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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Examine Electric Utility De-Energization of Power Lines in Dangerous Conditions.	Rulemaking 18-12-005

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) BI-WEEKLY UPDATE ON PSPS CORRECTIVE ACTION PLAN

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Dated: **January 27, 2023**

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In compliance with President Marybel Batjer's letter issued January 19, 2021, in R.18-12-005, Southern California Edison Company (SCE) hereby submits its bi-weekly update to report the status of its corrective action plan related to the Public Safety Power Shutoff program (Attachment 1 hereto).

Respectfully submitted,

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January 27, 2023

Attachment 1

Southern California Edison Company's Bi-Weekly Update on PSPS Corrective Action Plan

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E)

CORRECTIVE ACTION PLAN

UPDATED AS OF JAN. 27, 2023

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) CORRECTIVE ACTION PLAN UPDATED AS OF JAN. 27, 2023

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Topics from President Batjer's Letter	SCE's Corrective Action Plan Reference
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Provide quantitative analysis of all factors that SCE utilizes when considering de-energization	Section III.A
Identify and document the authorities of Senior Officer in Charge, or equivalent position, and how all elements of the utility emergency operations are clearly aligned under the command of this position	Section III.A
Identify and document all executives with the title of Vice President, or equivalent, and above, with responsibilities in making the decision to call a PSPS event	Section III.A
Identify and document all Board members and Board committees with PSPS decision-making oversight	Section III.A
2. Execution of the Notification Process	
Reduce the significant variance between the number of advance customer notifications sent out and the actual number of customers de-energized in a PSPS event	Section III.B
Research and document the root cause of any instance in which SCE's notification process failed to notify customers in advance of a PSPS event and implement appropriate corrective actions. If the notification deficiency was due to the weather, establish processes to fully demonstrate the rapidity of the change in weather conditions that led to a de-energization without being able to notify customers in advance. If due to other reasons, such as internal processes, database or vendor issues, SCE should immediately act upon those issues to address the problem	Sections III.C, VI
Improve SCE's Incident Management Team's processes and protocols to ensure notifications follow the timing interval guidelines and include estimated start date, time and duration of the de-energization event, and the estimated time of power restoration.	Section III.C
Develop a communication and notification strategy in anticipation of the disruption of the traditional communication channels. In doing this, SCE shall coordinate with public safety partners to use in-language public alert system and public radio broadcasts in de-energization impacted areas in situations where internet, cellular, or landline-based communication services are limited	Section III.C
3. Coordination and Communication with State and Local Governments	
Establish a more effective and efficient communication structure with counties and the State; Conduct after action reviews with counties and state agencies to better understand their information needs; Improve SCE's	Section III.D

Topics from President Batjer's Letter	SCE's Corrective Action Plan Reference
internal process to ensure timely and accurate information is submitted to CSWC; Take a proactive approach for prompt resolution of problems and establish a timeline to resolve problems during the communication with local and State government agencies.	
Separate the Operational Briefings from State Executive Briefings to ensure each call serves its own purpose.	Section III.D
Coordinate with counties, tribal governments, and Cal OES to develop and validate a list of public safety partners, including local government agencies and critical facilities	Section III.D
Develop a process to ensure public safety partners have the opportunity to adequately engage for each PSPS event. SCE should develop metrics and seek feedback from these organizations after each event to evaluate the effectiveness of the engagement, and to identify specific actions to be taken to address such feedback	Section III.D
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I.

EXECUTIVE SUMMARY

As required by the Commission, SCE is submitting this bi-weekly update to its Corrective Action Plan to share SCE's progress as of Jan. 27, 2023. All progress updates are provided in the "Update Jan. 27, 2023" sections following the original Corrective Action Plan narrative and timelines and the last bi-weekly update provided on Jan. 13, 2023. The status of each milestone is also updated in Appendix A. If a milestone has been completed, it is marked as "Completed" in both the timeline in the narrative and in Appendix A. Any changes in milestone completion dates are also reflected in the timeline table, as well as Appendix A. There is one new progress update from the last bi-weekly report submitted on Jan. 13, 2023.

As of Jun. 3, 2022, SCE has substantially completed execution of its Corrective Action Plan. All milestones except one have now been successfully achieved. The only remaining Action Plan milestone is a joint effort with the Rialto Unified School District (Rialto USD) to facilitate development of a behind-the-meter microgrid project for a school in Fontana as part of SCE's Community Resiliency Pilot. An amended agreement between Rialto USD and the microgrid developer was approved and executed. The timing of the project remains uncertain until a new project schedule is proposed, pending completion of certain requirements. This project has been delayed due to circumstances beyond SCE's control.[1]

[1] SCE approved the Self-Generation Incentive Program (SGIP) application, microgrid controller design and Single Line Diagram in 2021. Supply chain issues resulting from the COVID-19 pandemic caused a delay in the delivery of the storage battery and container, switch gear, transformer, electric panel and material required for the manufacturing of additional miscellaneous components. Recently, Rialto USD re-negotiated the contract with the microgrid developer to include statutory language required by the State of California before construction on the site could begin, which contributed to the delay. SCE is not a party to this contact.

II.

INTRODUCTION

In recent years, California has experienced an unprecedented number of catastrophic wildfires.[2] The 2020 wildfire season, specifically, was the largest recorded in California's history as nearly 10,000 wildfires burned over 4.2 million acres, more than four percent of the state's land.[3] During extreme weather conditions, high winds can create ignition risk, due to such issues as broken cross arms or vegetation or other objects blowing into powerlines. Such fires can then spread rapidly given the high winds and extremely dry conditions. SCE is implementing a robust infrastructure program, as described in its most recent Wildfire Mitigation Plan (WMP), submitted on February 5, 2021, to mitigate the risk of wildfires associated with electric facilities and protect the safety of our communities. SCE's infrastructure program is aimed at hardening the grid to reduce wildfire risks (*i.e.*, reducing the number of ignitions) and enhancing system resiliency (*i.e.*, reducing electrical infrastructure damage and improving power restoration time during and after a fire event). Despite the significant progress already made in hardening our grid, much work remains to be done. Proactive de-energization of power lines to reduce the risk of catastrophic wildfires, referred to as Public Safety Power Shutoffs (PSPS), is still a necessary measure of last resort appropriately employed to protect public safety under extreme fire-risk weather conditions.

SCE, however, expects PSPS events to become less frequent as it implements its wildfire mitigation initiatives described in SCE's WMP. The fundamental objectives of SCE's PSPS actions are to protect public safety while striving to keep the power on for as many customers as possible; communicate clearly and accurately before, during, and after events; and minimize the impact of de-energizations through customer programs.

By all accounts, 2020 was an extreme weather and fire season. In fact, five of the six largest wildfires in California's history took place last year and the average rainfall totals across Central and Southern California remained 50 percent to 75 percent below normal. Weather and dry fuel conditions in

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[2] *See* CAL FIRE's historical top 20 largest and top 20 most destructive fires, *available at* https://www.fire.ca.gov/stats-events/.

[3] *See* CAL FIRE summary of the 2020 fire season, *available at* https://www.fire.ca.gov/incidents/2020/.

2020 necessitated PSPS de-energization events to avoid even more fires than what California already experienced. SCE acknowledges that many customers were affected by PSPS on multiple occasions, including holidays—some of whom were trying to work and attend classes from home due to the COVID-19 pandemic. SCE understands the hardships that PSPS events cause our customers and communities, and we have consistently been improving the program. The feedback we received from stakeholders after the PSPS events in 2020, as well as reflected in President Batjer's January 19, 2021 letter and during the CPUC's public meeting on January 26, 2021, has crystallized and reinforced the areas where we must and will improve. SCE has heard the clear message from customers, regulators, government officials, and public safety partners: we must do more to reduce the need for PSPS; perform coordination, communication, de-energization, and re-energization protocols more effectively when PSPS is necessary; share our wildfire mitigation and PSPS-related plans in a clear and useful manner; and support our customers—especially Medical Baseline customers and customers with access and functional needs (AFN)—with more resiliency options.

The sections below describe SCE's plans for corrective actions and improvements to the PSPS program (Corrective Action Plan). In its Corrective Action Plan, SCE describes concrete activities it is undertaking to reduce the frequency, scope, and impact of PSPS during the 2021 fire season. These activities address the issues raised in President Batjer's January 19 letter and during the January 26 Commission meeting as well as the concerns raised by our customers and public safety partners. SCE's Corrective Action Plan proposes five categories of corrective actions:

- reduce the use of PSPS,
- execute PSPS events more effectively with transparency into the decision-making process,
- mitigate the impacts of PSPS events,
- keep partners and customers clearly and consistently informed, and
- enhance and improve post-event reporting.

SCE will submit biweekly updates on progress toward completing the Corrective Action Plan and will provide regular and as-requested updates to CPUC staff about progress toward the corrective actions.

Under similar weather conditions as those experienced in 2020, these activities collectively should reduce: (1) the number of circuits and circuit segments de-energized during PSPS events, (2) the duration of PSPS outages during events, (3) the number of customers de-energized during PSPS events, (4) the proportion of customers who were de-energized but did not receive PSPS notifications, and (5) the proportion of customers who received PSPS notifications but were not de-energized. We are prioritizing our efforts to implement these improvements in the communities that have been most heavily impacted by PSPS since 2019.

In addition, SCE will improve customer and stakeholder communication, including enhancing our coordination with emergency managers and public safety partners, before, during, and after PSPS events. SCE attempts to use every means of communication, in some cases employing them repeatedly, because different people absorb information in different ways and conveying information about PSPS events is essential. Nonetheless, we commit to continuously improve our approach to make it most useful for customers and public safety partners.

To assure that these steps benefit customers and other stakeholders, we will measure their effectiveness using surveys. SCE will share this information with the Commission through an appropriate bi-weekly report or meeting before the start of the 2021 traditional fire season. SCE will also measure actual improvements during and after the 2021 fire season and share the results in SCE's 2022 WMP Update.

Some of SCE's proposed corrective actions are in addition to or modifications of the PSPS-related activities outlined in SCE's 2021 WMP, submitted on February 5, 2021, and SCE will capture them in the WMP Change Orders Report process. For example, significant improvements in the efficiency and accuracy of the notification process may require incremental investments in technologies to integrate data sets across PSPS operations and automate customer and stakeholder notifications. Similarly, corrective actions that involve providing data analytics, establishing and monitoring performance measures, and creating enhanced visibility and traceability of decisions will also require incremental investments in technologies and related resources. The incremental work is also expected to require additional resources, and SCE is re-evaluating resource allocation amongst the actions included in this plan and the WMP to

assess and address potential execution risks. SCE will record and seek cost recovery of any incremental costs associated with these proposed actions in the same manner as the costs of other wildfire risk mitigation-related activities and programs set forth in the WMP.

III.

CORRECTIVE ACTION 1: REDUCE THE USE OF PSPS

PSPS is a necessary wildfire risk mitigation measure to protect public safety under extreme conditions that SCE uses as a last resort. However, because some communities, including but not limited to Acton, Agua Dulce, Chatsworth, and Simi Valley, were frequently impacted by PSPS events, SCE is taking proactive steps prior to the peak 2021 wildfire season to decrease the use of PSPS in these communities. Once the grid hardening and circuit exception measures below are implemented, the communities historically most impacted by PSPS events will see a reduction in the number of events, the duration of events, and the number of customers that experience these events, assuming the same weather conditions as 2020. SCE will develop metrics to reflect each reduction and report these to the Commission in its bi-weekly reports.

A. Expedited Grid Hardening

SCE will reduce the use of PSPS through expedited grid hardening activities on our most impacted circuits. As discussed in SCE's WMP, SCE continues to deploy covered conductor and other grid hardening measures to reduce the potential for wildfires. While SCE has used sophisticated wildfire risk models to prioritize its grid hardening deployment, the risk ranking of circuit segments using wildfire risk scores does not necessarily coincide with risk ranking of circuit segments accounting for PSPS. SCE's PSPS experience in the last two years has highlighted opportunities to adjust our approach by including PSPS history as an additional criterion, thus accelerating grid hardening deployment to bring quicker relief to those areas with high wildfire risks where PSPS events have been more frequent. Specifically, SCE will expedite grid hardening activities prior to peak wildfire season in 2021 to benefit the communities most frequently and severely impacted by PSPS events.

Examples of grid hardening activities that potentially can be expedited to reduce the use of PSPS are listed below.

- Installation of covered conductor: Covered conductor is the most effective mitigation against wildfires and protects the grid from a number of issues commonly seen in high-wind

conditions, such as blown-in debris, line slapping, and downed wires. SCE relies on lower PSPS de-energization thresholds in the absence of covered conductor. Therefore, fully completing the installation of covered conductor within an isolatable circuit segment enables SCE to raise de-energization thresholds, reducing frequency and duration of PSPS on that segment.[4]

- Installation of new automated sectionalizing devices (e.g., switches), relocation of existing devices, or automation of existing non-automated devices: PSPS de-energizations occur at the isolatable circuit segment level, which are defined as portions of a circuit between automated sectionalizing devices. Increasing the number of sectionalizing devices can allow SCE to be more targeted in its PSPS actions. For example, if there is a high wind event at the end of a circuit but the same conditions do not exist at the beginning of the circuit, a sectionalizing device in the middle of the circuit allows SCE to de-energize only the affected portion of the circuit. In this example, the PSPS event will still occur, but the additional sectionalizing devices would make it possible to reduce the number of customers impacted.

SCE plans to reduce the use of PSPS by expediting grid hardening activities on its most frequently impacted PSPS circuits. SCE identifies circuits for expedited grid hardening review based on the following circuit-specific characteristics:

- Circuit-level de-energization counts due to PSPS events from 2019-2021
- Number of customers impacted by these PSPS events, and
- Number of AFN customers and Critical Infrastructure customers impacted by these PSPS events.

Each circuit identified for expedited grid hardening is evaluated by a cross-functional team of subject matter experts, including operations personnel, risk management professionals, engineers, fire

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[4] Note that while SCE will also review the possibility of expedited underground conversion on a case-by-case basis, SCE anticipates that it is unlikely underground conversion activities can be completed prior to the peak 2021 fire season.

scientists, customer service personnel and construction project managers. The team reviews circuit segment-specific details, such as historical PSPS events, status of planned grid hardening projects, switching capabilities, weather station locations, and other relevant considerations. The team considers a wide variety of circuit-hardening options for the potential to reduce the use of PSPS on the given circuit segment. This segment-by-segment review yields customized recommendations for each circuit, with particular emphasis placed on the feasibility of accelerating the deployments of grid hardening options.

SCE is presently reviewing its list of circuit segments for expedited grid hardening. Once this list is finalized, these circuits will undergo in-depth review for expedited hardening opportunities to address both PSPS impacts and wildfire risks according to the projected milestones shown below. Final plans for expedited grid hardening will include an assessment of execution challenges such as availability of materials, labor resources, planned outage impacts, and environmental requirements. Feasibility of construction will depend on the resolution of these challenges. Timelines for the expedited grid hardening plan are provided below.

Corrective Action #	Description/Deliverables	Milestone/Deadline
1.A Expedited Grid Hardening	1.A.1 Identify Circuits potentially in scope for Expedited Hardening	~~Feb. 19, 2021~~ Completed
	1.A.2 Complete Circuit Segment Reviews for Identified Circuits	~~Mar. 15, 2021~~ Completed
	1.A.3 Finalize Circuit Mitigation Plans	~~Apr. 15, 2021~~ Completed
	1.A.4 Complete Construction per Plans	~~Sep. 1, 2021~~ ~~Oct. 1, 2021~~ Completed
	1.A.5 Complete Post-Construction Activities	~~Oct. 1, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

B. Circuit Segment Exceptions

SCE's plan to reduce the use of PSPS also involves determining additional "circuit segment exceptions" using updated information. SCE removes circuit segments from PSPS protocols in situations where persistent or prevalent wildfire risk associated with these segments are temporarily abated or no longer exist. While the potential for reducing PSPS based on circuit exceptions is much more limited than grid hardening activities, the exception process does not require installation or replacement of assets and, therefore, analysis and application of this option can typically be performed quicker than grid hardening activities when the latest information supports such exceptions.

The circuit exception review process begins when SCE personnel identify a line segment which—despite being located in a high fire risk area (HFRA) as designated by the Commission—might currently pose a very low risk for wildfire ignition or fire spread. For example, a portion of a circuit found to be traversing over a recent burn scar may be a candidate for circuit exception. Circuit segments can be identified as candidates for exception review as SCE begins preparing detailed designs for grid hardening activities, or through specific feedback received from field personnel. This process requires current and local knowledge of changing conditions to inform the circuit review process.

Identified circuit segments are reviewed by SCE's PSPS operations, fire science, and risk management experts evaluating the circuit segment's unique characteristics (e.g., construction type, outage history) and location characteristics (e.g., fuel quantity, fuel type, fuel dryness, fuel age, history of fires in the area) to determine if that circuit segment can be exempt from PSPS monitoring and de-energization due to low wildfire risk. Through this circuit exception review process, SCE was able to reduce customer impacts on 22 circuits in 2020. To further reduce the use of PSPS, SCE is expeditiously collecting and reviewing the latest circuit information and conducting detailed analysis for exception requests currently in queue according to the projected milestones shown below.

Corrective Action #	Description/Deliverables	Milestone/Deadline
1.B Circuit Segment Exceptions	1.B.1 Circuit Segment Exception Analysis for Exception Requests in Queue as of Feb. 12, 2021, Complete	~~Mar. 31, 2021~~ Completed
	1.B.2 Circuit Segment Exception Approval and Implementation for Exception Requests in Queue as of Feb. 12, 2021	~~Jun. 1, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

IV.

CORRECTIVE ACTION 2: EXECUTE PSPS EVENTS EFFECTIVELY WITH TRANSPARENCY OF THE DECISION-MAKING PROCESS

SCE commits to sharing more information with the Commission, other agency partners, and public about its PSPS decision-making process and the factors SCE considers in making de-energization decisions to protect public safety. SCE will also effectively and consistently engage with our stakeholders to assure the information we provide is comprehensive, clear, and responsive to the feedback we receive from our customers, regulators, and public safety partners. SCE will provide the metrics demonstrating its success in achieving these goals by sharing the feedback it receives with the Commission on a regular basis.

In this section, we also address the concerns expressed about SCE's PSPS notifications. Improved weather and fuels forecasting will reduce the number of customers de-energized without prior notification and reduce the variance between customers notified and those de-energized. We will conduct a detailed analysis to identify shortcomings and will use customer feedback to identify areas for improvement in content and cadence. Following these forecasting improvements and analyses to establish baselines, SCE will develop metrics to measure improvement and will report these to the CPUC.

A. Clearly Articulate Decision-Making Process for Each Event

SCE is committed to providing greater clarity and transparency on the qualitative and quantitative factors, such as environmental conditions (e.g., wind and fuel), circuit characteristics and public safety impacts, that it considers when making de-energization decisions to increase customer and public safety partner understanding.

SCE's de-energization decisions are complex and made on a circuit-by-circuit basis, often on a sub-circuit level, only when current conditions in the immediate area warrant action.[5] De-energization wind speed triggers are unique to each circuit and are dynamic based on evolving environmental and

[5] *See* section 8.1.3 of the 2021 WMP for a description of the utility's protocols and thresholds for PSPS implementation.

circuit-specific characteristics. Factors that SCE considers when setting de-energization triggers include wind speed, Fire Potential Index (FPI), ignition consequence modeling, circuit conditions, length of conductor, and other technical characteristics for the applicable circuit. SCE's Incident Management Team (IMT) takes characteristics such as a higher FPI, multiple historical outages and outstanding maintenance items into account when determining if wind speed thresholds for recommending de-energization should be modified.

Execution of de-energization protocols is managed by the IMT in alignment with nationally recognized Incident Command System principles. The IMT considers the following factors, while exercising its discretion:

- National Weather Service alerts or warnings for counties where SCE circuits in HFRA are located
- Ongoing assessments from SCE's in-house meteorologists informed by high resolution weather models, data from SCE weather stations (e.g., wind speeds, humidity levels, and temperature), and publicly available weather stations
- FPI, an internal tool that utilizes both modeled weather and fuel conditions
- Real-time situational awareness information obtained from weather station data and field observers, whenever possible, positioned locally in HFRA circuits identified as at risk for extreme fire weather conditions
- Specific concerns from state and local fire authorities, emergency management personnel, and law enforcement regarding public safety issues
- Expected impact of de-energizing circuits on essential services such as public safety agencies, water pumps, traffic controls, medical facilities, etc.
- Circuit maintenance conditions, length of conductor, and other technical characteristics for the applicable circuit

In addition to the above factors, which are monitored by SCE's IMT, at least one qualified Live Field Observer (LFO) is stationed at every circuit in scope, at least two hours before the start of the event when possible. The purpose of this LFO is to monitor a circuit for any possible signs of failure or

prevailing environmental conditions, such as potential damage from wind gusts, airborne vegetation, or flying debris. SCE also deploys field resources to pre-patrol each circuit that is forecasted to be in scope for PSPS de-energization consideration. The pre-patrol requires qualified personnel to visually inspect the entire length of the overhead circuit that traverses HFRA to verify if the circuit can withstand incoming weather and to provide additional up-to-date intelligence on field conditions to SCE's IMT. If maintenance concerns are discovered on a circuit in scope, repairs are expedited (if possible) before the impending wind event. Where possible, every circuit that is in scope for the upcoming event has a pre-patrol performed, unless it was already patrolled within the last seven days. While the SCE Incident Commander takes recommendations from LFOs, members of the IMT and external public safety partners, each decision to de-energize a circuit (or segment thereof) during a PSPS event must be ultimately authorized by the Incident Commander.

The decision to de-energize during a PSPS event involves the consideration of many dynamic and complex quantitative and qualitative factors that are difficult to communicate, particularly in real time during events. We accept, however, that we must make our decisions understandable to our customers and stakeholders and will improve our transparency as proposed below.

1. Increased Transparency

In 2021, SCE will enhance the transparency of its PSPS decision-making process by developing clear, understandable, and accessible materials to share with customers and public safety partners about its PSPS decision making process. As part of this effort, SCE will explain its activation thresholds, de-energization thresholds, and the quantitative and qualitative analysis that warrant de-energizing a circuit or portion of a circuit. Detailed information will be included in PSPS post-event reports to clearly explain why each PSPS event was necessary to protect public safety. SCE will identify the Incident Commanders that have decision-making authority in each PSPS event and fully demonstrate, when applicable, the rapidity of the change in weather conditions that led to a de-energization without being able to notify customers in advance.

To ensure newly developed materials reach customers and stakeholders, SCE will use a multi-pronged outreach approach that will include adding and updating factsheets and other materials to sce.com and sharing materials in presentations at community and at other public meetings. We will engage with non-profits, community-based organizations (CBOs), the AFN community, and with emergency management agencies, state, county, local and tribal governments, as well as meetings with the Commission, Cal OES and CAL FIRE. We will be responsive to the feedback received to improve our processes and the information we provide.

Corrective Action #	Description/Deliverables	Milestone/ Deadline
2.A.1 Increased Transparency	2.A.1.1 Develop clear and user-friendly external-facing materials to educate and inform customers, public safety partners and other stakeholders on SCE's decision-making process, including all factors that SCE utilizes when considering de-energization.	~~Apr. 1, 2021~~ Completed
	2.A.1.2 Provide and explain the quantitative and qualitative factors that SCE utilizes when considering de-energization, in update reports and in public and stakeholder outreach. Factors include activation and notification thresholds, de-energization thresholds (including impact from grid hardening), environmental conditions (wind speed, fire potential index, rapidly changing weather), circuit characteristics and input from emergency management and first responder agencies. Demonstrate why the thresholds are set at levels selected.	~~Apr. 1, 2021~~ Completed
	2.A.1.3 Share materials on sce.com/psps and via external outreach and engagement efforts, including meetings with communities, local, state and tribal government, emergency management and public safety agencies and critical infrastructure providers.	~~May 1, 2021~~ Completed
	2.A.1.4 Increase transparency in post-event reporting by including a more detailed description of the factors that SCE used when deciding to de-energize each circuit, or circuit segment.	~~Apr. – Dec. 2021 Post-Event Reports~~ Completed

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~~No updates to report during this period.~~

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No updates to report during this period.

2. Identify Senior Officer(s) In Charge During PSPS Events

SCE follows principles of the National Incident Management System and components of the Standardized Emergency Management System during PSPS events. This includes using an Incident Management Team structure to execute PSPS events, assigning an Incident Commander responsible for all de-energization decision-making and coordinating at the Operational Area level during PSPS events. SCE's Incident Management Team (IMT) and emergency response structure for all emergency events, including PSPS, are governed by the Crisis Management Council (CMC) framework. The CMC is SCE's senior executive governance body responsible for providing strategic direction during emergencies. The CMC's primary responsibilities are to provide policy-level oversight of on-going operations, assign executives to internal task forces, assign executives to represent SCE with local, state, and federal jurisdictions, communicate with SCE's Board of Directors, interact with senior local, state, and federal government officials, request declaration of a National Response Event for Mutual Assistance, approve expenditures that exceed normal limits and perform other corporate-level duties necessitated by an emergency event. Tactical decision-making is delegated to Incident Commanders.

The CMC is comprised of SCE's and Edison International's senior-most executives. The CMC may bring in executives from various SCE's operational units to provide subject matter expertise on an as-needed basis. When the CMC is not activated, it is represented by the Officer-in-Charge (OIC). The OIC is responsible for monitoring on-going events and, when necessary, making decisions on behalf of the CMC. Most CMC members rotate monthly to assume the role of the OIC.

3. Identify and Document all Executives with PSPS Decision-Making Authority

PSPS de-energization and re-energization decisions are made by executives (director or higher), who serve as Incident Commander during the PSPS events. These executives are trained in the Incident Command System as well as PSPS operations and are rostered into the PSPS IMT. The assigned Incident

Commander is responsible for all de-energization and re-energization decisions made during any PSPS event.

4. Identify and Document all Board Members and Committees with PSPS Decision-Making Oversight

The Safety and Operations Committee (SOC) of the SCE Board is responsible for the oversight of SCE's public safety, wildfire operations and risk mitigation including PSPS, business resiliency and emergency response functions. As such, SOC's oversight includes continuous improvement of operations, and responsiveness to stakeholders, customers, local governments, emergency response agencies, and other critical infrastructure providers. This committee also oversees safety, wildfire and operational performance metrics. This oversight role is outlined in the SOC charter available on the sce.com website. Biographies of SOC directors are also available on the sce.com website.[6] The SOC has standing agenda topics on public safety and wildfire safety, including PSPS operations.

The SOC reviews SCE's WMPs and receives regular progress updates on WMP implementation. All members of the SCE Board have visited SCE's Emergency Operations Center (EOC) for a demonstration of the personnel, technologies and resources used to manage PSPS events. The SOC is also briefed on aspects of PSPS operations such as meteorology, Fire Potential Index (FPI), circuit monitoring, segmentation, and use of technology such as cameras, weather stations, and grid control system.

Corrective Action #	Description/Deliverables	Milestone/ Deadline
2.A.2-4 Identify Senior Officer, Executives, and Board Members and Committees with PSPS Decision-Making Authority	2.A.2 Identify and document the authorities of Senior Officer in Charge, or equivalent position, and how all elements of the utility emergency operations are clearly aligned under this incident command system	~~Feb. 12, 2021~~ Completed
	2.A.3 Identify and document all executives with the title of Vice President, or equivalent, and above, with responsibilities in making the decision to call a PSPS event	~~Feb. 12, 2021~~ Completed
	2.A.4 Identify and document all Board members and Board committees with PSPS decision-making oversight.	~~Feb. 12, 2021~~ Completed

[6] Corporate Governance page *available at* https://www.sce.com/about-us/who-we-are/governance.

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~~No updates to report during this period.~~

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No updates to report during this period.

B. Improve Weather and Fuels Forecasting Accuracy

SCE uses forecasts of weather and fuels information from its customized in-house atmospheric modeling to identify upcoming weather events in which circuits may be in scope for potential de-energization to protect public safety during critical fire-risk weather. SCE's in-house modeling identifies utility-related hazards, and produces detailed forecasts of wind speed, relative humidity, vegetation moisture, and other information for every 1.25 square miles, making it the preferred source for PSPS weather information.

Due to the complexity of terrain and the localized nature of weather conditions in SCE's service area, all atmospheric modeling, independent of source, encounters challenges in accurately portraying details of weather events, and must be continually refined to improve accuracy. For SCE in the context of PSPS, this means that atmospheric and fire spread modeling predictions must be continually updated to minimize impacts to SCE customers.

Improved in-house forecasting capabilities will reduce the number of customers de-energized without prior notification. These enhanced capabilities will also address the variance between the customers who are notified of potential de-energization and the customers who are actually de-energized due to onset of increased fire danger conditions. President Batjer identified this "significant variance in number of customers initially notified versus the number actually de-energized" in her letter. This variance reflects the difference between SCE's long-range weather forecasting at the circuit level, which is the basis of initial (e.g., 72-hour, 48-hour and 24-hour) customer notifications, and de-energization decisions, which are based on real-time conditions at the circuit-segment level.

Targeted real-time decision-making at the circuit segment level allows SCE to de-energize as few customers as possible, based on actual weather conditions and as a last resort; however, it is the main source of the variance between initial notifications and actual de-energizations. Enhanced forecasting should reduce this inherent variance due to emergent variables, such as weather. SCE will continue to reduce PSPS impacts to individual customers during events by using real-time weather information rather than forecasting to make de-energization decisions, and by de-energizing only necessary segments of circuits, rather than entire circuits, even when all customers on a circuit may have initially been in scope for potential de-energization and received notifications to that effect.

Improved in-house forecasting capabilities will reduce the variance between the customers who are notified of potential de-energization and the customers who are actually de-energized due to onset of increased fire danger conditions, as well as the number of customers de-energized without prior notification.

SCE is making improvements to its in-house modeling in the following ways:

- Accelerating previously planned modeling enhancements: This includes the use of machine learning technology (Artificial Intelligence) to help improve estimations of wind speeds at specific locations where PSPS has occurred most frequently in prior wildfire seasons. In addition, SCE is acquiring additional weather model data from other sources to alleviate dependency on a single source for weather modeling information. Both efforts will increase precision in notifications and will help to identify the scope and duration of de-energizations more accurately.
- Increase resolution of weather and fire potential predictions: SCE will acquire more computing power, which will enable SCE to make wholescale systematic changes to all its in-house modeling. This will include doubling the forecast resolution from 2km to 1km, which will allow for more precise weather and fuels forecasts and will address some of SCE's inherent challenges in capturing details in the timing and magnitude of predicted fire weather events. These improvements will collectively help to more precisely identify the

scope of where, when, and how long potential de-energizations may occur, reducing the number of "short notice" and missed notifications.

- Utilize fire spread predictions for PSPS: SCE will evaluate its capability to estimate how large fires may grow and what their subsequent impact on nearby communities may be. Following evaluation, SCE will incorporate these estimations as another factor to inform decisions to de-energize portions of the grid during extreme weather events that lead to destructive wildfires. This will help to clarify the PSPS footprint to reflect true fire weather conditions more accurately.

Corrective Action #	Description/Deliverables	Milestone/Deadline
2.B Improve Weather and Fuels Forecasting Accuracy	2.B.1 Acquire additional data and use machine learning technology	~~May 1, 2021~~ Completed
	2.B.2 Increase the resolution of SCE's in-house weather modeling	~~Sept. 1, 2021~~ ~~Oct. 15, 2021~~ ~~Nov. 19, 2021~~ Completed
	2.B.3 Use fire spread predictions to help with de-energization decisions	~~Nov. 1, 2021~~ Completed

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~~No updates to report during this period.~~

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No updates to report during this period.

1. Improve Customer Notifications

As outlined in President Batjer's letter, "advanced and accurate notifications are vital for customers, critical facilities and public safety partners to prepare for a de-energization." SCE is committed to improving the clarity, cadence, and accuracy of notifications to better meet customers' needs, and to evaluate and improve the effectiveness of our notification delivery systems.

SCE is performing an end-to-end analysis of in-event notification (imminent de-energization, de-energization, imminent re-energization, and re-energization) gaps experienced in 2020 and using these results to develop process and technical solutions to continue improving notification accuracy. Missed initial (72-hour, 48-hour and 24-hour) notifications will be addressed through improvements in weather forecasting.

SCE will conduct independent customer research to understand how to best address the customer pain points with SCE communications both before, during, and after each PSPS event that have been identified through customer and community feedback. At the conclusion of the research process, we will update the language and cadence of our notifications to provide greater clarity for all customers who are impacted by PSPS.

2. Improve In-Event Notification Accuracy

SCE will assess and improve its accuracy and adherence to timing interval guidelines for notifications that are sent after the onset of extreme weather by performing an end-to-end assessment of the process gaps that have led to some instances of missed or inaccurate notifications and making integrated process improvements based on the findings of the analysis. Documentation for weather-related notification deficiencies, as requested in President Batjer's letter, will be provided in post-event reporting.

In 2020, both SCE's practice of de-energizing at the circuit-segment level, which reduced customer impacts, and the use of processes that were manually driven, slowed the notification process and resulted in missed or conflicting notifications. The root-cause analysis will help SCE better coordinate the handoff between operational and notification teams by integrating operational (grid) and customer (notification and communications) workflows.

SCE will also complete design and initiate development of a broad technical solution to increase automation. This system will integrate PSPS, customer and field data, further reducing the need for manual operations. This will also reduce data conflicts and improve efficiency. The automated system should provide significant improvements to accuracy and timeliness, as well as improved overall situational awareness.

SCE recognizes the schedule outlined below is aggressive, especially when considering technical complexity and key dependencies.

- Key dependencies include soliciting customer/stakeholder feedback, updates to provide more granular weather forecasts, and the need for coordinating and engaging with the Commission for some potential changes to notification requirements.
- Technical complexities include challenges associated with integrating disparate data sets across multiple SCE systems, working with systems vendors on changes, executing complete/rigorous testing, and performing detailed training on new processes and tools.
- SCE will use its bi-weekly reporting to keep the Commission informed on progress and adjust deadlines based on new information discovered through its design and analysis activities. SCE will prioritize changes that can be quickly implemented with minimal risk to effective PSPS operations.

Corrective Action #	Description/Deliverables	Milestone/Deadline
2.C.1 Improving In-Event Notification Accuracy	2.C.1.1 Act upon vendor issues: Validate resolution of vendor issue for telephone notification errors	~~Feb. 19,~~ ~~2021~~ Completed
	2.C.1.2 Simplify telephone language preferences: Change telephone messaging for customers to "Press 1 for English," in alignment with most common phone menus	~~Feb. 19, 2021~~ Completed
	2.C.1.3 Perform end-to-end analysis of 2020 notification failures to inform short- and long-range technical solutions	~~Mar. 31, 2021~~ Completed
	2.C.1.4 Complete design and initiate development and implementation for prioritized 2021 improvements including process change map and digital tools to better integrate the notification process with PSPS operations (in advance of more advanced long-range efforts)	~~May 1, 2021~~ Completed
	2.C.1.5 Implement prioritized initial updated processes and digital tools	~~Jun. 1, 2021~~ ~~June 21, 2021~~ ~~June 28, 2021~~ ~~July 1, 2021~~ Completed
	2.C.1.6 Provide training and job-aids for PSPS team members on new processes/tools	~~Jun. 1, 2021~~ ~~June 30, 2021~~ ~~July 14, 2021~~ ~~July 30, 2021~~

		~~August 31, 2021~~ Completed
	2.C.1.7 Complete design for an automated system to fully integrate PSPS data sets and processes, improve customer data accuracy, and reduce manual notification actions	~~Dec. 1, 2021~~ ~~Dec. 31, 2021~~ Completed

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~~No updates to report during this period.~~

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3. Reduce Notification Redundancy and Improve Clarity

SCE has initiated a re-evaluation of the PSPS notification experience, analyzing the cadence, content, language and delivery methods to more closely align with customer expectations.

In 2020, SCE notified customers each time their status changed (i.e., when their circuits were dropped or added from the pre-event monitored circuit list) and provided twice-daily updates. This led to customers' status sometimes changing more than once a day. Customer feedback indicates that these multiple updates created confusion and the perception of "over-notification." Other issues that were reported included unclear language, missing information, and providing worst-case, rather than realistic, estimated restoration times, significantly overstating how long most customers should plan on being without power.

SCE will continue to engage with customers[7] to clarify how much information customers want, how frequently they want it, and the best way to message the notification content for clarity and transparency. The process will map current-state customer notification experience to understand where we are falling short from the customer perspective, through both direct customer research and work with third-party communication experts.

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[7] SCE will also work with its public safety partners and critical infrastructure providers to develop notice content that better addresses their needs. See discussion in Sections II.C and IV.D.

Additional input will come from community meetings, critical infrastructure workshops and work with the PSPS Working Groups and Advisory Board.

SCE will also meet with CPUC staff to discuss how to best interpret the regulatory requirements to meet customer needs. Results will inform a re-design of the notification content and process including:

- Frequency and cadence of notifications
- Information and level of detail to be provided
- Approach to language and communications

At the end of this research process, SCE will determine the appropriate cadence, and content, for pre-event and in-event notifications. Revised notifications will include estimated start date, time and duration of the de-energization event, and the estimated time of power restoration. A high-level workplan for this activity is provided below.

Corrective Action #	Description/Deliverables	Milestone/Deadline
2.C.2 Reduce Notification Redundancy and Improve Clarity	2.C.2.1 Complete mapping of current customer experience from first notification through event all-clear, including the cadence, content, language, and delivery methods	~~Mar. 15, 2021~~ Completed
	2.C.2.2 Complete mapping of customer experience improvements	~~May 1, 2021~~ Completed
	2.C.2.3 Complete customer research to collect input from customers on future state PSPS notification experience	~~May 1, 2021~~ Completed
	2.C.2.4 Complete outreach to critical infrastructure customers to incorporate feedback into public safety notification cadence	~~May 1, 2021~~ ~~Jun. 30, 2021~~ Completed
	2.C.2.5 Codify new notification cadence for customers in scope to reduce out-of-event notification churn, and address imminent notification guidelines	~~Jun. 1, 2021~~ Completed
	2.C.2.6 Complete re-design of the notification content and process and launch new messages	~~Jun. 1, 2021~~ ~~Jun. 21, 2021~~ Completed
	2.C.2.7 Measure customer satisfaction for de-energized customers following each PSPS event and summarize at the end of the 2021 fire season	~~Each PSPS Event~~ Completed
	2.C.2.8 Measure customer sentiment of all HFRA customers	(a) ~~Sept. 15, 2021~~ Completed (b) ~~Dec. 31, 2021~~ Completed

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~~No updates to report during this period.~~

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No updates to report during this period.

4. Address Preferred Channels

SCE provides notifications through many channels in order to better ensure that all customers are receiving notifications. This means that customers and other stakeholders, including public safety partners and local and tribal governments, received multiple notifications that in some cases appeared to provide conflicting information. One known source of this confusion has been account holders subscribing to ZIP code alerts in addition to, or instead of, SCE customer alerts. ZIP code alerts have been made available to reach transient populations who do not have premise-level accounts, to allow them access to PSPS status within an area of interest. However, ZIP code alerts cover multiple circuits, and customers who sign up for ZIP code alerts instead of premise-level alerts receive separate notifications for all circuits within a single ZIP code. This can lead to account-holding customers receiving conflicting notifications that may not be relevant to them.

To reduce this notification duplication and potential for conflicting information, SCE will:

- Perform data analytics on customer notification channel subscriptions to identify customers who can be moved from ZIP code alerts to premise-level alerts, and
- Identify and employ proactive measures to enroll customers into customer alert channels, while directing non-account holders into a different notification option that will reduce the potential for confusion.

Corrective Action #	Description/Deliverables	Milestone/Deadline
2.C.3 Address Preferred Channels	2.C.3.1 Provide opt-out support to move customers from ZIP code alerts to premise-level alerts	~~Jun. 1, 2021~~ ~~Jul. 15, 2021~~ ~~Nov. 15, 2021~~ Completed

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~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

5. Consider Use of Public Radio Broadcast Where Appropriate

Customers in certain remote locations with poor cellphone access have difficulty communicating during power outages. To improve their ability to receive emergency messages, SCE will coordinate with County Offices of Emergency Management to identify remote locations that could require the use of the use of Emergency Radio Broadcasts during PSPS events and develop messaging for these areas where appropriate.

Corrective Action #	Description/Deliverables	Milestone/Deadline
2.C.4 Consider Use of Public Radio Broadcast, Where Appropriate	2.C.4.1 Work with County Offices of Emergency Management to identify remote locations that could require the use of Emergency Radio Broadcasts during PSPS events	~~Mar. Dec. 2021~~ Completed
	2.C.4.2 Develop appropriate messaging for use in Emergency Broadcast Systems where appropriate during PSPS events	~~Jun. 30, 2021~~ ~~Jul. 31, 2021~~ Completed

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~~No updates to report during this period.~~

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No updates to report during this period.

C. Improve Engagement with Local and State Emergency Management, First Responder Agencies and Other Public Safety Partners

SCE fosters strong relationships with Emergency Management at the local and State level to effectively coordinate and manage emergency events, including PSPS events. While foundationally strong,

these relationships have been strained through the frequency and magnitude of PSPS events during the 2020 fire season. In order to rebuild trust and continue to strengthen these relationships, SCE will complete the following corrective actions to improve engagement, ensure timely and accurate data sharing, proactively and quickly address issues, and simplify information shared with local and State Emergency Management, first responders and public safety partners during PSPS events. SCE will also establish engagement metrics, perform surveys and in-person (or virtual) after-action reviews after PSPS events and share the results of these surveys with partners and the Commission to measure improvement.

1. Develop and implement a process for public safety partners to adequately engage during PSPS events that includes improvement metrics.

While regular engagement with State and local public safety partners regarding PSPS protocols and their implementation has been ongoing since the advent of SCE's formalized PSPS program in 2018, new requirements have emerged and we have a better appreciation of expectations from our partners. There are opportunities to increase understanding of PSPS processes and, more importantly, create agreed-upon success metrics for PSPS events and solicit feedback from public safety partners ahead of the 2021 fire season to make further improvements. This year, SCE plans to again meet with public safety partners at the local and State level and solicit input on existing engagement structures during PSPS events. These meetings will allow SCE to identify needed improvements to existing communications, suggest and make improvements, and review improvements with the Working Groups and Advisory Board created in 2020 to solicit feedback on updated PSPS protocols.

To demonstrate progress towards these goals, SCE will work with public safety partners at the State and local level to create appropriate metrics that measure this improvement. As previously mentioned, SCE will also request feedback through electronic surveys and in-person (or virtual) after-action reviews with public safety partners after PSPS events. SCE will include the results of these engagement surveys in post-event reports to share our progress toward more effective engagement.

Corrective Action #	Description/Deliverables	Milestone/Deadline
2.D.1 Develop and implement a process for public safety partners to adequately engage during PSPS events that includes improvement metrics	2.D.1.1 Conduct discussions with Cal OES and county OEM Directors to solicit input on optimal structure for in-event communication structure and develop metrics to measure progress	~~Mar. 31, 2021~~ ~~May 31, 2021~~ Completed
	2.D.1.2 Document input during partner discussions and agree to and assign timeframe for implementation ahead of the 2021 fire season	~~Apr. 30, 2021~~ ~~May 31, 2021~~ Completed
	2.D.1.3 Implement any identified improvements to existing communications structure	~~May 31, 2021~~ Completed
	2.D.1.4 Consistently use Working Groups/Advisory Board to review results, share improvements, and identify further corrective actions to update IMT protocols and procedures	~~Jun. 15, 2021, and quarterly thereafter~~ Completed
	2.D.1.5 Perform after-action reviews with impacted county and state agencies after each PSPS event to better understand their information needs	~~Each PSPS Event beginning after Jun. 1, 2021~~ ~~Jun. 30, 2021~~ Completed
	2.D.1.6 Send out engagement surveys to State, county, and critical infrastructure partners after every PSPS event to evaluate our effectiveness and identify any potential areas of improvement	~~Each PSPS Event beginning after Jun. 1, 2021~~ ~~Jun. 30, 2021~~ Completed
	2.D.1.7 Include results of engagement surveys in post-event reports	~~Each PSPS Event beginning after Jun. 1, 2021~~ ~~Jun. 30, 2021~~ Completed

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~~No updates to report during this period.~~

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No updates to report during this period.

2. Improve internal processes for timely and accurate information submission to California State Warning Center (CSWC).

SCE has begun an initial series of meetings with California State Warning Center (CSWC) to align SCE's processes and procedures with CSWC's needs. SCE will meet regularly with CSWC ahead of the 2021 fire season to identify any additional corrective actions that will increase the ability to submit timely, accurate in-event reporting of de-energization specifics to Cal OES as they require.

Corrective Action #	Description/Deliverables	Milestone/Deadline
2.D.2 Improve internal processes to ensure timely and accurate information is submitted to California State Warning Center (CSWC)	2.D.2.1 Meet every month with CSWC ahead of the 2021 fire season to discuss forms, procedures and IOU differences in operations, implement existing corrective actions and identify any potential additional corrective actions	~~Monthly until at least May, 2021~~ Completed
	2.D.2.2 Confirm SCE's role in implementing the CSWC Standard Operations Guide (SOG)	~~Feb. 4, 2021~~ Completed
	2.D.2.3 Validate existing separation of State/County calls	~~Feb. 4, 2021~~ Completed
	2.D.2.4 Create job aids for Deputy Planning Section Chief role to include responsibility for essential elements of information and Cal OES notification form	~~Mar. 31, 2021~~ ~~Apr. 30, 2021~~ ~~May 31, 2021~~ Completed
	2.D.2.5 Clarify invitee/information expectation for each stakeholder call (State/County)	~~Mar. 31, 2021~~ Completed
	2.D.2.6 Validate invitee lists for State briefing calls to ensure accurate contact information	~~Mar. 31, 2021~~ Completed

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~~No updates to report during this period.~~

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No updates to report during this period.

3. Coordinate with counties, tribal governments, and Cal OES to develop and validate a list of public safety partners, including local government agencies and critical facilities.

In 2018, SCE managed a comprehensive effort to collaborate with counties, tribal governments and Cal OES to develop contact lists for PSPS events. SCE has continued to update these lists as additional partners have been identified during PSPS events. However, a comprehensive effort is again required to verify SCE has both the right public safety partners as well as the correct contact information to reach those partners during events. To accomplish this, SCE will once again contact all public safety partners, including local government agencies and critical facilities, to validate proper contacts and contact information. SCE will utilize an annual update strategy to identify additional public safety partners as applicable and update contact information for engagement in PSPS events. SCE will also evaluate if it is possible to manage future contact updates through the Public Safety Partner portal and implement, if feasible.

Corrective Action #	Description/Deliverables	Milestone/ Deadline
2.D.3 Coordinate with counties, tribal governments, and Cal OES to develop and validate a list of public safety partners, including local government agencies and critical facilities	2.D.3.1 Engage Tribal contacts for any additional coordination opportunities	~~Mar. 31, 2021~~ Completed
	2.D.3.2 Validate all Cal OES Regional Administrators are invited to daily in event operational briefings	~~Mar. 31, 2021~~ Completed
	2.D.3.3 Work with Cal OES to define and include additional public safety partners in State and County calls as applicable	~~Mar. 31, 2021~~ Completed

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~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

4. Proactively and promptly resolve problems during PSPS events with local and State public safety partners.

Given the number of late-2020 PSPS events, SCE was unable to provide the level of support expected to properly interface with public safety partners at the State and local level and provide prompt resolution of issues. To provide better support and minimize further communication challenges, SCE will dedicate situational awareness staff to provide information to public safety partners and promptly resolve issues during events in the 2021 fire season and beyond. This single point of contact during events will enhance information sharing and increase SCE's ability to quickly resolve public safety partner issues that arise.

Corrective Action #	Description/Deliverables	Milestone/ Deadline
2.D.4 Take a proactive approach for prompt resolution of problems and establish a timeline to resolve problems during the communication with local and State public safety partners.	2.D.4.1 Onboard new employees dedicated to information gathering and reporting to CSWC in PSPS events	~~Mar. 31, 2021~~ Completed
	2.D.4.2 Train new employees on finalized CalOES procedures after the Apr. 2021 CSWC workshop	~~May 31, 2021~~ Completed
	2.D.4.3 Provide dedicated in-event contact to CSWC for in-event communication, coordination and prompt resolution of issues	~~Each PSPS Event~~ Completed

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~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

D. Provide Clearer Event Status Via SCE's Website

SCE will improve its outage look-up features to make it easier for customers to find the status of any type of event that may impact their electrical service. This will address the current inconvenience when customers have to check up to three different pages (PSPS Events, Maintenance/Repair Outages, and CAISO Rotating Outages), which leads to confusion when customers attempt to determine the cause and expected duration of an outage during PSPS events that coincide with other service interruptions.

In SCE's revised website, customers will be able to simply enter an SCE service address and the website will display the status of any current or planned interruptions to their electrical service including estimated restoration time(s). In the first phase, SCE will implement a simple search-based service interruption look-up tool to expedite delivery in time for the beginning of the 2021 fire season. Phase 2 will expand the capability and scope to consolidate the various map-based displays of service interruptions into a single solution to improve the experience for website visitors who need or prefer to see the information in a visual, area-wide format. In Phase 2, SCE will also incorporate additional detail into the map-based display to improve customer understanding of active PSPS event conditions. Further, the website will better reflect realistic expected restoration times for each event.

The enhancements described above depend on access to data and the quality of that data. SCE has initiated several initiatives described in its 2021 WMP to improve data governance and integrate data into a central repository. SCE will use its bi-weekly reporting to keep the Commission informed on impacts from these dependencies and adjust deliverables and dates, if necessary, based on new information discovered through its design and analysis activities. SCE will ensure that any information displayed to customers is accurate and supports the goal of providing clearer information and reducing confusion.

Corrective Action #	Description/Deliverables	Milestone/ Deadline
2.E Provide Clearer Event Status on SCE's Website	2.E.1 Conduct initial digital experience benchmarking with PG&E	~~Feb. 2, 2021~~ Completed
	2.E.2 Initiate scoping/estimation process	~~Feb. 5, 2021~~ Completed
	2.E.3 Initiate Procurement activities	~~Feb. 15, 2021~~ Completed
	2.E.4 Complete scoping/estimation process Phase 1	~~Feb. 26, 2021~~ Completed
	2.E.5 Complete scoping/estimation process Phase 2	~~Mar. 5, 2021~~ Completed
	2.E.6 Complete procurement activities for Phase 1	~~Mar. 12, 2021~~ Completed
	2.E.7 Complete procurement activities for Phase 2	~~Mar. 19, 2021~~ Completed
	2.E.8 Initiate Phase 1 Development	~~Mar. 15, 2021~~ Completed
	2.E.9 Initiate Phase 2 Development	~~May 10, 2021~~ ~~Jun. 7, 2021~~ Completed
	2.E.10 Complete Phase 1 development (including testing)	~~May 31, 2021~~ ~~Jun. 11, 2021~~ Completed
	2.E.11 Launch Phase 1 – new sce.com service interruption lookup capability and revisions to sce.com/psps landing page	~~Jun. 1, 2021~~ ~~Jun. 18, 2021~~ Completed
	2.E.12 Complete Phase 2 development (including testing)	~~Sept. 10, 2021~~ ~~Sep. 17, 2021~~ ~~Oct. 8, 2021~~ ~~Late October/Early November 2021~~ ~~Dec. 31, 2021~~ Completed
	2.E.13 Launch Phase 2 – new sce.com service interruption map and revisions to sce.com/psps landing page	~~Sept. 13, 2021~~ ~~Sep. 24, 2021~~ ~~Oct. 15, 2021~~ ~~Late October/Early November 2021~~ ~~Jan. 14, 2022~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

V.

CORRECTIVE ACTION 3: MITIGATE IMPACTS OF PSPS

SCE understands that PSPS events have a meaningful impact on our communities and public safety partners. The section below reflects the steps SCE will take to mitigate the impacts to our communities and public safety partners. The effectiveness of these steps will be measured by increasing enrollment in customer programs that provide resiliency and back-up power, and providing additional support to our most vulnerable customers, including by expanding the Critical Care Back-up Battery program to all eligible Medical Baseline customers and verifying delivery of PSPS notifications to all impacted Medical Baseline customers.

A. Increase Participation in Back-Up Power Programs and Incentives

SCE offers customers multiple back-up power programs and incentives to support their resiliency planning and to mitigate the impacts of PSPS, especially for our most vulnerable customers.

Critical Care Back-up Battery (CCBB) Program:

In July 2020, SCE launched the CCBB program to support our most vulnerable customers, a subset of Medical Baseline customers who are designated as "Critical Care,"[8] enrolled in CARE or FERA and live in a HFRA. More than 700 batteries were delivered to participating customers in the first six months of the program out of the initial 2,500 target population.

In 2021, SCE is expanding the CCBB program to include all eligible Medical Baseline customers (not just Critical Care customers) that are enrolled in CARE or FERA and reside in HFRA. Progress in 2021 will not be impeded by the initial delays experienced in 2020, as inventory is no longer a constraint and SCE is expanding its marketing efforts. To increase battery deployments to eligible customers, SCE will outreach to all eligible customers (approximately 12,000). SCE assumes that approximately 30 percent of total eligible customers will choose to enroll this year. SCE will continue marketing and

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[8] Critical Care customers are those who rely on medical equipment to sustain life and cannot be without electricity for at least two hours.

outreach efforts to reach as many eligible customers as possible. SCE will expand marketing and outreach using direct mail, phone calls, email, and digital channels (sce.com, social media, etc.) and will work with CBOs and other agencies to increase awareness about the CCBB program. By expanding the eligible customer population, SCE will increase back-up batteries deployed to vulnerable customers in HFRA that may not otherwise have the resources to procure necessary resiliency equipment.

By the end of February 2021, SCE will expand the following marketing and outreach activities:

- Send direct mailers and email communications to all eligible customers including those that did not commit to participate in the CCBB program in 2020
- Battery deployment vendors begin outbound calling efforts to assess customer medical devices and enroll customers in the program
- Identify and conduct outreach to newly eligible customers every month
- By the end of April 2021, SCE will finalize and launch the following new activities:
- Develop social media posts to market the program through SCE's social channels
- Deploy targeted posts on platforms such as Nextdoor or similar other social media platforms
- Engage with CBOs, local and tribal governments, and other agencies to help educate customers in PSPS impacted areas about the CCBB program
- Provide CBOs with training and program collateral to help educate customers about the program
- Launch in-person visits and other methods to engage customers who are nonresponsive or have not agreed to participate in the program

Based on program metrics tracking, SCE may consider onboarding additional battery deployment vendors to increase enrollments and deployments in 2021.

SCE also provides rebates for portable back-up power available on SCE's Online Marketplace to meet the needs of those that may depend on electricity to pump water or to power small appliances, such as routers and modems, as well as charging devices, such as laptops and cell phones:

- Well Water Rebates (for portable generators): In July 2020, SCE launched a rebate pilot targeting customers in HFRA that depend on electricity to pump water to their home or property. This pilot was designed to address water pumping needs and will assess customer interest and barriers to participation. SCE designed the pilot to improve resiliency through portable back-up generators with rebate amounts of $300 for non-CARE/FERA customers and $500 for customers enrolled in CARE/FERA, limited to one rebate per SCE service account. Based on customer feedback, we discovered customers required larger generators to power their pumps and, as a result, we enhanced the product list to include larger portable generators. SCE will continue to market this offering starting in Q1 2021, including education on how to safely connect and use generators.
- Residential Power Station Rebate: In 2020, SCE implemented a portable power station resiliency pilot available to residential customers. The pilot tested customer interest and barriers to investing in resiliency in the form of a clean (battery) portable power station. Using the existing SCE Marketplace website, SCE set the rebate amount to $50 per portable power station, with a limit of five rebates per SCE service account. SCE will promote the offering through marketing, outreach and awareness campaigns starting in Q1 2021, including education on how to safely connect and use batteries. SCE will pursue co-funding of rebate opportunities with third parties to increase resiliency.

Customers can also apply for SCE's Self-Generation Incentive Program (SGIP), which is a statewide program that provides eligible customers with financial incentives to install new qualifying technologies to meet all, or a portion of, the electric energy needs of a home or facility. To improve resiliency and better prepare our vulnerable customers for outages, including PSPS, SGIP offers incentives for the installation of self-generating energy storage systems designed to offset the customer's energy use and work as a back-up battery to provide power when an outage occurs. The eligibility requirements to qualify for these incentives differ between residential and non-residential customers and are outlined in the

SGIP handbook.[9] In 2021, SCE will market SGIP to customers by focusing on the Equity Resiliency Incentive, which launched in 2020. The Equity Resiliency Incentive provides a $1.00 per Wh incentive towards the cost of an energy storage system to eligible customers residing in HFRAs (Tiers 2 and 3) or those who have experienced two or more PSPS events, as well as other eligibility criteria as outlined in the SGIP handbook.[10] SCE's marketing will also include communicating that eligible residential customers can receive 50 percent of the Equity Resiliency Incentive upfront.

Corrective Action #	Description/Deliverables	Milestone/Deadline
3.A Increase Participation and Incentives for Back-Up Power	3.A.1 Expand the CCBB program to all eligible Medical Baseline customers (CARE/FERA & HFRA) and increase outreach activities to increase enrollment a) Offer CCBB program to the expanded customer set through marketing b) Track and optimize enrollment progress in 2021 on a bi-weekly basis c) Establish additional partners (CBOs, contractors)	~~(a) Feb. 28, 2021~~ Completed (b) Completed ~~(c) Apr. 30, 2021~~ Completed
	3.A.2 Continue and expand marketing and outreach for all back-up power solutions (CCBB, online marketplace rebates) including ~300,000 eligible customers for the Self-Generation Equity Resiliency Incentive Program (whole-house battery solution) featuring the 50 percent upfront incentive payment enhancement	~~Throughout 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

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[9] Self-Generation Incentive Handbook Program *available at* https://www.selfgenca.com/documents/handbook/2020.
[10] *See generally* D.19-09-027.

B. Increase Community Resiliency

Microgrids and resiliency zones can potentially mitigate PSPS impacts by enabling some customers to remain energized when they otherwise would not be. SCE is pursuing microgrid and resiliency zone opportunities in a variety of formats. SCE is working with customers interested in behind-the-meter (BTM) single-customer microgrids. SCE is also exploring opportunities for front-of-the-meter (FTM) microgrids that utilize utility distribution infrastructure to serve multiple customers.

BTM Microgrids at Customer Sites

SCE's 2021 General Rate Case included a request to provide an incentive to defray part of the installation costs of a microgrid control system for customers willing to increase resiliency within HFRAs. This program will target non-residential customers who already have solar generation and power storage capabilities, or will be adding such capabilities to their sites, and are willing to island and redirect the energy in the storage battery to a designated building on site for use during PSPS or other emergencies. These facilities are required to be open to the public during PSPS events or other emergencies. Most customers that may be able to participate in this program are larger entities such as schools, local government facilities, and potentially large retailers.

In 2019, SCE initiated a pilot to fund two sites with microgrid controllers. One site has existing solar generation and power storage capability (retrofit pilot); the second site has solar generation and is in the process of adding power storage capabilities to their existing solar system (new build pilot). Installation of the retrofit pilot at San Jacinto High School in the San Jacinto Unified School District was completed in August 2020, and SCE entered into an agreement with Kordyak Elementary in the City of Fontana within the Rialto Unified School District for a microgrid targeted for 2021.

FTM Microgrids at Multiple Customer Sites

SCE is developing longer-term efforts in microgrids that will serve multiple customers. Through 2020, SCE explored potentially viable microgrid deployment opportunities to provide power during PSPS events by examining portions of our system that experience frequent PSPS outages, serve critical facilities or AFN customers, and have land availability. SCE identified and is pursuing an opportunity in Simi

Valley to form a microgrid to reduce PSPS impacts for a community of greater than 200 customers, both residential and commercial, including low-income, critical care, and Medical Baseline customers. The PSPS Microgrid Pilot will be built with clean generation/storage technology and is slated to be operational ahead of peak 2022 wildfire season. Its planning and execution will help SCE advance its capabilities in this nascent area and, correspondingly, inform SCE's contributions to the ongoing Microgrid Order Instituting Rulemaking (OIR).[11]

In 2021, SCE will work with the joint IOUs to develop a Microgrid Incentive Program (MIP) as required by the Microgrid OIR Track 2 Decision.[12] Details of the program remain to be developed, and we expect the program to represent an opportunity for communities interested in implementing FTM microgrids to propose their projects and, if the proposal is eligible, receive technical and financial assistance for its implementation. Proposed projects are expected to be operational in 2023.

Temporary Back-up Power

Temporary back-up power under certain conditions may be used to safely power subsets of customers who would otherwise be affected by a PSPS event. In late 2020, SCE took delivery of a novel mobile battery energy storage system (MBESS), which will function as a zero-emission alternative to a mobile diesel generator. In preliminary deployments, SCE will operate the MBESS in conjunction with diesel generators to reduce net emissions. SCE will also identify potential opportunities for standalone MBESS operation. With 0.7MW/2.9MWh power energy capacity, the MBESS can support multiple customers during a typical PSPS event, depending on targeted customer load profiles and event duration. The preliminary deployment site, north of Chatsworth in Los Angeles County has been impacted by past PSPS events and includes 121 total customers (113 residential and eight commercial). This site was well-suited for the preliminary deployment based on load profile, available space for equipment, and prior work preparing for temporary diesel generator implementation. The system is expected to be ready for

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[11] R.19-09-009, Order Instituting Rulemaking Regarding Microgrids Pursuant to Senate Bill (SB) 1339, issued 9/19/2019.

[12] D.21-01-018, Decision Adopting Rates, Tariffs, and Rules Facilitating the Commercialization of Microgrids Pursuant to SB 1339 and Resiliency Strategies, issued 1/21/2021.

deployment in time for peak 2021 wildfire season. Potential additional deployment sites have been identified in Ventura and San Bernardino counties. Expansion of MBESS deployment to other sites for the 2021 fire season will be evaluated based upon factors such as effectiveness in mitigating customer minutes of interruption and avoided emissions.

Resiliency Zones Pilot

In early 2020, SCE conducted an analysis of circuits impacted by 2019 PSPS events. SCE used the results of the analysis to identify remote communities to initiate the development of a pilot in 2020 to provide essential service sites (e.g., grocery stores, gas stations) in these remote communities with temporary, mobile back-up power. Participating county and community leaders will identify essential sites and SCE will upgrade customer equipment to enable connection to temporary generators deployed by SCE during PSPS events. To date, SCE has secured customer participant agreements for four sites: three in Agua Dulce and one in Cabazon. The three sites in Agua Dulce include a gas station/mini market, three businesses connected to one panel (hardware store, restaurant, and gift shop), and a pump house that supplies water to those three businesses. The site in Cabazon is a gas station. In 2021, SCE will continue engaging with county and community leaders to identify additional essential service sites in these communities for Resiliency Zones.

Community Resource Centers (CRCs)

In 2020, SCE had fifty-six CRCs and eight Community Crew Vehicles (CCVs) available for deployment during PSPS events, with the primary focus of reducing customer impact due to de-energization. In 2021, SCE will provide certain Community Resource Centers (CRC) in remote locations with a transfer switch and back-up power connection so they can continue to provide service to the community if the CRC site is impacted by a PSPS event. To date, SCE has signed customer agreements with three CRCs (Acton Community Center, James A. Venable Community Center (aka Family Service Association) in the city of Cabazon, and Stallion Springs Community Center in the city of Stallion Springs) to receive temporary back-up power if the CRCs are de-energized during PSPS events.

SCE will evaluate the need to expand beyond the current 56 CRC sites under contract by evaluating a refreshed view of locational needs. SCE will consider 2019-2020 event history, as well as grid hardening

efforts. We will continue discussions with tribal communities to increase their participation with designated CRC sites. In addition to CRCs, SCE has a fleet of CCVs that are deployed to locations where CRCs are not available. The CCVs provide similar services to the CRCs. During PSPS events, SCE will deploy trained staff to the CRCs/CCVs in the area of impact to provide information and services to our customers, including education and awareness on PSPS and related program information such as Medical Baseline, CARE/FERA discounts, resiliency rebates, resiliency items such as phone chargers, and amenities such as mobile device charging, snacks, water, and ice. SCE will continue to evaluate customer survey feedback from customer visits to SCE's CRCs and CCVs to make improvements.

Corrective Action #	Description/Deliverables	Milestone/Deadline
3.B Increase Community Resiliency: Microgrids and Resiliency Zones	3.B.1 Construct four Resiliency Zone sites (three in Agua Dulce and one in Cabazon) with back-up power transfer switches and secure additional community Resiliency Zone site commitments	• ~~Mar. 31, 2021: complete one site~~ Completed • ~~May 31, 2021: complete three sites~~ Completed • ~~Jun. 30, 2021: secure additional commitments~~ Completed
	3.B.2 Identify up to 15 CRC locations to enable a transfer switch for back-up power	• ~~Jun. 30, 2021: secure customer commitments~~ Completed
	3.B.3 Complete BTM microgrid enablement for a school in Fontana (Rialto USD) as part of SCE's Community Resiliency Pilot	• ~~Sept. 30, 2021: customer secures materials~~ • ~~October 31, 2021: customer secures materials~~ December 31, 2021: customer secures materials ~~Rescheduled~~ • ~~Dec. 31, 2021: developer completes construction~~ ~~Feb 28, 2022: developer completes construction~~ ~~Rescheduled~~ ~~March 31, 2022: developer completes construction~~ ~~June 30, 2022: developer completes construction~~ ~~Oct. 30, 2022: developer completes construction rescheduled~~ • Delayed due to contract re-negotiations – project schedule TBD

Update Jan. 13, 2023

~~An amended agreement between Rialto USD and the microgrid developer has been approved and executed. The timing of the project remains uncertain until a new project schedule is proposed, pending the completion of certain requirements.~~

Update Jan. 27, 2023

No updates to report during this period.

C. Address Community Safety

SCE will continue to work with local and tribal governments to help identify community challenges due to the loss of power and develop resiliency plans for PSPS events and other outages. Understanding the community challenges will help address issues SCE has heard from our customers about the need for community resiliency plans for traffic signals, water supply, and telecommunication needs during emergency situations. Additionally, SCE will work with local and tribal governments to support their applications for third-party grant funding for resiliency opportunities. SCE's support may include technical assistance and other assistance as required for the grant. SCE will partner with these stakeholders and the Working Groups, Advisory Board, and other parties to identify and evaluate potential solutions. SCE will also review opportunities to improve the timeliness and content of notifications to help them prepare for potential outages as discussed in Section 2.C of this document.

Corrective Action #	Description/Deliverables	Milestone/Deadline
3.C Address Community Safety and Expand CRC/CCV	3.C.1 Send WMP and PSPS updates to key stakeholders and ask them to identify community safety needs	~~Mar. 31, 2021~~ Completed
	3.C.2 Request meetings with local and tribal governments and critical infrastructure customers	~~Mar. 31, 2021~~ Completed
	3.C.3 Assess feedback and incorporate feedback into other action items as appropriate.	~~Oct. 1, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

VI.

CORRECTIVE ACTION 4: KEEP PARTNERS AND CUSTOMERS INFORMED

SCE understands that our partners and customers need to be informed about PSPS events, including how to prepare for these events and, especially for our AFN population, enroll in programs intended to support them during such events. In the section below, SCE will demonstrate success through measurably increased program enrollment, stakeholder feedback, and increased outreach in advance of the PSPS events.

A. Education and Awareness Before PSPS Events

1. Education on wildfire, PSPS, hardening, and resiliency

Based on feedback received, SCE recognizes the need to increase customer understanding regarding PSPS processes and decision-making. SCE also needs to increase education about available customer programs, rebates and services that can help customers prepare for PSPS events as well as assist them during an outage.

a) SCE's 2021 PSPS Marketing Campaign

Past efforts include direct mail, social media, videos, emails, and other advertisements focused on increasing customer awareness around what PSPS events are, how notifications work and where to locate materials online to get information about PSPS events and sign-up for notifications. SCE will continue to provide that information.

In 2021, SCE will direct customers to newly developed, clear and concise information explaining why customers are in scope and being notified regarding PSPS, including the factors that lead to de-energizations and improvements on the grid that will ultimately reduce the need for PSPS.[13] SCE will also

[13] SCE's wildfire and PSPS related webpages, available in all prevalent languages, include: Wildfire Safety primary landing page (sce.com/wildfire), Wildfire Mitigation Efforts page (sce.com/mitigation), PSPS page (sce.com/psps), PSPS Alerts page (sce.com/pspsalerts), Fire Weather page (sce.com/fireweather), Community

Continued on the next page

provide information about and increase enrollment in customer programs and services that support customer resiliency. In addition to the overall marketing campaign, SCE will continue targeted marketing efforts to its AFN customers (see section 4.B).

SCE's outreach effort will include the PSPS Newsletter mailed to all five million SCE customers with targeted PSPS information and a focus on customers in HFRA. That effort will be augmented with an advertising and marketing campaign that includes radio, digital (videos, banners, connected TV, radio), social media, and search ads.

SCE will continue using SCE's customer-facing Energized by Edison website to complement these materials, creating content that aids customers in understanding PSPS and encourages customer participation in rebates and other customer programs. SCE will continue to outreach using the Energized website monthly digital newsletter to leverage this content and encourage partners to amplify its message.

Further customer education and outreach efforts will include active outreach to local and regional media outlets, with an emphasis on getting customer programs information to communities that face the highest risk of wildfire.

SCE leverages the results of its various customer surveys to determine opportunities to strengthen messaging, communication channels, and prioritization of customers who may need additional or targeted outreach.

SCE's ongoing marketing campaign, which includes radio, digital, social media, search ads and direct customer mailings, seeks to educate customers and the public on PSPS, including the conditions that trigger a PSPS, how to prepare for a PSPS, what SCE has done and continues to do to mitigate the risk of wildfires, and how to prepare for emergencies including signing up for alerts. In 2021, SCE will create new ads to improve customer awareness of the available programs and services for customers impacted by a PSPS outage, directing them to customer resources and programs. SCE will measure impressions, with a

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Meetings page, (*available at* sce.com/wildfiresafetymeetings) and Customer Resources and Support page (sce.com/customerresources).

2021 campaign-wide goal of one billion impressions, as well as measuring click-through rates for these ads.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.A.1.a Marketing Campaign	4.A.1.a.1 Create new ads and expand the marketing campaign to increase awareness of programs and services and help increase customer participation	~~Apr. 30, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

b) 2021 PSPS Newsletters Mailed to All Customers:

In April and May 2021, SCE will direct mail PSPS newsletters to all SCE customers, with content adjusted for customers in HFRA. The newsletter sent to customers in HFRA will focus on PSPS, including SCE's decision-making factors for PSPS as well as information regarding available customer programs and rebates. Customers in non-HFRA will receive materials focused on emergency preparedness that will also include an overview of PSPS. Both versions will provide an update on SCE's wildfire mitigation efforts, helpful emergency preparedness websites and ways to sign up for alerts and customer support programs.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.A.1.b PSPS Newsletters	4.A.1.b.1 Newsletter content completed	~~Mar. 31, 2021~~ Completed
	4.A.1.b.2 Newsletters printed	~~Apr. 15, 2021~~ Completed
	4.A.1.b.3 Newsletter mailings complete to HFRA customers	~~Apr. 30, 2021~~ Completed
	4.A.1.b.4 Newsletter mailings complete to non-HFRA customers	~~Apr. 30, 2021~~ ~~May 31, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

c) Energized Stories and Monthly Wildfire Digital Newsletter:

SCE shares stories about its wildfire mitigation and PSPS efforts on Energized by Edison. In 2020, wildfire mitigation content on Energized by Edison accounted for 21 percent of total content. This averages two to three content pieces each month. Energized by Edison is available on energized.edison.com and in 2020 had roughly 1.5 million unique visitors. The platform is regularly distributed to media and shared with members of our Consumer Advisory and Government Advisory panels.

In addition to topics including wildfire mitigation activities, emergency preparedness and inspections, content will be expanded to feature programs such as the Critical Care Back-up Battery program and encourage participation in other customer care programs, such as Medical Baseline. SCE also uses its Monthly Wildfire Digital Newsletter to outreach to partner agencies and governments to amplify and share this content on their respective platforms and on social media.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.A.1.c Energized Stories & Digital Newsletter	4.A.1.c.1 Publish two to three stories monthly related to wildfire mitigation and customer programs	~~Jan. – Dec. 2021~~ Completed
	4.A.1.c.2 Use Monthly Wildfire Digital newsletter to outreach to partner agencies, governments and community organizations	~~Mar., Jul., Sept., Dec. 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

d) Media Outreach:

As part of its customer outreach efforts, SCE directly contacts local and regional media outlets to leverage Energized by Edison external stories for earned media coverage. These activities have provided information to help customers prepare for PSPS or other emergencies through the coverage achieved.

In 2021, SCE will continue these outreach efforts to media publication in HFRA with a new emphasis on customer programs and rebates to drive customer participation. SCE will also conduct outreach to other media outlets that have covered PSPS issues.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.A.1.d Media Outreach	4.A.1.d.1 Identify and verify media outlet contact information (HFRA and Non-HFRA)	~~Apr. 1, 2021~~ Completed
	4.A.1.d.2 Outreach with customer program focus and follow-up to HFRA media outlets	~~May 15, 2021~~ Completed
	4.A.1.d.3 Outreach and follow-up to non-HFRA media	~~Jun. 30, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

2. Clearly communicate specific circuit information about hardening investments in communities and how those are reducing PSPS need

As mentioned previously, it is our commitment to reduce the use of PSPS over time with increased grid hardening and improved operations, including changing de-energization thresholds where appropriate, and reducing the number of customers de-energized due to wildfire risk. This effort includes expanding

circuit-specific grid hardening and PSPS mitigation plans, particularly for frequently impacted circuits and communicating this information clearly and concisely to customers that were most impacted in 2020. Information about SCE's wildfire mitigation and grid hardening efforts is *available at* sce.com/mitigation.

Corrective Action #	Description/Deliverables	Milestone/ Deadline
4.A.2 Specific information about grid hardening investments in communities and how those are reducing PSPS need	4.A.2.1 Publish 2021 WMP Update fact sheet with comprehensive overview of SCE's grid hardening efforts, progress-to-date and 2021 plans on sce.com	~~Feb. 5, 2021~~ Completed
	4.A.2.2 Publish quarterly progress report on grid hardening on sce.com	~~Feb. – Dec. 2021~~ Completed
	4.A.2.3 Identify and publish information on the circuits most impacted by PSPS in 2020	~~Mar. 1, 2021~~ Completed
	4.A.2.4 Explain on sce.com the work being conducted in 2021 in most impacted communities	~~Apr. – Sept. 2021~~ Completed
	4.A.2.5 Mail letters and conduct outreach to customers on these circuits as progress is made in their area	~~Apr. – Sept. 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

B. Reaching Vulnerable Customers to Update Contact Information and Increase Enrollment in Programs and Services

SCE recognizes the importance of reaching vulnerable populations when de-energization events occur and is committed to doing so in advance and during events. SCE also acknowledges that not all customer impacts are the same and that those customers who rely on power for medical devices, medications, mobility or other vulnerabilities may require additional support through tailored customer care programs.

Specifically, SCE currently tracks the following indicators of a customer's AFN status, and SCE will continue marketing to increase enrollment in relevant programs, which will in turn increase enrollment

in SCE's AFN tracking, as well as partnering with statewide organizations and agency partners to enhance its ability to identify vulnerable customers:

- Customers enrolled in the following programs:
  - California Alternate Rates for Energy Program (CARE)
  - Family Electric Rate Assistance (FERA)
  - Medical Baseline (including Critical Care)
- Customers who receive their utility bill in an alternate format:
  - Braille
  - Large Font Bill
- Customers who self-identify as having a person with a vulnerability (such as a disability) in the home and could require an in-person visit prior to disconnection if not otherwise reachable
- Customers who have stated a language preference as other than English

SCE remains committed to understanding the unique needs of its AFN customers and finding opportunities to help enhance outreach, education, and resiliency support in advance, during and following emergency situations such as PSPS events. In 2021, SCE will partner with statewide organizations and trusted agency partners that serve vulnerable populations to enhance its capabilities in identifying AFN customers. SCE is currently working with State Council on Developmental Disabilities (SCDD), Cal OES and the joint utilities on proposals for leveraging In-Home Support Services (IHSS) and the Regional Center programs for identification of vulnerable populations. These organizations serve approximately one-million customers across the State of California and it is believed that those served represent the most vulnerable of the AFN populations. These partnerships will directly serve to enhance SCE's capabilities for identifying vulnerable populations and help get eligible customers enrolled in meaningful programs offered by SCE. SCE will also continue relying on customers self-certification and intend to enhance outreach, awareness and education with its customers as mentioned in other sections within this CAP.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.B Identifying vulnerable populations	4.B.a Partner with SCDD, Cal OES (AFN), CFILC and the joint utilities to broaden utility awareness of vulnerable customers enrolled in programs with IHSS and statewide Regional Centers	~~June 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

1. Expand marketing and outreach efforts to reach vulnerable customers, including Medical Baseline enrollment

In prior years, SCE has focused efforts during de-energization events on customers that are most medically vulnerable by leveraging information from its Medical Baseline program and taking additional cautionary measures for those designated as Critical Care (customers dependent on a medical device that cannot be without power for at least two hours to sustain life). SCE will continue to focus on identifying, communicating with, and supporting its most vulnerable customers. In 2021, SCE will increase marketing, education, and outreach to enroll vulnerable populations into appropriate programs and services, such as SCE's Medical Baseline program.

SCE's marketing campaign seeks to educate customers and the public on PSPS, including the conditions that trigger a PSPS, how to prepare for a PSPS, what SCE has done and continues to do to mitigate the risk of wildfires, and how to prepare for emergencies. In 2021, SCE plans to continue to run advertisements in English and other languages using a variety of channels, including digital banners, digital video, connected TV, social media, digital audio and broadcast radio as described above in section IV.A.

In addition to this overall marketing campaign, SCE will continue to promote meaningful and relevant programs that offer benefits, incentives, and services to its AFN customers. SCE promotes these

programs throughout the year using campaigns dedicated to individual programs. Communications that include highlights about available programs are sent to customers to raise awareness and direct them to channels, such as sce.com and SCE's contact center, where they can learn more about the programs. In 2021, SCE will more than triple the dedicated marketing budget[14] to increase Medical Baseline program enrollments and will continue to cross-promote Medical Baseline with other campaigns as mentioned above.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.B.1 Reaching vulnerable customers to update contact information and increase enrollment in programs, services, delivery notifications	4.B.1.1 Launch expanded marketing and outreach efforts to reach vulnerable customers, including Medical Baseline enrollment	~~Mar. 31, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

2. Researching the Needs of Vulnerable Populations

To help address the needs, identify the right solutions and support efforts to aid vulnerable populations, SCE conducts its own research studies, gathers direct and meaningful feedback from members of the community and partners with trusted stakeholders such as CBOs, independent living centers (ILCs), the Statewide AFN Advisory Council, 2-1-1 Interface, Working Groups, Advisory Board, and public agencies that represent the AFN population to better understand and address gaps where they exist with our vulnerable customers.

[14] SCE's 2020 budget dedicated solely to marketing Medical Baseline was $75,000.

In 2021, SCE will launch a new research study for our AFN customers that will help us further understand the varying needs and impacts of this diverse and vulnerable population when PSPS events unfold providing insights through practices such as surveys and or focus groups. Further, this research study will help to influence customer care plans and future programs that will address the gaps in resiliency capabilities for AFN customers so that as PSPS events unfold, this population will have emergency plans in place that enable them to remain resilient through these events. Data gathered from this study will enhance and inform the strategies for greater integration with the vulnerable population and customer programs offered by SCE for the needs of our vulnerable populations.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.B.2 Identifying vulnerable populations	4.B.2.1 Define research objectives and scope to gather qualitative feedback on the customer experience and improve our efforts to help vulnerable customers	~~Mar. 2021~~ Completed
	4.B.2.2 Initiate research with customers	~~Apr. 2021~~ Completed
	4.B.2.3 Complete AFN Research study with conclusions and recommendations	~~Jul. 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

3. Enhance the Online Experience

In addition to further identifying and understanding the needs of vulnerable populations, SCE will enhance the online experience by creating a dedicated web page where customers can self-certify as vulnerable, enroll in programs, and update contact information. Additionally, SCE will enable the ability for customers to provide e-signatures for their Medical Baseline applications.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.B.3 Enhance the online experience	4.B.3.1 Enable e-signatures for Medical Baseline applications	~~Apr. 2021~~ ~~Jul. 31, 2021~~ Completed
	4.B.3.2 Enable customers to self-certify as vulnerable, enroll in programs, and update contact information via sce.com	~~Jul. 2021~~ ~~August 31, 2021~~ ~~Sep. 17, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

4. Delivery of PSPS Alerts and Notifications to Vulnerable Populations

Identifying Medical Baseline and AFN customers and notifying them of PSPS events is critical to helping ensure the safety and wellbeing of some of the State's most vulnerable residents. Historically, SCE has focused on the most vulnerable customers (those who cannot be without electricity for life sustaining devices for at least two hours, *i.e.*, Critical Care customers) for verification of delivery for alerts and notifications. In 2021, SCE will expand capabilities to apply similar treatment for all Medical Baseline customers and those who self-certify as needing an in-person visit prior to disconnection. This includes ensuring positive delivery to customers and, in cases when SCE cannot verify a positive delivery, SCE will escalate contact attempts up to an in-person visit at the customer's premise, if necessary.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.B.4 Ensure delivery of PSPS alerts & notifications to vulnerable populations	4.B.4.1 Expand verification of notification deliveries to Medical Baseline customers and those who certify as needing an in-person visit prior to disconnection, in addition to existing Critical Care customers	~~Jul. 2021~~ ~~Aug. 31, 2021~~ ~~Sep. 30, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

5. Community Partnerships

SCE will continue engaging with diverse community stakeholders to conduct outreach and raise awareness about PSPS, promote resiliency preparedness for when PSPS events unfold and gain insights on the varying and unique needs of the AFN populations. SCE remains committed to supporting its relationships with statewide and local CBOs and trusted agency partners throughout its service area and continues to expand those relationships outward to other trusted agencies that support AFN customers. SCE's 2021 Access and Functional Needs Plan filed on February 1, 2021, provides a comprehensive listing of community and partnership activity. In 2021, SCE will continue engaging existing partnerships, including within the Statewide AFN Advisory Council, and expand partnerships.

a) Statewide AFN Advisory Council:

SCE is committed to understanding the unique and diverse needs of its AFN customer populations and co-funds the Statewide AFN Advisory Council in partnership with the other California IOUs. The AFN Advisory Council meets at least monthly and is comprised of a diverse group of recognized CBO leaders that support the AFN population as well as members and advocates from within the AFN community. The Statewide AFN Council serves as an appropriate foundation for successfully serving its AFN customers. The AFN Council opens the dialogue to discuss unique needs of this most vulnerable population and to develop a holistic strategy to better serve AFN customers. The board of the AFN Council is comprised of IOUs, state leaders (*e.g.*, Cal OES, CPUC), and statewide CBO leaders who support the AFN population. In 2021, SCE remains committed to building upon the expertise within the AFN Advisory Council and further opportunities to serve its AFN populations.

b) State Agency Partners:

SCE's AFN Plan describes its approach to identifying AFN populations as well as customer care plans. Information is provided to state agencies through manual methods during PSPS events. In 2021, SCE will include the needs of the AFN population into the Public Safety Partner Portal referenced in Section IV.D, providing information on SCE's AFN vulnerability criteria and framework.

c) In-Home Supportive Services (IHSS) Partnerships:

In 2021, SCE will launch its partnership with IHSS to provide training to in-home health workers and other social service staff about the programs that SCE provides that are meaningful and helpful to their clients. The training program will be virtual with a series of events made available on an estimated quarterly basis. The Deputy Director of IHSS and SCE will launch the first quarterly training program by end of Q2 2021 and coordinate additional quarterly trainings throughout 2021. The training will consist of in-depth overview of helpful programs that SCE offers its customers with emphasis on the Medical Baseline program. Additionally, IHSS will coordinate the distribution of collateral and attendees for the sessions using their resource information databases. SCE and IHSS will evaluate the effectiveness of the training programs and look for opportunities throughout the year to improve this partnership, where possible.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.B.5 AFN Community Partnerships	4.B.5.1 Continue engagement of existing partnerships including within the Statewide AFN Advisory Council	~~Jan. – Dec. 2021~~ Completed
	4.B.5.2 Launch training of county healthcare workers on Medical Baseline with IHSS	~~Mar. 31 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

C. Comprehensive Stakeholder and Community Engagement Plans, Including Townhall Meetings for Impacted Communities

SCE understands that its stakeholders and customers have many questions and concerns regarding PSPS. SCE has engaged and will continue to engage government, business, and community stakeholders, public safety partners, and the public to increase awareness about SCE's wildfire mitigation work, PSPS, customer programs and resources; identify collaboration opportunities; and solicit feedback on possible improvements to these programs. SCE will host public meetings for communities that have been impacted by PSPS as well as participate in government, business, and community forums to educate customers and communities on SCE's WMP and help them prepare for wildfire and PSPS. The stakeholder and community engagement activities will help support and obtain feedback for the other actions listed in this plan.

SCE will document feedback received in these and other meetings for potential changes and improvements to SCE's PSPS processes and procedures. Input and recommendations will be documented and reviewed. SCE will incorporate changes where possible and will keep the stakeholders informed on the status of their feedback.

1. Community Meetings

SCE acknowledges and understands that communities need help understanding what actions SCE is taking to reduce the frequency of PSPS events in their communities. SCE will continue to build upon its community engagement efforts over the past three years. In 2020, SCE held virtual community meetings for customers in high risk fire areas, including communities that were impacted by multiple PSPS events in late 2019: Tehachapi/Lake Isabella, Santa Paula/Fillmore, Acton/Agua Dulce, Chatsworth, Santa Clarita, Cabazon, and Mammoth Lakes/Mono and Inyo counties. SCE also held two virtual meetings open to all communities that were not targeted to a specific area.

By March 31, 2021, SCE will host three virtual community meetings for communities that have been impacted by PSPS events in late 2020 and early 2021. During these meetings, SCE will present and solicit feedback on its Corrective Action Plan. Specifically, SCE will discuss the steps it is taking to

address concerns raised by stakeholders and customers regarding recent PSPS events, the mitigations to reduce PSPS events, and customer care programs and resources. SCE will also share how it will keep customers informed about wildfire mitigation activities and other issues discussed in this plan.

During the second quarter of 2021, SCE will host the remaining community meetings for customers in high risk fire areas and for specific communities impacted by multiple recent PSPS events. SCE will address customer questions and concerns about recent PSPS events. SCE will provide information on grid hardening and mitigation activities in communities that have been frequently impacted by PSPS and explain how that work will reduce future PSPS events in those communities. SCE acknowledges that customers also want to understand the factors SCE uses in implementing PSPS, so SCE will provide more detailed information about the decision-making process for monitoring and de-energizing circuits. SCE also understands the impact PSPS events have on customers and will provide detailed information on the various customer care programs (e.g., battery back-up programs, Self-Generation Incentive Program, generator rebate for well water customers) and measures to help customers prepare for outages, including PSPS events. SCE will also encourage customers to sign up for PSPS/outage notifications and other programs, including Medical Baseline. Customers will have the opportunity to ask questions to SCE representatives during the meetings. SCE will send a survey to meeting attendees to solicit feedback on the meetings.

The loss of telecommunications during PSPS events is a concern for many customers, so SCE will invite telecommunication companies serving the impacted areas to participate in the community meetings to share their resiliency plans with customers. SCE will also invite local emergency officials to discuss emergency preparedness tips and explain how customers can access tools and programs provided by local and tribal governments.

Given the COVID-19 pandemic and current stay-at-home orders, SCE plans to hold these meetings virtually, but will re-assess if conditions change. Meetings will be recorded and posted on SCE's website.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.C.1 Community Meetings	4.C.1.1 Educate customers and communities on SCE's wildfire mitigation work (including community-specific grid hardening activities), PSPS decision-making factors, available customer programs and resources; obtain feedback	• ~~Mar. Jun. 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

2. Local and Tribal Government Engagement

SCE understands the importance of educating and partnering with local and tribal governments on SCE's WMP. SCE coordinates closely with the communities it serves and has designated representatives who interface regularly with local and tribal governments.

As SCE has done on an annual basis, SCE will send information on its WMP and PSPS protocols to local and tribal governments in high risk fire areas by March 31, 2021. The material provided will include:

- Updates on changes and improvements to PSPS protocols
- Information on the circuits in the jurisdiction that could be impacted by PSPS
- Information of how to access GIS maps of PSPS circuits
- Description of decision-making factors used to determine the implementation of PSPS
- Information on the grid hardening activities the company is doing in the local area and the impact that will have to reduce the use of PSPS
- Description of SCE's PSPS notification process and ongoing improvements to improve timeliness and accuracy
- Request to verify and update governmental and tribal contact information
- Request for assistance in promoting the enrollment of SCE's PSPS/outage notifications, SCE's Medical Baseline and SCE's customer programs aimed at building customer resiliency for emergencies, including PSPS

- Request to verify or identify additional critical facilities within the jurisdiction's boundaries
- Request for recommendations on how to identify and contact vulnerable populations, including community-based organizations that may be helpful
- Request to help identify additional locations for Community Resource Centers and Community Crew Vehicles
- Solicit input on the SCE Public Safety Partner Portal
- Reminder to assess additional back-up power needs and to test currently available capabilities
- Request input on topics to share or focus on during community meetings

After sending the information, SCE representatives will request to meet with all local and tribal governments in HFRA to review the material provided and solicit input on how SCE can improve its information-sharing, collaboration, and partnership.

SCE has designated representatives for the 13 Native American tribes in SCE's service area. As mentioned above, SCE's representatives regularly engage and coordinate with tribal governments, including during PSPS events. In addition to the individual meetings with tribal governments, SCE will engage the Southern California Tribal Emergency Management Group and will also host a workshop for tribal governments to discuss PSPS and address concerns they may have.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.C.2 Local and Tribal Government Engagement	4.C.2.1 Send WMP and PSPS updates to key stakeholders and ask them to identify community safety needs	~~Mar. 31, 2021~~ Completed
	4.C.2.2 Request meetings with local and tribal governments and critical infrastructure customers	~~Mar. 31, 2021~~ Completed
	4.C.2.3 Assess feedback and incorporate feedback into other action items as appropriate.	~~Oct. 1, 2021~~ Completed
	4.C.2.4 Gather information from local and tribal governments on community safety needs	~~Oct. 1, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

3. County Operational Area Engagement

SCE relies on the partnerships with local and tribal government public safety and emergency management personnel for effective coordination and response to emergency events, including PSPS. As part of ensuring an engagement process that meets the needs of SCE's partners, SCE plans to meet individually with each county Office of Emergency Management ahead of the 2021 fire season. As a follow-up to those initial conversations, SCE will also request to attend and present at existing Operational Area meetings these agencies host to share information on PSPS protocols. These meetings are attended by cities, towns, tribes, and other public safety partners in each county and are an excellent forum for sharing PSPS processes and procedures and soliciting feedback from our agency partners. SCE will use this feedback to improve its PSPS program, strengthen existing relationships, and build new ones.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.C.3 County Operational Area Meetings	4.C.3.1 Solicit public safety partner feedback through Operational Area meetings	~~Mar. – Dec. 2021~~ Completed
	4.C.3.2 Incorporate feedback from Operational Area meetings into PSPS Protocols	~~May and Dec. 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

4. Local and Tribal Government Planning Meetings

As required by California Public Utilities Code Section 768.6, SCE will host two meetings for local and tribal government emergency planning officials by March 31, 2021. These meetings provide SCE an opportunity to review and solicit feedback on its emergency planning activities and to coordinate with local and tribal governments. Information on SCE's PSPS plans will also be reviewed in these meetings.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.C.4 Local and Tribal Government Planning Meetings	4.C.4.1 Review and receive input on SCE's Emergency Plan, including PSPS	~~Apr. 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

5. Local/Tribal Government Resiliency Workshops

As required by the CPUC's Microgrid OIR Track 1 Decision,[15] SCE will hold workshops semiannually starting in 2021 for all local and tribal governments to provide information to assist them in their own resiliency planning efforts and preparing for PSPS. Topics will include PSPS, weather forecasting, microgrids, SCE's electric grid and infrastructure resiliency plans, and reliability. Community choice aggregators and organizations serving AFN and vulnerable populations will also be invited to the workshops.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.C.5 Local/Tribal Government Resiliency Workshops	4.C.5.1 Provide information to assist local and tribal governments in their own resiliency planning efforts and preparing for PSPS	~~Apr. 30 and Sept. 30, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

[15] D.20-06-017.

Update Jan. 27, 2023

No updates to report during this period.

6. PSPS Working Groups and Advisory Board

As required by the CPUC's PSPS OIR Phase 2 Decision,[16] SCE hosts PSPS Working Groups and Advisory Board meetings quarterly to expand the opportunities available to share lessons learned between SCE and impacted communities on PSPS protocols and to develop best practices on PSPS. SCE will continue to host PSPS Working Group and Advisory Board meetings quarterly in 2021 and will leverage feedback from these forums to improve PSPS and address stakeholder concerns.

Subjects typically addressed by the Working Groups include: CRCs, communication strategies, information sharing including soliciting information of SCE's Public Safety Portal, identification of critical facilities, strategies for supporting AFN people/communities, and resiliency plans. SCE used the existing Cal OES regions to establish three Working Groups to represent stakeholders from the entire SCE service area, including small multi-jurisdictional electric utilities, community choice aggregators (CCAs), publicly owned electric utilities, communications and water service providers, CPUC staff, tribal and local government entities, public safety partners, representatives of AFN and other vulnerable communities.

The PSPS Advisory Board leverages lessons learned from Working Group sessions to make recommendations on potential improvements to SCE's PSPS program. The Advisory Board includes participants from public safety partners, communications and water service providers, local and tribal government officials, business groups, non-profits, representatives of AFN and vulnerable people/communities, and academic organizations.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.C.6 PSPS Working Groups/Advisory Board	4.C.6.1 Share lessons learned and help develop best practices around PSPS	~~Quarterly in 2021~~ Completed

[16] *See* D.20-05-051, p. 90.

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

7. Critical Infrastructure Customer / Public Safety Partner Engagement

SCE understands the need to improve the partnership with public safety partners and critical infrastructure customers to ensure they are aware of the impact PSPS may have on their operations.

Specifically, SCE will:

- Continue to provide detailed information on which of their facilities are subject to PSPS, including circuit names
- Review SCE's PSPS notification process and ongoing improvements to timeliness and accuracy of information
- Provide awareness of and visibility into the decision-making factors used to determine the implementation of PSPS
- Provide historical circuit impacts to critical infrastructure customers located in areas that require back-up resiliency plans to ensure they can properly prepare
- Continue to identify and verify all accounts in the critical infrastructure category
- Ensure that critical infrastructure accounts are correctly identified so that they receive the early notifications
- Continue to verify and update contact information
- Continue to provide information and training for access and use of the Representational State Transfer (REST) Service, and GIS maps of PSPS circuits
- Continue to provide load profiles for customers so they can identify back-up power/resiliency requirements
- Solicit input on the SCE Public Safety Partner Portal

SCE will continue to host PSPS resiliency workshops designed for public safety partners and critical infrastructure customers in emergency services, government facilities, healthcare and public health, energy, chemical and transportation sectors, as well as community choice aggregators. SCE has responded

to customer feedback by incorporating discussion on customer resiliency and highlights of lessons learned from PSPS events. Topics discussed during these workshops will include:

- Updates on SCE's grid hardening efforts and education on available customer tools and resources
- Review of SCE's PSPS process and communication protocols
- Share technical issues encountered by customers (e.g., ensuring connection of back-up power is compatible, confirming critical equipment is connected to back-up power sources)
- Review opportunities for mutual aid
- Obtain an understanding of customer issues and concerns

SCE values customer feedback stemming from PSPS events and, as a result of such feedback, will provide demonstrations of the GIS tools available to customers, including SCE's REST service, and a review of customer back-up generation requirements. These workshops will occur in the second quarter of 2021. SCE will also improve notifications sent to these customers as detailed in section II.C of this document.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.C.7 Critical Infrastructure Customer / Public Safety Partner Engagement	4.C.7.1 Educate Critical Infrastructure customers and Public Safety Partners on SCE's wildfire mitigation work, PSPS protocols, and customer resiliency plans; receive input and identify collaboration opportunities	~~Mar. Dec. 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

8. CBO Engagement

Throughout 2021, SCE will continue to partner with CBOs, such as Fire Safe Councils, Independent Living Centers, 211 Operators, and emergency preparedness groups, to educate their members

and share information on SCE's wildfire mitigation work, PSPS, customer care programs, and emergency preparedness resources. SCE will seek regular feedback from CBOs to inform continuous improvements on outreach, communications, and program adoption. SCE will also seek assistance to promote customer programs such as Medical Baseline, Self-Generation Incentive Program, and other programs to support customer resiliency.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.C.8 Community-Based Organization Engagement	4.C.8.1 Engage with Community-Based Organizations to educate their members and help share information on SCE's wildfire mitigation work, PSPS, customer care programs, and emergency preparedness resources	~~Throughout 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

9. Power Talks

SCE hosts Power Talks, which are sessions to help educate business and residential customers prepare for all types of electrical outages, including sharing PSPS protocols, notification process and resiliency efforts. SCE plans to hold these sessions virtually across SCE's service area starting in March 2021.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.C.9 Power Talks	4.C.9.1 Educate business and residential customers on SCE's outage types, including PSPS protocols, notification process, and resiliency efforts	~~Mar. Dec. 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

D. Keeping Public Safety Partners and Critical Infrastructure Customers Informed During Events

Currently, local and tribal government officials, public safety partners, and critical infrastructure managers can access outage and period of concern boundaries for HFRA circuits in the SCE service area for planning purposes through SCE's Representational State Transfer (REST) Service. SCE will create a new Public Safety Partner Portal to improve situational awareness during PSPS events for first responders and operators of critical facilities and communications systems. Features and content of the Portal will include the same real-time PSPS information publicly available on sce.com and through SCE's PSPS REST service and will, subject to appropriate confidentiality measures, expand upon that information to enable better coordination of event response between SCE and public safety partners.

Proposed information available via the Portal:

- Planning Information
  - PSPS planning maps
    (GIS layers, KMZ, Shapefile, PDF, File Geodatabase, GeoJSON, Feature Collection)
  - Circuit map
  - Summary of potentially impacted customers, including critical customers and medical baseline customers
  - PSPS Policies & Procedures
  - PSPS Sample Notifications
- Event Information
  - Event-specific information and maps
    (GIS layers, KMZ, Shapefile, PDF, File Geodatabase, GeoJSON, Feature Collection)
  - PSPS Outage and Restoration areas
  - List of all affected customers
  - Situation Reports

SCE's estimates below are based on its best available information for data integration and stakeholder requirements. SCE will use its bi-weekly reporting to keep the Commission informed on progress and adjust deadlines, if necessary, based on new information discovered and new requirements identified through its design and analysis activities. SCE will prioritize activities to provide stakeholders accurate and useful information to keep them informed throughout a PSPS event.

Corrective Action #	Description/Deliverables	Milestone/Deadline
4.D Keeping public safety partners informed during events	4.D.1 Conduct initial benchmarking with PG&E Portal team	~~Feb. 2, 2021~~ Completed
	4.D.2 Initiate scoping/estimation process with SCE IT	~~Feb. 5, 2021~~ Completed
	4.D.3 Initiate Procurement activities	~~Feb. 15, 2021~~ Completed
	4.D.4 Complete scoping/estimation process with SCE IT	~~Feb. 26, 2021~~ ~~Mar. 12, 2021~~ Completed
	4.D.5 Complete procurement activities	~~Mar. 12, 2021~~ ~~Apr. 2, 2021~~ ~~Apr. 30, 2021~~ ~~May 13, 2021~~ Completed
	4.D.6 Initiate Phase 1 Development	~~Mar. 15, 2021~~ ~~Apr. 15, 2021~~ Completed
	4.D.7 Initiate Phase 2 Development	~~May 10, 2021~~ ~~Jun. 14, 2021~~ Completed
	4.D.8 Complete Phase 1 development (including testing)	~~May 31, 2021~~ Completed
	4.D.9 Launch Phase 1 Public Safety Partner Portal	~~Jun. 1, 2021~~ Completed
	4.D.10 Complete Phase 2 development (including testing)	~~Sept. 10, 2021~~ ~~Oct. 15, 2021~~ ~~Nov. 9, 2021~~ ~~Nov. 15, 2021~~ Completed
	4.D.11 Launch Phase 2 Public Safety Partner Portal	~~Sept. 13, 2021~~ ~~Oct. 22, 2021~~ ~~Nov. 15, 2021~~ ~~Dec. 13, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

VII.

CORRECTIVE ACTION 5: ENHANCE AND IMPROVE POST-EVENT REPORTING

To provide more transparent post-event reports that adequately, accurately, and simply state the circumstances and criteria SCE used to determine the need for a PSPS event, SCE has begun reviewing and improving its current post-event report format based on feedback it has received from its customers, public safety partners, and the Commission on late-2020 PSPS events. Ahead of the 2021 fire season, SCE will coordinate with the Commission staff to confirm that changes to the content and structure of post-event reports aligns with Commission expectations, perform a gap analysis for any information that needs to be expanded, such as demonstrating rapidity of weather change, where appropriate, and continue to make substantive improvements to the post-event report content, template and attachments. These discussions will address all concerns raised by the Commission, including the appropriate way to report multiple periods of concern that occur back-to-back. SCE's post-event report submitted on February 4, 2021, demonstrates SCE's initial improvements and SCE's continuous improvements will be measured by Commission staff confirmation that SCE's 2021 reports meet its expectations and provide all necessary data in a manner that is useful to the Commission and other stakeholders.

Corrective Actions	Description/Deliverables	Milestone/Deadline
5.A. Enhance post-event reporting to align with Commission expectations	5.A.1 Review all comments on SCE's 2020 and January 2021 post-event reports	~~Feb. 28, 2021~~ Completed
	5.A.2 Consult Commission staff on process for reporting multiple consecutive periods of concern and type of complaint information required	~~Feb. 28, 2021~~ Completed
	5.A.3 Perform a gap analysis to identify additional information that should be included in reports from the Corrective Action Plan and needed template improvements	~~Apr. 30, 2021~~ ~~Jun. 30, 2021~~ Completed
	5.A.4 Complete initial reporting template improvements and review with Commission staff	~~May 31, 2021~~ Completed
	5.A.5 Obtain, intake and analyze final Phase III OIR post-event reporting requirements for any additional actions	~~Jun. 30, 2021~~ Completed

Update Jan. 13, 2023

~~No updates to report during this period.~~

Update Jan. 27, 2023

No updates to report during this period.

Appendix A

Master Table of Corrective Actions and Milestones

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
1.A Expedited Grid Hardening	Terry Ohanian	Erik Takayesu	1.A.1 Identify Circuits potentially in scope for Expedited Hardening	Feb. 19, 2021	Completed
			1.A.2 Complete Circuit Segment Reviews for Identified Circuits	Mar. 15, 2021	Completed
			1.A.3 Finalize Circuit Mitigation Plans	Apr. 15, 2021	Completed
			1.A.4 Complete Construction per Plans	~~Sept. 1, 2021~~ Oct. 1, 2021	Completed
			1.A.5 Complete Post-Construction Activities	Oct. 1, 2021	Completed
1.B Circuit Segment Exceptions	Terry Ohanian	Erik Takayesu	1.B.1 Circuit Segment Exception Analysis for Exception Requests in Queue as of Feb. 12, 2021	Mar. 31, 2021	Completed
			1.B.2 Circuit Segment Exception Approval and Implementation for Exception Requests in Queue as of Feb. 12, 2021	Jun. 1, 2021	Completed
2.A.1 Increased Transparency	Tom Brady, Tom Botello	Erik Takayesu	2.A.1.1 Develop clear and user-friendly external-facing materials to educate and inform customers, public safety partners and other stakeholders on SCE's decision-making process, including all factors that SCE utilizes when considering de-energization.	Apr. 1, 2021	Completed
			2.A.1.2 Provide and explain the quantitative and qualitative factors that SCE utilizes when considering de-energization, in update reports and in public and stakeholder outreach. Factors include activation and notification thresholds, de-energization thresholds (including impact from grid hardening), environmental conditions (wind speed, fire potential index, rapidly changing weather), circuit characteristics and input from emergency management and first responder agencies. Demonstrate why the thresholds are set at levels selected.	Apr. 1, 2021	Completed
			2.A.1.3 Share materials on sce.com/psps and via external outreach and engagement efforts, including meetings with communities, local, state and tribal government, emergency management and public safety agencies and critical infrastructure providers.	May 1, 2021	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
			2.A.1.4 Increase transparency in post-event reporting by including a more detailed description of the factors that SCE used when deciding to de-energize each circuit, or circuit segment.	Apr. – Dec. 2021 Post-Event Reports	Completed
2.A.2-4 Identify Senior Officer, Executives, and Board Members and Committees with PSPS Decision-Making Authority			2.A.2 Identify and document the authorities of Senior Officer in Charge, or equivalent position, and how all elements of the utility emergency operations are clearly aligned under this incident command system	Feb. 12, 2021	Completed
			2.A.3 Identify and document all executives with the title of Vice President, or equivalent, and above, with responsibilities in making the decision to call a PSPS event	Feb. 12, 2021	Completed
			2.A.4 Identify and document all Board members and Board committees with PSPS decision-making oversight.	Feb. 12, 2021	Completed
2.B Improve Weather and Fuels Forecasting Accuracy	Tom Brady	Erik Takayesu	2.B.1 Acquire additional data and use machine learning technology	May 1, 2021	Completed
			2.B.2 Increase the resolution of SCE's in-house weather modeling	~~Sept. 1, 2021~~ ~~Oct. 15, 2021~~ Nov. 19, 2021	Completed
			2.B.3 Use fire spread predictions to help with de-energization decisions	Nov. 1, 2021	Completed
2.C.1 Improving In-Event Notification Accuracy	Ranbir Sekhon, Jessica Lim	Erik Takayesu	2.C.1.1 Act upon vendor issues: Validate resolution of vendor issue for telephone notification errors	Feb. 19, 2021	Completed
			2.C.1.2 Simplify telephone language preferences: Change telephone messaging for customers to "Press 1 for English," in alignment with most common phone menus	Feb. 19, 2021	Completed
			2.C.1.3 Perform end-to-end analysis of 2020 notification failures to inform short- and long-range technical solutions	Mar. 31, 2021	Completed
			2.C.1.4 Complete design and initiate development and implementation for prioritized 2021 improvements including process change map and digital tools to better integrate the	May 1, 2021	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
			notification process with PSPS operations (in advance of more advanced long-range efforts)		
			2.C.1.5 Implement prioritized initial updated processes and digital tools	~~Jun. 1, 2021~~ ~~June 21, 2021~~ ~~June 28, 2021~~ July 1, 2021	Completed
			2.C.1.6 Provide training and job-aids for PSPS team members on new processes/tools	~~Jun. 1, 2021~~ ~~June 30, 2021~~ ~~July 14, 2021~~ ~~July 30, 2021~~ Aug. 31, 2021	Completed
			2.C.1.7 Complete design for an automated system to fully integrate PSPS data sets and processes, improve customer data accuracy, and reduce manual notification actions	~~Dec. 1, 2021~~ Dec. 31, 2021	Completed
2.C.2 Reduce Notification Redundancy and Improve Clarity			2.C.2.1 Complete mapping of current customer experience from first notification through event all-clear, including the cadence, content, language, and delivery methods	Mar. 15, 2021	Completed
			2.C.2.2 Complete mapping of customer experience improvements	May 1, 2021	Completed
			2.C.2.3 Complete customer research to collect input from customers on future state PSPS notification experience	May 1, 2021	Completed
			2.C.2.4 Complete outreach to critical infrastructure customers to incorporate feedback into public safety notification cadence	~~May 1, 2021~~ Jun. 30, 2021	Completed
			2.C.2.5 Codify new notification cadence for customers in scope to reduce out-of-event notification churn, and address imminent notification guidelines	Jun. 1, 2021	Completed
			2.C.2.6 Complete re-design of the notification content and process and launch new messages	~~Jun. 1, 2021~~ Jun. 21, 2021	Completed
			2.C.2.7 Measure customer satisfaction for de-energized customers following each PSPS event and summarize at the end of the 2021 fire season	Each PSPS Event	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
			2.C.2.8 Measure customer sentiment of all HFRA customers.	Sept. 15, 2021 Dec. 31, 2021	Completed Completed
2.C.3 Address Preferred Channels			2.C.3.1 Provide opt-out support to move customers from ZIP code alerts to premise-level alerts	~~June 1, 2021~~ ~~Jul. 15, 2021~~ Nov. 15, 2021	Completed
2.C.4 Consider Use of Public Radio Broadcast, Where Appropriate			2.C.4.1 Work with County Offices of Emergency Management to identify remote locations that could require the use of Emergency Radio Broadcasts during PSPS events	March – December 2021	Completed
			2.C.4.2 Develop appropriate messaging for use in Emergency Broadcast Systems where appropriate during PSPS events	~~June 30, 2021~~ July 31, 2021	Completed
2.D.1 Develop and implement a process for public safety partners to adequately engage during PSPS events that includes improvement metrics	Tom Brady	Erik Takayesu	2.D.1.1 Conduct discussions with Cal OES and county OEM Directors to solicit input on optimal structure for in-event communication structure and develop metrics to measure progress	~~Mar. 31, 2021~~ May 31, 2021	Completed
			2.D.1.2 Document input during partner discussions and agree to and assign timeframe for implementation ahead of the 2021 fire season	~~Apr. 30, 2021~~ May 31, 2021	Completed
			2.D.1.3 Implement any identified improvements to existing communications structure	May 31, 2021	Completed
			2.D.1.4 Consistently use Working Groups/Advisory Board to review results, share improvements, and identify further corrective actions to update IMT protocols and procedures	June 15, 2021 and quarterly thereafter	Completed
			2.D.1.5 Perform after-action reviews with impacted county and state agencies after each PSPS event to better understand their information needs	Each PSPS Event beginning after Jun. 30, 2021	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
			2.D.1.6 Send out engagement surveys to State, county. And critical infrastructure partners after every PSPS event to evaluate effectiveness and identify any potential areas of improvement	Each PSPS Event beginning after Jun. 30, 2021	Completed
			2.D.1.7 Include results of engagement surveys in post-event reports	Each PSPS Event beginning after Jun. 30, 2021	Completed
2.D.2 Improve internal processes to ensure timely and accurate information is submitted to California State Warning Center (CSWC)			2.D.2.1 Meet every month with CSWC ahead of the 2021 fire season to discuss forms, procedures and IOU differences in operations, implement existing corrective actions and identify any potential additional corrective actions	Monthly until at least May, 2021	Completed
			2.D.2.2 Confirm SCE's role in implementing the CSWC Standard Operations Guide (SOG)	Feb. 4, 2021	Completed
			2.D.2.3 Validate existing separation of State/County calls	Feb. 4, 2021	Completed
			2.D.2.4 Create job aids for Deputy Planning Section Chief role to include responsibility for essential elements of information and Cal OES notification form	~~Mar. 31, 2021~~ ~~Apr. 30, 2021~~ May 31, 2021	Completed
			2.D.2.5 Clarify invitee/information expectation for each stakeholder call (State/County)	Mar. 31, 2021	Completed
			2.D.2.6 Validate invitee lists for State briefing calls to ensure accurate contact information	Mar. 31, 2021	Completed
2.D.3 Coordinate with counties, tribal governments, and Cal OES to develop and validate a list of public			2.D.3.1 Engage Tribal contacts for any additional coordination opportunities	Mar. 31, 2021	Completed
			2.D.3.2 Validate all Cal OES Regional Administrators are invited to daily in event operational briefings	Mar. 31, 2021	Completed
			2.D.3.3 Work with Cal OES to define and include additional public safety partners in State and County calls as applicable	Mar. 31, 2021	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
safety partners, including local government agencies and critical facilities					
2.D.4 Take a proactive approach for prompt resolution of problems and establish a timeline to resolve problems during the communication with local and State public safety partners.			2.D.4.1 Onboard and train new employees dedicated to information gathering and reporting to CSWC in PSPS events	Mar. 31, 2021	Completed
			2.D.4.2 Train new employees on finalized CalOES procedures after the Apr. 2021 CSWC workshop	May 31, 2021	Completed
			2.D.4.3 Provide dedicated in-event contact to CSWC for in-event communication, coordination and prompt resolution of issues	Each PSPS Event	Completed
2.E Provide Clearer Event Status on	Ranbir Sekhon	Todd Inlander	2.E.1 Conduct initial digital experience benchmarking with PG&E	Feb. 2, 2021	Completed
			2.E.2 Initiate scoping/estimation process	Feb. 5, 2021	Completed
			2.E.3 Initiate Procurement activities	Feb. 15, 2021	Completed
			2.E.4 Complete scoping/estimation process for Phase 1	Feb. 26, 2021	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
SCE's Website			2.E.5 Complete scoping/estimation process Phase 2	Mar. 5, 2021	Completed
			2.E.6 Complete procurement activities for Phase 1	Mar. 12, 2021	Completed
			2.E.7 Complete procurement activities for Phase 2	Mar. 19, 2021	Completed
			2.E.8 Initiate Phase 1 Development	Mar. 15, 2021	Completed
			2.E.9 Initiate Phase 2 Development	~~May 10, 2021~~ Jun. 7, 2021	Completed
			2.E.10 Complete Phase 1 development (including testing)	~~May 31, 2021~~ Jun. 11, 2021	Completed
			2.E.11 Launch Phase 1 – new sce.com service interruption lookup capability and revisions to sce.com/psps landing page	~~Jun. 1, 2021~~ Jun. 18, 2021	Completed
			2.E.12 Complete Phase 2 development (including testing)	~~Sept. 10, 2021~~ ~~Sep. 17, 2021~~ ~~Oct. 8, 2021~~ ~~Late October/Early November 2021~~ Dec. 31, 2021	Completed
			2.E.13 Launch Phase 2 – new sce.com service interruption map and revisions to sce.com/psps landing page	~~Sept. 13, 2021~~ ~~Sep. 24, 2021~~ ~~Oct. 15, 2021~~ ~~Late October/Early November 2021~~ Jan. 14, 2022	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
3.A Increase Participation and Incentives for Back-Up Power	Jessica Lim	Nicole Howard	3.A.1 Expand the CCBB program to all eligible Medical Baseline customers (CARE/FERA & HFRA) and increase outreach activities to increase enrollment a) Offer CCBB program to the expanded customer set through marketing b) Track and optimize enrollment progress in 2021 on a bi-weekly basis c) Establish additional partners (CBOs, contractors)	a) Feb. 28, 2021 b) Completed c) Apr. 30, 2021	Completed Completed Completed
			3.A.2 Continue and expand marketing and outreach for all back-up power solutions (CCBB, online marketplace rebates) including ~300,000 eligible customers for the Self-Generation Equity Resiliency Incentive Program (whole-house battery solution) featuring the 50 percent upfront incentive payment enhancement	Throughout 2021	Completed
3.B Increase Community Resiliency: Microgrids and Resiliency Zones	Jessica Lim	Nicole Howard	3.B.1 Construct four Resiliency Zone sites (three in Agua Dulce and one in Cabazon) with back-up power transfer switches and secure additional community Resiliency Zone site commitments	~~• Mar. 31, 2021: complete one site~~ Completed ~~• May 31, 2021: complete three sites~~ Completed • Jun. 30, 2021: secure additional commitments	Completed
			3.B.2 Identify up to 15 CRC locations to enable a transfer switch for back-up power	• Jun. 30, 2021: secure customer commitments	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
			3.B.3 Complete BTM microgrid enablement for a school in Fontana (Rialto USD) as part of SCE's Community Resiliency Pilot	~~• Sept. 30, 2021: customer secures materials~~ ~~• Oct. 31, 2021: customer secures materials~~ • Dec. 31, 2021: customer secures materials • ~~Dec. 31, 2021: developer completes construction~~ ~~• Feb. 28, 2022: developer completes construction~~ ~~• Mar. 31, 2022: developer completes construction~~ ~~• Jun. 30, 2022: developer~~	Delayed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
				~~completes construction Oct. 30, 2022: developer completes construction rescheduled~~ Project schedule TBD	
3.C Address Community Safety and Expand CRC/CCV	Jessica Lim	Nicole Howard	3.C.1 Send WMP and PSPS updates to key stakeholders and ask them to identify community safety needs	Mar. 31, 2021	Completed
			3.C.2 Request meetings with local and tribal governments and critical infrastructure customers	Mar. 31, 2021	Completed
			3.C.3 Assess feedback and incorporate feedback into other action items as appropriate.	Oct. 1, 2021	Completed
4.A.1.a Marketing Campaign	Gloria Quinn	Beth Foley	4.A.1.a.1 Create new ads and expand the marketing campaign to increase awareness of programs and services and help increase customer participation	Apr. 30, 2021	Completed
4.A.1.b PSPS Newsletters			4.A.1.b.1 Newsletter content completed	Mar. 31, 2021	Completed
			4.A.1.b.2 Newsletters printed	Apr. 15, 2021	Completed
			4.A.1.b.3 Newsletter mailings complete to HFRA customers	Apr. 30, 2021	Completed
			4.A.1.b.4 Newsletter mailings complete to non-HFRA customers	~~Apr. 30, 2021~~ May 31, 2021	Completed
4.A.1.c			4.A.1.c.1 Publish two to three stories monthly related to wildfire mitigation and customer programs	Jan. – Dec. 2021	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
Energized Stories & Digital Newsletter			4.A.1.c.2 Use Monthly Wildfire Digital newsletter to outreach to partner agencies, governments and community organizations	Mar., Jul., Sept., Dec. 2021	~~On Target~~ Completed
4.A.1.d Media Outreach			4.A.1.d.1 Identify and verify media outlet contact information (HFRA and Non-HFRA)	Apr. 1, 2021	Completed
			4.A.1.d.2 Outreach with customer program focus and follow-up to HFRA media outlets	May 15, 2021	Completed
			4.A.1.d.3 Outreach and follow-up to non-HFRA media	Jun. 30, 2021	Completed
4.A.2 Specific information about grid hardening investments in communities and how those are reducing PSPS need			4.A.2.1 Publish 2021 WMP Update fact sheet with comprehensive overview of SCE's grid hardening efforts, progress-to-date and 2021 plans on sce.com	Feb. 5, 2021	Completed
			4.A.2.2 Publish quarterly progress report on grid hardening on sce.com	Feb. – Dec. 2021	Completed
			4.A.2.3 Identify and publish information on the circuits most impacted by PSPS in 2020	Mar. 1, 2021	Completed
			4.A.2.4 Explain on sce.com the work being conducted in 2021 in most impacted communities	Apr. – Sept. 2021	Completed
			4.A.2.5 Mail letters and conduct outreach to customers on these circuits as progress is made in their area	Apr. – Sept. 2021	Completed
4.B Identifying vulnerable populations	Jessica Lim	Nicole Howard	4.B.a Partner with SCDD, Cal OES (AFN), CFILC and the joint utilities to broaden utility awareness of vulnerable customers enrolled in programs with IHSS and statewide Regional Centers	~~Launch by March 31, 2021~~ Jun. 30, 2021	Completed
4.B.1 Reaching vulnerable customers to update contact information and increase enrollment in			4.B.1.1 Launch expanded marketing and outreach efforts to reach vulnerable customers, including Medical Baseline enrollment	Mar. 31, 2021	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
programs, services, delivery notifications					
4.B.2 Identifying vulnerable populations			4.B.2.1 Define research objectives and scope to gather qualitative feedback on the customer experience and improve our efforts to help vulnerable customers	Mar. 2021	Completed
			4.B.2.2 Initiate research with customers	Apr. 2021	Completed
			4.B.2.3 Complete AFN Research study with conclusions and recommendations	Jul. 2021	Completed
4.B.3 Enhance the online experience			4.B.3.1 Enable e-signatures for Medical Baseline applications	~~Apr. 2021~~ Jul. 31, 2021	Completed
			4.B.3.2 Enable customers to self-certify as vulnerable, enroll in programs, and update contact information via sce.com	~~Jul. 2021~~ ~~Aug. 31, 2021~~ Sep. 17, 2021	Completed
4.B.4 Ensure delivery of PSPS alerts & notifications to vulnerable populations			4.B.4.1 Expand verification of notification deliveries to Medical Baseline customers and those who certify as needing an in-person visit prior to disconnection, in addition to existing Critical Care customers	~~Jul. 2021~~ ~~Aug. 31, 2021~~ Sep. 30, 2021	Completed
4.B.5 AFN Community Partnerships			4.B.5.1 Continue engagement of existing partnerships including within the Statewide AFN Advisory Council	Jan. – Dec. 2021	~~On Target~~ Completed
			4.B.5.2 Launch training of county healthcare workers on Medical Baseline with IHSS	Mar. 31 2021	Completed
4.C.1 Community Meetings	Zanku Armenian	Erik Takayesu	4.C.1.1 Educate customers and communities on SCE's wildfire mitigation work (including community-specific grid hardening activities), PSPS decision-making factors, available customer programs and resources; obtain feedback	Mar. – Jun. 2021	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
4.C.2 Local and Tribal Government Engagement			4.C.2.1 Send WMP and PSPS updates to key stakeholders and ask them to identify community safety needs	Mar. 31, 2021	Completed
			4.C.2.2 Request meetings with local and tribal governments and critical infrastructure customers	Mar. 31, 2021	Completed
			4.C.2.3 Assess feedback and incorporate feedback into other action items as appropriate.	Oct. 1, 2021	Completed
			4.C.2.4 Gather information from local and tribal governments on community safety needs	Oct. 1, 2021	Completed
4.C.3 County Operational Area Meetings			4.C.3.1 Solicit public safety partner feedback through Operational Area meetings	Mar. – Dec. 2021	Completed
			4.C.3.2 Incorporate feedback from Operational Area meetings into PSPS Protocols	May and Dec. 2021	Completed
4.C.4 Local and Tribal Government Planning Meetings			4.C.4.1 Review and receive input on SCE's Emergency Plan, including PSPS	Apr. 2021	Completed
4.C.5 Local/Tribal Government Resiliency Workshops			4.C.5.1 Provide information to assist local and tribal governments in their own resiliency planning efforts and preparing for PSPS	Apr. 30 and Sept. 30, 2021	Completed
4.C.6 PSPS Working Groups/Advisory Board			4.C.6.1 Share lessons learned and help develop best practices around PSPS	Quarterly in 2021	Complete
4.C.7 Critical Infrastructure Customer /			4.C.7.1 Educate Critical Infrastructure customers and Public Safety Partners on SCE's wildfire mitigation work, PSPS protocols, and customer resiliency plans; receive input and identify collaboration opportunities	Mar. – Dec. 2021	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
Public Safety Partner Engagement					
4.C.8 Community-Based Organization Engagement			4.C.8.1 Engage with Community-Based Organizations to educate their members and help share information on SCE's wildfire mitigation work, PSPS, customer care programs, and emergency preparedness resources	Throughout 2021	Completed
4.C.9 Power Talks			4.C.9.1 Educate business and residential customers on SCE's outage types, including PSPS protocols, notification process, and resiliency efforts	Mar. – Dec. 2021	Completed
4.D Keeping public safety partners informed during events	Ranbir Sekhon	Todd Inlander	4.D.1 Conduct initial benchmarking with PG&E Portal team	Feb. 2, 2021	Completed
			4.D.2 Initiate scoping/estimation process with SCE IT	Feb. 5, 2021	Completed
			4.D.3 Initiate Procurement activities	Feb. 15, 2021	Completed
			4.D.4 Complete scoping/estimation process with SCE IT	~~Feb. 26, 2021~~ Mar. 12, 2021	Completed
			4.D.5 Complete procurement activities	~~Mar. 12, 2021~~ ~~Apr. 2, 2021~~ ~~Apr. 30, 2021~~ May 13, 2021	Completed
			4.D.6 Initiate Phase 1 Development	~~Mar. 15, 2021~~ Apr. 15, 2021	Completed
			4.D.7 Initiate Phase 2 Development	~~May 10, 2021~~ Jun. 14, 2021	Completed
			4.D.8 Complete Phase 1 development (including testing)	May 31, 2021	Completed

Corrective Action #	Owner	Executive Lead	Description/Deliverables	Milestone/ Deadline	Status
			4.D.9 Launch Phase 1 Public Safety Partner Portal	Jun. 1, 2021	Completed
			4.D.10 Complete Phase 2 development (including testing)	~~Sept. 10, 2021~~ ~~Oct. 15, 2021~~ ~~Nov. 9. 2021~~ Nov. 15, 2021	Completed
			4.D.11 Launch Phase 2 Public Safety Partner Portal	~~Sept. 13, 2021~~ ~~Oct. 22, 2021~~ ~~Nov. 15, 2021~~ Dec. 13, 2021	~~On Target~~ Completed
5.A. Enhance post-event reporting to align with Commission expectations	Tom Brady	Erik Takayesu	5.A.1 Review all comments on SCE's 2020 and January 2021 post-event reports	Feb. 28, 2021	Completed
			5.A.2 Consult Commission staff on process for reporting multiple consecutive periods of concern and type of complaint information required	Feb. 28, 2021	Completed
			5.A.3 Perform a gap analysis to identify additional information that should be included in reports from the Corrective Action Plan and needed template improvements	~~Apr. 30, 2021~~ Jun. 30, 2021	Completed
			5.A.4 Complete reporting template improvements and review with Commission staff	May 31, 2021	Completed
			5.A.5 Obtain final Phase III OIR post-event reporting requirements	Jun. 30, 2021	Completed

Appendix B

CMC, PSPS IC, and Board SOC Rosters

Crisis Management Council – 2021 Roster	
Name	**Title**
Pedro Pizarro	President and CEO of Edison International
Adam Umanoff	EVP and General Counsel of Edison International
Maria Rigatti	EVP and CFO of Edison International
Kevin Payne	President & CEO of Southern California Edison
Steven Powell	EVP of Operations
Todd Inlander	CIO & SVP of Information Technology
Jacqueline Trapp	SVP of Human Resources
Caroline Choi	SVP of Corporate Affairs
Carla Peterman	SVP of Strategy & Regulatory Affairs
Drew Murphy	SVP of Strategy & Corporate Development
Beth Foley	VP of Corporate Communications
Phillip Herrington	SVP of Transmission & Distribution
Jill Anderson	SVP of Customer Service

PSPS Incident Commanders – 2021 Roster	
Name	**Title**
Adebola Ayorinde	Director, NW Construction and Maintenance
Vik Trehan	Director, Design Engineering & Work Management
Anthony Edeson	Director, Grid Operations
James Cherrie	Director, Substation Construction and Maintenance
Robert Sholler	Director, Central Field Services
Dana Cabbell	Director, Integrated System Strategy
Russ Ragsdale	Director, Asset and Engineering Strategy
Dana Bullock	Director, Transmission
William Chiu	Managing Director, System and Asset Strategy
Terry Ohanian	Director, Southeast DC&M
Dean Yarbrough	Director, SCE Safety
Jose Goizueta	Director, Advanced Analytics and Process Improvement

SCE Board of Directors' Safety and Operations Committee – 2021 Roster	
Name	**Title**
Timothy T. O'Toole	Chairperson
Jeanne M. Beliveau-Dunn	Member
Carey A. Smith	Member
Linda G. Stuntz	Member
Peter J. Taylor	Member
Keith Trent	Member