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July 31, 2020

**ADVICE 4266-E**  
**(U 338-E)**

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA  
ENERGY DIVISION

**SUBJECT:** Southern California Edison Company's Quarterly Advice Letter Pursuant to Assembly Bill 1054 Regarding the Implementation of Its Approved Wildfire Mitigation Plan and Its Safety Recommendations

Southern California Edison Company (SCE) hereby submits this Tier 1 Advice Letter (AL) detailing the implementation of its approved 2020-2022 Wildfire Mitigation Plan (WMP),<sup>1</sup> recommendations of the most recent safety culture assessment, a statement of the recommendations of its board of directors' safety committee<sup>2</sup> (Committee) meetings that occurred during the second quarter of 2020, and a summary of the implementation of Committee recommendations during the first quarter of 2020.<sup>3</sup>

**PURPOSE**

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

**BACKGROUND**

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

The executive director of the commission 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 tier 1 advice letter on a quarterly basis that details the implementation of both its

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<sup>1</sup> CPUC WMP approval statement available at:  
<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M340/K129/340129782.PDF>

<sup>2</sup> 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."

<sup>3</sup> Advice 4204-E

approved wildfire mitigation plan and recommendations of the most recent safety culture assessment, and a statement of the recommendations of the board of directors safety committee meetings that occurred during the quarter. The advice letter shall also summarize the implementation of the safety committee recommendations from the electrical corporation's previous advice letter filing. If the division has reason to doubt the veracity of the statements contained in the advice letter filing, it shall perform an audit of the issue of concern.

SCE provides the required information as indicated below:

**(1) Implementation of Wildfire Mitigation Plan**

On February 7, 2020, SCE submitted its second comprehensive WMP covering the years 2020 through 2022 and building on its 2019 WMP, including successes and lessons learned. After an extensive review process that included discovery, workshops, and comments, the CPUC approved SCE's 2020-2022 WMP on June 11, 2020.<sup>4</sup>

In 2020, SCE is tracking 69 specific wildfire-related programs and activities included in its 2020-2022 WMP. As in SCE's 2019 WMP, the 2020-2022 plan includes wildfire mitigation activities such as infrastructure hardening, vegetation management, detailed inspections and remediations, and situational awareness. SCE's WMP also emphasizes Public Safety Power Shutoff (PSPS) resilience and community engagement, particularly for under-represented groups and access and functional needs customers. SCE's 2020-2022 plan increases the use of data, advanced risk analytics and innovative technologies to help the company prioritize the activities with the greatest potential to mitigate wildfire risks and improve public safety.

In Attachment A, SCE presents detailed information about the implementation status of meeting WMP 2020 Program Targets for each of these wildfire-related mitigation activities and programs. As referenced in Exhibit A, SCE is currently substantially on track on the majority of 2020 goals listed in its 2020-2022 WMP.

As noted in SCE's previous advice letter,<sup>5</sup> COVID-19-related restrictions are beginning to have an impact on the implementation plans for a few WMP activities. In some instances, SCE has adjusted some of its planned activities to accommodate social distancing restrictions (e.g., community meetings and emergency response training exercises are being held virtually instead of in-person). In one activity, OP-3 (UAS Operations Training), COVID-19 social distancing orders have caused delays due to closure of FAA testing centers and

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<sup>4</sup> CPUC WMP approval statement available at:  
<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M340/K129/340129782.PDF>

<sup>5</sup> Advice 4204-E

a lack of a virtual training alternative. SCE has reported this activity as at risk but is currently exploring the potential for small group classroom and outdoor training options, and continuing to monitor FAA contracted testing centers on plans to reopen.

SCE remains cautiously optimistic that it will be able to meet the year-end program targets and is continuing to monitor and, where possible, accommodate COVID-19-related impacts. SCE will report on WMP COVID-19 impacts in its forthcoming letter to the Wildfire Safety Division (WSD)<sup>6</sup> in August 2020.

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

SCE has not yet undergone a CPUC-led safety culture assessment pursuant to PUC Section 8389(d)(4). Notwithstanding this, 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 via in-person meetings, trainings, corporate messaging and the incorporation of feedback from all levels of the organization. SCE looks forward to working with the CPUC and other interested stakeholders to further review its safety culture and build upon existing efforts to strengthen it.

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

The Committee had three meetings during the second quarter of 2020 (on April 22, June 11, and June 24). During these second quarter meetings, the Committee focused on wildfire and safety issues in the following categories: Wildfire Safety and Employee, Contractor and Public Safety. Each of these areas is separately addressed below.

**Wildfire Safety**

The April 22<sup>nd</sup> meeting discussions centered on PSPS readiness and improvements, ongoing grid hardening, customer care programs, community engagement, and data and business records governance. The PSPS readiness efforts include circuit-level planning that increases utilization of sectionalization tools to limit customer impacts, and improved customer notification tools and processes. Ongoing community and customer engagement were also discussed. The Committee also discussed the use of PSPS as a continuing critical tool to have available for wildfire risk mitigation. Management discussed addressing concerns raised by local jurisdictions to delay or cancel outages during the COVID-19 stay-at-home orders. Management provided an update on the 2020 fire season outlook including the potential COVID-19 impact on firefighting resources across the state.

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<sup>6</sup> See Resolution WSD-004, Ordering Paragraph 7.

The June 11<sup>th</sup> meeting was held at the request of the Committee for review of the annual Safety Certification filing (the “2020 Safety Certification Filing”). Management provided an overview of the 2020 WMP conditional approval, the safety certification process and recently issued recommendations on the 2021 WMP from the Wildfire Safety Advisory Board (WSAB). Management and the Committee discussed the content of the draft resolutions provided to SCE by the Commission’s WSD on the 2020 WMP. Management reported on areas where the WSD draft resolutions require additional work by SCE and the other investor owned utilities (IOUs). Management summarized the process for WMP approval and the 2020 Safety Certification Filing timing. The Committee and management continued the discussion of the utilization of PSPS as a wildfire risk mitigation tool, regulatory and legislative concerns regarding the frequency and customer impacts initially discussed at the April 2020 meeting, and SCE’s efforts to reduce such frequency and impacts. Management and the Committee discussed the CPUC-led safety culture assessments for the other IOUs, the Wildfire Mitigation Capability Maturity Model Scoring (“Maturity Model”), and current practice for other components of the safety certification, including board-level reporting. The Committee and management also discussed WSD’s 10-year WMP planning requirement in the WMP resolution. Management responded to additional questions from the Committee, including regarding statewide wildfire suppression resources, continued SCE work on wildfire mitigation and remote staffing of PSPS operations during COVID-19, and the comments in response to the WSAB’s draft recommendations for the 2021 WMP.

At the June 24<sup>th</sup> meeting, management provided an update on the outlook for an active fire season and updates on PSPS readiness and operational enhancements, including improved modeling, tools and processes such as remote operations and expected implementation of switching playbooks to reduce the number of impacted circuits and customers. Management reported on progress on WMP activities and progress toward the 2020 WMP targets. Management also reported on asset data validation within high fire risk areas. Management responded to questions from the Committee including resource deployment based on risk prioritization, the overall critical business records effort, and the engagement of SCE’s internal Audit Services Division to review asset data in high fire risk areas.

### **Employee/Contractor/Public Safety**

The Committee concentrated on worker and contractor safety at its second quarter meetings, discussing safety culture surveys, Days Away, Restrictions and Transfers injuries (“DART”) rates and contractor safety incidents.

At the April 22<sup>nd</sup> meeting, management provided an overview of recent contractor safety incidents, including a fatality and additional serious injuries, and the possible connection to COVID-19-related distractions or stress. Management also provided an overview of the contractor safety oversight program, including independent third-party review of serious injury incidents. The Committee and

management discussed the areas of focus for increased contractor oversight, including third-party independent assessments, corrective action plans for contractors based on performance and the various control stages with progressive actions that may be taken from restricting bidding on new work to contract termination. The Committee and management discussed implementation of mitigations based on prior audit findings and the ongoing review of opportunities for continuous improvement. Management provided an update on safety culture and discussed utilizing elements of the safety culture to further evaluate DART rates and safety performance at both high- and low-performing locations.

At the June 24<sup>th</sup> meeting, management reported on SCE's safety performance including the serious injuries and fatalities and DART rates. Management summarized additional safety programs, including the risk-informed safety program to identify and engineer risk-mitigation strategies for the greatest serious injury and fatalities exposures, and the site-specific safety action plans to reduce DART rates. Management responded to questions from the Committee, including regarding safety observations, effectiveness of cause evaluations, managing stress and distractions due to COVID-19-related impacts and field leader engagement on the safety action plans.

## **Committee Recommendations/Management Responses and Schedule**

### ***First Quarter 2020 Recommendations/Responses***

The Committee recommended in the February 26<sup>th</sup> meeting that management provide additional information on the DART reduction efforts at a future meeting. In response to this recommendation, management provided presentations on the DART reduction efforts at the April 22<sup>nd</sup> and June 24<sup>th</sup> meeting as discussed above.

### ***Second Quarter 2020 Recommendations/Responses***

The Committee made the following recommendations and requests during its second quarter meetings:

1. The Committee asked management to follow up with a deep dive on the Safety Culture Assessment survey results of the seven groups/locations targeted for further work on reducing DARTs; specifically looking at areas of opportunity for this specific target group, and include similar analysis of where safety performance is high.
2. The Committee recommended that the discussion with management regarding effective oversight of contractor safety performance should be ongoing
3. The Committee recommended that management provide information at a future meeting or in written materials regarding the safety culture assessment report issued to Pacific Gas & Electric ("PG&E") by NorthStar.
4. The Committee recommended that management provide additional information at a future meeting regarding the Maturity Model scoring by

the WSD, provide SCE's response and plans for the categories where SCE was scored "0" and an update regarding efforts to eliminate scoring below expectation.

5. The Committee recommended management provide updates throughout the development of the 10-year plans for wildfire mitigation.

In response to the Committee's recommendations, management provided the following responses at the June 24<sup>th</sup> meeting:

1. Management provided a detailed plan on location-specific DART safety action plans.
2. Management provided a summary of the NorthStar Report regarding PG&E's safety culture assessment.
3. Management provided a summary of SCE's scoring on the Maturity Model and responded to questions from the Committee and agreed to continue its engagement with the WSD and to provide further update at a future meeting regarding efforts to eliminate scoring below expectation.

The Committee has a third quarter meeting currently scheduled on August 26, 2020 and additional meetings will be scheduled as appropriate.

No cost information is required for this AL.

This AL will not increase any rate or charge, cause the withdrawal of service, or conflict with any other schedule or rule.

### **TIER DESIGNATION**

Pursuant to General Order (GO) 96-B, Energy Industry Rule 5.1, this AL is submitted with a Tier 1 designation.

### **EFFECTIVE DATE**

SCE respectfully requests that this AL become effective July 31, 2020, which is the same date as submitted.

### **NOTICE**

Anyone wishing to protest this AL may do so by letter via U.S. Mail, facsimile, or electronically, any of which must be received no later than 20 days after the date of this advice letter. Protests should be submitted to:

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, California 94102  
E-mail: [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Copies should also be mailed to the attention of the Director, Energy Division, Room 4004 (same address above).

In addition, protests and all other correspondence regarding this AL should also be sent by letter and transmitted via facsimile or electronically to the attention of:

Gary A. Stern, Ph.D.  
Managing Director, State Regulatory Operations  
Southern California Edison Company  
8631 Rush Street  
Rosemead, California 91770  
Telephone (626) 302-9645  
Facsimile: (626) 302-6396  
E-mail: [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com)

Laura Genao  
Managing Director, State Regulatory Affairs  
c/o Karyn Gansecki  
Southern California Edison Company  
601 Van Ness Avenue, Suite 2030  
San Francisco, California 94102  
Facsimile: (415) 929-5544  
E-mail: [Karyn.Gansecki@sce.com](mailto:Karyn.Gansecki@sce.com)

There are no restrictions on who may submit a protest, but the protest shall set forth specifically the grounds upon which it is based and must be received by the deadline shown above.

In accordance with General Rule 4 of GO 96-B, SCE is serving copies of this AL to the interested parties shown on the attached GO 96-B, R.18-10-007, R.18-12-005, and A.18-09-002 service lists. Address change requests to the GO 96-B service list should be directed by electronic mail to [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com) or at (626) 302-4039. For changes to all other service lists, please contact the Commission's Process Office at (415) 703-2021 or by electronic mail at [Process\\_Office@cpuc.ca.gov](mailto:Process_Office@cpuc.ca.gov).

Further, in accordance with PUC Section 491, notice to the public is hereby given by submitting and keeping this AL at SCE's corporate headquarters. To view other SCE advice letters submitted with the Commission, log on to SCE's web site at <https://www.sce.com/wps/portal/home/regulatory/advice-letters>.

For questions, please contact Kavita Srinivasan at (626) 302-3709 or by electronic mail at [kavita.srinivasan@sce.com](mailto:kavita.srinivasan@sce.com).

**Southern California Edison Company**

/s/ Gary A. Stern, Ph.D.  
Gary A. Stern, Ph.D.

GAS:ks:jm  
Enclosures





# ADVICE LETTER SUMMARY

## ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.:

Utility type:

ELC       GAS       WATER  
 PLC       HEAT

Contact Person:

Phone #:  
E-mail:  
E-mail Disposition Notice to:

EXPLANATION OF UTILITY TYPE

ELC = Electric      GAS = Gas      WATER = Water  
PLC = Pipeline      HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #:

Tier Designation:

Subject of AL:

Keywords (choose from CPUC listing):

AL Type:  Monthly     Quarterly     Annual     One-Time     Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL:

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested?  Yes     No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required?  Yes     No

Requested effective date:

No. of tariff sheets:

Estimated system annual revenue effect (%):

Estimated system average rate effect (%):

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected:

Service affected and changes proposed<sup>1</sup>:

Pending advice letters that revise the same tariff sheets:

<sup>1</sup>Discuss in AL if more space is needed.

**Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:**

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, CA 94102  
Email: [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Name:  
Title:  
Utility Name:  
Address:  
City:  
State: Zip:  
Telephone (xxx) xxx-xxxx:  
Facsimile (xxx) xxx-xxxx:  
Email:

Name:  
Title:  
Utility Name:  
Address:  
City:  
State: Zip:  
Telephone (xxx) xxx-xxxx:  
Facsimile (xxx) xxx-xxxx:  
Email:

## ENERGY Advice Letter Keywords

Affiliate	Direct Access	Preliminary Statement
Agreements	Disconnect Service	Procurement
Agriculture	ECAC / Energy Cost Adjustment	Qualifying Facility
Avoided Cost	EOR / Enhanced Oil Recovery	Rebates
Balancing Account	Energy Charge	Refunds
Baseline	Energy Efficiency	Reliability
Bilingual	Establish Service	Re-MAT/Bio-MAT
Billings	Expand Service Area	Revenue Allocation
Bioenergy	Forms	Rule 21
Brokerage Fees	Franchise Fee / User Tax	Rules
CARE	G.O. 131-D	Section 851
CPUC Reimbursement Fee	GRC / General Rate Case	Self Generation
Capacity	Hazardous Waste	Service Area Map
Cogeneration	Increase Rates	Service Outage
Compliance	Interruptible Service	Solar
Conditions of Service	Interutility Transportation	Standby Service
Connection	LIEE / Low-Income Energy Efficiency	Storage
Conservation	LIRA / Low-Income Ratepayer Assistance	Street Lights
Consolidate Tariffs	Late Payment Charge	Surcharges
Contracts	Line Extensions	Tariffs
Core	Memorandum Account	Taxes
Credit	Metered Energy Efficiency	Text Changes
Curtable Service	Metering	Transformer
Customer Charge	Mobile Home Parks	Transition Cost
Customer Owned Generation	Name Change	Transmission Lines
Decrease Rates	Non-Core	Transportation Electrification
Demand Charge	Non-firm Service Contracts	Transportation Rates
Demand Side Fund	Nuclear	Undergrounding
Demand Side Management	Oil Pipelines	Voltage Discount
Demand Side Response	PBR / Performance Based Ratemaking	Wind Power
Deposits	Portfolio	Withdrawal of Service
Depreciation	Power Lines	







**Attachment A**  
**SCE's 2020 Wildfire Mitigation Plan**  
**(WMP) Progress Update – June 30, 2020**

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

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(All data is as of June 30, 2020 or later)

# WMP Activities Summary

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

## PSPS Activities

### Public Safety Agencies and Local Govt

#### **De-Energization Notifications (PSPS-1.1)**

**Program Target:** Notify applicable public safety agencies and local governments of possible de-energization

**Status Update:** PSPS Incident Management Team (IMT) was remotely activated for two events in Q2. Notifications were sent out to appropriate stakeholders, but no circuits were ultimately de-energized during the events.

### Enhance EONS

#### **Enhance Emergency Outage Notification System (PSPS-1.4)**

**Program Target:** Enhance Emergency Outage Notification System (EONS) to include Zip Code level alerting to include in-language notifications to align with its existing notification abilities for SCE customers

**Status Update:** Zip code level and in-language notification enhancements (in Spanish, Mandarin, Cantonese, Vietnamese, Korean, Tagalog) have been implemented and are ready for PSPS events.

### Cal OES

#### **De-Energization Notifications (PSPS-1.2)**

**Program Target:** Notify Cal OES through the State Warning Center of possible de-energization

**Status Update:** PSPS IMT was remotely activated for two events in Q2. Notifications were sent out to CalOES, but no circuits were ultimately de-energized during the events.

### Community Resource Centers

161% confirmed

#### **Community Resource Centers (PSPS-2)**

**Program Target:** Have 23 sites available across SCE service territory for customers impacted by a PSPS

**Status Update:** 37 CRCs have been contracted to date and are ready for activation according to original February requirements. SCE currently has 19 CRCs in compliance with new extended hours requirements per PSPS Phase 2 D.20-05-051 and is working to increase this number. SCE is prepared to activate CRCs during COVID-19 both virtually and in-person. Virtual activation will involve a digital platform to help customers be prepared and informed without leaving their home. In-person CRCs will take the form of walk-ups or drive-thrus and will include social distancing practices.

### CPUC

#### **De-Energization Notifications (PSPS-1.3)**

**Program Target:** Notify the CPUC of possible de-energization

**Status Update:** PSPS IMT was remotely activated for two events in Q2. Notifications were sent out to the CPUC but no circuits were ultimately de-energized during the events.

### Customer Resiliency Equipment

#### **Customer Resiliency Equipment Incentives (PSPS-3)**

**Program Target:** Develop a customer resiliency equipment incentive pilot program that provides financial support to customers willing to increase resiliency within its HFRA. One customer will be implemented for this pilot in 2020.

**Status Update:** The pilot program will enable a local high school, with solar and storage, the ability to island itself during a power outage. Equipment installation was slightly delayed but completed in Q2. System testing is expected to be completed in Q3.

# WMP Activities Summary

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

## PSPS Activities

### IQCC Customer Battery Backup

#### **Critical Care Battery Backup Program (CCBB)\* (PSPS-4)**

**Program Target:** Outreach to eligible customers (low income, critical care, Tier 2/3) to provide portable battery back-up solution. SCE has identified approximately 2,500 customers that it will target for the program in 2020, with efforts to begin in the second quarter.

**Status Update:** COVID-19 contributed to battery inventory shortages, which delayed program launch to July 7<sup>th</sup>. All eligible customers received letters describing the program and a prioritized group of customers who were impacted by a PSPS in 2019 have been identified for individual outreach in mid-July.

### MICOP Partnership

#### **MICOP Partnership (PSPS-5)**

**Program Target:** Enable communications with indigenous populations and measure the number of customers contacted

**Status Update:** The Mixteco/Indigena Community Organization Project (MICOP) has conducted outreach to over 1,400 people year to date and expects to start follow-up outreach in Q3.

### Independent Living Center Partnerships

#### **Independent Living Centers Partnership (PSPS-6)**

**Program Target:** Conduct outreach activities and workshops/trainings to provide preparedness education and assistance in applying for the Medical Baseline Program and measure the number of customers contacted

**Status Update:** 14 workshops have been held YTD, exceeding the target of 10. Total outreach has been conducted to ~7,500 customers.

### Community Outreach

#### **Community Outreach (PSPS-7)**

**Program Target:** Minimum of five Community Crew Vehicles (CCVs) ready to be deployed during times when weather and fuel conditions are at critical levels. Communicate with customers in a local targeted way using a variety of channels to ensure timely delivery of notifications

**Status Update:** Eight CCVs are ready for deployment, exceeding the goal of five. The CCV locator tool will be featured on sce.com and promoted during PSPS events. SCE is prepared to activate CCVs during COVID-19 both virtually and in-person. Virtual activation will involve a digital platform to help customers be prepared and informed without leaving their home. In-person CCVs will adhere to social distancing practices.

### Microgrid Assessment

#### **Microgrid Assessment (PSPS-8)**

**Program Target:** 1) Execute requests for proposals (RFP) for six resiliency microgrid projects  
2) Depending on RFP results, implementation of up to 6 resiliency microgrid projects shown to be technically feasible and cost-effective

**Status Update:** 2020 program target of issuing RFP for six potential 2020 microgrid projects was completed. However, this did not produce any cost-effective results so, although complete, SCE is still exploring additional locations that could be safely islanded. A review of potential, future microgrid sites followed by a go/no-go decision to issue an RFP is expected in Q3. Depending on the outcome of the go/no-go decision a second RFP would potentially be issued in Q4.

\*Formerly called the Income Qualified Critical Care (IQCC) Customer Battery Backup Incentive

# WMP Activities Summary

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

## Operational Practices and Risk Analysis Activities

### OP: Operational Practices

#### Annual SOB 322 Review

#### Annual SOB 322 Review (OP-1)

**Program Target:** Review and update SOB 322 to reflect lessons learned from past elevated fire weather threats/PSPS events and integrate, where applicable, new and improved situational awareness data, improved threat indicators, and applicable regulatory requirements in an effort to reduce wildfire risk and the impact of outages on customers.

**Status Update:** Updated and published Annual SOB 322 with lessons learned from 2019 PSPS Events.

#### Wildfire Infrastructure Protection Staffing

#### Wildfire Infrastructure Protection Team Additional Staffing (OP-2)

**Program Target:** Hire additional resources including: a senior compliance manager, two compliance advisors, a project/program advisor, a data specialist and a fire-weather meteorologist. PSPS Operations will also be staffed to provide dedicated operational, project management, and compliance capabilities.

**Status Update:** Completed hiring of a senior compliance manager, a project/program advisor, a data specialist and a fire-weather meteorologist. Pending hiring of two compliance advisors. PSPS Operations has started the hiring of permanent team members.

#### UAS Operations Training

#### Unmanned Aerial (UAS) Operations Training (OP-3)

**Program Target:** Increase the number of UAS operators by an additional 50 crews

**Status Update:** COVID-19 social distancing orders have caused delays due to closure of FAA testing centers and there is no virtual training alternative for the FAA Part 107 Knowledge Test.

### RA: Risk Analysis

#### Expansion of Risk Analysis







#### Expansion of Risk Analysis (RA-1)

**Program Target:** Implement Wildfire Risk Reduction Model (WRRM) module of Technosylva (software platform)

**Status Update:** Historical weather data, a required input for WRRM module development, was received mid-June (behind schedule). This has shifted out interim milestones, however, activity is still on track to complete by year end.



# WMP Activities Summary

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

## Vegetation Management Activities

### HTMP

**73%**  
trees assessed

#### **Hazard Tree Management Program (VM-1)**

**Program Target:** Assess 75,000 trees for hazardous conditions and perform prescribed mitigations in accordance with program guidelines and schedules

**Status Update:** Assessed ~54,000 of 75,000 trees and performed prescribed mitigations in accordance with program guideline and schedule through Q2.

### DRI Inspections & Mitigations

#### **Drought Relief Initiative (DRI) Inspections and Mitigations (VM-4)**

**Program Target:** Perform DRI annual inspection scope and complete prescribed mitigations in accordance with internal DRI program guidelines

**Status Update:** DRI inspections are underway. DRI removals are currently off track, due to weather and contractor onboarding delays. Currently, ~75% of active inventory has been removed prior to 180 days. SCE's program requirements state 94% of active inventory should be removed within 180 days.

### Expanded Pole Brushing

**49%**  
poles cleared

#### **Expanded Pole Brushing (VM-2)**

**Program Target:** Perform brush clearance of 200,000 poles. SCE will strive to perform brush clearance for 300,000 poles subject to resource constraints and other execution risks

**Status Update:** Cleared ~98,500 of 200,000 poles. SCE has continued to ramp up contractors throughout Q2 and expects increased production in Q3 and Q4.

### Vegetation Management Quality Control

#### **Vegetation Management Quality Control (VM-5)**

**Program Target:** Perform 3,000 risk-based HFRA circuit mile vegetation management Quality Control inspections

**Status Update:** Performed ~2,500 of 3,000 of risk-based HFRA circuit mile quality control inspections.

### Expanded Clearances for Legacy Facilities

#### **Expanded Clearances for Legacy Facilities (VM-3)**

**Program Target:** Perform assessments of all identified facilities in HFRA. Establish enhanced buffers at 30% of identified facilities

**Status Update:** Expanded clearance work has been completed at ~20% of identified facilities. SCE is continuing to conduct field visits at other identified facilities.

# WMP Activities Summary

□ Inactive    □ Complete    □ Ahead of Plan    □ 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

104%  
installed

#### **Weather Stations (SA-1)**

**Program Target:** Install 375 Weather Stations. SCE will strive for installation of 475 Weather Stations subject to resource constraints and other execution risks

**Status Update:** ~390 of 375 weather stations installed. Exceeded WMP Program target and will continue installations striving for 475 installations.

### Fire Potential Index Phase II

#### **Fire Potential Index (FPI) Phase II (SA-2)**

**Program Target:** Refine the current FPI by integrating historical weather and vegetation data into the index

**Status Update:** Completed development of fuel type map and acquired historical weather data. Testing the new FPI in Q3.

### HPCC Weather Modeling System

#### **High-Performing Computer Cluster (HPCC) Weather Modeling System (SA-3)**

**Program Target:** Complete installation of second HPCC

**Status Update:** Completed the installation of second HPCC weather modeling system and it is in operational use.

### Asset Reliability & Risk Analysis

#### **Asset Reliability & Risk Analytics Capability (SA-4)**

**Program Target:** Implement FireCast and FireSim modules of Technosylva

**Status Update:** Completed the installation of FireCast and FireSim applications and fire scientist training. Full implementation of the programs are planned in Q3.

### Fuel Sampling Program

#### **Fuel Sampling Program (SA-5)**

**Program Target:** Perform updated fuel sampling in HFRA in areas deemed appropriate once every two weeks (weather permitting)

**Status Update:** Collecting fuel data bi-weekly across three regions. Fuel sampling in the Western Sierras has been impacted by COVID-19 travel restrictions. Currently scoping alternative locations.

### Surface and Canopy Fuels Mapping

#### **Surface and Canopy Fuels Mapping (SA-6)**

**Program Target:** Initiate surface and canopy fuels mapping across HFRA

**Status Update:** Continuing to work with Technosylva to map surface and canopy fuels, allowing fire spread modeling to be more accurate.

### Remote Sensing / Satellite Fuel Moisture

#### **Remote Sensing / Satellite Fuel Moisture (SA-7)**

**Program Target:** Initiate procurement process for remote sensing technology for future implementation

**Status Update:** Continuing to explore potential vegetation management use cases before initiating procurement process.

### Fire Science Enhancements

#### **Fire Science Enhancements (SA-8)**

**Program Target:** Implement enhanced forecasting capability and improved fuel modeling

**Status Update:** Program is working on multiple updates to forecasting capabilities. Contract delays with vendors led to a later than planned program start.

# WMP Activities Summary

□ Inactive    ■ Complete    ■ Ahead of Plan    ■ On Track    ■ Behind Plan, Likely to Meet Year-end Goal    ■ Behind Plan, At-Risk of Not Meeting Year-end Goal

## Emergency Preparedness Activities

### Dear Neighbor Letter

#### **Customer Education and Engagement – Dear Neighbor Letter (DEP-1.1)**

**Program Target:** Send ~915,000 letters with information about PSPS, emergency preparedness, and SCE's wildfire mitigation plan to customer accounts in HFRA and ~3,200,000 letters to customer accounts in non-HFRA

**Status Update:** Mailings have been completed to all customers (both HFRA and non-HFRA). COVID-19 messaging was included in the newsletter along with contact information in 15 languages.

### Community Meetings

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

**Program Target:** Host 8-12 community meetings in areas impacted by 2019 PSPS plus other meetings including online as determined to share information about PSPS, emergency preparedness, and SCE's wildfire mitigation plan

**Status Update:** Nine virtual Community Meetings were held by the end of June.

### Marketing Campaign

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

**Program Target:** Marketing campaign to reach 5,000,000 Customer Accounts (goal of 40% awareness about the purpose of PSPS, emergency preparedness, and SCE's wildfire mitigation plan)

**Status Update:** The marketing campaign was launched in May and SCE will continue to track PSPS and emergency awareness throughout year-end.

### SCE Emergency Response Training

#### **SCE Emergency Response Training (DEP-2)**

**Program Target:** Hold SCE IMT member training on de-energization protocols, determine additional staffing needs and train, exercise and qualify new staff

**Status Update:** Annual trainings have been completed and drills/exercises are planned to be completed in July. Trainings and drills/exercises were completed virtually as a result of COVID-19. Additional staffing needs are being evaluated on an on-going basis.

### IOU Customer Engagement

#### **IOU Customer Engagement (DEP-3)**

**Program Target:** Participate in statewide multichannel and multi-lingual campaign using digital ads, social media ads, and radio ads to provide customers with important and consistent messaging about wildfire mitigation activities happening across the state

**Status Update:** SCE has determined there is no need for a separate statewide customer engagement campaign in addition to SCE's local market campaign and informed CalOES of this change in direction. SCE further described this change in its June 1, 2020 Off-Ramp report. SCE's local PSPS education campaign launched in May 2020 across digital channels and will continue throughout wildfire season.

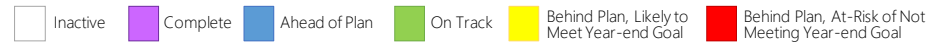
### Customer Research and Education

#### **Customer Research and Education (DEP-4)**

**Program Target:** Develop/implement various research activities that gauge customer awareness, preparedness for, and satisfaction with outage experiences; to include but not be limited to: town hall meetings, online & telephone surveys, focus groups, and assessments of programs & services to prepare customers before and after PSPS outages

**Status Update:** Research plan has been finalized and surveys on completed Community Meetings have begun. Research activities that were originally scheduled to be in-person will now be conducted virtually due to COVID-19.

# WMP Activities Summary



## System Hardening Activities

### Covered Conductor

47%

Circuit Miles Installed

#### **Covered Conductor (SH-1)**

**Program Target:** Install 700 circuit miles of covered conductor in HFRA. While 700 circuit miles is SCE's program target, SCE will strive to complete 1,000 circuit miles subject to resource constraints and other execution risks

**Status Update:** ~330 of 700 circuit miles installed.

### Install RAR/RCS

64%

RARs/RCSs Installed

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

**Program Target:** Install 45 RARs/RCSs

**Status Update:** 29 of 45 RARs/RCSs installed and operationalized.

### Undergrounding Overhead Conductor

#### **Undergrounding Overhead Conductor (SH-2)**

**Program Target:** Refine evaluation methodology for targeted undergrounding as a wildfire mitigation activity

**Status Update:** Review of existing methodology began in March and was completed in early Q2. Team is in the process of developing the 2022 undergrounding scope. Revised criteria and methodology for undergrounding that will influence the 2023 scope is planned to be completed in Q4.

### Circuit Breaker Relay Hardware for Fast Curve

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

**Program Target:** Replace/upgrade 55 relay units in HFRA. SCE will strive to replace up to 110 relay units in HFRA. These targets are subject to resource constraints and other execution risks.

**Status Update:** Installations are planned to begin in August. No known delays in material supply, construction dates have been set and engineering has started.

### Fire Resistant Poles

36%

Poles Installed

#### **Fire Resistant Poles (SH-3)**

**Program Target:** Replace 5,200 poles with fire resistant poles in HFRA. SCE will strive to replace 11,700 poles with fire resistant poles in HFRA subject to pole loading assessment results, resource constraints and other execution risks

**Status Update:** ~1,870 of 5,200 poles installed.

### PSPS-Driven Grid Hardening Work

#### **PSPS-Driven Grid Hardening Work (SH-7)**

**Program Target:** Review 50% of all distribution circuits within HFRA to determine if modifications may improve sectionalizing capability within HFRA

**Status Update:** All circuits have been identified by looking at the level of PSPS impact they experienced in 2019. Review of 140 of the 550 circuits (25%) is complete. Reviews of the remaining 410 circuits will continue through Q4.

### Branch Line Protection Strategy

47%

Locations

#### **Branch Line Protection Strategy (SH-4)**

**Program Target:** Install/replace fuses at 3,025 locations

**Status Update:** ~1,440 of 3,025 locations installed/replaced fuses.

### Transmission Open Phase Detection

#### **Transmission Open Phase Detection (SH-8)**

**Program Target:** Continue deployment of transmission open phase detection on six additional transmission/subtransmission circuits

**Status Update:** Four of the six circuits have been completed and the remaining two are targeted for completion in Q3.

# WMP Activities Summary

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

## System Hardening Activities

### Transmission Overhead Standards

#### **Transmission Overhead Standards (TOH) Review (SH-9)**

**Program Target:** Review transmission standards to determine if there are any changes that can be made to help reduce wildfire threats, especially during extreme wind events

**Status Update:** Started review of historical transmission faults/ignitions and have identified preliminary areas for TOH standards updates. Documentation and internal socialization of findings will continue through the end of the year.

### Tree Attachment Remediation

12%

Remediated

#### **Tree Attachment Remediation (SH-10)**

**Program Target:** Remediate 325 tree attachments. SCE will strive to complete 481 tree attachment remediations subject to resource constraints and other execution risks

**Status Update:** Program initiated in June. ~40 of 325 remediations completed.

### Legacy Facilities

#### **Legacy Facilities (SH-11)**

**Program Target:** Evaluate risk, scope, and alternatives for identified circuits; evaluation of additional system hardening mitigation for wildlife fault protection and grounding/lightning arresters

**Status Update:** Risk assessments have begun for hydro control circuits, low voltage sites, wildlife protection, and grounding/lighting arresters.

### Remediations - Distribution

#### **Remediations - Distribution (SH-12.1)**

**Program Target:** Remediate 100% of notifications with ignition risk in accordance with CPUC requirements, non-inclusive of notifications which meet the criteria of a valid exception

**Status Update:** Based on current production rate SCE is on target to meet year-end goal.

### Remediations - Transmission

#### **Remediations - Transmission (SH-12.2)**

**Program Target:** Remediate 100% of notifications with ignition risk in accordance with CPUC requirements, non-inclusive of notifications which meet the criteria of a valid exception

**Status Update:** SCE is behind the year-to-date plan due to initial focus on closing out 2019 notifications and a large volume of right of way work. Based on current production rate, SCE plans to meet year-end goal.

### Remediations - Generation

#### **Remediations - Generation (SH-12.3)**

**Program Target:** Remediate 100% of notifications with ignition risk in accordance with CPUC requirements, non-inclusive of notifications which meet the criteria of a valid exception

**Status Update:** Based on current production rate SCE is on target to meet year-end goal.

# WMP Activities Summary

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

## Alternative Technologies Activities

### MADEC

#### **Alternative Technology Pilots - Meter Alarming for Downed Energized Conductor (MADEC) (AT-1)**

**Program Target:** Evaluating algorithm improvements specific to the detection of downed energized covered conductor, which may behave differently than bare conductor

**Status Update:** SCE is collecting and analyzing field data to build an event database to update the MADEC algorithm effectively. To date, too few datapoints to enhance algorithm for covered conductor.

### Ground Fault Neutralizer

#### **Alternative Technology Evaluations: Rapid Earth Fault Current Limiter – Ground Fault Neutralizer (GFN) (AT-3.1)**

**Program Target:** Initiate engineering design and order equipment for a GFN field installation

**Status Update:** Real Time Digital Simulation (RTDS) testing, phase data gathering, and factory acceptance testing completed. Substation engineering and design have started. GFN material receipt expected Q4.

### Distribution Fault Anticipation

#### **Distribution Fault Anticipation (DFA) (AT-2.1)**

**Program Target:** Evaluate technology performance on fault anticipation technology and future deployment

**Status Update:** To date, SCE's 60 field-installed units have identified two events where proactive remediations were executed for the system to prevent future faults and possible ignition occurrences. Both situations involved fault events that likely would not have been identified without the DFA. Team is in the process of developing 2021 deployment plan recommendations and will continue to monitor the performance of its DFA units through the end of 2020.

### Resonant Grounding

#### **Alternative Technology Evaluations: Rapid Earth Fault Current Limiter – Resonant Grounding with Arc Suppression Coil (AT-3.2)**

**Program Target:** Initiate engineering design to convert a typical substation to resonant grounding

**Status Update:** Pilot locations were finalized, equipment specifications were completed, and design contracts were issued. Testing and protection requirements were also completed in Q2. Substation engineering and design is already in progress and on track to complete in Q4.

### Advanced UAS Study

#### **Advanced Unmanned Aerial Systems Study (AT-2.2)**

**Program Target:** Conduct additional Extended Visual Line of Sight (EVLOS) demonstration UAS flights using lessons learned from 2019 study and validate aerial patrol findings via truck, foot, or helicopter

**Status Update:** SCE short-listed new vendors with more advanced Beyond Visual Line of Sight (BVLOS) capabilities and is evaluating their proposals. COVID-19 delayed the Technical and Safety Qualification due to distancing restrictions but team has safety protocols and a location selected to proceed and stay on track

### Isolation Transformer

#### **Alternative Technology Evaluations: Rapid Earth Fault Current Limiter – Isolation Transformer (AT-3.3)**

**Program Target:** Install one Rapid Earth Fault Current Limiter - Isolation Transformer

**Status Update:** Design approval and construction pre-requisites were completed in May. Hardware field installation was completed toward the end of Q2. Ground grid construction and the development of commissioning criteria are in progress. COVID-19 did not impact this activity as originally anticipated.

# WMP Activities Summary

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

## Alternative Technologies Activities

### Distribution Open Phase Detection

#### **Alternative Technology Evaluations – Distribution Open Phase Detection (AT-3.4)**

**Program Target:** Complete pilot installation for five circuit locations

**Status Update:** Materials ordered, pilot locations finalized, and cybersecurity evaluation and pilot standards completed. Field installations are planned for the end of Q3 pending vendor site visit which is going through COVID-19 travel approval.

### Partial Discharge Assessment

#### **Assessment of Partial Discharge for Transmission Facilities (AT-6)**

**Program Target:** Evaluate use of a Partial Discharge assessment technology to assess the health of in-service transmission assets

**Status Update:** SCE finished identifying a vendor and evaluating current partial discharge assessment technology. In the process of determining pilot feasibility.

### Vibration Dampers

#### **Alternative Technology Implementation – Vibration Dampers (AT-4)**

**Program Target:** Evaluate damper technologies for both small and large diameter covered conductor applications and develop standards for small and large diameter covered conductors

**Status Update:** Vendor completed lab testing for large diameter covered conductor prototype design. In-field testing for the large conductor vibration dampers is still on hold due to COVID-19-related travel restrictions but SCE is working on the possibility for remote testing. In the meantime, SCE is moving forward with vibration damper design.

### Early Fault Detection Evaluation

#### **Early Fault Detection (EFD) Evaluation (AT-7)**

**Program Target:** Develop installation standards, install, and commission at least 10 EFD sensors. Gather data to determine requirements to support the potential for larger system deployments. SCE will strive to complete an additional 90 sensors for evaluation subject to resource constraints and other execution risks

**Status Update:** Team developed installation standards and completed field installation of all 10 early fault detection (EFD) units, effectively completing their WMP goal. As of the end of June, 11 EFDs had been field installed. Locations have been identified for all remaining 2020 installations.

### Asset Defect Detection Using

#### **Asset Defect Detection Using Machine Learning Object Detection (AT-5)**

**Program Target:** Begin standardization of data collection for Machine Learning (ML) by cataloging and tagging inspection imagery metadata for ML. Investigate SCE use cases and evaluate feasibility of ML to support objective evaluation of assets

**Status Update:** A data repository for Aerial and Ground inspection imagery was developed and will serve as a central index to standardize data collection for future ML development. Data labeling effort for ML models is ongoing. First iteration of ML model is available and team is determining best way to integrate its capabilities into the current inspection / remediation processes.

### High Impedance Relay Evaluations

#### **High Impedance Relay Evaluations (AT-8)**

**Program Target:** Investigate and deploy two controllers/relays with a High Impedance (Hi-Z) element in HFRA

**Status Update:** SCE completed development and review of the relay settings. Pilot locations were identified and approved. Testing and validation of settings is in progress.

# WMP Activities Summary

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

## Inspections Activities

### Distribution HFRII in HFRA

102%  
structures  
inspected

#### **Distribution High Fire Risk Informed Inspections (HFRII) in HFRA (IN-1.1)**

**Program Target:** Inspect 105,000 structures in HFRA

**Status Update:** ~107,000 of 105,000 structures inspected in HFRA.

Distribution  
Infrared  
Inspections

#### **Infrared Inspection of Energized Overhead Distribution Facilities and Equipment (IN-3)**

**Program Target:** Inspect 50% of distribution circuits in HFRA

**Status Update:** ~3,740 circuits miles inspected in HFRA.

### Transmission HFRII in HFRA

129%  
structures  
inspected

#### **Transmission High Fire Risk Informed Inspections (HFRII) in HFRA (IN-1.2)**

**Program Target:** Inspect 22,500 structures in HFRA

**Status Update:** ~29,000 of 22,500 structures inspected in HFRA.

Transmission  
Infrared  
Inspections

#### **Infrared Inspection, Corona Scanning, and High Definition Imagery of Energized Overhead Transmission facilities and Equipment (IN-4)**

**Program Target:** Inspect 1,000 transmission circuit miles in HFRA

**Status Update:** Began test flights in June and currently developing flight plans for Q3 and Q4.

### Quality Oversight / Quality Control

65%  
structures  
inspected

#### **Quality Oversight / Quality Control (IN-2)**

**Program Target:** Perform quality control and oversight of inspections of 15,000 transmission, distribution, and generation structures in HFRA

**Status Update:** Performed quality control on ~9,800 of 15,000 structures in HFRA.

Generation  
HFRII in  
HFRA

#### **Generation High Fire Risk Informed Inspections in HFRA (IN-5)**

**Program Target:** Perform inspection of 200 generation-related assets

**Status Update:** ~170 of 200 structures inspected in HFRA.



# WMP Activities Summary

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

## Inspections Activities

### Aerial Inspections – Distribution

#### **Aerial Inspections - Distribution (IN-6.1)**

**Program Target:** Inspect 165,000 structures in HFRA

**Status Update:** ~55,000 of 165,000 structures inspected in HFRA.

2020 aerial inspections were delayed in March due to COVID-19 restrictions preventing aerial inspectors from accessing the on-site inspection room. COVID-19 safety concerns have been mitigated through use of remote image inspectors and increased number of image capture crews from local vendors to minimize out-of-state travel. Aerial inspections began in Q2.

### Aerial Inspections – Transmission

#### **Aerial Inspections - Transmission (IN-6.2)**

**Program Target:** Inspect 33,500 structures in HFRA

**Status Update:** ~6,000 of 33,500 structures inspected in HFRA.

2020 aerial inspections were delayed in March due to COVID-19 restrictions preventing aerial inspectors from accessing the on-site inspection room. COVID-19 safety concerns have been mitigated through use of remote image inspectors and increased number of image capture crews from local vendors to minimize out-of-state travel. SCE is shifting a portion of Transmission inspections from helicopters to unmanned aircraft systems to aid in getting back on track. Aerial inspections began in Q2.

### Failure Modes and Effects Analysis

#### **Failure Modes and Effects Analysis (IN-7)**

**Program Update:** Complete FMEA study for substation assets in HFRA and prepare final report

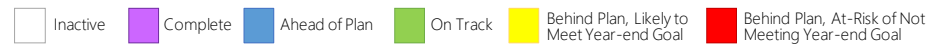
**Status Update:** The working group began developing FMEA risk identification in Q2 and is planning to complete the FMEA risk assessment in Q3. Final report is on track for completion in Q4.

# Appendix

Behind Plan Activities Details

# WMP Activities Details

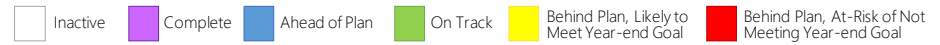
## Behind Plan Activities



Status	Current Goal	Narrative
	<p>OP-3: Unmanned Aerial (UAS) Operations Training</p> <p><b>Increase the number of UAS operators by an additional 50 crews</b></p>	<p><b>Summary:</b> COVID-19 social distancing orders have caused delays due to closure of FAA contracted vendor testing centers and lack of a virtual training alternative. Team is discussing potential training options and aligning with FAA on testing center re-openings.</p> <p><b>Progress:</b></p> <ul style="list-style-type: none"> <li>• 10 resources passed the FAA exam but are awaiting aircraft training</li> <li>• Currently in procurement process with vendor for acquire UAS aircrafts for operational training</li> <li>• ~70 employees have expressed interested in becoming a UAS operator</li> </ul> <p><b>Risks or Challenges:</b></p> <ul style="list-style-type: none"> <li>• Certification is contingent on FAA contracted testing centers re-opening for on-site exams</li> <li>• FAA contracted vendor testing centers remaining closed will cause the delay for FAA certification needed to train with operational aircrafts</li> </ul> <p><b>Actions to Improve Performance / Get Well Plan:</b></p> <ul style="list-style-type: none"> <li>• Discussing small group classroom training options for resources and potential outdoor aircraft operational training with the COVID-19 IMT</li> <li>• Contacting FAA contracted vendor testing centers on their plans to open</li> </ul>

# WMP Activities Details

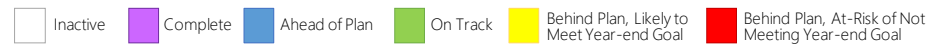
## Behind Plan Activities



Status	Current Goal	Narrative
Behind Plan, Likely to Meet Year-end Goal	<p>IN-6: Aerial Inspections in Distribution and Transmission</p> <p><b>IN-6.1: Inspect 165,000 structures in HFRA</b></p> <p><b>IN-6.2: Inspect 33,500 structures in HFRA</b></p>	<p><b>Summary:</b> 2020 aerial inspections are began later than originally planned in Q2, but plan to be completed in Q4.</p> <p><b>Progress:</b></p> <ul style="list-style-type: none"> <li>Refined 2020 approach to incorporate 2019 EOI lessons learned</li> <li>By the end of Q2, ~45 image inspectors were supporting Distribution and ~15 were supporting Transmission via a remote work</li> <li>All 2020 Distribution and Transmission inspection scope has been assigned to vendors.</li> </ul> <p><b>Risks or Challenges:</b></p> <ul style="list-style-type: none"> <li>In March, COVID-19 safety concerns resulted in the release of aerial inspectors from on-site inspection room. Since then, the number of inspectors working remotely has increased.</li> <li>SCE is shifting a portion of Transmission inspections from helicopters to UAS to improve image quality.</li> </ul> <p><b>Actions to Improve or Sustain Performance:</b></p> <ul style="list-style-type: none"> <li>The SCE aerial team is working with relevant internal and external parties to ensure image capturing flights can continue safely in a COVID-19 environment.</li> </ul>
Behind Plan, Likely to Meet Year-end Goal	<p>SH-12.2: Transmission Remediations</p> <p><b>Remediate 100% of notifications with ignition risk in accordance with CPUC requirements, non-inclusive of notifications which meet the criteria of a valid exception</b></p>	<p><b>Summary:</b> Q2 production exceeded Q1, but behind YTD production remains behind plan. Based on trending production rate, SCE expects to meet year-end goal.</p> <p><b>Progress:</b></p> <ul style="list-style-type: none"> <li>Increasing monthly production by effectively communicating work priorities with crews and ensuring completed notifications are closed out in system of record</li> </ul> <p><b>Risks or Challenges:</b></p> <ul style="list-style-type: none"> <li>Q1 2020 focus on completing 2019 roll over notifications delayed start of 2020 work.</li> <li>Experiencing delays in notifications in two regions due to access issues</li> <li>Technology and tool issues (e.g., connectivity, lost data, trouble synching) caused impact to performance</li> </ul> <p><b>Actions to Improve or Sustain Performance:</b></p> <ul style="list-style-type: none"> <li>Development of a SharePoint scheduling tool provides visibility to all grids</li> <li>Alignment with Risk Group to identify high risk pending remediations and potential risk prioritization</li> <li>Explore an increase of the current four ROW crews to increase pace, however, delays in receiving environmental clearances to complete the work has been an issue</li> </ul>

# WMP Activities Details

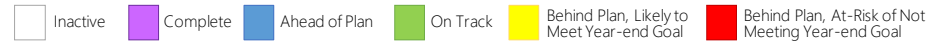
## Behind Plan Activities



Status	Current Goal	Narrative
Behind Plan, Likely to Meet Year-end Goal	<p>VM-4: Drought Relief Initiative (DRI) Inspection and Mitigations</p> <p><b>Perform annual DRI inspection scope and compete mitigations according to guidelines</b></p>	<p><b>Summary:</b> Drought Relief Initiative (DRI) inspections are behind YTD plan. DRI mitigations are currently off track, with ~75% of active inventory being removed prior to 180 days. SCE’s program requirements state 94% of active inventory should be removed within 180 days.</p> <p><b>Progress:</b></p> <ul style="list-style-type: none"> <li>Began centralized scheduling and assignment of work to both patrol/removal vendors utilizing circuit-based scope of work that supports daily reporting and management visibility</li> </ul> <p><b>Risks or Challenges:</b></p> <ul style="list-style-type: none"> <li>Large volume of trees held in “hold” status pending assorted species and agency approvals</li> </ul> <p><b>Actions to Improve Performance / Get Well Plan:</b></p> <ul style="list-style-type: none"> <li>Coordinate inspection efforts with contractors in the northern territory and contractors in the southern territory to ensure Q2/Q3 inspection compliance. Additional crews staff was on-boarded to support effort.</li> <li>Monitor mitigation work prioritization of those not in line with 180-day goal</li> </ul>

# WMP Activities Details

## Behind Plan Activities



Status	Current Goal	Narrative
Behind Plan, Likely to Meet Year-end Goal	<p>SA-8: Implement Fire Science Enhancement Initiatives</p> <p><b>Implement enhanced forecasting capability and improved fuel modeling.</b></p>	<p><b>Summary:</b> Contract signed with vendor to begin ensemble forecasting in late Q2. Plan is in place to obtain initial ensemble forecasting output in Q4.</p> <p><b>Progress:</b></p> <ul style="list-style-type: none"> <li>Contract completed in late Q2 and includes six projects (Ensemble Forecasting Methodologies, Sub-trans FPI, FPI 2.0, Climate Statistics, Data Visualization, &amp; mapping weather stations to circuits)</li> <li>Enhancements to dead fuel moisture have been operationalized</li> </ul> <p><b>Risks or Challenges:</b></p> <ul style="list-style-type: none"> <li>Aligning resources to effectively manage all six projects and work directly with vendor</li> </ul> <p><b>Actions to Improve Performance / Get Well Plan:</b></p> <ul style="list-style-type: none"> <li>Increase frequency of planning meetings and work sessions</li> </ul>

# WMP Activities Details

## Behind Plan Activities

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

Status	Current Goal	Narrative
	<p>RA-1: Expansion of Risk Analysis</p> <p><b>Implement Wildfire Risk Reduction Model (WRRM) module of Technosylva</b></p>	<p><b>Summary:</b> Historical weather data, a required modeling input, was received behind schedule. Moreover, fewer years of data than originally planned were provided due to limited data availability. As a result, several of the WRRM milestone dates are shifted out. However, the WRRM module is still planned to be completed by Q4 2020.</p> <p><b>Progress:</b></p> <ul style="list-style-type: none"> <li>Historical weather data was received in late Q2. Data quality and storage limitations resulted in SCE receiving 20 years of historical data rather than 40 years as originally planned, but the 20-year data set was deemed sufficient (and more representative of future patterns) in order to move forward with WRRM module development.</li> </ul> <p><b>Risks or Challenges:</b></p> <ul style="list-style-type: none"> <li>Asset location information is in different systems making it more challenging to align asset information with asset location</li> <li>Completion of the Technosylva consequence data, which was originally going to be delivered by them in July, is dependent on completing the weather scenarios using historical weather data</li> </ul> <p><b>Actions to Improve Performance / Get Well Plan:</b></p> <ul style="list-style-type: none"> <li>Improve communications around business and technical requirements to reduce churn</li> <li>Team is planning to do a comparison between Technosylva's consequence scores and REAX scores to identify the primary differences between the two after the Technosylva consequence data becomes available</li> <li>Technosylva has confirmed that they are prioritizing the consequence data above all other projects</li> </ul>