-automated data aggregation and external Detection (EFD) at 50 are fully gualified/rewith funding to support Cameras subject to land availability portal for data sharing locations ualified by 7/1 annuall QRF program

Behind Plan, At-Risk of Not Meeting Year-end Target



Behind Plan, At-Risk of Not Meeting Year-end Target

Situational Awareness Activities

Weather Stations 95% 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: Through the end of Q3, SCE completed installation of 81 weather stations in HFRA. 	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. Program met target in August of installing 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 in May of 500 weather station locations, and a total of 621 weather station locations were equipped with new machine learning. 	Early Fault Detection (EFD) 148% 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 in June of 50 EFD installations, and a total of 74 EFDs have been installed.

Fire Science (SA-8)

Section 8.3.1.2 Page 449

Fire Spread

Modeling

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

Status Update: Through the end of Q3, SCE developed draft report summarizing results of historical consequence data analysis.

in August of 500 fuse locations, and a total of 549 fuse locations

were installed/replaced.



On-Track Behir

Behind Plan, Likely to Meet Year-end Target Meeting Y

Behind Plan, At-Risk of Not Meeting Year-end Target

Grid Design and System Hardening

Remote Controlled Automatic Reclosers Settings Covered Conductor (SH-1) **Remote Controlled** Covered Automatic Reclosers Section 8.1.1.2 Page 238 Update (SH-5) Conductor Program Target: Install 1,100 circuit miles of covered conductor in **Settings Update** Section 8.1.1.2 Page 239 SCE's HFRA. SCE will strive to install up to as many as 1,200 circuit Program Target: SCE will install 6 RAR/RCS sectionalizing devices miles of covered conductor in SCE's HFRA, subject to resource 76% subject to 2022 PSPS analysis and subject to change. SCE will strive 17% constraints and other execution risks. to install up to 17 RAR/RCS sectionalizing devices subject to 2022 Installed PSPS analysis, resource constraints and other execution risks. Installed Status Update: Through the end of Q3, SCE completed installation of 846.51 circuit miles of covered conductor in HFRA. Activity is off Status Update: Through the end of Q3, SCE completed installation track due to impacts from severe weather in Q1, resource impacts of 1 RAR/RCS sectionalizing device. associated with new contract agreements, and environmental permitting challenges. Activity is expected to return to on-track performance in Q4 2023. **Circuit Breaker Relay Fast Curve (SH-6)** Undergrounding Overhead Conductor (SH-2) Undergrounding **Circuit Breaker** Section 8.1.1.2 Page 239 Section 8.1.1.2 Page 238 **Overhead** Program Target: Replace/upgrade 75 CB relay units with fast curve Relay Fast Curve Program Target: Convert 11 circuit miles of overhead to Conductor settings in SCE's HFRA. SCE will strive to replace/upgrade up to 88 underground in SCE's HFRA. relay units with fast curve settings in SCE's HFRA, subject to resource 91% constraints and other execution risks. 28% Status Update: Through the end of Q3, SCE completed installation Installed of 3.05 targeted underground miles in HFRA. Approximately 3 out of Installed Status Update: Through the end of Q3, SCE completed 11 targeted miles will be delayed until 2024; addressing remaining replacement/upgrade of 68 CB relays units with fast curve settings in concerns with easement agreements. SCE's HFRA. Branch Line Protection Strategy (SH-4) **Transmission Open Phase Detection (SH-8) Branch Line** Section 8.1.1.2 Page 238 Section 8.1.1.2 Page 239 Protection Program Target: Install or replace fusing at 500 fuse locations that **Program Target:** Install TOPD at 5 locations that serve HFRA circuitry Transmission serve HFRA circuitry. SCE will strive to install or replace fusing at up with both alarm and trip functionality Strategy **Open Phase** to 570 locations that serve HFRA circuitry, subject to resource constraints and other execution risks. Detection **Status Update:** Through the end of Q3, SCE completed review of the 110% protection design and initiated wiring on these 5 locations. **Status Update**: SCE met target in Q3. Program exceeded its target Installed



Behind Plan, At-Risk of Not Meeting Year-end Target

Grid Design and System Hardening

Tree Attachment Remediation 39% 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: Through the end of Q3, SCE remediated 155 tree attachments in HFRA. Activity is off track due to severe weather	Vibration Damper Retrofit 125% 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 in
	impacts and constrained access in regions with tree attachment scope.		July of 300 structures, and a total of 374 structures were retrofitted. Rapid Earth Fault Current Limiters (REFCL)
Long Span Initiative 122%	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.	REFCL (Ground Fault Neutralizer)	Kapic Earth Fault Current Limiters (KEFCL) (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: Activity is off track due to material shortages and
Remediations	Status Update: SCE met target in Q3. Program exceeded its target in July of 400 spans, and a total of 486 spans were remediated.		prerequisites for electrical construction start in Phelan substation. Electrical construction on track at Acton and expedited electrical construction is underway at Phelan. Activity is at risk of not meeting YE target.
Vertical Switches 27% 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: Through the end of Q3, SCE installed 3 vertical switches in SCE's HFRA. Two vertical switch installations are at risk due to delays with required Caltrans permits. 	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:Through the end of Q3, SCE completed work order design and initiated construction.

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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 89% Aerial 84%	Distribution HFRI Ground / Aerial Inspections and Remediations (IN-1.1)Section 8.1.1.2 Page 242Program 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: Through the end of Q3, SCE completed 167,224 ground and 157,155 aerial inspections in HFRA. Activity is off track due to challenges faced earlier in the year such as severe weather impacts in Q1, resource levels, and drone availability. Activity is expected to return to on-track performance in Q4 2023.	Transmission Infrared Inspections 107% 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 in August of 1,000 transmission overhead circuit miles in HFRA, and a total of 1,072.65 circuit miles were inspected.
YTD Status Ground 98% Aerial 77%	Transmission HFRI Ground / Aerial Inspections and Remediations (IN-1.2)Section 8.1.1.2 Page 242Program 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: Through the end of Q3, SCE completed 27,455 ground and 21,619 aerial inspections in HFRA. Transmission Aerial is off track due to challenges faced earlier in the year such as severe weather impacts in Q1, onboarding delays, and vendor performance. Activity is expected to return to on-track performance in Q4 2023.	Generation Inspections 133% 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 in August of 170 inspections, and a total of 226 generation-related assets were inspected.
Distribution Infrared Inspections 101% 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 Q3. Program exceeded its target in August of 5,300 distribution overhead circuit miles in HFRA, and a total of 5,348.39 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: Activity is off track due to resourcing delays. Final resource was onboarded in September and the team has begun working on Proof-of-Concept development and completing detailed design to migrate the distribution ground inspection application to a single digital platform. Activity is expected to return to on track performance in Q4.

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Behind Plan, At-Risk of Not Meeting Year-end Target

Asset Management and Inspections

YTD Status	Transmission Conductor & Splice Assessment: Spans		
TTD Status	with LineVue & X-Ray (IN-9)		
LineVue	Section 8.1.1.2 Pages 244-245 Program Target:		
132%	 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	 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. 		
88%			
	 Status Update: LineVue: SCE met target in Q3. Program exceeded its target in September of 50 inspections, and a total of 66 inspections were completed. X-Ray: Through the end of Q3, SCE completed X-Ray inspections 		
	on 44 splices. Activity is slightly off track due to 11 inspections removed due to issues with images and are planned for re- inspection in October. Activity is expected to return to on-track performance in Q4 2023.		
YTD Status	<u>Wildfire Safety Data Mart and Data Management</u> (WiSDM / Ezy) (DG-1)		
	Section 8.1.1.2 Pages 245		
Ezy	 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:		
WiSDM	 Ezy: Through the end of Q3, SCE completed migration of legacy LiDAR data to the Google Cloud Platform (GCP). WiSDM: SCE met target for sub-activity 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. 		



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

Vegetation Management and Inspections

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Hazard Tree Management Program (VM-1)

85% Grids/Circuits Assessed 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: Through the end of Q3, SCE completed inspections on 350 grids/circuits.

Dead and Dying Tree Removal

85% 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: Through the end of Q3, SCE completed inspections on 434 grids/circuits.

Structure Brushing (VM-2)

Structure Brushina

117% Structures Cleared 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 in August of 63,700 structure inspections, and a total of 74,635 structures were inspected.

Expanded Clearances for Legacy Facilities

egacy Facilities

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 in August of 50 sites, and a total of 58 sites were treated and maintained.

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: Through the end of Q3, SCE initiated User Acceptance Testing of developed capabilities to support final upcoming milestone to enable supplemental Vegetation Management (emergent work) tree maintenance program capabilities in Arbora by end of year.

Inactive Under Review Complete On-Track

k 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 91% 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: Through the end of Q3, SCE completed inspections of 698 grids within SCE's distribution system.	LiDAR Vegetation Inspections – Distribution 99% 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: Through the end of Q2, SCE completed inspection of 1,009.07 HFRA circuit miles. Activity is slightly off track by 1% due to a limited amount of outdated circuit mile data; this issue has since been corrected. Activity is expected to return to on-track performance in Q4 2023.
Detailed Inspections: Transmission 99% 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: Through the end of Q3, SCE completed inspections of 414 grids within SCE's transmission system.	LiDAR Vegetation Inspections – Transmission 111% 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 in September of 1,820 HFRA circuit miles, and a total of 2,017.52 HFRA circuit miles were inspected.

Inactive Under Review Complete

te 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) **99%**

On-Time Deployments

SCE Emergency

Responder

Training

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 days³ 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.³

Status Update: Through the end of Q3, 99% of customers enrolled received their battery within 30 calendar days.

Customer Care Programs (Portable Power Station and Generator Rebates)

> **100%** On-Time Rebates Processed

> > Aerial

Suppression

<u>Customer Care Programs (Portable Power Station</u> and Generator Rebates) (PSPS-3)

Section 8.4.1.2 Page 525

Program Target: Process 85% of all rebate claims within 30 business days³ 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.³

Status Update: Through the end of Q3, 100% of rebate claims submitted were processed and distributed within 30 business days.

SCE Emergency Responder Training (DEP-2)

Section 8.4.1.2 Page 523 **Program Target:** PSPS response teams are fully qualified/requalified by 7/1 annually to maintain readiness.

Status Update: SCE met target in Q2. SCE executed all readiness trainings to ensure PSPS response teams are fully qualified/requalified by 7/1 annually to maintain readiness.

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. Contracts were issued at the end of 2022 and final payment was provided to the agencies in January 2023.

³ Number of calendar/business days subject to change based on customer survey feedback.

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

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.

100% Safety Meetings **Status Update:** SCE met target in Q2. SCE hosted four wildfire community safety meetings by region in targeted HFRA communities.

Customer

Research and Education

> 40% 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: Through the end of Q3, SCE completed two of five PSPS-related customer studies.

Off-Track Narrative – IN-1.1A Dist. HFRI Inspections in HFRA Ground

YTD StatusBehind PlanYE OutlookOn Track

Activity 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).

Key Takeaways

- Off track by 3% (167,224 inspections YTD vs 172,640 planned).
- Activity is expected to return to on-track performance in Q4 2023.

Risks or Challenges

 Activity is off track due to continued recovery from challenges faced earlier in the year such as severe weather impacts in Q1, onboarding delays and vendor performance.

- Vendors continuing to use extended hours to complete additional inspections.
- Vendors have maintained crew counts needed to meet recovery plan.
- SCE utilizing overtime and upgrading Senior Electrical System Inspectors until scope complete.

Off-Track Narrative – IN-1.1B Dist. HFRI Inspections in HFRA Aerial

YTD Status Behind Plan YE Outlook On Track

Activity 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).

Key Takeaways

- Off track by 9% (157,155 inspections YTD vs 172,640 planned).
- Activity is off track due to continued recovery from challenges faced earlier in the year such as severe weather impacts in Q1, onboarding delays and vendor performance.
- Activity is expected to return to on-track performance in Q4 2023.

Risks or Challenges

 Activity is off track due to continued recovery from challenges faced earlier in the year such as severe weather impacts in Q1, onboarding delays and vendor performance.

- Vendors continuing to use extended hours to complete additional inspections.
- Vendors have maintained crew counts needed to meet recovery plan.
- SCE utilizing overtime and upgrading Senior Electrical System Inspectors until scope complete.

SCE will strive to inspect up to 29,500 structures in HFRA.

Inspect 28,000 structures in HFRA.

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Activity Target

Off-Track Narrative – IN-1.2B Transmission HFRI Inspections in HFRA Aerial

YTD Status Behind Plan YE Outlook On Track

Key Takeaways

- Off track by 16% (21,619 inspections YTD vs 25,800 planned).
- Activity is expected to return to on-track performance in Q4 2023.

Risks or Challenges

- Activity is off track due to resource constraints and continued recovery from challenges faced earlier in the year such as severe weather impacts in Q1, onboarding delays and vendor performance.
- Team is assessing contingency plans for access/obstructed inspections.

- Vendors increased crew counts to perform data capture and desktop review.
- Utilizing overtime for inspectors.

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

Activity Target

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



YTD Status	Behind Plan
YE Outlook	On Track

Key Takeaways

- Off track to develop the detailed design to migrate the distribution ground inspection application to the single digital platform.
- Activity is expected to return to on-track performance in Q4 2023.

Risks or Challenges

• Activity is off track due to resource and procurement delays which impacted timing of Q3 work.

Actions to Improve Performance / Get Well Plan

 Final resource was onboarded in September and the team has begun working on Proof-of-Concept development and completing detailed design to migrate the distribution ground inspection application to a single digital platform.

Off-Track Narrative – IN-9.B Transmission Conductor & Splice Assessment – X-Ray

YTD Status	Behind Plan
YE Outlook	On Track

Activity Target

- 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.

Key Takeaways

- Off track by 2% (44 inspections YTD vs 45 planned).
- Activity is expected to return to on-track performance in Q4 2023.

Risks or Challenges

• Activity is off track due to 11 completed X-rays in August which were removed due to issues with inspection images.

Actions to Improve Performance / Get Well Plan

• Inspections with image issues are planned for re-inspection in October.

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

YTD Status Behind Plan YE Outlook On Track

Activity 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.

Key Takeaways

- Off track by 19% (846.51 circuit miles YTD vs 1047 planned).
- Activity is expected to return to on-track performance in Q4 2023.

Risks or Challenges

- Activity is off track due to impacts from severe weather in Q1, resource impacts associated with new contract agreements and environmental challenges.
- A few regions are currently underperforming compared to plan.
- Some miles have been deferred due to Hurricane Hillary and red flag warnings.
- Other miles have experienced environmental delays associated with protected bumble bee species.

- By end of Sept, at least 90 additional miles completed in the field (not credited because they are either part of a larger work order, or in the process of being closed out in system of record).
- Working with each region to ensure appropriate staffing levels and develop recovery plans to ensure successful completion by YE.

Off-Track Narrative – <u>SH-2 Undergrounding</u>

Activity Target

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

YTD StatusBehind PlanYE OutlookOff Track

Key Takeaways

• Off track by 62% (3.05 circuit miles completed YTD vs 8 planned) due to permitting constraints on undergrounding work.

Risks or Challenges

 Mc Allister/Tin Mine (2.82 circuit miles) constrained by easement language issued by Metropolitan Water District (MWD). SCE is actively working with MWD to modify easement language to ensure long-term agreement for placement of SCE facilities; Project completion is delayed until 2024.

- Easement discussions have been escalated both within SCE and MWD, and resources have been dedicated to expedite resolution.
- MWD is amenable to updating the easement language, however it will need to follow MWD's process timelines including board approval.

Off-Track Narrative – SH-10 Tree Attachment Remediation

Activity 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.

YTD Status	Behind Plan
YE Outlook	Off Track

Key Takeaways

- Off track by 61% (155 attachments remediated YTD vs 400 planned).
- Activity is off track due to severe weather in Q1 which impacted access and ability to perform work in regions with tree attachment scope.

Risks or Challenges

- Access to tree attachment work in Camp Nelson area partially impacted by road access issues caused from weather impacts earlier in the year. Currently partial access to the area via a detour, but main road still inaccessible to heavy vehicles. All road closures/impacts should be lifted by 10/19.
- Work in Rurals partially impacted by lingering snow in higher elevations and environmental restrictions.

Actions to Improve Performance / Get Well Plan

• Extending crew hours and bringing in additional contractor resources into the regions to expedite work.

Off-Track Narrative – SH-15 Vertical Switches

Activity 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 risks.

YTD Status	On Track
YE Outlook	Off Track

Key Takeaways

- Activity is meeting plan YTD, however YE performance is at risk of not meeting YE target due to constraints on vertical switch scope.
- 3 switches are complete YTD, 4 switches on track for completion.

Risks or Challenges

- 2 vertical switches awaiting Caltrans Permit.
 - Permit request for the first switch submitted on 9/12 and expected by end of October.
 - Second switch is pending Caltrans Design Standard Decision Document (DSDD) – currently in 3rd round of reviews but at risk that approval may not be received by year-end.

Actions to Improve Performance / Get Well Plan

• Actively pursuing permitting and ensuring material and design availability to facilitate construction completion by year end.

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

YTD Status Behind Plan YE Outlook Off Track

Activity Target

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



Key Takeaways

- Acton Outage restrictions in place, construction expected to be complete by October
- Phelan Sourcing material shortages/additional material needs, crews return 10/23/23 to proceed with electrical construction.

Risks or Challenges

- Phelan 66-12kV power transformer failure that needed replacement and material supply challenges delayed construction start, construction completion at risk of going beyond 2023 year end.
- Weather and loading may further inhibit ability to obtain outages.

- All known missing/additional materials have been ordered and are being received and staged at warehouse to be moved to location when crews return.
- Ground Fault Neutralizer on foundation at Phelan, expected to be wired by year-end 2023.

Off-Track Narrative – VM-9 LiDAR Vegetation Inspections - Distribution

YTD Status	Behind Plan
YE Outlook	On Track

Activity Target

• SCE will inspect at least 1,020 HFRA circuit miles.



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planned).

Actions to Improve Performance / Get Well Plan

Key Takeaways

Activity is expected to return to on-track performance in Q4 2023.

Off track by 1% (1,009.07 HFRA circuit miles inspected vs 1,020

• Circuit mile data issue has since been corrected.

Risks or Challenges

• Activity is off track due to a limited amount of outdated circuit mile data; this issue has since been corrected.