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May 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 first quarter of 2023, and a summary of the implementation of Committee recommendations in the first quarter of 2023 from previous meetings.

<u>PURPOSE</u>

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

BACKGROUND

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

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

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."

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

SCE provides the required information below:

(1) 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 – Q1 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. Although ten activities are currently behind plan for the quarter due to circumstances such as severe weather and resource constraints, SCE expects these ten activities will meet their year-end targets.

(2) Implementation of Most Recent Safety Culture Assessment

Energy Safety issued the 2021 SCA Report for SCE on September 2, 2021. The SCA was conducted by DEKRA, its third-party administrator. The 2021 SCA Report included the following four findings and recommendations:

- 1. Update current safety leader activities to address issues noted by the workforce concerning wildfire communications, roles, and decisions.
- 2. Use Safety Culture Pulse Surveys to evaluate progress of supervisors in engaging frontline workers on wildfire hazards and providing clear communication about wildfire-related procedures.
- 3. Embed learning organization concepts into the culture via training, incident investigations and corrective action systems.
- 4. Recognize and take action to mitigate the serious exposure posed by interactions with certain discontented members of the public.

³ Pub. Util. Code § 8389(e)(7).

As discussed in more detail below, SCE is addressing the four findings and recommendations of its most recent SCA report.⁴ SCE has implemented actions to address these findings and recommendations and will continue to strive towards continuous improvement in these areas.

Addressing recommendation one, *update current safety leader activities to address issues noted by the workforce concerning wildfire communications, roles, and decisions,* in Q1 SCE:

- Engaged in follow-up communications with 110 frontline workforce members who received our Field Engagement survey. In the communication we shared the results of the survey and identified mitigations for those issues that need additional attention.
- Continued to develop a PSPS Resource Hub to facilitate information gathering. The internal portal will serve as a single source of information for useful resources and tools during a PSPS activation, including circuits lists, status of activations, safety information, questions and answers, and points of contact. The resource hub is 75% complete, with an estimated completion date of June 30, 2023.
- Incorporated Field Worker input into the de-energization decision making process to improve awareness of field conditions during PSPS events.
- Planned for implementation of in-person roundtable sessions with field supervisors to get them more engaged in keeping their pre- and post-activation teams well informed about wildfire safety, the PSPS de-energization decision-making process, and how, when, and to whom to communicate critical information. Roundtable sessions, which will aid in Field Engagement survey response rate, will take place during Q2 or early Q3 2023.

SCE will continue to engage and obtain feedback from its workforce on an ongoing basis.

Addressing recommendation two, use Safety Culture Pulse Surveys to evaluate progress of supervisors in engaging frontline workers on wildfire hazards and providing clear communication about wildfire-related procedures, SCE's implementation of this recommendation included the administration of a Field Engagement survey in Q4 2022 to understand engagement with frontline workers on wildfire hazards and wildfire-related procedures. In Q1 SCE:

- Received a 32% response rate from our Field Engagement survey (n=110).
 - 50% rated their overall experience during PSPS events as 4 or better (out of 5).
 - \circ 56% felt that their feedback contributes to effective decision making.
 - More than 80% felt prepared to perform their role and that their understanding of processes and procedures continues to improve.

⁴ 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 draft 2022 SCA report on April 17, 2023 (originally estimated to be issued by the end of February) and comments are due on the same day as the date of this filing. SCE will provide an update on its final 2022 SCA report in its next QNL.

SCE will continue to engage and obtain feedback from the frontline workforce on an ongoing basis.

Addressing recommendation three, *embed learning organization concepts into the culture via training, incident investigations and corrective action systems,* SCE reported the work completed for this activity in the Q3 2022 Quarterly Notification Letter (Q3 QNL)⁵ and the Q4 2022 Quarterly Notification Letter (Q4 QNL).⁶ In Q1 SCE continued to deepen the sharing of lessons learned throughout the organization by including the results of cause evaluations in weekly safety messaging that goes directly to field leaders and our contractors.

Addressing recommendation four, *recognize and take action to mitigate the serious exposure posed by interactions with certain discontented members of the public,* SCE reported the work completed for this activity in the Q3 QNL and the Q4 QNL and in Q1, SCE has continued this effort and has seen further improvements.

Compared to Q4 2022, there was a 47% reduction (17 to 9) in customer threats against employees and contractors in Q1 2023. This includes a 37.5% decrease (8 to 5) in customer threats based on property access.

(3) Recommendations of the Safety and Operations Committee

The Committee had two meetings during the first quarter of 2023: one special meeting on January 30 and one regular meeting on February 22. During these meetings, 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 is 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 crews and leaders in the field.

a. Wildfire Safety

At its special January meeting, the Committee received an overview of the 2023-2025 WMP filing. Management noted that the 2023-2025 WMP filing builds on the foundational strategy of grid hardening, enhanced operational practices and situational awareness in prior WMPs, incorporates further Energy Safety requirements and continues the focus on risk-informed mitigation strategies. The Committee received updates on further risk prioritization of WMP mitigations within High Fire Risk Areas (HFRAs), projections for covered conductor deployment and increased targeted undergrounding, and further PSPS operational improvements and reduction of customer impacts. Management noted the WMP's primary focus on the distribution system, with additional focus on the transmission system, and year-round fire suppression resources.

The Committee received an overview of the new Energy Safety wildfire maturity model. The Committee and management discussed the maturity model, and efforts to improve the

⁵ See Southern California Edison's Q3 2022 Quarterly Notification Letter (Q3 QNL), available at <u>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53177&shareable=true</u>

⁶ See Southern California Edison's Q4 2022 Quarterly Notification Letter (Q4 QNL), available at <u>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53357&shareable=true</u>

methodology to measure wildfire risk reduction. The Committee and management also discussed areas of improvement for SCE within the model, including regarding documentation, benchmarking practices and an improved feedback loop to incorporate learnings into work practices and training.

The Committee received a report on the tiered risk approach within HFRAs, the process for utilizing wildfire modeling software and data from prior ignitions to model potential wildfire impacts, and the mitigations being deployed to address those risks. The Committee also received updates on the effectiveness of various mitigations, including fire suppression, effectiveness of covered conductor in relation to targeted undergrounding, and ongoing efforts to lower barriers to undergrounding such as costs and permitting delays.

The Committee received an overview of the external engagement plan for the WMP with stakeholders, including benchmarking across the investor-owned utilities.

At its regular February meeting, the Committee received an overview of WMP activities, and updated reportable ignitions data showing the decline of ignitions in HFRAs since 2020 and the effectiveness of covered conductor in reducing ignitions and mitigating wildfire risk. The Committee also received a report on wildfire mitigations and PSPS operations customer communications that covered the primary channels of communication, lessons learned from benchmarking with other utilities, and the results from customer focus groups.

The Committee also received a report on technology enhancements in support of wildfire mitigations, including centralized data platforms, common field inspection tools, an integrated vegetation management platform, and the utilization of drones. The Committee received an updated analysis of the risk reduction achieved through SCE's wildfire mitigations and utilization of PSPS.

b. Worker Safety

At the January special meeting, the Committee received a preliminary report on an employee fatality in Barstow. At its regular February meeting, the Committee received an update on the employee fatality and additional information on specific actions taken immediately following the incident to stand down work, convene a tactical team to review immediate and longer-term actions, and immediate procedural changes made for working on specific equipment. The Committee was briefed on the additional reviews of work processes that will be undertaken by this tactical team, including benchmarking externally on training or procedures, the review of live-front transformers and an assessment to evaluate risk-based replacement strategies. The Committee and management also discussed engineering solutions to reduce safety risks, and benchmarking efforts.

The Committee received a report on additional benchmarking efforts across three lifecritical areas of work including electrical contact and flash incidents, falls from height and third-party vehicle incidents. The Committee and management discussed learnings from peer benchmarking and additional potential technology tools to support the safety of employees working alone in the field.

c. Public Safety

At its regular February meeting, the Committee received a report on the public safety Serious Injuries and Fatalities (SIF) data reported to the California Public Utilities Commission (Commission) and factors contributing to the year-over-year trend of decreasing public safety SIFs. The Committee was also provided an update on opportunities to further reduce public safety risks with investments in system hardening, public service announcements, and engineering solutions based on further data collection and analysis. The Committee received a report on reductions in wire down events in the HFRAs and factors contributing to wire down events in non-HFRAs. The report also covered underground equipment failures (UEFs), noting the drivers of UEFs and associated mitigations. The Committee and management discussed the impacts of weather events, safety communication with members of the public, prioritization of equipment replacement in relation to wildfire mitigations, and data and records management. The Committee received a summary of SCE's system operations during the January rainstorms, including mutual aid provided to Pacific Gas & Electric Company.

d. Committee Recommendations

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

- 1. Recommended that management provide an update on asset replacement plans.
- 2. Recommended that management continue to report on prioritization of life-critical areas of focus for worker safety.
- 3. Recommended management report on continued benchmarking for utility safety and operations.
- 4. Recommended that management report on potential tools/technologies that can support the safety of workers performing solo work.

e. Completed Management Responses to Committee Recommendations

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

• <u>Recommendation (First and Fourth Quarter 2022)</u>: The Committee recommended management continue to report on wire down and underground equipment failure events and the impacts of mitigations.

Management response: The Committee received information on wire down and underground equipment failure trends and the impact of mitigations at their February 2023 meeting.

• <u>Recommendation (Fourth Quarter 2022)</u>: The Committee recommended that management provide PSPS operations metrics over time to track performance and improvements.

Management response: The Committee received a Wildfire Safety report at its December 2022 meeting that provided PSPS operations metrics over time to track performance improvements. The Committee was also updated on the status of the PSPS metrics as part of the update on the WMP activities that it received at its special January 2023 meeting.

• <u>Recommendation (Second Quarter 2022)</u>: The Committee recommended that management continue to report on public safety risk reduction efforts.

Management response: The Committee received a Public Safety report at its February 2023 meeting that covered progress on public safety risk reduction efforts.

• <u>Recommendation (Second Quarter 2022)</u>: The Committee recommended that management review and report back on the operations/cost impact of planning for a longer fire season.

Management response: Year-round funding of a quick reaction force (QRF) of aerial firefighting resources was covered in the report on the WMP at the Committee's special January 2023 meeting.

• <u>Recommendation (Fourth Quarter 2022)</u>: The Committee recommended that management report on proactive customer communications on wildfire mitigation efforts.

Management response: The Committee received Wildfire Safety reports at its February 2023 meeting that covered proactive customer communications on wildfire mitigation efforts.

• <u>Recommendation (First Quarter 2022)</u>: The Committee recommended that management continue to report on safety performance and progress on safety observation and skill refresher training improvements.

Management response: The Committee received reviewed reports at its February 2023 meeting that covered Days Away, Restricted, or Transferred (DART) performance for year-end 2022 and January 2023, and management also confirmed DART will continue to be used as a corporate metric in 2023, as part of the corporate goals that were approved by the Compensation and Executive Personnel Committee in February and discussed by the Committee at its October and December 2022 meetings.

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

The Committee has one regular second quarter 2023 meeting scheduled for April 26, 2023, which will be summarized in the next quarterly notification letter. Additional meetings will be scheduled as appropriate.

CONCLUSION

For questions, please contact Sarah Lee at (626) 238-3022 or by electronic mail at <u>sarah.lee@sce.com.</u>

Southern California Edison Company

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

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CJF:sl:cm Enclosures

SCE's 2023-2025 Wildfire Mitigation Plan (WMP) Progress Update – Q1 2023

(All data is as of March 31, 2023)¹

¹ Source: All data is as of March 31, 2023 (+/- 5 business days). Reported numbers are subject to revision upon data validation. ² Information marked with an * denotes changes from the WMP filing that were submitted in the Errata dated April 6, 2023.

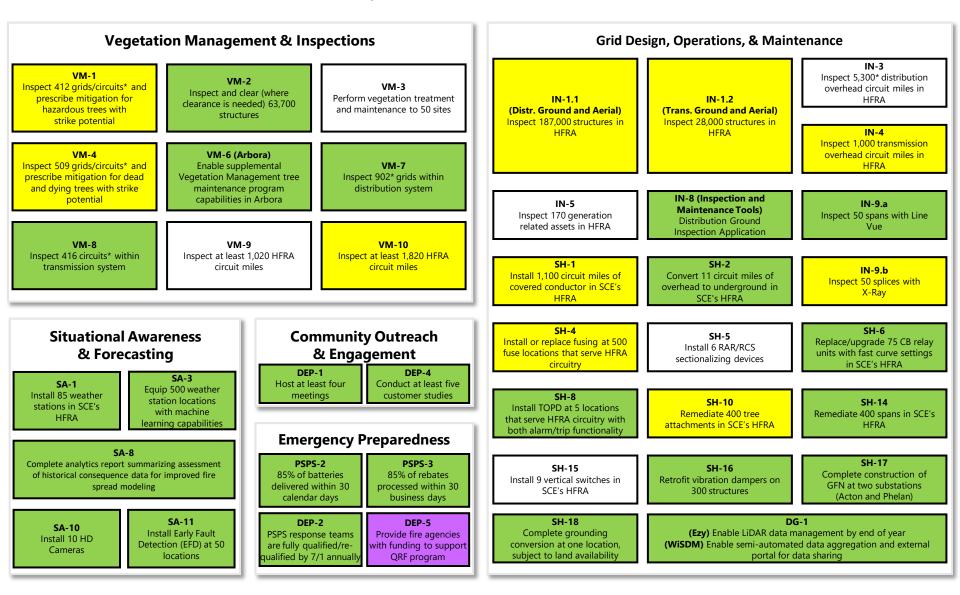


Energy for What's Ahead[™]

WMP Activities Summary³

Inactive Under Review Complete On-Track

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



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



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 13% 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: In Q1, SCE completed installation of 11 weather stations in HFRA. 	High Definition (HD) Cameras 20% 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: In Q1, SCE completed installation of 2 HD cameras.
Weather and Fuels Modeling	 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 has not yet equipped any weather station locations with machine learning capabilities. However, pursuant to our plan, in Q1, SCE identified over 620 potential weather station locations for machine learning. 	Early Fault Detection (EFD)	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: In Q1, SCE completed installation of 30 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: In Q1, SCE compiled historical forecast data and provided to the vendor for analysis.		



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 Covered Conductor (SH-1)

19% Installed

Section 8.1.1.2 Page 238

constraints and other execution risks

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

Status Update: In Q1, SCE completed installation of 205 circuit miles of covered conductor in HFRA. Activity is off track due to weather impacting deployment of miles, along with resource impacts associated with new contract agreements. Activity is expected to return to on-track performance in Q3 2023.

Remote Controlled Automatic Reclosers Settings Update

0% Installed

Remote Controlled Automatic Reclosers Settings Update (SH-5)

Section 8.1.1.2 Page 239

Program Target: SCE will install 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: Activity is scheduled to begin in Q2.

Undergrounding **Overhead** Conductor

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.

27% Installed Status Update: In Q1, SCE completed installation of 2.99 targeted underground miles in HFRA.

Circuit Breaker Relay Fast Curve 21% Installed

Transmission

Open Phase

Detection

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: In Q1, SCE completed replacement/upgrade of 16 CB relays with fast curve settings in HFRA.

Branch Line Protection Strategy

2% 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: In Q1, SCE completed installation/replacement of 11 fuses in HFRA. Activity is off-track due to additional time needed to review scope. Activity is expected to return to on-track performance in Q2 2023.

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 has not yet installed TOPD at any locations. However, in Q1, SCE completed job walks and protection reviews for 5 lines. Engineering is currently in progress.



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 1% 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: In Q1, SCE remediated 2 tree attachments in HFRA. Activity is off track due to severe weather that impacted regions with	Vibration Damper Retrofit 9% 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: In Q1, SCE retrofit vibration dampers on 26 structures in
Long Span Initiative	tree attachment scope. Activity is expected to return to on-track performance in Q3 2023. Long Span Initiative (SH-14) Section 8.1.1.2 Page 240 Program Torget Damadiate 400 space in SCE/a UEDA SCE will strive		HFRA. Rapid Earth Fault Current Limiters (REFCL) (Ground Fault Neutralizer) (SH-17) Section 8.1.1.2 Page 241
1% Remediations	 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: In Q1, SCE remediated 3 spans in HFRA. 	REFCL (Ground Fault Neutralizer)	 Program Target: SCE will complete construction of GFN at two substations (Acton and Phelan). Status Update: SCE has not yet completed construction of GFN at either location. However, in Q1, SCE continued civil construction on both Acton and Phelan.
[]	Vertical Switches (SH-15)		Rapid Earth Fault Current Limiters (REFCL)

VILCINES (SH-15)

Vertical Switches

0%

Installed

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: Activity is scheduled to begin in Q2.

REFCL (Grounding **Conversion**)

(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 has not yet completed grounding conversion at one location. However, in Q1, SCE placed material purchase orders and work order design is currently in progress.



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 15% Aerial 14%	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: In Q1, SCE completed 27,630 ground and 26,547 aerial inspections in HFRA. Activity is off track due to weather and resource levels. Activity is expected to return to on-track performance in Q2 2023.	Transmission Infrared Inspections 12% 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: In Q1, SCE completed inspections of 123.4 transmission circuit miles in HFRA. Activity is off track due to severe weather impacting performance. Activity is expected to return to on- track performance in Q2 2023.
YTD Status Ground 21% Aerial 10%	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: In Q1, SCE completed 5,872 ground and 2,906 aerial inspections in HFRA. Activity is off track due to weather and resource levels. Activity is expected to return to on-track performance in Q2 2023.	Generation Inspections 0% 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: Activity is scheduled to begin in Q2.
Distribution Infrared Inspections 0% 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: Activity is scheduled to begin in Q2.	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: In Q1, SCE completed an initial detailed design analysis and began developing use cases to inform the Proof of Concept.



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	<u>Transmission Conductor & Splice Assessment: Spans</u> with LineVue & X-Ray (IN-9)		
LineVue	Section 8.1.1.2 Pages 244-245 Program Target:		
32%	 IN-9.a: 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	 IN-9.b: 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 		
<mark>18%</mark>	 Status Update: IN-9.a: In Q1, SCE completed LineVue inspections on 16 spans. 		
	• IN-9.b: In Q1, SCE completed X-Ray inspections on 9 splices. Activity is off track due to required outage cancellation. Activity is expected to return to on-track performance in Q2 2023.		
YTD Status	Wildfire Safety Data Mart and Data Management (WiSDM / Ezy) (DG-1) Section 8.1.1.2 Pages 245		
WiSDM	 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 Data: In Q1, SCE completed the Business Requirement 		
Ezy	 Document and LiDAR System Requirements Specification. WiSDM: In Q1, SCE completed validation of all datasets, advanced use of WiSDM in support of Q1-2023 QDR reporting. 		



Behind Plan, Likely to Meet Year-end Target On-Track

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

Vegetation Management and Inspections

HTMP

26%

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: In Q1, SCE completed inspections on 107 circuit grids. Activity is off track due to severe weather and temporary work management tool technical challenges. Activity is expected to return to on-track performance in Q2 2023.

Dead and Dying Tree Removal

20%

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: In Q1, SCE completed inspections of 101 circuits. Activity is behind plan due to severe weather and temporary work management tool technical challenges. Activity is expected to return to on-track performance in Q2 2023.

Structure Brushing (VM-2)

Structure Brushing

40% 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.

Status Update: In Q1, SCE completed inspections and cleared (where clearance is needed) 25.245 structures in HFRA.

Expanded **Clearances for**

Legacy Facilities

16% 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: In Q1, SCE performed vegetation treatment and maintenance at 8 sites

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: In Q1, SCE identified emergent work capabilities to be implemented by end of year.



On-Track B

to support this activity. Activity is expected to return to on-track

performance in Q3 2023.

Behind Plan, Likely to Behind Pla Meet Year-end Target Meeting Ye

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

Vegetation Management and Inspections

Detailed Inspections: Distribution 28% Inspections	Detailed inspections and management practices for vegetation clearances around Distribution electrical lines, and equipment (VM-7) Section 8.2.1.2 Page 380 Program Target: SCE plans to inspect 902* grids within our distribution system. Status Update: In Q1, SCE completed inspection of 255 grids.	LiDAR Vegetation Inspections – Distribution 0% 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: Activity is scheduled to begin in Q2.
Detailed Inspections: Transmission	Detailed inspections and management practices for vegetation clearances around Transmission electrical lines, and equipment (VM-8) Section 8.2.1.2 Page 380 Program Target: SCE plans to inspect 416 circuits* within our transmission system.	LiDAR Vegetation Inspections – Transmission	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.
19% Inspections	Status Update: In Q1, SCE completed inspection of 81 grids.	1% Inspections	Status Update: In Q1, SCE completed inspection of 16.32 HFRA circuit miles in HFRA. Activity is off track due to vendor issues with meeting program requirements. SCE is working to onboard additional vendors

Energy for What's Ahead[™] 9

Inactive Under Review Complete

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 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.⁴

Status Update: In Q1, 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 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.⁵

Status Update: In Q1, 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: In Q1, all PSPS readiness trainings are in the process of being developed and training dates are scheduled.

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.

⁴ Number of calendar/business days subject to change based on customer survey feedback. ⁵ Number of calendar/business days subject to change based on customer survey feedback. Energy for What's Ahead[™] 10



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 (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: Activity is scheduled to begin in Q2.

Customer Research and Education

Customer Research and Education (DEP-4)

Section 8.5.1.0 Page 579 **Program Target:** SCE plans to conduct at least five PSPS-related customer studies in 2023.

Status Update: SCE completed one of five PSPS-related customer studies in Q1. This included a total of 1,563 fieldwork surveys with residential customers. A second PSPS-related customer study is underway; so far, SCE has received 219 completed surveys from business customers.

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 14% (27,630 inspections YTD vs 32,000 planned).
- Activity is off track due to weather impacts that have presented significant challenges to performing inspections.
- Activity is expected to return to on-track performance in Q2 2023.

Risks or Challenges

• Weather impacts have significantly challenged performing inspections.

Actions to Improve Performance / Get Well Plan

• Anticipate increased productivity in Q2 onward with improved weather conditions and the mobilization of a 3rd party vendor.

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

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 17% (26,547 inspections YTD vs 32,000 planned).
- Activity is off track due to weather impacts that have presented significant challenges to performing inspections.
- Activity is expected to return to on-track performance in Q2 2023.

Risks or Challenges

• Weather impacts have significantly challenged performing inspections.

Actions to Improve Performance / Get Well Plan

• Anticipate increased productivity in Q2 onward with improved weather conditions and the mobilization of a 3rd party vendor.

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

YTD Status Behind Plan YE Outlook On Track

Activity 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., AOC).



Key Takeaways

- Off track by 15% (2,906 inspections YTD vs 3,400 planned).
- Activity is off track due to weather impacts that have presented significant challenges to performing inspections.
- Researching a potential data discrepancy of completed inspections which could, if resolved, lead to Transmission Aerial being On Track.
- Activity is expected to return to on-track performance in Q2 2023.

Risks or Challenges

• Weather impacts have significantly challenged performing inspections.

Actions to Improve Performance / Get Well Plan

• Anticipate increased productivity in Q2 onward with improved weather conditions and the mobilization of a 3rd party vendor.

Off-Track Narrative – IN-4 Infrared Inspection of Transmission Facilities/Equipment

Activity Target

Inspect 1,000 transmission overhead circuit miles in HFRA.



YTD StatusBehind PlanYE OutlookOn Track

Key Takeaways

- Off track by 18% (123.4 circuit miles YTD vs 150 planned).
- Activity performance went off track in March due to severe weather impacting performance.
- Activity is expected to return to on-track performance in Q2 2023.

Risks or Challenges

- Severe weather impacts have significantly challenged performing inspections.
- Due to emergency operations needing helicopter support, the program may be limited in April due to advanced helicopter maintenance schedule.

Actions to Improve Performance / Get Well Plan

 Continue to partner with Air Ops on helicopter availability to meet April goal as well as make up for the missed March inspections in Q2.

Off-Track Narrative – IN-9B 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 10% (9 splices YTD vs 10 planned).
- Activity performance went off track in March due to required outage cancellation.
- Activity is expected to return to on-track performance in Q2 2023.

Risks or Challenges

• N/A

- Cancelled outage to take place in May.
- Work is scheduled to get back on track in Q2 and planning is underway to ensure that the YTD goal is met and any weather-related cancellations are mitigated.

Off-Track Narrative – <u>SH-1 Covered Conductor (WCCP and Non-WCCP)</u>

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 28% (205.62 circuit miles YTD vs 281 planned).
- Activity performance went off track in January and remains off track due to weather impacting deployment of miles, along with resource impacts associated with a new contract agreement.
- Activity is expected to return to on-track performance in Q3 2023.

Risks or Challenges

• While Q1 was mainly impacted by weather, Q2 will see impacts from the new RFP issuance as SCE works to secure necessary line worker resources for vendors in new regions.

- Working to identify any work with constraints.
- Moving into Q2 SCE will look to leverage premium time to improve execution pacing, while supporting the higher performing regions to continue to exceed pace where possible.

Off-Track Narrative – SH-4 Branch Line Protection Strategy

Activity 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.

YTD Status Behind Plan YE Outlook On Track

Key Takeaways

- YTD performance is off track by 35% (11 fuses install/replaced YTD vs 17 planned).
- Activity went off track in March due to additional time needed to validate executable scope, resulting in delay to planned execution pace.
- Higher than anticipated ineligible scope.
 - Branch Line Fuse notifications associated with prior completed covered conductor work.
- Activity is expected to return to on-track performance in Q2 2023.

Risks or Challenges

 Ineligible scope due to Notifications associated with prior completed covered conductor work.

- Working with Regions on catch up plans .
- Continuing to determine if corrections are needed to fuse installation or replacement scope due to prior completed covered conductor work.

Off-Track Narrative – <u>SH-10 Tree Attachment Remediation</u>

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	On Track

Key Takeaways

- Off track by 96% (2 attachments remediated YTD vs 45 planned).
- Activity performance went off track in February due to severe weather which impacted regions with tree attachment scope.
- Activity is expected to return to on-track performance in Q3 2023.

Risks or Challenges

• Access to work locations not expected until June.

Actions to Improve Performance / Get Well Plan

 San Joaquin region has experienced significant damage to roads preventing access to work areas. Access is not expected until June.

Off-Track Narrative – VM-1 Hazard Tree Management Program

Activity Target

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



YTD StatusBehind PlanYE OutlookOn Track

Key Takeaways

- Off track by 9% (108 grids YTD vs 119 planned).
- Activity is expected to return to on-track performance in Q2 2023.
- Program has sufficient inspectors to execute work, however, there were work management tool access issues for tree crews that impacted productivity.

Risks or Challenges

- Pre-inspection contract change includes 3 vendors who are new to the Hazard Tree Program.
- Some past-due locations are temporarily inaccessible due to snow; work will resume there once conditions improve.

- Meeting with the new vendors to review program requirements and ensure work management tool sign on and training is provided.
- Bi-weekly calls with vendors to ensure work is on track and areas that were heavily impacted by weather and snow are now accessible.
- Continue to troubleshoot work management tool system challenges through increased communication with SCE IT, assessors, and tree crews

Off-Track Narrative – VM-4 Dead & Dying Tree Removal

Activity Target

Inspect 509 grids/circuits* and prescribe mitigation for dead and dying trees with strike potential within those grids/circuits.



YTD Status Behind Plan YE Outlook On Track

Key Takeaways

- Off track by 25% (101 grids YTD vs 135 planned).
- Activity is expected to return to on-track performance in Q2 2023.
- Continue to work to resolve known functionality issues through upcoming sprints. Closely monitor resources to drive to mitigate trees by due dates.

Risks or Challenges

• Weather impacts have significantly challenged performing inspections.

- Meeting with the new vendors to review program requirements.
- Bi-weekly calls with vendors to ensure work is on track and areas heavily impacted by weather and snow are now accessible.
- Weekly communication to vendors to track status projected for completion of circuits.
- Continue to troubleshoot work management tool system challenges through increased communication with IT, assessors, and tree crews.

Off-Track Narrative – VM-10 LiDAR Transmission Vegetation Inspections

YTD Status Behind Plan YE Outlook On Track

Activity Target

SCE will inspect at least 1,820 HFRA circuit miles.

(Subject to change based on program adjustments and evolution of remote sensing technologies).



Key Takeaways

- Off track by 98% (16.32 circuit miles YTD vs 750 planned).
- Activity is off track primarily due to vendor issues with meeting program requirements.
- Q1 deliverables are in progress. LiDAR captures have been completed; however, desktop reviews are still pending due to GIS data discrepancies which are actively being addressed.

Risks or Challenges

- GIS data discrepancies continue to pose a delay in completing desktop reviews for completed LiDAR captures.
- Current vendor does not have resources to process work manually and is awaiting updated GIS information to complete reviews.

- Team will be providing updated GIS information to the vendor, which is necessary for the vendor's ability to meet program requirements and complete Q1 scope.
- 2 additional vendors were onboarded in March to support completion of upcoming scope.
- At least 2 additional vendors are currently in the RFP process to create additional resource redundancy options within the inspections program.