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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 2021 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) meetings that occurred during the second quarter of 2021, and a summary of the implementation of Committee recommendations from previous meetings.³

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 Although Public Utilities Code Section 8389 requires a quarterly notification detailing the implementation of a utility's approved WMP, SCE is reporting on the implementation of its 2021 WMP Update, which is pending approval. Advice 4437-E (submitted March 8, 2021) and SCE's 2020 Annual Report on Compliance (ARC, submitted March 31, 2021) provide details on implementation of SCE's approved 2020-2022 WMP.

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."

³ SCE Advice 4337-E.

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.⁴

SCE provides the required information below:

(1) Implementation of Wildfire Mitigation Plan

On February 5, 2021, SCE submitted its 2021 WMP Update,⁵ a comprehensive WMP covering 2021-2022 and building on its 2020 WMP. The Update included discussion of 2021 programs and activities, including successes and lessons learned. On June 3, 2021, SCE submitted its 2021 WMP Update Revision, which included responses to four Critical Issues identified by the Wildfire Safety Division (WSD). On July 1, 2021, the WSD transitioned from the California Public Utilities Commission to the California Natural Resources Agency and became the Office of Energy Infrastructure Safety (OEIS or Energy Safety). On July 16, 2021, the California Public Utilities Commission contemporaneously issued a draft Resolution WSD-020 and comment letter ratifying Energy Safety's draft Action Statement approving SCE's 2021 WMP Update.

In 2021, SCE is tracking 39 specific wildfire-related programs and activities that constitute its 2021 WMP Update, including additional grid hardening, enhanced inspection and repair programs, continuation of aggressive vegetation management, increased situational awareness and response and augmented activities for Public Safety Power Shutoff (PSPS) resilience and community

⁴ Pul. Util. Code § 8389(e)(7).

⁵ SCE submitted a Supplement to the Update on February 26, 2021.

engagement, particularly for underrepresented groups and access and functional needs customers.

In Attachment A (SCE's 2020-2022 Wildfire Mitigation Plan Progress Update – Q2 2021), SCE presents detailed information about the implementation status of meeting WMP 2021 Program Targets for each of these wildfire-related mitigation activities and programs. As referenced in Attachment A, SCE is currently on track to meet its 2021 year-end goals as set forth in the 2021 WMP Update but notes that 11 of the activities are behind plan for Q2 due to external circumstances such as delays in vendor deliverables and obtaining permits; however, 10 of those activities are still on track for meeting year-end targets. The goal for one activity (IN-8) will likely be delayed until 2022 due to challenges with the delivery of the application tool needed to train SCE's inspectors. Plans may vary pending SCE's reevaluation after a final general rate case decision.⁶

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

Safety is the first of SCE's core values and this is demonstrated through the company's commitment to creating and maintaining a safe environment for employees, contractors, and the public. SCE continues to improve its safety culture through leader safety ownership, safety culture training, engagement and message reinforcement, and the incorporation of feedback from all levels of the organization.

The OEIS recently initiated its 2021 Safety Culture Assessment (SCA) process for electrical corporations and conducted its first assessment for SCE on June 14th. SCE partnered with OEIS and DEKRA, its third-party administrator, to complete the organizational self-assessment, workforce safety culture survey and accompanying focus groups. SCE anticipates receiving Safety Culture Assessment results and recommendations by August 20, 2021, which will assist in building on existing efforts to strengthen our safety culture.

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

The Committee had one regular meeting and one special meeting during the second quarter of 2021 (on April 21, 2021 and June 23, 2021, 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 separately addressed below. In addition to quarterly meetings, the Committee Chair meets regularly with SCE management to discuss wildfire and worker safety issues.

⁶ On July 9, 2021, the California Public Utilities Commission (CPUC) issued a Proposed Decision (PD) on SCE's 2021 GRC Track 1 request, which is expected to be voted on by August 19, 2021.

Wildfire Safety

Discussions on wildfire safety during second quarter meetings covered progress made under the WMP and updates on the PSPS Action Plan.

At the April meeting, the Committee received a progress report on WMP activities. Management noted that SCE expects to receive revision notices for the WMP in May, with expected consideration for final approval later in the summer. The Committee also received a report on the proposed decision in the PSPS Order Instituting Investigation proceeding.

Also at the April meeting, management reported that SCE had its first PSPS event of 2021, indicating the onset of fire season. The Committee reviewed progress on the PSPS Action Plan, including improvements to customer notification systems and processes and expanded eligibility for the Critical Care Battery Backup (CCBB) program. The Committee and management discussed being responsive to Commission requirements and expectations for customer participation in the CCBB. Management also noted the expedited grid hardening efforts to reduce customer impacts due to PSPS. The Committee and management also discussed evaluations underway on potential changes to PSPS thresholds due to grid hardening work that could further reduce the use of PSPS frequency, scope and duration.

At the June meeting, the Committee received: an overview of the expected wildfire season; the summer readiness operational work, including accelerated inspections in high fire risk areas, and the status of WMP goals; and the process and timing of updates from the WSD regarding SCE's safety certificate. Management and the Committee also discussed the work SCE is doing to address ignition risk from communications infrastructure, including reporting communications infrastructure matters to the Commission.

Also at the June meeting, the Committee reviewed progress on the PSPS Action Plan, including SCE's regular engagement with the Commission regarding progress made. The Committee also received an update on the acceleration of grid hardening in high PSPS frequency areas, continued work on customer notification improvements, and the increased deployment of the CCBB.

Worker Safety

The Committee received reports on worker safety at its second quarter meetings, discussing contractor management and safety and worker safety performance trends, which include safety incidents in the Transmission group, and attention to higher risk incidents such as falls from height.

At the April meeting, management reported on contractor management, the implementation of contractor scorecards, and the planned rollout of the contractor environmental compliance handbook. Management noted three focus

areas for improved contractor management, including standardization of processes, clarification of decision rights and accountability, and performance management. The Committee and management discussed a contractor center of excellence, continued development of leadership in this area, and managing contractor construction non-conformance.

At the June meeting, management reported on worker safety performance regarding serious injuries and the Days Away, Restrictions, and Transfers rate, noting the Transmission group's safety performance trends. Management described the Transmission group's safety incidents and immediate actions in response as well as additional actions on accountability, training, specific mitigations from the risk-based safety program, and evaluation of personal protective equipment alternatives for increased safety. The Committee and management also discussed Enterprise Risk Management's involvement on the falls from height risks, including engineering, organizational and human-based planned mitigations, leading indicators, benchmarking for best practices, and supervisory oversight and responsibilities.

Also at the June meeting, the Committee received a report on a recent safety incident involving two vegetation contract workers that resulted in serious injuries. The Committee noted multiple safety performance failures on site at the incident and describing factors that may have contributed to the event, including the rapid growth in the contractor's business. Management also noted the contractor was stood down from all work, and the ongoing evaluation regarding any return to work. The Committee and management discussed the potential impacts of vegetation management safety performance on wildfire operations.

Public Safety

The Committee received reports on public safety at its second quarter meetings, including on public safety risks presented by underground equipment failures and wire down events; guy wire anchor installation issues; and contractor management issues.

At the April meeting, the Committee reviewed public safety risks managed by the safety team and operational units. The Committee and management discussed traditional public safety focus areas such as underground equipment failures and wire down events. They also discussed the Transmission and Distribution Public Safety Roadmap and its focus on asset failure cause evaluation and mitigation efforts. Management reported on the range of public safety risks that may result in serious injuries and/or fatalities. The Committee and management discussed public behaviors that may result in incidents, including increased theft and vandalism. They also discussed utilizing asset failure tracking for higher probability incidents, the quality of data being captured, and risk-informed points of data.

At the June meeting, the Committee received a report on guy wire anchor installation issues, the known contractors and subcontractors involved, the operational mitigations and processes that both implicated contractors and SCE are undergoing to help ensure that installations requiring remediation are identified and addressed. Management noted that SCE self-reported the matter to the Commission's Safety and Enforcement Division (SED), and planned to provide an update to SED in mid-July.

The Committee and management also discussed SCE's request for proposals for external expertise on contractor management, controls, and best practices.

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 SCE provide data on Transmission safety performance by district/region (similar to the data provided for Distribution safety performance).
2. Recommended the ongoing evaluation of the Audit Plan related to safety audits for transmission work.
3. Recommended that management report on results of the RFP for external expertise on contractor management, controls, and best practices.
4. Recommended that management continue to report on the status of vegetation management safety performance and impacts on WMP program targets.
5. Recommended that management report back on status of efforts to address guy wire anchor installations.

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:

1. Recommendation (Fourth Quarter 2020): The Committee discussed the role and duty of telecommunications companies to inspect and maintain assets to improve safety, reduce ignition risk and provide resilient services as well as address in a timely fashion the repair and maintenance issues identified by SCE. The Committee recommended that management work with telecommunications partners and appropriate regulators and continue to review SCE practices and procedures related to telecommunications services.

Management Response: The Committee received a report that

addressed this recommendation at the June 2021 meeting.

2. Recommendation (First Quarter 2021): The Committee recommended that the Committee Chair review the PSPS Action Plan.

Management Response: The Committee Chair reviewed the PSPS Action Plan in February 2021 prior to its filing with the Commission on February 12, 2021.

3. Recommendation (First Quarter 2021): The Committee recommended that management provide periodic ongoing updates on progress on PSPS Action Plan.

Management Response: The Committee received updates on the progress under the PSPS Action Plan at both the April and June 2021 meetings.

4. Recommendation (First Quarter 2021): The Committee recommended that management report on the Safety Culture Assessment requirements released by the Commission on January 1, 2021 and SCE's plan to address them at a future meeting.

Management Response: The Committee received a report that addressed this recommendation at the June 2021 meeting.

5. Recommendation (First Quarter 2021): The Committee recommended that SCE provide additional district-specific safety data in a future report to the Committee.

Management Response: The Committee received a report that addressed this recommendation at the April 2021 meeting

6. Recommendation (First Quarter 2021): The Committee recommended the incorporation of PSPS Action Plan along with other PSPS improvement efforts, into the 2021 operational goals.

Management Response: The PSPS Action Plan and other PSPS improvement efforts were incorporated into SCE's 2021 operational goals.

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 2020): The Committee recommended that management report back to the Committee on their risk evaluation and prioritization methodology in light of the

significant increase in ignitions from secondary conductors.

The Committee will hold one regular third quarter meeting on August 25, 2021, which will be summarized in the next quarterly report. 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/ Shinjini C. Menon
Shinjini C. Menon

SCM:sl:cm
Enclosures

ATTACHMENT A

SCE's 2020-2022 Wildfire Mitigation Plan (WMP) Progress Update – Q2 2021

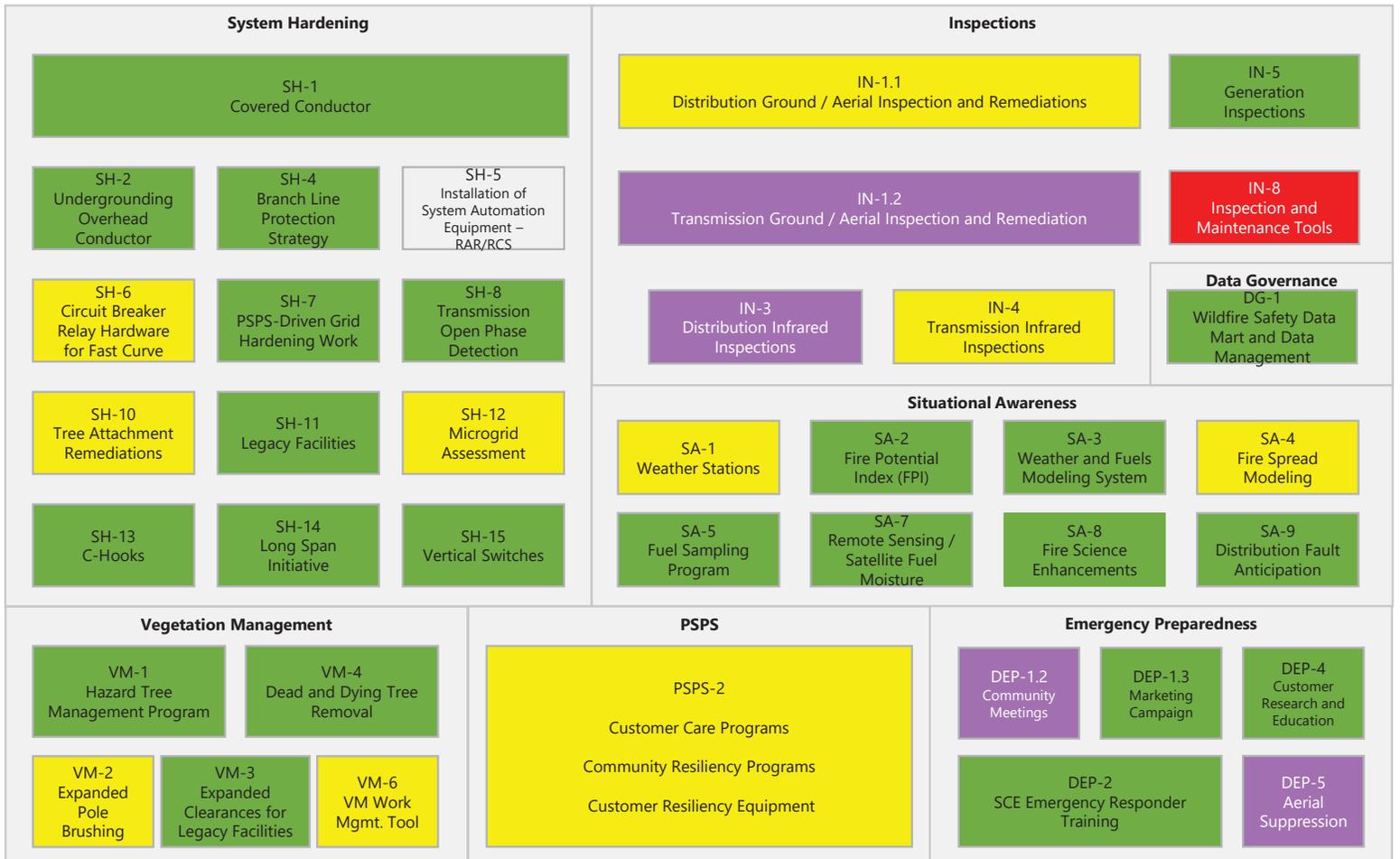
(All data is as of June 30, 2021, or later)

Energy for What's AheadSM



WMP Activities Summary

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



Source: All data is as of June 30, 2021 or later.

*Reported numbers are subject to revision upon data validation. Plans may vary pending SCE's reevaluation after a final general rate case decision.

WMP Activities Summary

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

Situational Awareness Activities

Weather Stations

Weather Stations (SA-1)

Section 7.3.2.1 Page 196*

Program Target: SCE expects to install 375 weather stations but will attempt to install as many as 475.

Status Update: Began installations in Q2 and installed ~100 weather stations through Q2 as compared to a plan of 120. Plan to complete installations by end of year.

Fire Spread Modeling

Fire Spread Modeling (SA-4)

Section 7.3.2.6.2 Page 205

Program Target: Develop a methodology and a strategy to test FireCast/FireSim implementation into PSPS decision making based on backcast information by Q3.

Status Update: Fire Spread Modeling has fallen behind due to vendor delays on the PSPS decision making analysis. SCE is reviewing data with vendor and discussing next steps.

Fire Potential Index (FPI)

FPI (SA-2)

Section 7.3.2.4.1 Page 201

Program Target: 1) Backcast 20 years of FPI using FPI 2.0 before typical height of fire season (Q3) to determine historical performance compared to current FPI 2) Run FPI 2.0 in parallel with the current FPI and compare outputs for the 2021 fire season

Status Update: Currently evaluating FPI 2.0 data output calculated on the circuit level and backcasted over a 40-year historical period by Fire Climate Zone..

Fuel Sampling Program

Fuel Sampling Program (SA-5)

Section 7.3.2.4.2 Page 202

Program Target: Maintain periodic fuel sampling across SCE's HFRA and evaluate the need to sample additional locations

Status Update: Vendor continues to fill gaps in local fire agencies' fuel sampling programs in a timely fashion.

Weather and Fuels Monitoring System

Weather and Fuels Monitoring System (SA-3)

Section 7.3.2.6.1 Page 207

Program Target: Install two additional High-Performance Computing Clusters (HPCCs) to facilitate the installation and Operationalization of the Next Generation Weather Modeling System, allowing for more precise, higher resolution output

Status Update: HPCCs were built in Q2. SCE is performing additional testing through the year before operationalizing the HPCCs.

Remote Sensing / Satellite Fuel Moisture

Remote Sensing / Satellite Fuel Moisture (SA-7)

Section 2.3.2.4.3 Page 204

Program Target: Initiate wind profiler pilot project to validate weather model performance for potential improvements to weather models

Status Update: Working with vendor to identify anticipated scope of work for vegetation modeling tools.

WMP Activities Summary

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

Situational Awareness Activities

Fire Science Enhancements

Fire Science Enhancements (SA-8)

Section 7.3.2.4.4 Page 205

Program Target: Evaluate current wildfire events in context of 40-year history of wildfires

Status Update: SCE plans to develop and operationalize climatology products in Q3 and Q4 that provide historical weather context for PSPS decision-making. In Q1-Q3 SCE is working with vendor to initiate contract and develop historical weather data.

Distribution Fault Anticipation (DFA)

Distribution Fault Anticipation (DFA) (SA-9)

Section 7.3.2.2 Page 198

Program Target: Complete installation of 120 DFA units on circuits in SCE's HFRA and continue evaluation of DFA technology which may result in SCE installing up to 150 units

Status Update: Devices are in design and installations are scheduled to begin in Q3.

WMP Activities Summary

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

System Hardening

Covered Conductor

54% installed

Covered Conductor (SH-1)

Section 7.3.3.3.1 Page 214

Program Target: SCE expects to install 1,000 circuit miles of covered conductor in SCE's HFRA but will attempt to install as many as 1,400 circuit miles of covered conductor in SCE's HFRA, subject to resources constraints and other execution risks. Once a final GRC decision is issued, SCE will reevaluate its covered conductor strategy and scope along with alternative strategies as appropriate to protect public safety.

Status Update: ~540 circuit miles installed.

Undergrounding Overhead Conductor

Undergrounding Overhead Conductor (SH-2)

Section 7.3.3.16.1 Page 228

Program Target: Install 4 miles of undergrounded HFRA circuits SCE will attempt to install 6 miles of undergrounded HFRA circuits, subject to resource constraints and other execution risks, such as permitting, environmental or coordinating with other utilities.

Status Update:

Construction began in Q2. First miles to be complete in Q3.

Branch Line Protection Strategy

Branch Line Protection Strategy (SH-4)

Section 7.3.3.7.1 Page 219

Program Target: Install or replace fusing at 330 fuse installation Locations SCE will strive to install or replace fusing at 421 locations, subject to resource constraints and other execution risks

Status Update: Engineering and design work released to regions in Q2 and installations to begin in Q3.

Install RAR/RCS

Installation of System Automation Equipment – RAR/RCS (SH-5)

Section 7.3.3.9 Page 223

Program Target: N/A – If RARs/RCSs are determined to be necessary based on the SH-7 analysis, SCE will develop appropriate project plans

Status Update: Developing new project plan, as per completion of SH-7 2020 analysis., consistent with Corrective Action Plan

Circuit Breaker Relay Hardware for Fast Curve

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

Section 7.3.3.2 Page 213

Program Target: Replace/upgrade 60 relay units in HFRA. SCE will strive to replace/upgrade 86 relay units in HFRA, subject to Resource constraints and other execution risks

Status Update: Installed/replaced 25 CB Relays through Q2 as compared to planned 27. Slightly behind plan due to delays in vendor sign-off on cybersecurity documentation. Matter was resolved and activity is on track to return to schedule in Q3.

PSPS-Driven Grid Hardening

PSPS-Driven Grid Hardening Work (SH-7)

Section 7.3.3.8.1 Page 221

Program Target: SCE will develop a methodology to project probability of PSPS de-energization and impact. Utilizing this methodology, SCE will adopt a more targeted approach by evaluating highly impacted circuits from the remaining 50% circuits in HFRA.

Status Update: Documentation of methodology is under development and on track for the 2021 evaluation. Identification of the riskiest circuits within the remaining 50% of unevaluated circuits was completed by June as planned.

WMP Activities Summary

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

System Hardening

Transmission Open Phase Detection
20%
 installed

Transmission Open Phase Detection (SH-8)
 Section 7.3.3.17.1 Page 230
Program Target: Install transmission open phase detection devices on 10 transmission circuits.
Status Update: Installation has been completed on two circuits ahead of schedule.

C-Hooks

C-Hooks (SH-13)
 Section 7.3.3.15.1 Page 227
Program Target: Replace C-Hooks on at least 40 structures in HFRA. SCE will strive to replace all C-hooks in HFRA, currently estimated between 50- 60 structures
Status Update: Sites and locations finalized. Environmental screenings and engineering design completed. Installations to begin in Q4.

Tree Attachment Remediation
18%
 remediations

Tree Attachment Remediation (SH-10)
 Section 7.3.3.3.2 Page 217
Program Target: Remediate 500 tree attachments. SCE will strive to complete over 600 tree attachment remediations, subject to resource constraints and other execution risks.
Status Update: Off track due to slow ramp up in certain communities related to obtaining lay-down yards for staging. There were also environmental delays. Remediated 89 tree attachments as compared to a plan of 240 by Q2. All scope has been released to region to execute work; expecting to finish by the end of the year.

Long Span Initiative

Long Span Initiative (SH-14)
 Section 7.3.3.12.1 Page 226
Program Target: Complete all field assessments for locations and corresponding remediations. Remediate the highest risk locations, estimating that 300, and up to 600, locations will be remediated in 2021, subject to the completion timeline for inspections, resource constraints and other execution risks.

Legacy Facilities

Legacy Facilities (SH-11)
 Section 7.3.3.17.2 Page 231
Program Target: Perform evaluation on 5 circuits for possible hardening. Create 2 project plans based on 2020 engineering assessments on low voltage site. Complete 12 additional assessments on grounding studies/lighting arrester.
Status Update: SCE evaluated 2 circuits in Big Creek and completed grounding studies/lighting assessments on 8 sites. Assessments of low voltage sites were completed in Q2.

Status Update: ~170 spans* of the 600 high-risk locations from available scope have been remediated to date in the manner described in the WMP. There are an additional ~80 notifications which may have been remediated in previous years. As noted in our Q1 QAL, SCE clarifies that it will remediate the 300-600 highest risk locations by 2021, subject to the completion timeline for inspections, resource constraints and other execution risks.

Microgrid Assessment

Microgrid Assessment (SH-12)
 Section 7.3.3.8.2 Page 222
Program Target: Perform internal assessment of vendor bid and location options. If assessment favorable, issue engineering procurement construction (EPC) contract.
Status Update: Undergoing contract negotiations for site selection.

Vertical Switches

Vertical Switches (SH-15)
 Section 7.3.3.17.3 Page 232
Program Target: Install 20 switches in HFRA. SCE will strive to install 30 switches in HFRA.
Status Update: Installed 2 switches through Q2, plan to continue with installations in Q3.

*This number may increase as more analysis is performed checking for previous work completions, and the remediation of pending notifications.

WMP Activities Summary

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

Inspections

YTD Status

Ground

106%

Aerial

64%

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

Section 7.3.4.9.1 Page 242

Program Target: Inspect between 163,000 and 198,000 structures in HFRA, via both ground and aerial inspections.

Status Update: Completed ~173,200 ground inspections and ~105,700 aerial inspections. Distribution aerial inspections were delayed due to issues with image quality, AOC scope reprioritization, and weather; however, activity is on track to catch up in Q3.

Transmission Infrared Inspections

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

Section 7.3.4.5 Page 239

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

Status Update: Inspections were delayed due to malfunctioning camera equipment and travel restrictions impeding equipment repair. Camera has been repaired and expected to resume inspections in Q3.

YTD Status

Ground

102%

Aerial

102%

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

Section 7.3.4.10.1 Page 248

Program Target: Inspect between 16,800 and 22,800 structures in HFRA, via both ground and aerial inspections.

Status Update: Completed ~17,000 ground and ~17,300 aerial inspections. Met goal based on initial review but currently validating data.

Generation Inspections

Generation Inspections and Remediations (IN-5)

Section 7.3.4.9.2 Page 246

Program Target: Complete inspection of 181 generation-related assets in HFRA

Status Update: Completed ~100 Generation inspections and will continue in Q3.

Distribution Infrared Inspections

100%

Targeted Circuits Inspected

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

Section 7.3.4.4 Page 238

Program Target: Inspect approximately 50% of distribution circuits in HFRA.

Status Update: Completed inspections on ~50% of distribution circuits in HFRA, approximately 4,400 inspections.

Inspection and Maintenance Tools

Inspection and Maintenance Tools (IN-8)

Section 7.3.4.3.1 Page 236

Program Target: Transition Aerial and Transmission ground inspection process to a single digital platform with at least 75% of inspectors trained to use the tool by year end 2021. Deploy scope mapping tool with GIS visualization to Distribution.

Status Update: Behind plan due to technical challenges which have caused significant delays with development of the Transmission Ground Inspection application. The complexity and uncertainty of the technical issues cause the goal to be at-risk for year end. The Distribution and Transmission Aerial applications are on track for year end.

WMP Activities Summary

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

Vegetation Management

HTMP

43%

Trees Assessed

Hazard Tree Management Program (VM-1)

Section 7.3.5.16.1 Page 278

Program Target: Assess between 150,000 and 200,000 trees for hazardous conditions and perform prescribed mitigations in accordance with program guidelines and schedules

Status Update: ~64,900 trees have been assessed through Q2 and prescribed mitigations are on track in accordance with program guidelines and schedules. The number of assessors will be evaluated in Q3.

Dead and Dying Tree Removal

Dead and Dying Tree Removal (VM-4)

Section 7.3.5.16.2 Page 280

Program Target: Perform Drought Relief Initiative (DRI) annual inspections and perform prescribed mitigations in accordance with program guidelines and schedules.

Status Update: On track to complete the first and second circuit passes as planned. ~740 assessments completed through Q2. Continuing to monitor contractor resource plans to ensure timely completions.

Expanded Pole Brushing

37%

Poles Cleared

Expanded Pole Brushing (VM-2)

Section 7.3.5.5.1 Page 265

Program Target: SCE plans to pole brush between 200,000 and 300,000 Distribution poles

Status Update: Cleared ~74,200 poles. Delays due to reallocation of vendors to work on Areas of Concern. Return to planned schedule in July means productivity is expected to increase throughout Q3.

VM Work Management Tool (Arbora)

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

Section 7.3.5.19 Page 282

Program Target: Continue Work Management Tool (Arbora) agile development and releases in accordance with project plan – complete full rollout of Dead & Dying Tree Removal and Hazard Tree Mitigation, and conduct discovery and design architecture associated with Line Clearing

Status Update: Completed initial discovery and design architecture for the Hazard Tree Management Program and Dead and Dying Tree Removal. Pilot delayed until Q3 due to IT issues, however, a full rollout planned for Q4.

Expanded Clearances for Legacy Facilities

Expanded Clearances for Legacy Facilities (VM-3)

Section 7.3.5.5.2 Page 266

Program Target: Treat 46 sites

Status Update: Sites have been identified to complete 2021 program target. Expanded clearances have been completed at 34 sites.

WMP Activities Summary

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

Emergency Preparedness Activities

Community Meetings

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

Section 7.3.10.1.1 Page 324

Program Target: Host at least 9 virtual community meetings. SCE will complete additional meetings as needed in 2021, based on PSPS impact to communities, up to 18

Status Update: Completed 9 virtual community meetings through Q2.

Customer Research and Education

Customer Research and Education (DEP-4)

Section 7.3.10.1.4 Page 333

Program Target: Administer at least 4 PSPS-related surveys (PSPS Tracker Survey to capture feedback on the 2020 events, wildfire Community meeting feedback survey, CRC/CCV feedback survey, In-Language Wildfire Mitigation Communications Effectiveness Pre/Post Survey)

Status Update: Completed the data collection of residential and business customer feedback for the 2020 PSPS Tracker. Also completed the Residential report in Q2, and plan to complete the Business report in Q3. In-Language Wildfire Mitigation Communications Effectiveness Survey to begin in Q3.

Marketing Campaign

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

Section 7.3.10.1.3 Page 331

Program Target: PSPS Awareness goal: 50%

Status Update: As of the end of Q2 PSPS awareness was at ~59%.

Fuel Sampling Program

Aerial Suppression (DEP-5)

Section 7.3.10.3 Page 337

Program Target: Will enter a Memorandum of Understanding (MOU) with CAL FIRE and local county fire departments to provide standby cost funding for up to 5 aerial suppression resources strategically placed around the SCE service area.

Status Update: All 3 MOUs have been signed by SCE and each respective county. Payments disbursed to all 3 counties in Q2.

SCE Emergency Responder Training

SCE Emergency Responder Training (DEP-2)

Section 7.3.9.1 Page 313

Program Target:

IMT (Incident Management Team): Have all PSPS IMT and Task Force members fully trained and qualified or requalified by July 1, 2021.
 UAS (Unmanned Aircraft System): In 2021 SCE plans to expand the program by an additional 50 operators over 2020 levels.

Status Update:

IMT: Complete – PSPS IMT trainings and qualifications were completed in Q2.

UAS: On Track - Nine operators have passed the FAA 107 exam. ~50 operators have attended FAA 107 prep courses in preparation for taking the exam in Q3 or Q4.

WMP Activities Summary

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

Data Governance

Wildfire Safety Data Mart and Data Management

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

Section 7.3.7.1 Page 303

Program Target:

WiSDM:

- Complete the WiSDM solution analysis and design for centralized data repository
- Initiate staggered consolidation of datasets from SCE Enterprise systems

Ezy Data:

- Implement the cloud platform infrastructure for Ezy Data
- Build a solution for data consumption, storage and visualization of inspection data (LiDAR, HD video, photograph)
- Enable an environment for Artificial Intelligence (AI) assisted analytics

Status Update:

SCE has completed the initial solution design for the Wildfire Safety Data Mart (WiSDM). Staggered consolidation of datasets will begin in Q3. The first release of the Ezy Data cloud platform was also completed in Q1. SCE is continuing to work on solutions to consume, store, and visualize data from wildfire inspection activities.

WMP Activities Summary

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

PSPS

Customer Care Programs

Customer Care Programs (PSPS-2)

Section 7.3.6.5.2 Page 294

Program Target:

- Community Resource Centers (CRC): Adjust as needed.
- Community Resiliency Programs: Goals for Resilience Zones dependent on community leaders identifying potential customers. Targeting to obtain 5 to 10 agreements. Complete installation of microgrid islanding (CREI) capability on second pilot customer.
- Customer Resiliency Equipment:
 - Critical Care Backup Battery (CCBB): Expand program to eligible MBL customers who are enrolled in CARE/ FERA and reside HFRA. Expand marketing and outreach plans.
 - Well Water & Residential Battery Station Rebates: Enhance the programs to increase customer participation by 20% - 40%

Status Update:

- The refreshed CRC strategy for 2021 includes evaluation of circuits that will likely be impacted by PSPS events. The strategy identified 12 communities that need CRC coverage (all of which have at least 1 CRC)
- Community Resiliency Programs behind plan due to delays in identifying customers willing to participate; will continue to identify additional customer sites in Q3. Four customer agreements have been executed through Q2.
- CCBB program was completed in Q2 after reaching out to eligible Medical Baseline Customers and establishing additional partners (CBOs)
- Well Water & Residential Battery Station Rebate have ~1,100 enrollments through Q2.

Appendix

Behind Plan Activities Details

2021 WMP Activity Narratives

Off-track or other notable activities

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

YTD Status	Current Goal	Narrative
	IN-1.1b: Distribution Aerial Inspections Inspect between 163,000 and 198,000 structures in HFRA, via both ground and aerial inspections. This target includes HFRI, compliance due structures in HFRA and emergent risks during the fire season.	<p>Summary: Distribution inspections are ~11% behind plan (~105k Actual vs ~118k Planned) due to issues with image quality, AOC scope reprioritization, and weather; however, activity is on track to catch up in Q3.</p> <p>Progress:</p> <ul style="list-style-type: none"> • Team has onboarded more vendors than in previous years with more capacity to capture • Latest capture rate stands at ~12k/week, measured after vendor quality resolution and onboarding <p>Risks or Challenges:</p> <ul style="list-style-type: none"> • Delays due to image quality, AOC scope reprioritization, and weather <p>Actions to Improve Performance / Get Well Plan:</p> <ul style="list-style-type: none"> • Aerial has onboarded more image capture resources than previous years, leading to ~12k/week capture rate • A total of 50 Qualified Electrical Workers were onboarded, resulting in activity nearly catching up to plan after initial delays • Released scope has a ~10% margin over 163k inspection goal, to help advance towards achieving year-end goal

2021 WMP Activity Narratives

Off-track or other notable activities

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YTD Status	Current Goal	Narrative
	IN-4: Infrared Inspections Inspect 1,000 transmission circuit miles on HFRA circuits	<p>Summary: Malfunctioning Corona camera equipment delayed all IR and Corona inspections. Vendor repair arrived and is in process of fixing camera module. Original in-service date was moved from June 22 to week of July 12.</p> <p>Progress:</p> <ul style="list-style-type: none"> • Program kicked off in April ahead of plan • Resources and inspection plans have been finalized • Initial functionality of all equipment was verified • Camera technical issue was diagnosed and is being returned to service <p>Risks or Challenges:</p> <ul style="list-style-type: none"> • Performing scans with suboptimal temperature or loading conditions may have quality issues • Pushing out this activity for over a month will have schedule and minor cost impacts <p>Actions to Improve Performance / Get Well Plan:</p> <ul style="list-style-type: none"> • Vendor flew from Israel to perform cable swap to fix the underlying issue in late June • Logistics issues caused by rescheduling inspections may potentially warrant contracting this work out in the fall

2021 WMP Activity Narratives

Off-track or other notable activities



YTD Status	Current Goal	Narrative
	<p>IN-8: Inspection and Maintenance Tools</p> <p>Transition Aerial and Transmission Ground inspection processes to a single digital platform with at least 75% of inspectors trained to use the tool by year end 2021. Key AI/ML models leveraged by the Aerial inspection process; Deploy scope mapping tool with GIS visualization to Distribution Planning and Engineering users. Deploy remediation mobile software and iPad devices for transmission and distribution.</p>	<p>Summary: Activity fell behind due to technical challenges that will most likely not be fixed in time, on account of COVID-19 impacts to vendor in India, to deliver the InspectForce application in 2021 for Transmission Ground. Distribution & Transmission Aerial still plans to meet the goal by end of 2021, using alternative solutions.</p> <p>Progress:</p> <ul style="list-style-type: none"> Implemented Version 4.0 for Distribution Ground Inspect Application and Version 2.0 for Aerial Inspect App <p>Risks or Challenges:</p> <ul style="list-style-type: none"> The app is scheduled to be ready by the end of November, but the delay puts pressure on training schedule Resource constraints due to the same senior patrolmen being trained on the system who are also responsible for remediations, PSPS patrols, and system restoration in the event of a wildfire <p>Actions to Improve Performance / Get Well Plan:</p> <ul style="list-style-type: none"> Identified alternative solutions to the technical issues and plan to address in Q3

2021 WMP Activity Narratives

Off-track or other notable activities



YTD Status	Current Goal	Narrative
	<p>SH-6: Circuit Breaker Relay Hardware for Fast Curve</p> <p>Replace/upgrade 60 relay units in HFRA SCE will strive to replace/upgrade 86 relay units in HFRA, subject to resource constraints and other execution Risks</p>	<p>Summary: Activity is 7% behind plan (25 YTD Actual vs 27 Planned). There was slow progress from April through May as an expected result of a relay rack procurement delay due to vendor documentation sign-offs; the issue has been resolved and the vendor has signed the amendment. Normal pace has returned. Resources are in place to return schedule by end of July.</p> <p>Progress:</p> <ul style="list-style-type: none"> • Vendor contract agreement was signed in March • Relay rack materials were ordered and many arrived in June • 9 completions occurred in June, as expected; however, activity is 2 behind plan <p>Risks or Challenges:</p> <ul style="list-style-type: none"> • No risks exist to year-end goal <p>Actions to Improve Performance / Get Well Plan:</p> <ul style="list-style-type: none"> • The vendor contract delay has been resolved and materials are being delivered • Installation plan for July is enough to be ahead of plan by the end of July. Materials are in place.

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	SH-10: Tree Attachment Remediation Remediate 500 tree attachments	<p>Summary: Due to slow ramp up in communities related to obtaining lay-down yards for staging resources and also environmental delays, only 89 tree attachments have been remediated year-to-date, including 0 completions in June, as forecasted last month. Team has released all annual scope (over 800) to region. Expecting completions to be reported in completed work order packages in July.</p> <p>Progress:</p> <ul style="list-style-type: none"> • Have released 870 tree attachments to regions to complete <p>Risks or Challenges:</p> <ul style="list-style-type: none"> • Have faced several environmental delays due to bird nesting, wetlands, etc. • Originally were facing staff resourcing issues in light of national lack of available resources <p>Actions to Improve Performance / Get Well Plan:</p> <ul style="list-style-type: none"> • All scope has been released to region to execute work by year end

2021 WMP Activity Narratives

Off-track or other notable activities



YTD Status	Current Goal	Narrative
Behind Plan, Likely to Meet Year-end Goal	SH-12: Microgrid Assessment Perform internal assessment of vendor bid and location options. If assessment is favorable, SCE will issue engineering, procurement, construction (EPC) contract to a vendor that meets SCE's design requirements.	<p>Summary: External partner committee voted to proceed with project after leadership turnover; however, committee also decided to add additional administrative steps prior to signing a land lease agreement with SCE, leading to more negotiation. Contract negotiation is proceeding.</p> <p>Progress:</p> <ul style="list-style-type: none"> Partner organization and Project team have worked through minor clarifications revealed upon review of contract. Counter-offer by Project team to Partner organization is being reviewed by Partner. <p>Risks or Challenges:</p> <ul style="list-style-type: none"> The milestone is an external dependency which leaves SCE project team with few options to accelerate timeline; although it is highly unlikely this will interfere meeting with the 2021 WMP goal as the Partner has demonstrated commitment to the project. <p>Actions to Improve Performance / Get Well Plan:</p> <ul style="list-style-type: none"> Contract negotiations are actively in progress between Project team and Partner organization.

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YTD Status	Current Goal	Narrative
	SA-1: Weather Stations SCE expects to install 375 weather stations but will attempt to install as many as 475	<p>Summary: Weather station installations fell behind due to supply chain disruptions (i.e., unrest in Myanmar) for the vendor. Plan to review data with vendor in mid-July and discuss next steps. Vendor confirmed a revised delivery schedule in May</p> <p>Progress:</p> <ul style="list-style-type: none"> • 93 weather installations in June, meeting the monthly install target • At the present install rate, this activity will be back on track by the end of July <p>Risks or Challenges:</p> <ul style="list-style-type: none"> • Still verifying the sustainability of the accelerated installation rate <p>Actions to Improve Performance / Get Well Plan:</p> <ul style="list-style-type: none"> • Revised delivery schedule has been confirmed by the vendor • Planned monthly installs were increased from 50 to 93 to get back on track after supply chain disruptions

2021 WMP Activity Narratives

Off-track or other notable activities



YTD Status	Current Goal	Narrative
	<p>SA-4: Fire Spread Modeling</p> <p>Backset risk and consequence for various PSPS events for 2020. Develop a methodology and a strategy to test FireCast/FireSim implementation into PSPS decision making based on backcast information.</p>	<p>Summary: Fire Spread Modeling has fallen behind due to vendor delays on the PSPS analysis. Plan to review data with vendor in mid-July and discuss next steps.</p> <p>Progress:</p> <ul style="list-style-type: none"> Risk Associated with Value Exposure (RAVE) analysis completed in June which will help the understanding of the vulnerability of a given community due to wildfire. Fire Spread Modeling has fallen behind due to vendor delays on the PSPS decision-making analysis. <p>Risks or Challenges:</p> <ul style="list-style-type: none"> Delay could potentially impact ability to build methodology for incorporating Technosylva data into PSPS decision making process. <p>Actions to Improve Performance / Get Well Plan:</p> <ul style="list-style-type: none"> Plan to review data with vendor in mid-July and discuss next steps.

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YTD Status	Current Goal	Narrative
	PSPS-2b: Resiliency Zone Goals for Resilience Zones dependent on community leaders identifying potential customers. Targeting to obtain 5 to 10 Agreements.	<p>Summary: This was a pilot to engage community leaders to recommend customer sites for participation in the Resiliency Zones pilot. This effort started in May 2020 and to date, we have 8 agreements signed (in 2021, 4 customer agreements have been executed). Of these 8 sites, the installation has been completed for 4 sites.</p> <p>Progress:</p> <ul style="list-style-type: none"> • Outreach conducted to 17 potential customer sites over the last 5 months • Suppliers have conducted site visits at two of the four sites with agreements; furthermore, engineering drawings are nearing completion for these sites. <p>Risks or Challenges:</p> <ul style="list-style-type: none"> • This activity depended on community leaders providing resiliency zone sites and customers' willingness to participate in the program. • Some customers had installed their own switching equipment and purchased generators. <p>Actions to Improve Performance / Get Well Plan:</p> <ul style="list-style-type: none"> • Team will continue to pursue community leaders to share potential customer sites

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YTD Status	Current Goal	Narrative
	VM-2 Pole Brushing SCE plans to pole brush between 200,000 and 300,000 Distribution poles	<p>Summary: Pole Brushing has fallen behind due to reallocation of vendors to Area of Concern (AOC) project.</p> <p>Progress:</p> <ul style="list-style-type: none"> ~74,200 poles have been brushed year-to-date (vs. 91,200 expected) <p>Risks or Challenges:</p> <ul style="list-style-type: none"> Team is expected to stay off-track until July due to continued AOC prioritization <p>Actions to Improve Performance / Get Well Plan:</p> <ul style="list-style-type: none"> Return to planned schedule in July will increase productivity and throughput to address May-June deficit Streamlined scheduling of available work by coordinating a circuit-based geographical approach

2021 WMP Activity Narratives

Off-track or other notable activities



YTD Status	Current Goal	Narrative
	<p>VM-6: VM Work Management Tool (Arbora)</p> <p>Continue Work Management Tool (Arbora) agile development and releases in accordance with project plan – complete full rollout of Dead & Dying Tree Removal and Hazard Tree Mitigation, and conduct discovery and design architecture associated with Line Clearing</p>	<p>Summary: VM Work Management Tool has fallen behind due to limitations with using the tool in offline areas. New design architecture will be utilized to remedy the issue but will require at least 4-6 weeks for Proof of Concept (POC) development and testing before pilot can be re-launched.</p> <p>Progress:</p> <ul style="list-style-type: none"> Although the re-launch criteria was met, pilot was not resumed due to product data volume limitations <p>Risks or Challenges:</p> <ul style="list-style-type: none"> Milestone timeline delay is not currently expected to impede WMP goal of full deployment of HTMP/DRI before year end <p>Actions to Improve Performance / Get Well Plan:</p> <ul style="list-style-type: none"> Vendor has provided new design architecture to remedy this issue The re-design will require at least 4-6 weeks of Proof of Concept development and testing before pilot can be re-launched Current re-architecture will reduce work volume constraints Team has collaborated with the other vendor projects to introduce a new "Smart Form" product that will help streamline the user interfaces and improve field performance