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Managing Director, State Regulatory
Operations

February 1, 2023

Docket# 2022-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 detailing the implementation of its 2022 Wildfire Mitigation Plan (WMP) Update,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 fourth quarter of 2022, and a summary of the implementation of Committee recommendations in the fourth quarter of 2022 from previous meetings.

PURPOSE

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

BACKGROUND

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

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

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 2022 WMP Update, which was approved by the Office of Energy Infrastructure Safety (Energy Safety) via final decision on July 20, 2022.

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."

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 February 18, 2022, SCE submitted its 2022 WMP Update (Update). The Update included discussion of 2022 programs and activities, as well as successes and lessons learned from 2021. On July 20, 2022, the Office of Energy Infrastructure Safety (Energy Safety) approved SCE's 2022 WMP Update via final decision.

For 2022, SCE has tracked 39 specific wildfire-related activities and ten additional vegetation management targets that constitute its Update, 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 2020-2022 Wildfire Mitigation Plan Progress Update – Q4 2022), SCE presents detailed information about the implementation status of each of these wildfire-related mitigation activities. As referenced in Attachment A, SCE met all except for one of its 2022 year-end targets set forth in its Update. More specifically, of the 39 activities, 38 have been completed. For the one activity that was not completed, SH-11, Generation Legacy Facilities, SCE completed two out of three sub-activities (Low Voltage Site Hardening and Grounding Studies/Lightning Arrestor). For the remaining sub-activity, Hydro Control Circuits, SCE completed two out of three projects. The one project that was not completed within the Generation Legacy Facility target was delayed due to external environmental permitting issues and SCE expects to complete that project in Q3 2023. SCE has met all additional vegetation management targets; ten out of ten have been completed.⁴

(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.

³ Pub. Util. Code § 8389(e)(7).

⁴ Ten Vegetation Management (VM) targets were created in response to an Energy Safety requirement to create 2022 targets for additional VM initiatives that can be measured quantitatively. As a result, they are tracked as additional VM targets but are not considered formal WMP activities. The targets were filed in the 2022 WMP Update on February 18, 2022.

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.

As discussed in more detail below, SCE is addressing the four findings and recommendations of its most recent SCA report.⁵ While SCE has implemented actions to address these findings and recommendations, SCE 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 Q4, SCE:

- Completed initial engagement, by interviewing members of our frontline workforce to better understand employee sentiments, needs, and the substance of their concerns. At the end of 2022, supervisors and leaders engaged with frontline workforce to obtain feedback. Survey results to be reviewed and addressed by end of Q1 2023.

The rest of the work completed for this activity was reported in Q3.⁶ While SCE anticipates completing recommendation one by the end of Q1 2023, SCE will continue to engage and obtain feedback from the 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 reported the work completed for this activity in the Q3 QNL.

Addressing recommendation three, *embed learning organization concepts into the culture via training, incident investigations and corrective action systems*, SCE has:

- Completed human and organizational performance training for select leaders and employees to systematically embed learning organization concepts in SCE's safety culture. SCE plans to continue expanding human performance training across the organization and aims to complete training in Grid Operations by Q2 2024 and in Transmission by Q4 2025.

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. Energy Safety is not expected to release a final SCA report until the end of February 2023.

⁶ See Southern California Edison's Q3 2022 Quarterly Notification Letter (Q3 QNL), available at <https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53177&shareable=true>

- Implemented a new tiered cause evaluation process for all SCE personnel that expanded the range of incidents being evaluated from Days Away, Restricted, or Transferred (DART) and Serious Injuries and Fatalities (SIF) to include all Occupational Safety and Health Administration recordable incidents. As a result, this cause evaluation process now includes most incidents requiring medical attention. The Tiered evaluation process was implemented in Transmission and Distribution in Q4 2021 and enterprise-wide on January 1, 2023.

The remaining work completed for this activity was reported in the Q3 QNL.

Addressing recommendation four, *recognize and take action to mitigate the serious exposure posed by interactions with certain discontented members of the public*, SCE has:

- Implemented a robust program to mitigate the risk posed by hostile members of the public. In addition to providing ongoing de-escalation training for workers, SCE continues to maintain and distribute monthly records on customers who have presented a potential threat to employees and take appropriate action to mitigate the risk, for example, providing physical security for inspections where access was denied and/or hostile customers identified.

The work completed for this activity was reported in the Q3 QNL.

Compared to 2021, there was a 6% (84 to 79) reduction in customer threats against employees/contractors in 2022, including a 20% (46 to 37) decrease in customer threats based on property access.

(3) Recommendations of the Safety and Operations Committee

The Committee had two regular meetings during the fourth quarter of 2022 on October 26 and December 7. 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 regular October meeting, the Committee received an overview of wildfire mitigation activities, including progress on SCE's 2022 WMP, PSPS events, the extension of third party quick-reaction aerial firefighting assets, and the review of the newer transmission conductors. The Committee received reports on recent PSPS operations and performance, customer data remediation for high fire risk areas, and the 2022 WMP activities at risk at that time for not meeting year-end targets. The Committee also received updates on customer data improvement efforts, PSPS performance data, and testing and mitigations for transmission conductor performance.

At its regular December meeting, the Committee received a summary of the Energy Safety-issued WMP annual reports on compliance for 2020 that noted SCE was found to be substantially compliant. The Committee and management discussed the annual reports and compliance findings for the other California investor-owned utilities and management noted that it was reviewing those annual reports for applicable lessons learned for SCE. The Committee received a review of the PSPS event over the Thanksgiving holiday, including its size and scale relative to prior PSPS events and the PSPS metrics utilized to manage performance and opportunities for improvement. The Committee received an overview of OEIS guidance for the 2023 – 2025 WMP submission. The Committee also received a review of 2022 WMP performance and discussed with management the activities at risk at that time of not meeting year end targets and areas of significant progress. The Committee received a review of the changes to the methodology for the OEIS wildfire maturity model.

b. Worker and Public Safety

At its regular October meeting, the Committee received a report on worker and public safety matters including worker safety performance and recent employee and contractor safety incidents. The Committee received a report on the Transmission and Distribution organization's safety work plan, the development and tracking of metrics, and near- and long-term objectives and workstreams. The Committee received information on areas of focus including Distribution district deep dives, groundman-focused plans to reduce safety incidents, and industrial ergonomics implementation plans. The Committee also received an update on the remediation of improperly installed guy anchors and other equipment. The Committee and management discussed contractor management and underground equipment failure data.

At its regular December meeting, the Committee received reports on worker and contractor safety performance where management noted the fact that the company goals related to these metrics would not be met. The Committee received updates on DART rates, SIF rates, employee safety performance and recent SIFs. The Committee and management also discussed the comparison between contractor and SCE employee safety performance and potential factors contributing to contractor performance improvement. The Committee received an overview of the Transmission and Distribution safety plan workstreams, with a focus during this meeting on two of the plan's focus areas: the groundman safety success plan and the industrial sprains and strains management program. The Committee was provided an overview of the goals, metrics and expected timetable for progress on these workstreams, training, and district performance. The Committee also received a report on a recent contractor flash incident that included the root cause evaluation, corrective action plans and mitigations put into place.

c. Committee Recommendations

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

1. Recommended that management follow-up with the Committee on work practices in underground vaults.

2. Recommended that management follow-up with the Committee on the trend of underground equipment failures.
3. Recommended that management provide PSPS operations metrics over time to track performance and improvements.
4. Recommended that management provide additional information regarding severity of employee injuries across classifications (e.g., SIF, DART, etc.).
5. Recommended that management review proactive customer communications on wildfire mitigation efforts.

d. Completed Management Responses to Committee Recommendations

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

1. Recommendation (Fourth Quarter 2021): The Committee recommended management continue to review the effectiveness of safety metrics such as DART for future consideration.

Management response: The Committee received information on safety metrics at their October and December meetings that each covered input on operational goals for the corporate goals structure and concluded that DART is an appropriate metric.

2. Recommendation (Third Quarter 2022): The Committee recommended that management report on progress on worker safety improvement focus areas (leadership competency and accountability, higher risk work, strains and sprains, leading indicators).

Management response: The Committee received Worker and Public Safety reports at their October and December meetings that each covered progress on worker safety improvement focus areas.

3. Recommendation (Third Quarter 2022): The Committee recommended that management report on progress on improving customer data quality.

Management response: The Committee received Wildfire Safety reports at its October and December 2022 meetings that each covered PSPS operations and performance and customer data remediation for high fire risk areas.

e. 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.

1. Recommendation (First Quarter 2022): The Committee recommended that

management continue to report on safety performance and progress on safety observation and skill refresher training improvements.

2. Recommendation (First Quarter 2022): The Committee recommended that management continue to report on wire down and underground equipment failure trends and the impacts of mitigations.
3. Recommendation (Second Quarter 2022): The Committee recommended that management continue to report on public safety risk reduction efforts.
4. Recommendation (Second Quarter 2022): The Committee recommended that management review and report back on the operations/cost impact of planning for a longer fire season.

The Committee has a special and a regular first quarter 2023 meeting scheduled for January 30, 2023 and February 22, 2023, respectively, which will be summarized in the next quarterly letter. Additional meetings will be scheduled as appropriate.

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

Southern California Edison Company

/s/ Connor J. Flanigan
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CJF:sl:cm Enclosures

SCE's 2020-2022 Wildfire Mitigation Plan (WMP) Progress Update – Q4 2022

(All data is as of December 31, 2022)¹

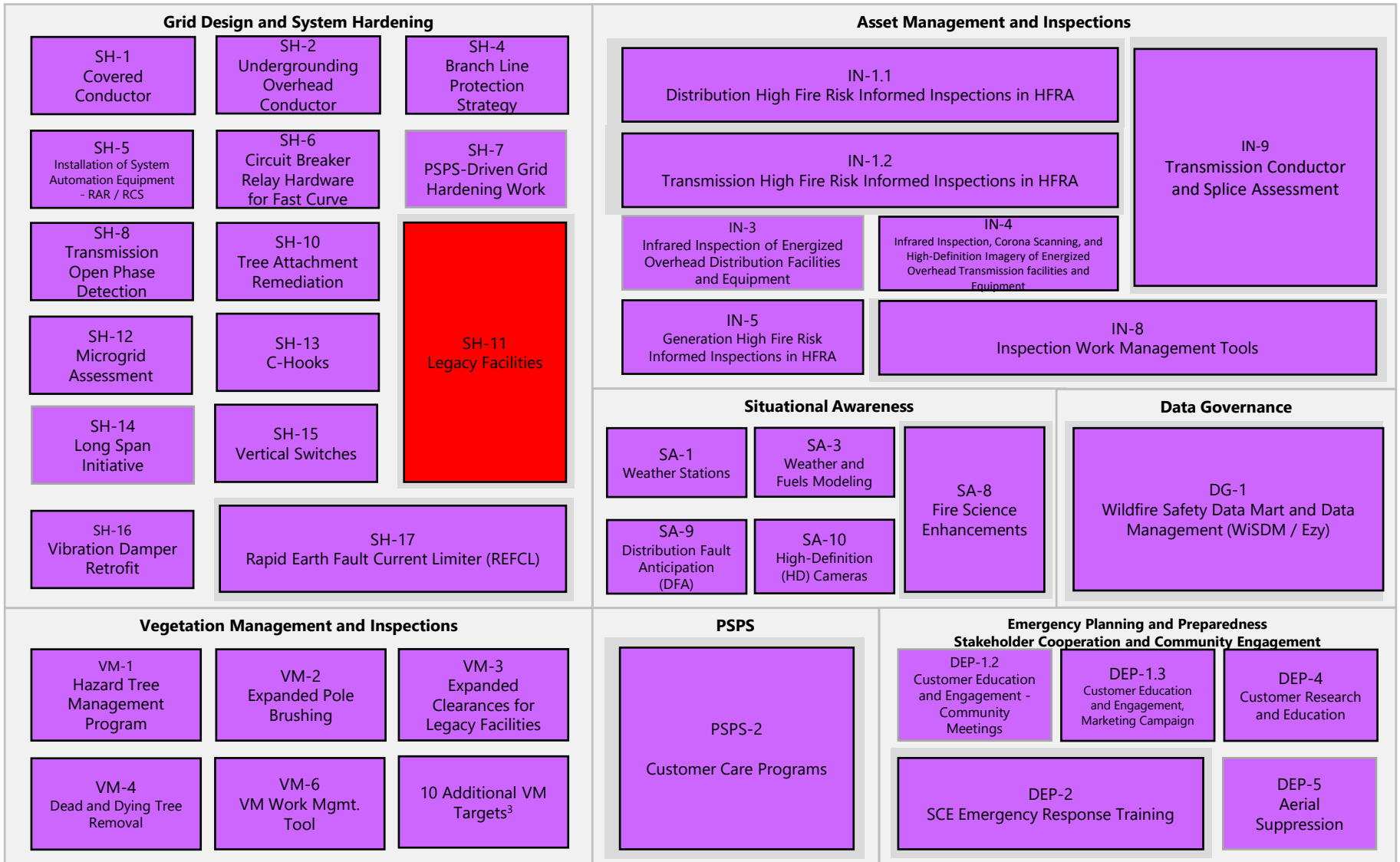
¹ Source: All data is as of December 31, 2022 (+/- 5 business days). Reported numbers are subject to revision upon data validation.

Energy for What's AheadSM



WMP Activities Summary²

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

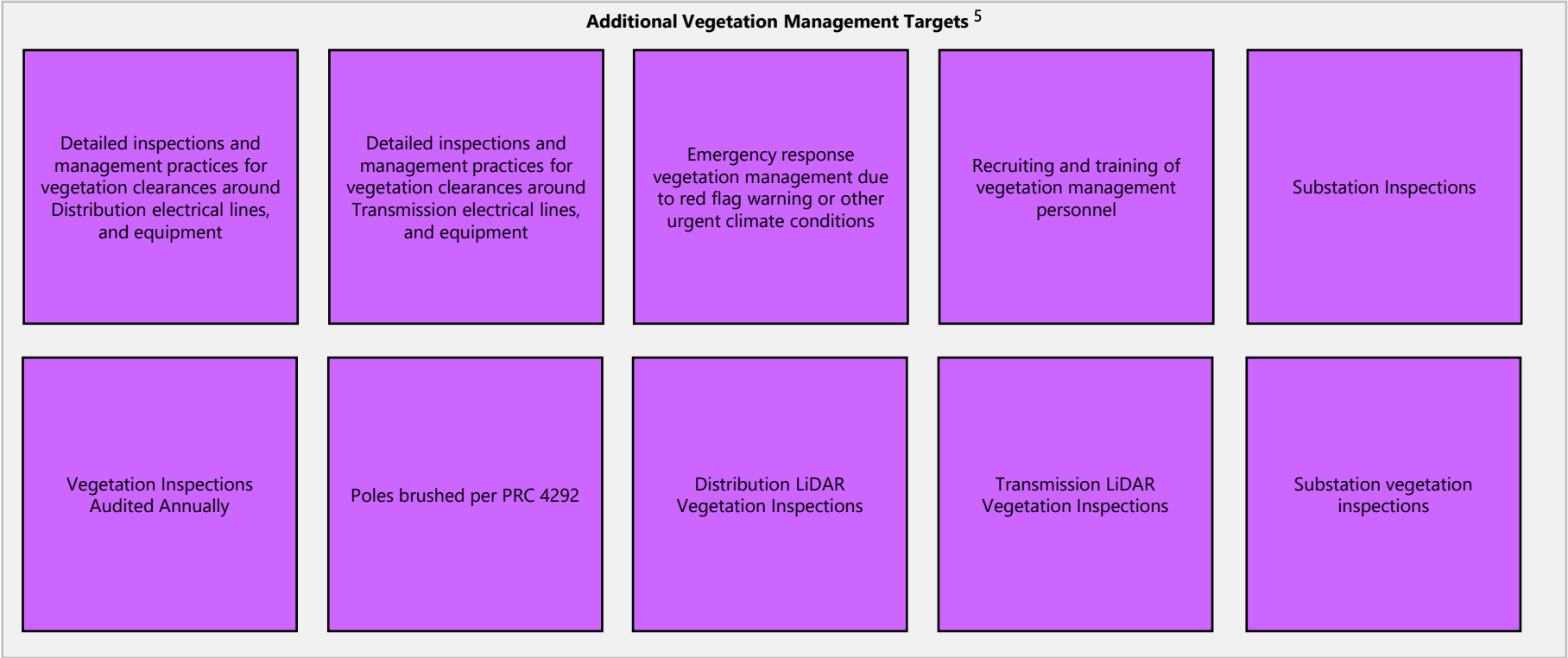


² Source: All data is as of December 31, 2022 (+/- 5 business days). Reported numbers are subject to revision upon data validation.

³ These VM targets are in response to an Energy Safety requirement to create 2022 targets for additional VM initiatives that can be measured quantitatively. As a result, they are tracked as additional VM targets but are not considered formal WMP activities.

WMP Activities Summary⁴







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



⁴ Source: All data is as of December 31, 2022 (+/- 5 business days). Reported numbers are subject to revision upon data validation.

⁵ These 10 VM targets are in response to an Energy Safety requirement to create 2022 targets for additional VM initiatives that can be measured quantitatively. As a result, they are tracked as additional VM targets but are not considered formal WMP activities. The targets were filed in the 2022 WMP Update on February 18, 2022.

WMP Activities Summary

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

Situational Awareness Activities

Weather Stations

107%

Installed

Weather Stations (SA-1)

Section 7.3.2 Page 265⁶

Program Target: Install 150 weather stations in SCE's HFRA. SCE will strive to install up to 175 weather stations in SCE's HFRA, subject to resource and execution constraints.

Status Update: SCE met target in Q4 by completing installation of 160 weather stations.

Weather and Fuels Modeling

141%

Equipped with machine learning

Weather and Fuels Modeling (SA-3)

Section 7.3.2 Page 283

Program Target: Equip 400 weather station locations with machine learning capabilities. SCE will strive to equip up to 500 weather station locations with machine learning capabilities, subject to resource and execution constraints.

Status Update: SCE met target in Q3 by equipping 564 weather station locations with machine learning capabilities.

Fire Science

Fire Science (SA-8)

Section 7.3.2 Page 275

Program Target: Calibrate FPI 2.0 and evaluate its performance over the 2022 fire season. Improve fire spread modeling applications (i.e., FireSim and FireCast) to include 1) fire suppression and 2) buildings destroyed by fire.

Status Update: SCE met target by updating the FPI 2.0 methodology to include calibration and verification statistics. Building Loss Factor and a metric measuring suppression effectiveness have also been integrated into FireCast and is being evaluated for integration of fire spread modeling into the PSPS decision-making process.

Distribution Fault Anticipation (DFA)

Distribution Fault Anticipation (DFA) (SA-9)

Section 7.3.2 Page 269

Program Target: SCE will evaluate the performance of installed fault anticipation technology and develop recommendations for future use by year-end 2022.

Status Update: SCE met target in Q3 by completing evaluation of the performance of installed fault anticipation technology and developing recommendations for future use. Overall, there were 1,121 total events reviewed internally; and 18 events with the vendor. Recommended improvements for future use have been summarized in a final report.

High Definition (HD) Cameras

160%

Installed

High Definition (HD) Cameras (SA-10)







Section 7.3.2 Page 272

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

Status Update: SCE met target in Q4 by completing installation of 16 HD cameras.

⁶ Denotes section and page number within SCE 2022 Wildfire Mitigation Plan Update.

WMP Activities Summary

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

Grid Design and System Hardening

Covered Conductor

128%
Installed

Covered Conductor (SH-1)

Section 7.3.3 Page 294

Program Target: Install 1,100 circuit miles of covered conductor in SCE's HFRA. SCE will strive to install up to as many as 1,250 circuit miles of covered conductor in SCE's HFRA, subject to resource constraints and other execution risks.

Status Update: SCE met target in Q4 by completing installation of ~1,412 circuit miles of covered conductor in HFRA.

Remote Controlled Automatic Reclosers Settings Update

100%
Installed

Remote Controlled Automatic Reclosers Settings Update (SH-5)

Section 7.3.3 Page 313

Program Target: Install 15 sectionalizing devices such as RARs/RCSs driven by the results of evaluations / assessments conducted under SH-6 and SH-7. SCE will strive to install up to 31 sectionalizing devices such as RARs/RCSs driven by the results of evaluations / assessments conducted under SH-6 and SH-7, subject to resource constraints and other execution risks.

Status Update: SCE met target in Q4 by completing installation of 15 RAR/RCS sectionalizing devices.

Undergrounding Overhead Conductor

128%
Installed

Undergrounding Overhead Conductor (SH-2)

Section 7.3.3 Page 334

Program Target: Install 11 circuit miles of targeted undergrounding in SCE's HFRA. SCE will strive to install up to 13 miles of targeted undergrounding in SCE's HFRA, subject to resource constraints and other execution risks.

Status Update: SCE met target in Q4 by completing installation of ~14 underground miles in HFRA.

Circuit Breaker Relay Hardware for Fast Curve

113%
Installed

Circuit Breaker Relay Hardware for Fast Curve (SH-6)

Section 7.3.3 Page 292

Program Target: Replace/upgrade 104 relay units in SCE's HFRA. SCE will strive to replace/upgrade up to 125 relay units in SCE's HFRA, subject to resource constraints and other execution risks.

Status Update: SCE met target in Q4 by replacing/upgrading 117 relay units in HFRA.

Branch Line Protection Strategy

105%
Installed

Branch Line Protection Strategy (SH-4)

Section 7.3.3. Page 308

Program Target: Install or replace fusing at 350 fuse locations that serve HFRA circuitry. SCE will strive to install or replace fusing at up to 483 locations that serve HFRA circuitry, subject to resource constraints and other execution risks.

Status Update: SCE met target in Q3 by completing installation of 369 fuses.

PSPS-Driven Grid Hardening

149%
Evaluations







PSPS-Driven Grid Hardening Work (SH-7)

Section 7.3.3 Page 310

Program Target: Evaluate approximately 70 highly impacted circuits including 2021 PSPS events to determine additional deployment of PSPS mitigations.

Status Update: SCE met target in Q1 with 104 circuits evaluated against the 70 target.

WMP Activities Summary

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

Grid Design and System Hardening

Transmission Open Phase Detection

220%
Installed

Transmission Open Phase Detection (SH-8)

Section 7.3.3 Page 337

Program Target: Deploy open phase logic on five transmission lines. SCE will strive to deploy open phase logic on up to 11 transmission lines, subject to resource constraints and other execution risks.

Status Update: SCE met target in Q3 by deploying open phase logic on 6 transmission lines. In Q4, open phase logic was deployed on an additional 5 transmission lines for a total of 11 transmission lines deployed with open phase logic.

Tree Attachment Remediation

193%
Remediations

Tree Attachment Remediation (SH-10)

Section 7.3.3 Page 301

Program Target: Remediate 500 tree attachments in SCE's HFRA. SCE will strive to complete up to 700 tree attachment remediations in SCE's HFRA, subject to resource constraints and other execution risks.

Status Update: SCE met target in Q3 by completing remediation of 703 tree attachments in HFRA. In Q4 completed an additional 261 remediations for a total of 964 tree attachment remediations in HFRA

Legacy Facilities (SH-11)

Section 7.3.3 Page 340

Program Target:

- **Grounding Studies/Lightning Arrestor Assessments and Remediations:** Based on 2021 assessments perform four remediation projects at legacy facility sites. Additionally, complete 13 assessments.
- **Low Voltage Site Hardening:** Based on 2021 assessment, perform one grid hardening project at a legacy facility site.
- **Hydro Control Circuits:** Based on 2021 assessments, perform grid hardening on three control circuits at three legacy facility sites.

Status Update:

- **Grounding Studies/Lightning Arrestor:** SCE met target in Q4 by completing 4 remediation projects and 13 assessments.
- **Low Voltage Site Hardening:** SCE met target in Q4 by performing one grid hardening project at a legacy facility.
- **Hydro Control Circuits:** Work at 2 of 3 control circuits completed. Remaining control circuit project will be completed in Q3 2023. Please see appendix slide for further details.

Legacy Facilities

Microgrid Assessment

Microgrid Assessment (SH-12)

Section 7.3.3 Page 311

Program Target: SCE will actively attempt to obtain approval of easement with the landowner of the microgrid site, and if approval is received, SCE will move forward with microgrid project. If an approval is not received by June 30, 2022 or rejected, SCE will start to pursue other microgrid opportunities.

Status Update: SCE met target in Q4 by completing assessments on other potential microgrid sites after unsuccessfully obtaining an easement agreement with the landowner of the proposed microgrid site. No new sites were identified in the subsequent assessment. SCE will continue to re-evaluate its approach, re-run its assessment, and explore potential cooperative opportunities for microgrids.

C-Hooks

100%
Installed

C-Hooks (SH-13)

Section 7.3.3 Page 331

Program Target: SCE will replace C-Hooks on 10 structures in SCE's HFRA and strive to replace up to 21 C-Hooks, subject to execution risks such as environmental clearance.

Status Update: SCE met target in Q4 by completing replacement of 10 C-Hooks in HFRA.

Long Span Initiative

121%
Remediations







Long Span Initiative (SH-14)

Section 7.3.3 Page 321

Program Target: Remediate 1,400 spans in SCE's HFRA. SCE will strive to remediate up to 1,800 spans in SCE's HFRA, subject to resource constraints and other execution risks.

Status Update: SCE met target in Q2 with 1,589 remediations. Completed an additional 105 remediations through Q4 for a total of 1,694.

WMP Activities Summary

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

Grid Design and System Hardening

Vertical Switches

107%
Installed

Vertical Switches (SH-15)

Section 7.3.3 Page 341

Program Target: Install 15 vertical switches in SCE's HFRA. SCE will strive to install 25 vertical switches in SCE's HFRA.

Status Update: SCE met target in Q4 by completing installation of 16 vertical switches in HFRA.

Vibration Damper Retrofit

127%
Installed

Vibration Damper Retrofit (SH-16)

Section 7.3.3 Page 303

Program Target: Retrofit vibration dampers on 100 structures where covered conductor is already installed in SCE's HFRA. SCE will strive to retrofit vibration dampers on up to 115 structures where covered conductor is already installed in SCE's HFRA.

Status Update: SCE met target in Q4 by retrofitting 127 vibration dampers where covered conductor is already installed in HFRA.

Rapid Earth Fault Current Limiters (REFCL)

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

Section 7.3.3 Page 323

Program Target: SCE will produce a report summarizing performance and lessons learned from previous REFCL installations. SCE will also initiate engineering and material purchase for the ground fault neutralizers (GFNs) to be constructed in 2023 at Acton and Phelan Substations.

Status Update: SCE met target in Q4 to produce report summarizing performance from previous REFCL installations and initiated engineering and material purchase for the ground fault neutralizers (GFNs) to be constructed in 2023 at Acton and Phelan substations.

Asset Management and Inspections

YTD Status

Ground

108%

Aerial

105%

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

Section 7.3.4 Page 362

Program Target: Inspect 150,000 structures in HFRA via both ground and aerial inspections. Subject to resource constraints and other factors, SCE will strive to inspect up to 180,000 structures in HFRA via both ground and aerial inspections. This target includes HFRI, compliance due structures in HFRA and emergent risks identified during the fire season.

Status Update: SCE met target by completing 162,721 ground and 157,144⁷ aerial inspections in HFRA.

Transmission Infrared Inspections

108%

Targeted Circuits Inspected

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

Section 7.3.4 Page 354

Program Target: Inspect 1,000 transmission circuit miles on HFRA circuits.

Status Update: SCE met target in Q3 by completing 1,075 inspections on transmission circuit miles in HFRA.

YTD Status

Ground

108%

Aerial

107%

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

Section 7.3.4 Page 375

Program Target: Inspect 16,000 structures in HFRA via both ground and aerial inspections. Subject to resource constraints and other factors, SCE will strive to inspect up to 19,000 structures in HFRA via both ground and aerial inspections. This target includes HFRI, compliance due structures in HFRA and emergent risks identified during the fire season.

Status Update: SCE met target by completing 17,225 ground and 17,133 aerial inspections in HFRA.

Generation Inspections

117%

Inspected

Generation Inspections and Remediations (IN-5)

Section 7.3.4 Page 373

Program Target: Inspect 190 generation-related assets in HFRA.

Status Update: SCE met target in Q4 by completing 222 Generation inspections in HFRA.

Distribution Infrared Inspections

100%

Targeted Circuits Inspected

Infrared Inspection of energized overhead distribution facilities and equipment (IN-3)

Section 7.3.4 Page 352

Program Target: Inspect 4,408 distribution overhead circuit miles in HFRA.

Status Update: SCE met target miles in Q2 after remaining flights were completed the first week of June. ~4,408 miles of inspections were completed in 2022 against the 2-year, ~8,816 mile inspection target that was set in 2021; ~4,409 miles of inspections completed in 2021. Approximately 50% of the remaining HFRA distribution miles were inspected in 2021 with the remainder inspected in 2022.

Inspection and Maintenance Tools

Inspection and Maintenance Tools (IN-8)

Section 7.3.4 Page 347

Program Target:

- **IN-8.a:** Design capability for the legacy Distribution Ground inspection application in 2022 to transition to a single digital inspection platform in a future year.
- **IN-8.b:** In support of remediation efforts, conduct assessment to identify enhancements for Field Crew application, and evaluate applicability of enhancements by year-end 2022.

Status Update:

- **IN-8.a:** SCE met target in Q3 to design capability for the legacy Distribution Ground Inspection application. Completed identification and feasibility assessment of enhancement capabilities, and migration to a single digital inspection platform is tentatively scheduled for 2024.
- **IN-8.b:** SCE met target in Q4 with the assessment, identification, and evaluation of applicability of enhancements for Field Crew application. Field Crew application enhancements were rolled out to ~60 Distribution contract users, resulting in the real time closure of notification issues in the field.

⁷ In Q3 SCE reported having completed 158,604 aerial inspections; after year-end review the aerial count was revised to 157,144.

Asset Management and Inspections

Transmission Conductor & Splice Assessment

Transmission Conductor & Splice Assessment (IN-9)

Section 7.3.3 Page 356

Program Target:

- **IN-9.a:** Will inspect 75 spans⁸ with LineVue and strive to inspect up to 150 spans with LineVue
- **IN-9.b:** Inspect 50 splices⁹ with X-Ray and inspect up to 70 splices with X-Ray
- **IN-9.c:** Obtain five Conductor Samples¹⁰ and obtain up to 15 Conductor Samples, subject to execution constraints

Status Update:







- **IN-9.a:** SCE met target in Q4 by completing inspections on 79 spans with LineVue.
- **IN-9.b:** SCE met target in Q2 by inspecting 63 splices with X-Ray.
- **IN-9.c:** SCE met target in Q4 by inspecting 6 Conductor Samples.

⁸ Span defined as 1 phase from one structure to another.

⁹ Splice defined as individual splice.

¹⁰ Conductor sample defined as 15 ft segment of conductor.

WMP Activities Summary

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

Vegetation Management and Inspections

HTMP

142%
Circuits Assessed

Hazard Tree Management Program (VM-1)

Section 7.3.5 Page 425

Program Target: Inspect 330 circuits and assess any trees with strike potential along those circuits.

Status Update: SCE met target in Q4 by completing inspection and assessments of 467 circuits.

Dead and Dying Tree Removal

103%
Circuits Inspected

Dead and Dying Tree Removal (VM-4)

Section 7.3.5 Page 427

Program Target: Inspect 900 unique circuits and prescribe mitigation for dead and dying trees with strike potential along those circuits.

Status Update: SCE met target in Q4 by completing inspection of 926 circuits.

Expanded Pole Brushing

134%
Poles Cleared

Expanded Pole Brushing (VM-2)

Section 7.3.5 Page 404

Program Target SCE will inspect and clear (where clearance is needed) 78,700 poles in HFRA, with the exception of poles for which there are customer access or environmental constraints. SCE will strive to inspect and clear (where clearance is needed) up to 170,000 distribution poles in HFRA. These poles are in addition to poles subject to PRC 4292.

Status Update: SCE met target in Q4 by inspecting and clearing (where clearance was needed and access possible) 105,377 poles in HFRA.

VM Work Management Tool (Arbora)

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

Section 7.3.5 Page 430

Program Target SCE will implement the following programs within the VM Work Management Tool, Arbora: (1) Hazardous Tree Management Program (HTMP) (including: Dead & Dying Tree Removal and Hazard Tree Mitigation) and (2) Routine Line Clearing.

Status Update: SCE met target in Q4 by implementing the Vegetation Management work management tool for the Hazard Tree Program (HTP), which includes HTMP and Dead and Dying Tree removal, and for Routine Line Clearing. As with other large system implementations, SCE will continue to monitor performance, and as applicable, run legacy systems in parallel.

Expanded Clearances for Legacy Facilities

100%
Expanded Clearances Performed

Expanded Clearances for Legacy Facilities (VM-3)

Section 7.3.5 Page 407

Program Target: Perform expanded clearances at 32 legacy facility locations.

Status Update: SCE met target in Q4 by completing expanded clearance at 32 sites.

WMP Activities Summary

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

Additional Vegetation Management Targets

Detailed Inspections: Distribution

109%
Inspections

Detailed inspections and management practices for vegetation clearances around Distribution electrical lines, and equipment:

Section 7.3.5 Page 396

Program Target: Inspect ~600,000 trees adjacent to Dist. lines, based on current unique tree inventory count

Status Update: SCE met target in Q4 by completing inspection of 656,691 trees adjacent to Distribution lines, based on current unique tree inventory count.

Detailed Inspections: Transmission

104%
Inspections

Detailed inspections and management practices for vegetation clearances around Transmission electrical lines, and equipment:

Section 7.3.5
Page 400

Program Target: Inspect ~100,000 trees adjacent to Trans. lines, based on current unique tree inventory count. In Q3, SCE updated year-end target to reflect 71,286 unique trees in inventory because the unique tree inventory was reduced due to wildfire from ~100,000 to 71,286.

Status Update: SCE met target in Q4 by completing inspection of 74,025 trees adjacent to Trans. lines, based on current unique tree inventory count.

Vegetation Emergency Response

104%
Inspections

Emergency response vegetation management due to red flag warning or other urgent climate conditions:

Section 7.3.5 Page 400

Program Target: Inspect and clear (where clearance needed and access possible) ~26,400 poles in identified Areas of Concern (AOC).

Status Update: SCE met target in Q4 by inspecting and clearing (where clearance needed and access possible) 27,518 poles.

Vegetation Recruiting and Training

175
Arborists

Recruiting and training of vegetation management personnel:

Section 7.3.5 Page 420

Program Target: Maintain current staffing levels of 95 ISA certified arborists performing work within SCE service territory.

Status Update: SCE met target in Q4 with current staffing level at 175 ISA certified arborists performing work within SCE service territory.

Substation Inspections

152%
Inspections

Substation Inspections:

Section 7.3.5 Page 428

Program Target: Inspect 169 substations, 5 times per year for (146) GO174 substations and (23) ISO & FERC substations, totaling 845 inspections.

Status Update: SCE met target in Q4 by completing 1283 inspections; 146 GO174 substations and 23 ISO & FERC substations, 169 substations were inspected 5 or more times.

Vegetation Inspections Audited Annually

186%
of in Scope Tree Inventory







Vegetation Inspections Audited Annually:

Section 7.3.5 Page 416

Program Target: Perform risk-based circuit mile Quality Control (QC) inspections on approximately 15% of SCE total tree inventory.

Status Update: SCE met target in Q4 by completing 468,857 QC inspections, or 28% of total tree inventory. While the WMP target was to review 15% or 252,000 trees, SCE continued to perform QC inspections beyond that point per internal quality control guidelines.

WMP Activities Summary

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

Additional Vegetation Management Targets

Poles brushed per PRC 4292:

131%
Inspections

Poles Brushed Per 4292:

Section 7.3.5 Page 407

Program Target: Inspect and clear 55,100 poles (where clearance needed and access possible) in state responsibility area with equipment identified by PRC 4292.

Status Update: SCE met target in Q4 by inspecting and clearing (where clearance needed and access possible) 72,328 poles.

Substation Vegetation Management

104%
Inspections

Substation Vegetation Management:

Section 7.3.5 Page 429

Program Target: Perform Vegetation Management substation inspections in Tier 2 & Tier 3, totaling 169 substations.

Status Update: SCE met target in Q3 by inspecting 175 substation inspections.

Distribution LiDAR Vegetation Inspections

241%
Inspections

Remote Sensing Inspections of Vegetation and Around Transmission Electric Lines and Equipment:

Section 7.3.5 Page 410

Program Target Inspect at least 500 HFRA circuit miles.

Status Update: SCE met target in Q3 by inspecting 1,207 circuit miles in HFRA. LiDAR resources were made available to different programs which enabled SCE to inspect AOC circuits via LiDAR.

Transmission LiDAR Vegetation Inspections

106%
Inspections







Remote Sensing Inspections of Vegetation and Around Transmission Electric Lines and Equipment:

Section 7.3.5 Page 412

Program Target: Inspect at least 1600 HFRA circuit miles.

Status Update: SCE met target in Q4 by inspecting 1,696 HFRA circuit miles.

WMP Activities Summary

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

Emergency Planning and Preparedness Stakeholder Cooperation and Community Engagement

Community Meetings

111%

Safety meetings

Customer Education and Engagement – Community Meetings (DEP-1.2)

Section 7.3.10 Page 491

Program Target: SCE will host at least nine wildfire community safety meetings in targeted communities based on the impact of 2021 PSPS events and ongoing wildfire mitigation activities.

Status Update: SCE met target in Q2 by conducting 10 community safety meetings

Customer Research and Education

100%

Surveys Conducted

Customer Research and Education (DEP-4)

Section 7.3.10 Page 507

Program Target: SCE plans to conduct at least six PSPS-related surveys in 2022, including the PSPS Tracker survey, wildfire safety community meeting feedback survey, CRC/CCV feedback survey, In-Language Wildfire Mitigation Communications Effectiveness Surveys, PSPS Working Group and Advisory Board Surveys, and the Voice of Customer surveys.

Status Update: SCE met target in Q4 by conducting 6 PSPS related surveys, including PSPS Tracker Survey, Wildfire Safety Community Meeting Feedback Survey, CRC/CCV Feedback Survey, In-Language Wildfire Mitigation Communications Effectiveness Survey, PSPS Working Group and Advisory Board Survey, and the Voice of Customer Survey.

Marketing Campaign

57%

Awareness

Customer Education and Engagement – Marketing Campaign (DEP-1.3)

Section 7.3.10 Page 502

Program Target: PSPS Awareness target: 50%.

Status Update: SCE met target in Q4 with PSPS awareness at 57%.

Aerial Suppression

100%

MOUs signed

Aerial Suppression (DEP-5)

Section 7.3.10 Page 512

Program Target: Will enter into a Memorandum of Understanding (MOU) with local county fire departments to provide standby cost funding for up to five aerial suppression resources strategically placed around the SCE service area.

Status Update: SCE met target in Q2 by entering into three Memoranda of Understanding (MOUs) signed by SCE and each respective county, and by funding a total of five aerial suppression resources.

SCE Emergency Responder Training

IMT: 100%

UAS: 112%

SCE Emergency Responder Training (DEP-2)

Section 7.3.9 Page 477

Program Target:

IMT (Incident Management Team): Have all PSPS IMT and Task Force members fully trained and qualified or requalified by July 1, 2022

UAS (Unmanned Aircraft System): SCE plans to expand the program by technically qualifying 50 UAS Operators that have passed the FAA 107 exam.

Status Update:

IMT: SCE met target in Q2 by fully training and qualifying/requalifying 346 PSPS IMT and Task Force members.

UAS: SCE met target in Q3 by technically qualifying 56 UAS Operators.

Data Governance

Wildfire Safety Data Mart and Data Management

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

Section 7.3.7 Page 462

Program Target:

Ezy Data:

- Expand cloud Artificial Intelligence (AI) platform
- Enable LIDAR data storage capability







WiSDM:

- Complete wildfire data repository design
- Consolidate wildfire data storage onto wildfire data repository platform

Status Update: SCE met target in Q4

- Ezy Data:
 - 1) Activity scope was completed in Q2 following the deployment of two new Distribution defect detection models.
 - 2) Completed the solution design and analysis for Lidar data.
- WiSDM:
 - 1) Completed wildfire data repository design
 - 2) Successfully met in Q4 with the data mapping, ingestion, and verification of 70+ datasets into the WiSDM platform.

WMP Activities Summary

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

PSPS

Customer Care Programs

CCBB Enrollments: 136%

Rebates Issued: 105%

Customer Care Programs (PSPS-2)

Section 7.3.6 Page 448

Program Target:

- 2a: Critical Care Backup Battery (CCBB): Enroll 2,750 customers in the CCBB program (35% of forecasted eligible population). Continue to identify new eligible customers each month to offer program.
- 2b: Portable Power Station Rebates and Portable Generator Rebates: SCE to issue 3,000 rebates and will strive to issue 4,000 rebates.

Status Update: SCE met target in Q4

- 2a - Critical Care Backup Battery (CCBB): Program has completed 3,733 customer enrollments and 3,466 deployments.
- 2b - Portable Power Station Rebates and Portable Generator Rebates: Program has issued 3,145 customer rebates.

WMP Activity Narrative

Off-Track Narrative – SH-11C Legacy Facilities

YTD Status	Not Met
YE Outlook	Not Met

Activity Target

Legacy Facilities: Hydro Control Circuits

Based on 2021 assessments, perform grid hardening on three control circuits at three legacy facility sites



Key Takeaways

- **Legacy Facilities: Hydro Control Circuits** - This activity missed the 2022 target to perform grid hardening on control circuits at three legacy facility sites
- Of the three projects scoped, construction on two of the three projects were completed in 2022
- The remaining project is pending environmental permitting and is scheduled to complete in Q3 2023

Risks or Challenges

- **Legacy Facilities: Hydro Control Circuits:** The remaining project is delayed due to external environmental permitting



Actions to Improve Performance / Get Well Plan

- **Legacy Facilities: Hydro Control Circuits** – SCE submitted water permitting request to the water agency, California Department of Fish and Wildlife (CDFW) on 9/2; draft agreement under review by SCE. Feedback from CDFW expected in January 2023