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Managing Director, State Regulatory Operations

August 1, 2022

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 and Safety 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 committee[2] (Committee) during meetings that occurred during the second quarter of 2022, and a summary of the implementation of Committee recommendations in the second 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.

[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. SCE's Q4 2021 Quarterly Notification (submitted February 1, 2022) and SCE's 2021 Annual Report on Compliance (ARC, submitted March 31, 2022) provide details on implementation of SCE's approved 2021 WMP Update.

[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."

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 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.

In 2022, SCE is tracking 39 specific wildfire-related activities and ten additional vegetation management targets that constitute its Update, including additional 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 – Q2 2022), 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 2022 year-end targets set forth in its Update, but notes that seven activities and one of the

[3] Pub. Util. Code § 8389(e)(7).

additional vegetation management targets[4] are currently behind plan for the quarter due to circumstances such as vendor delays, resource constraints, customer participation rates and weather. Six of these activities are still on track to meet year-end targets and SCE is actively pursuing a plan to get the one activity (PSPS-2) currently at risk of not meeting the year-end target back on track.

(2) **Implementation of Most Recent Safety Culture Assessment**

Energy Safety initiated its 2021 Safety Culture Assessment (SCA) process for electrical corporations and conducted its first assessment for SCE on June 14, 2021. SCE partnered with Energy Safety and DEKRA, its third-party administrator, to complete the organizational self-assessment, workforce safety culture survey, and accompanying focus groups. On September 2, 2021, Energy Safety issued the 2021 SCA Report for SCE.[5]

As discussed in more detail below, SCE is currently implementing the findings and recommendations in the SCA report, which include: (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; and (4) Recognize and take action to mitigate the serious exposure posed by interactions with certain discontented members of the public.

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

- Executed a one-on-one communication engagement strategy that established a dialogue with the frontline workforce to better understand employee sentiments, needs, and the substance of their concerns.
- Collected feedback from the engagements and evaluating comments to understand themes and determine refinements to workforce engagement approach, e.g.., training techniques and the delivery method of procedure and safety protocol updates.
- Continued to refine frontline workforce training to improve awareness on wildfire safety protocols, procedures, decisions, and communicate updates with impacted stakeholders.

[4] 10 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.

[5] https://energysafety.ca.gov/wp-content/uploads/2021-sca-report-sce.pdf.

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 has:

- Performed ongoing quarterly one-on-one engagements to monitor the effectiveness of organizational change management efforts and wildfire communication improvements. Responses are monitored quarterly and will inform engagement efforts. Feedback from this effort remains under evaluation, however initial field response has been positive and appreciated.

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 leaders and employees to systematically embed learning organization concepts in SCE's safety culture.
- Implemented a new tiered cause evaluation process for all Transmission and Distribution personnel which expanded the range of DART and SIF incidents being evaluated to include evaluations for all OSHA Recordable incidents, that include DARTs, SIFs, and most incidents requiring some type of medical attention. SCE will implement the process enterprise-wide by the end of 2022.
- Targeted timely communication to field workers conducting similar scope of work and sharing preliminary learnings for all serious injury cause evaluations, including potential incidents within 10 days after the incident has occurred. Final learnings are shared at completion of cause evaluation.
- Conducted communication via the SCE Weekly Incident Report broadly sharing SCE incident causes and corrective actions on a weekly basis from recently completed incident evaluations, and preliminary information with prevention tips on recent incidents.

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

- Maintained and distributed records regarding customers who have presented or may present a potential threat to employees. Coached employees on techniques to reduce likelihood of recurrence.
- Provided security escort to employees and vendors for aerial inspections at locations where there have been prior hostile interactions. Provided

safety training presentations for drone vendors and shared lessons learned at Annual Safety Summit.
- Included safety guidelines and de-escalation tips in PSPS crew member training.
- Experienced a 13% reduction in reported customer threats mid-year compared to the same time last year.

(3) **Recommendations of Safety and Operations Committee**

The Committee had one regular meeting and one special meeting during the second quarter of 2022 on April 27, 2022 and June 22, 2022, respectively. 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 regularly scheduled 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**

Discussions on wildfire safety during the second quarter 2022 meetings covered updates on the WMP, PSPS operations updates, potential penalties related to PSPS operations in 2020 and additional mitigation activities.

At its regular April meeting, the Committee received an update on wildfire mitigation activities, including information on which areas under the WMP are on- and off-track. The Committee also received information about the Energy Safety notices of violation and/or defect (“NOV/Ds”) regarding observations during inspections, including issues related to data. The Committee and management discussed PSPS post-event data reporting and areas for improvement. The Committee also received an update on a review of construction and design standards.

At its June meeting, the Committee received updates on 2022 WMP mitigation activities that are on-track at this early stage in the wildfire season, including enhanced overhead inspections and vegetation management work in high fire risk areas of concern, and operating restrictions in the designated areas of concern to reduce ignition risk. The Committee received a report on the Safety and Enforcement Division’s proposed PSPS penalty related to PSPS operations in 2020. The Committee Chair discussed the operational improvements that were observed during his visit to the SCE Emergency Operations Center regarding automation of PSPS operations and the continued focus on data quality improvement. The Committee received a report on the Energy Safety draft decision approving SCE’s 2022 WMP submission. Management and the Committee discussed the critical care backup program and that the customer enrollment and battery deployment were both behind target. The Committee also

received a report on the work to address the Energy Safety-issued NOV/Ds, including on supply chain impacts of the deployment of vibration dampers and the correction of data translation issues regarding covered conductor deployment.

(b) **Worker and Public Safety**

At its June meeting, the Committee received a report on a contractor fatality that was caused by a third-party vehicle incident, the findings of the investigation to date, and lessons learned, including eliminating hazards from survey jobs by utilizing drones where possible. The Committee Chair discussed the National Safety Council's focus on traffic safety because the risks SCE and its contractors face have increased for all industries nationwide as traffic accidents and fatalities are on the rise. The Committee received a report from SCE's Senior Vice President for Transmission and Distribution on SCE's safety improvement opportunities, including driving leadership, ownership, and accountability for safety, and reducing safety risk particularly in high-hazard work. The Committee also received a report on a recent public safety incident involving a wire down event in a residential neighborhood and factors that may have contributed to the incident, which included a description of the internal review of potential issues, along with equipment attributes and public safety messaging.

(c) **Committee Recommendations**

In addition to discussing the wildfire and safety topics during second quarter meetings, the Committee made the following recommendations and requests:

1. Recommended that management continue to report on PSPS notification improvements.

2. Recommended that management continue to report on worker safety performance, leader accountability, and job planning risk reduction.

3. Recommended that management continue to report on public safety risk reduction efforts.

4. Recommended that management review and report back on the operations/cost impact of planning for a longer fire season.

5. Recommended that management continue to report on addressing the Energy Safety NOV/Ds.

(d) **Completed Management Responses to Committee Recommendations**

In response to the Committee's recommendations in prior meetings, management provided the following responses during the second quarter

meetings, the details of which are described above or were pending from prior meetings:

1. Recommendation (First Quarter 2022): The Committee recommended that management continue to report on wildfire mitigation plan activities and PSPS operations.

   Management response: The Committee received a Wildfire Safety report that included reporting on wildfire mitigation plan activities and PSPS operations at its April and June 2022 meetings.

2. Recommendation (Second Quarter 2022): The Committee recommended that management continue to report on addressing the Energy Safety NOV/Ds.

   Management response: The Committee received a report on the resolution of the Energy Safety NOV/Ds at its June meeting.

3. Recommendation (First Quarter 2022): The Committee recommended that management continue to report on guy wire anchor rod installations.

   Management response: The Committee received a report on guy wire anchor rod installations at its February meeting.[6]

(e) **Pending Management Responses to Committee Recommendations**

The following recommendations were made by the Committee in past meetings and management plans to address them at future meetings.

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

2. Recommendation (Fourth Quarter 2021): The Committee recommended management provide an update on implementation of SCE's 2021 Safety Culture Assessment recommendations.

3. 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.

4. 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.

[6] The resolution of this recommendation was inadvertently omitted from the Q1 Notification as the recommendation was completed in the same quarter it was recommended, Q1.

The Committee has one regular third quarter 2022 meeting scheduled for August 24, 2022, which will be summarized in the next quarterly report. Additional meetings will be scheduled as appropriate.

For questions, please contact June Bote at (714) 895-0585 or by electronic mail at june.bote@sce.com.

Southern California Edison Company

/s/ Connor J. Flanigan
Connor J. Flanigan

CJF:sl:cm
Enclosures

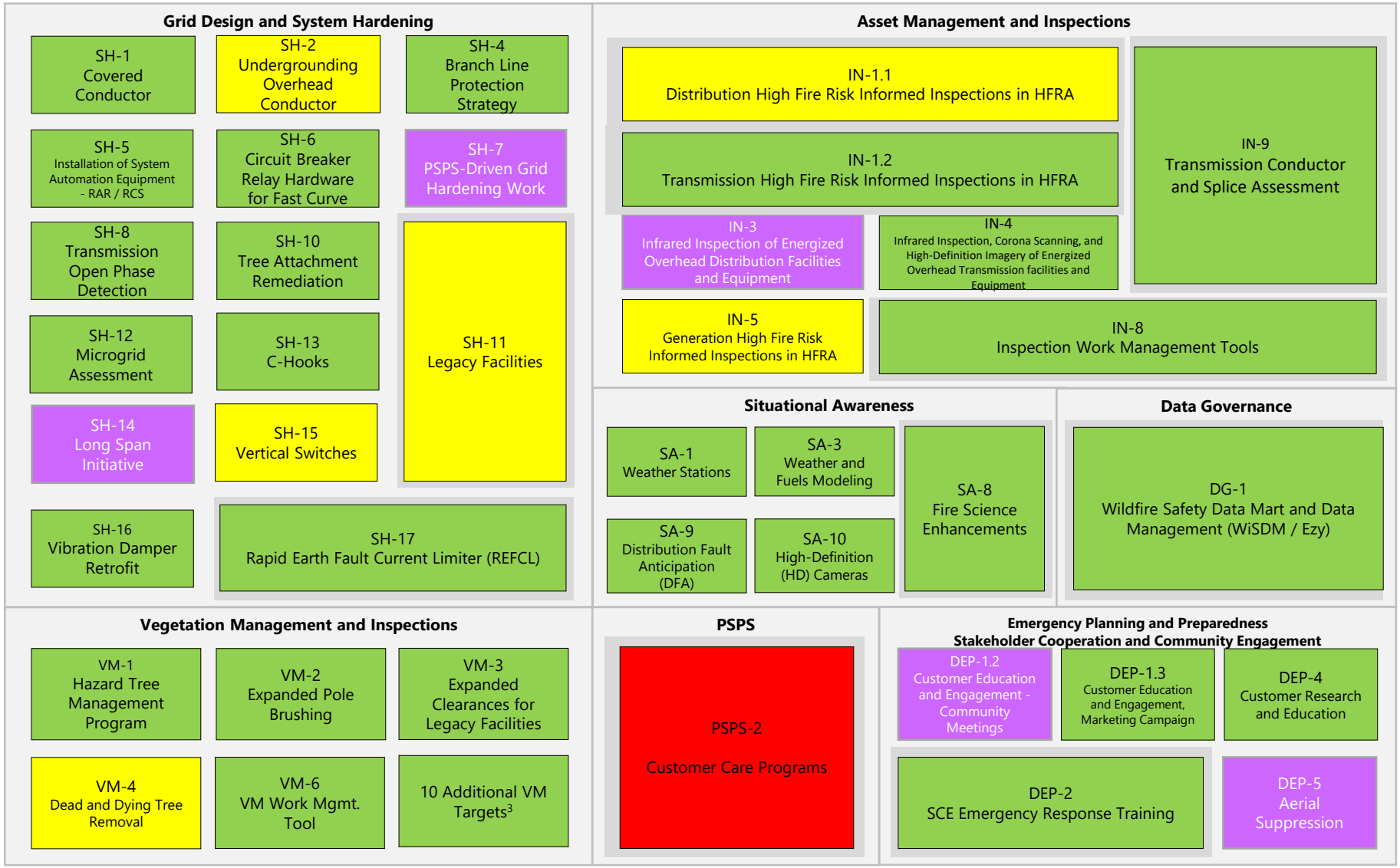
ATTACHMENT A

SCE's 2020-2022 Wildfire Mitigation Plan (WMP) Progress Update – Q2 2022

(All data is as of June 30, 2022) [1]

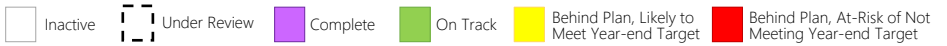
[1] Source: All data is as of June 30, 2022 (+/- 5 business days). Reported numbers are subject to revision upon data validation.

WMP Activities Summary[2]



[2] Source: All data is as of June 30, 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 Summary[4]



Additional Vegetation Management Targets [5]

Detailed inspections and management practices for vegetation clearances around Distribution electrical lines, and equipment	Detailed inspections and management practices for vegetation clearances around Transmission electrical lines, and equipment	Emergency response vegetation management due to red flag warning or other urgent climate conditions	Recruiting and training of vegetation management personnel	Substation Inspections
Vegetation Inspections Audited Annually	Poles brushed per PRC 4292	Distribution LiDAR Vegetation Inspections	Transmission LiDAR Vegetation Inspections	Substation vegetation inspections

[4] Source: All data is as of June 30, 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

76%
Installed

Weather Stations (SA-1)

Section 7.3.2 Page 265[6]
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: Completed installation of 115 weather stations.

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: All DFA events were reviewed internal to SCE; prepared first draft of report.

Weather and Fuels Modeling

4 of 5
Milestones Complete

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: Completed testing of new machine learning models in the test environment and successfully operationalized all new machine learning models in the production environment. Completed testing the new machine learning output within existing tools in the Foundry platform and Legacy tools without issue. Operationalizing of the software **to all 400 stations simultaneously** is scheduled for November 2022.

High Definition (HD) Cameras

60%
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: Completed installation of six HD cameras

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: Calibration of FPI 2.0: Continuing with the development of a Fire Behavior Metric related to FPI 2.0's components. Development of the metrics to evaluate FPI 2.0 against the current FPI is on schedule. Fire Spread Modeling: The Building Loss Factor and Suppression Effectiveness Simulation metrics are under development and will be evaluated for reliability in Q4.

[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

59%
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: Completed installation of 649 circuit miles of covered conductor in HFRA.

Undergrounding Overhead Conductor

16%
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: Completed installation of ~two underground miles in HFRA.

Branch Line Protection Strategy

59%
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: Completed installation of 208 fuses.

Remote Controlled Automatic Reclosers Settings Update

20%
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:. Completed installation of 3 RAR/RCS sectionalizing devices.

Circuit Breaker Relay Hardware for Fast Curve

19%
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: Completed 20 installations to replace/upgrade relay units in HFRA.

PSPS-Driven Grid Hardening

PSPS-Driven Grid Hardening (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

67%
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:. Relay settings for six and the strive target of 11 lines have been developed, approved and issued. Wiring activities in progress on two of the lines.

Tree Attachment Remediation

67%
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: Completed remediation of 338 tree attachments in HFRA.

Legacy Facilities

Legacy Facilities (SH-11)

Section 7.3.3 Page 340
Program Target: Hydro Control Circuits: Based on 2021 assessments, perform grid hardening on three control circuits at three legacy facility sites Low Voltage Site Hardening: Based on 2021 assessment, perform one grid hardening project at a legacy facility site Grounding Studies/Lightning Arrestor Assessments and Remediations: Based on 2021 assessments perform four remediation projects at legacy facility sites. Additionally, complete 13 assessments.

Status Update:

- Hydro Control Circuits: Two of the three assessments are scheduled for completion in 2022. Remediations scheduled for Q4.
- Low Voltage Site Hardening: Internal resources secured to complete grid hardening in Q3.
- Grounding Studies/Lightning Arrestor: two circuits are awaiting to begin construction. One circuit design has been approved and is in Environmental review.

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: Prospective customer elected not to move forward with the land lease agreement. Project team will be conducting assessment to determine feasibility of pursuing other microgrid opportunities

C-Hooks

60%
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: Completed replacement of six C-Hooks in HFRA.

Long Span Initiative

105%
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 1,482 remediations against the 1,400 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

Vertical Switches

26%
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: Completed installation of four vertical switches in HFRA.

Vibration Damper Retrofit

36%
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: Completed 36 retrofit vibration damper installations 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:

- REFCL**:** Ground fault neutralizer is in service, and performance continues to be monitored. Assessment to be completed in Q3.
- GFN: Acton circuit balancing plans complete and work scope currently in design. Continuing work on lightning arrestor replacement scope finalization at Phelan substation.

WMP Activities Summary

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

Asset Management and Inspections

YTD Status

Ground

92%

Aerial

91%

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 ground 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 completed 138,807 ground and 136,944 aerial inspections in HFRA. Distribution ground inspections is slightly behind plan by 7% and experienced delays due to new vendor onboarding which have since been addressed.

YTD Status

Ground

82%

Aerial

86%

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 completed 13,132 ground and 13,787 aerial 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 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; ~4,409 miles of inspections completed in 2021. Approximately 50% of HFRA distribution miles were inspected in 2021 with the remainder inspected in 2022.

Transmission Infrared Inspections

94%

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 completed inspections of 948 transmission circuit miles in HFRA.

Generation Inspections

36%

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 completed 69 Generation inspections in HFRA.

Inspection and Maintenance Tools

Inspection and Maintenance Tools (IN-8)

Section 7.3.4 Page 347

Program Target: Design capability for the legacy Distribution Ground inspection application in 2022 to transition to a single digital inspection platform in a future year. 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: Feasibility study to migrate Inspect App to InspectForce for Ground Distribution is complete and findings are being socialized across key functional teams. Preliminary rollout plan has been developed with deployment of the iPad-based field crew application to begin Q4.

WMP Activities Summary

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

Asset Management and Inspections

Transmission Conductor & Splice Assessment

Transmission Conductor & Splice Assessment (IN-9)

Section 7.3.3 Page 356

Program Target:

- IN-9.a: Will inspect 75 spans[7] with LineVue and strive to inspect up to 150 spans with LineVue
- IN-9.b: Inspect 50 splices[8] with X-Ray and inspect up to 70 splices with X-Ray
- IN-9.c: Obtain five Conductor Samples[9] and obtain up to 15 Conductor Samples, subject to execution constraints

Status Update:

- IN-9.a: Inspected 50 spans with LineVue
- IN-9.b: SCE met target inspecting 57 splices with X-Ray, completed in Q2
- IN-9.c: Inspected three Conductor Samples.

[7] Span defined as 1 phase from one structure to another.
[8] Splice defined as individual splice.
[9] 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

59%
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: Completed inspection of 197 circuits for HTMP.

Dead and Dying Tree Removal

62%
Circuits Inspected

Dead and Dying Tree Removal (VM-4)[9]

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: Completed inspections of 566 circuits.

Expanded Pole Brushing

66%
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: Inspected and cleared (where clearance needed and access possible) 52,652 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: Full roll-out to HTMP completed in Q2 and the team continues to support implementation stabilization. Development of Routine Line Clearing functionality continues with launch date in Q3.

Expanded Clearances for Legacy Facilities

25%
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: Completed expanded clearance at eight 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

75%
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: Completed inspection of 455,039 trees adjacent to Dist. lines, based on current unique tree inventory count.

Vegetation Recruiting and Training

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: Current staffing level at 169 ISA certified arborists performing work within SCE service territory.

Detailed Inspections: Transmission

64%
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.

Status Update: Completed inspection of 64,969 trees adjacent to Trans. lines, based on current unique tree inventory count. At-risk status due to potential reduction of available tree inventory to complete ~100k target.

Substation Inspections

69%
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: Completed 587 inspections.

Vegetation Emergency Response

88%
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: Inspected and cleared (where clearance needed and access possible) 23,475 poles.

Vegetation Inspections Audited Annually

85%
Of total 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: Completed 215,492 QC inspections.

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:

89%
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: Inspected and cleared (where clearance needed and access possible) 49,211 poles.

Substation Vegetation Management

60%
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: Completed 103 substation inspections.

Distribution LiDAR Vegetation Inspections

157%
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 by inspecting 785 circuit miles in HFRA

Transmission LiDAR Vegetation Inspections

92%
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: Completed inspection of 1,481 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 by conducting 10 community safety meetings

Customer Research and Education

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: Analysis of residential customer survey data is in progress. Business survey data collection is complete, and analysis in progress. Reports for residential and business will be available in Q3.

Marketing Campaign

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

Section 7.3.10 Page 502

Program Target: PSPS Awareness target: 50%.

Status Update: PSPS awareness at 53%.

Aerial Suppression

100%

MOU's 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 has met funding target of five aerial suppression resources by having three Memoranda of Understanding (MOUs) signed by SCE and each respective county.

SCE Emergency Responder Training

IMT: 100%

UAS: 94%

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 has met target by fully training and qualifying/requalifying 346 PSPS IMT resources

UAS: 43 UAS Operators became technically qualified.

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

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:

- Ezy Data:
  - 1) Activity scope was completed in May following the deployment of two new Distribution defect detection models.
  - 2) LiDAR Data Storage and Integration project's preliminary analysis is in progress.
- WiSDM:
  - 1) Completed wildfire data repository design
  - 2) Completed ~70 Energy Safety dataset mapping for Q2. Identified >70 datasets needed to be worked on in WiSDM

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: 35%

Rebates Issued: 32%

Customer Care Programs (PSPS-2)

Section 7.3.6 Page 448

Program Target:

- 2a: Customer Resiliency Equipment: 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:

- 2a: Customer Resiliency Equipment: Critical Care Backup Battery CCBB program has completed 965 customer enrollments and 853 deployments through Q2. Activity is at risk for not meeting year end target which was set based on 2021 enrollments. Enrollments have been low despite repeated outreach to eligible customers including knocking on doors. SCE is currently assessing ways to further encourage and increase customer enrollments

- 2b: Portable Power Station Rebates and Portable Generator Rebates has issued 986 customer rebates through Q2 and is at risk for not meeting year end target due to lower than forecasted program participation. SCE is currently assessing additional ways to encourage and increase customer enrollments such as continuing to reach out to interested customers as well as launching a social media marketing campaign.

WMP Activity Narratives

YTD Status	Behind Plan
YE Outlook	On Track

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

Activity Target

Inspect 150,000 structures in HFRA via ground 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.

Key Takeaways

- Off track by 7% or 11,193 (total 138,807 YTD) against the original plan (150,000).
- Activity performance initially went off-track in February and remains off-track through June due to operational delays and data synchronization issues impacting reporting.

Risks or Challenges

- Delays caused by SAP data synchronization issues and a focus on area of concern (AOC) reprioritizing resources and presenting challenges due to location and structure accessibility.

Actions to Improve Performance / Get Well Plan

- Continuing to address and work with IT on data synchronization.
- Majority of summer AOC scope completed. Resources refocused on HFRA inspections.

WMP Activity Narratives

Off-Track Narrative – IN-5 Generation Inspections

YTD Status	Behind Plan
YE Outlook	On Track

Activity Target

Inspect 190 generation-related assets in HFRA.

Key Takeaways

- Off track by 1% or one inspection (total 69 YTD) against the original plan (70).
- Activity performance ran off-track in June.
- Expect to return to on-track performance in Q3.

Risks or Challenges

- Project plan was front loaded to ensure inspections could be performed with minimal weather impacts. The team is working on validating schedule in July.
- This activity is one inspection behind plan and there are no current concerns with work being scheduled.

Actions to Improve Performance / Get Well Plan

- Team is working to complete at least one additional inspection in July to compensate for the one-inspection delta for June.

WMP Activity Narratives

Off-Track Narrative – SH-2 Undergrounding

YTD Status	Behind Plan
YE Outlook	On Track

Activity 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.

Key Takeaways

- Off track by six circuit miles (total ~2 YTD) against the original plan.
- Activity performance initially went off-track in May and remains off-track through June due to the outages required to conduct the undergrounding work being delayed.
- Activity is expected to return to on-track performance in September.

Risks or Challenges

- Desert region experienced outage fatigue, Customers voicing frustration with having frequent outages which has caused delays.

Actions to Improve Performance / Get Well Plan

- Staggering outages and adding additional crews to minimize impacts to the customers, so work is being performed simultaneously to lessen outage fatigue in the desert region.
- Expect to return to on-track performance in September.
- Additional scope mileage from the desert region has been brought in to 2022 as a contingency to help meet target.

WMP Activity Narratives

YTD Status	Behind Plan
YE Outlook	On Track

Off-Track Narratives – SH-11A, SH-11B, SH-11C Legacy Facilities

Activity Target

SH-11A Legacy Facilities: Grounding Studies
Based on 2021 assessments perform four remediation projects at legacy facility sites. Additionally, complete 13 assessments.

SH-11B Legacy Facilities: Low Voltage Site
Based on 2021 assessment, perform one grid hardening project at a legacy facility site.

SH-11C Legacy Facilities: Hydro Control Circuits
Based on 2021 assessments, perform grid hardening on three control circuits at three legacy facility sites.

Key Takeaways

- **SH-11A Legacy Facilities: Grounding Studies** - Off track by 60% or three planned assessments (total 2 YTD) against the original plan. Activity performance ran off-track again in June due additional analysis needed for Kaweah 2 project. Vendor conducting the grounding studies is resource constrained.
- **SH-11B Legacy Facilities: Low Voltage Site** - YTD performance is on track against the target to perform one grid hardening project at a legacy facility. Resources are expected to be procured by end of June.
- **SH-11C Legacy Facilities: Hydro Control Circuits** - Currently behind plan with no project scope/plan finalized against the original plan to complete in March. The delay is minimal by only by a couple weeks and the design is scheduled to be completed. Expect to return to on track performance by end of April.

Risks or Challenges

- **SH-11A Legacy Facilities: Grounding Studies** - Pre-requisite of T&D soil resistivity testing caused performance delays early in the year due to COVID-19 impacts across staff. Soil testing will be done in July although it can take up to 60 days to prepare the assessment for T&D review. Potential for required environmental clearances. The sites are scattered and pose some logistical challenges in scheduling
- **SH-11C Legacy Facilities: Hydro Control Circuits:** All work is reliant on availability of T&D resources. Obtaining environmental clearances is a risk.

Actions to Improve Performance / Get Well Plan

- **SH-11A Legacy Facilities: Grounding Studies** - Expect to return to on-track performance at end of Q3 due to vendor lead time of approximately 60 days. Vendor has agreed to add more resources to offset constraints and expedite the assessments; however, this is not a guarantee given the vendor is supporting multiple other Generation projects.
- **SH-11C Legacy Facilities: Hydro Control Circuits** - Expect to return to on-track performance in Q3. Delay was due to only one planning resource in Shaver Lake, although T&D does not anticipate any further delays. Two of the three control circuits have been finalized, approved and scheduled for completion in 2022.

WMP Activity Narratives

YTD Status	Behind Plan
YE Outlook	On Track

Off-Track Narrative – SH-15 Vertical Switches

Activity Target

Install 15 vertical switches in SCE's HFRA.

SCE will strive to install 25 vertical switches in SCE's HFRA.

Key Takeaways

- Off track by 43% or three vertical switch installs (total four YTD) against the original plan.
- Activity performance initially went off-track in May and remains off-track through June due to a shift in resources to focus on other grid hardening work and outage scheduling for installations.

Risks or Challenges

- Two switch installations were placed on-hold, pending Transmission work to be performed, to allow for an outage to install switches.
- One switch had to go back to Engineering for re-design as a result of the location.

Actions to Improve Performance / Get Well Plan

- Expect to return to on-track performance in September.
- Identifying additional scope to be released as a contingency to help meet target.

WMP Activity Narratives

Off-Track Narrative – PSPS-2 Customer Care Programs

YTD Status	Off Track
YE Outlook	Off Track

Activity Target

PSPS-2a Critical Care Backup Battery
Enroll 2,750 customers in the CCBB program (35% of forecasted eligible population). Continue to identify new eligible customers each month to offer program.

PSPS-2b Portable Power Station Rebates and Portable Generator Rebates
SCE to issue 3,000 rebates and will strive to issue 4,000 rebates.

Key Takeaways

PSPS-2a Critical Care Battery Backup
- Off track and at risk for year-end by 44% or 752 enrollments (total 965 YTD) against the original plan (1,719).
- YTD SCE has deployed 853 batteries to eligible customers.
- The forecast was based on 2021 enrollments. Despite extensive outreach and retooling of the marketing strategy, customer interest continues to be lower than forecasted.

PSPS-2b Portable Power Station Rebates and Portable Generator Rebates
- Off track and at risk for year-end by 28% or 383 (total 986 YTD) against the original plan (1,369).
- Activity performance remains off-track due to lower than forecasted program participation and subsequent restructuring of marketing strategy.

Risks or Challenges

PSPS-2a Critical Care Battery Backup
- Forecast was based on 2021 enrollments.
- CARE/FERA enrollment requirements are currently in place which limits eligible customer base.

PSPS-2b Portable Power Station Rebates and Portable Generator Rebates
- Only residents in HFRA are eligible for the rebate, which limits the number of qualified residents.
- Customers are required to pay up-front the entire costs for an eligible product(s) before a rebate can be requested and may deter customers, resulting in fewer rebates.
- Enrollment may be impacted by lack of PSPS events, reducing the urgency for resiliency products to be purchased before Wildfire season.

Actions to Improve Performance / Get Well Plan

PSPS-2a Critical Care Battery Backup
- The team is working to develop an estimated return to on track performance
- Updates will be made to marketing material based on key customer survey feedback; customers weren't aware battery was free.
- Adjusting data pull dates so mailers can go out earlier in the month and contractors may contact customers earlier.
- Evaluating adjustments to eligibility requirements

PSPS-2b Portable Power Station Rebates and Portable Generator Rebates
- Evaluating adjustments to program offering which may include restructuring of the rebate amount.
- Continuing to reach out to interested customers as well as launching a social media marketing campaign, paid search ads & Display Re-targeting ads campaigns.

WMP Activity Narratives

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

YTD Status	Behind Plan
YE Outlook	On Track

Activity Target

Inspect 900 circuits and assess any trees with strike potential along those circuits.

Key Takeaways

- Off track by 16% or 110 (total 566 YTD) against the original plan (676).
- Activity performance initially went off-track in March and remains off-track through June due to challenges closing out circuits in the VM Work Management Tool, Arbora, that have been completed.

Risks or Challenges

- Off-track status driven by reporting delays.
- Enhancements are being made to the reporting functionality of the newly implemented vegetation management work management tool, Arbora.

Actions to Improve Performance / Get Well Plan

- Expect to return to on-track performance by end of July.
- Assessor vendors maintaining headcount are on track to perform circuits planned. Program is running as expected and all 1st pass circuits have been released to vendors.
- Continue to work through new software challenges to complete/close out circuits in Arbora.
- Arbora reporting expected to be available for the next reporting cycle.

WMP Activity Narratives

YTD Status	Off Track
YE Outlook	Off Track

Off-Track Narrative – Trans. Inspections for Vegetation Clearances

Activity Target

In its HFRA for 2022, SCE plans to inspect approximately 100,000 trees adjacent to transmission lines, based on current unique tree inventory count. Tree inventory is subject to fluctuations based on actual field conditions.

Key Takeaways

- Off track by 9% or 6,493 (total 64,969 YTD) against the original plan (71,462).
- Activity performance initially went off-track in March and remains off-track through July due to an an inability to keep pace with high planned monthly units.

Risks or Challenges

- Planned monthly units increase in Q2 with a heavy drop-off by year end. This approach is designed to ensure inspections are completed prior to fire season and provides an ability to resolve potential backlog in Q3.
- Possible reduction of available tree inventory driven by removals and previous fire activity (pending validation).

Actions to Improve Performance / Get Well Plan

- Monitoring monthly inspection production to ensure pace is maintained to meet plan.
- Field validating available tree inventory adjacent to transmission lines.