

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE  
STATE OF CALIFORNIA**

**SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E)  
REPLY TO PUBLIC COMMENTS**

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**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE  
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Pursuant to Resolution WSD-001, Southern California Edison Company (SCE) respectfully submits these Reply Comments responding to the Public Comments served on April 7, 2020. Given that many parties’ Comments substantially overlap, SCE has limited its responses to the most salient comments on particular subjects. SCE’s silence on any particular party proposal should not be interpreted as acceptance of, agreement to, or acquiescence with that proposal.

**I.**

**POLICY – SCOPE OF WMP ACTIVITIES AND COST RECOVERY**

**A. The Wildfire Safety Division Should Approve the Scope of SCE’s Wildfire Mitigation Plan**

In its comments, TURN attempts to re-litigate issues that were resolved in prior Commission decisions. TURN argues that the Wildfire Safety Division (WSD) should clarify that, “it is not approving the scope of the wildfire mitigation plans or the reasonableness of costs.”<sup>1</sup> While Decision (D.)19-05-036 made clear that the Commission’s approval did not, “constitute approval of the costs associated with the actions in the plan,” TURN attempts to expand that guidance to exclude approval of the very scope of the Wildfire Mitigation Plan

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<sup>1</sup> TURN Comments at p. 7.

(WMP). This position is untenable and should be rejected outright. Public Utilities Code Section 8386 provides that as part of their WMPs, utilities must provide, “A description of the preventive strategies and programs to be adopted by the electrical corporation to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.” Further, Section 8386.3 requires the WSD to monitor utilities’ compliance with their WMPs. If the WSD’s evaluation and approval process does not include evaluation and approval of a WMP’s scope, then the above requirements would be rendered meaningless and this entire serious effort would be converted into what TURN terms “paper compliance.”<sup>2</sup> Through Assembly Bill 1054, the California legislature created the WSD, an entire new division within the CPUC to specifically “ensure safe operations by electrical corporations” regarding utility wildfire mitigation programs and initiatives. SCE spent thousands of employee hours to assemble its WMP to meet the extensive requirements put forward by the ALJ Ruling on Dec 16, 2019 and answer hundreds of data requests. Thus, contrary to TURN’s assertion, the WSD’s evaluation is not merely a check-the-box exercise. TURN’s own extensive comments on SCE’s risk analysis undermine this assertion. If a WMP’s scope is not part of the WSD’s approval, it raises the question of why risk reduction, cost, and risk spend efficiency (RSE) of the WMP’s scope of work is important to review. Accordingly, to properly evaluate a WMP, the WSD must necessarily evaluate and ultimately approve or otherwise modify its scope. If the WSD accepts TURN’s arguments, it is difficult to see what the point of the entire exercise is to begin with.

TURN further argues that if a utility previously requested and was denied cost recovery for a given initiative, the utility may not again request cost recovery for that same initiative, even if the initiative is within the scope of an approved WMP.<sup>3</sup> TURN wants it both ways, arguing that the WSD shouldn’t make any decisions *approving* cost recovery and then arguing that the WSD should specifically exclude certain types of cost recovery. SCE respectfully submits that

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<sup>2</sup> TURN Comments at p. 4.

<sup>3</sup> TURN Comments at p. 6.

the WSD is not the appropriate regulatory body to evaluate rate recovery issues; that is not what the Legislature intended when it created the division. Moreover, it appears that TURN is attempting to extend the reach of Public Utilities Code Section 451.3, which is designed to examine whether it is reasonable to re-seek recovery of utility wildfire mitigation costs that had already been previously authorized. That is different from “re-requesting” recovery for a previously-denied initiative. Asking the Commission to again consider its previous conclusion using new evidence and new data may indeed be appropriate for a particular program or initiative if circumstances have sufficiently changed that now would better justify cost recovery. For example, the case for requesting cost recovery for installing covered conductor would obviously look very different today versus what it would have looked like ten years ago. As such, TURN’s suggestion of a certification that a utility has not previously requested costs for a given initiative should be disregarded.

## II.

### **RISK AND RSE**

#### **A. Providing RSEs for Certain Initiatives is Neither Practical Nor Useful**

Several parties noted in their comments that SCE should provide RSEs for all initiatives, despite the lack of validation data to develop an RSE. As explained in its response to a WSD data request response, SCE did not provide RSEs for initiatives that fell into the following categories:

1) Pilot projects: No RSE was developed for these initiatives because their deployment is at a limited scale and SCE is still determining their level of mitigation effectiveness, which is the objective of the pilots. The entire purpose of a pilot project is for SCE to collect validation data to judge whether it is effective and can be operationalized. Pilots do not reduce risks, and therefore RSEs for pilots are not meaningful. In other words, neither the “risk” nor the “spend” calculations would be informative when evaluating pilot programs. As such, requiring SCE to develop an RSE for pilots is obviating the very reason for a pilot in the first place. A pilot by

definition is a cost-effective way to test ideas. Pilots can provide information on how effective broad implementation of the pilots could be in reducing risks, and therefore can help with RSE calculations for future implementation activities after the pilots are complete. Examples include distributed fault anticipation and meter alarming for downed energized conductor.

2) Traditional programs: No RSE was developed for these initiatives because it is difficult to measure the incremental impact of a preexisting program. To determine the incremental amount of risk reduced by a specific initiative, there must be a baseline level of risk to start from. For example, SCE recently implemented its Hazard Tree Management Program (HTMP). SCE had data on how many tree-caused circuit interruptions (TCCIs) occurred prior to implementation of the HTMP and thus could estimate how much incremental risk the HTMP could mitigate. On the other hand, SCE has been performing “vegetation management to achieve clearances around electric lines and equipment” for decades. SCE does not have data on how many TCCIs occurred prior to SCE performing this traditional program, cannot estimate how many TCCIs might occur if line clearance activities are not continued, and thus cannot develop an RSE for it. Even if SCE were to take TURN’s suggestion and derive an RSE without data, the end product would have minimal probative value. No matter what RSE was developed for this initiative, SCE would continue to perform vegetation management to achieve clearances because it is required to do so. Similarly, SCE would not forgo any activity due to the relative highness or lowness of a theoretical RSE for “vegetation management to achieve clearances around electric lines and equipment” and the primary focus of SCE’s 2020-2022 WMP is to detail the wildfire mitigation activities SCE is performing that are incremental to its traditional baseline of activities that it has been required to perform for years.

3) Enabling activities: A separate RSE was not developed for initiatives that do not directly reduce the risk of wildfire, but rather directly enable a wildfire initiative that does reduce wildfire risk. An example of an enabling activity is de-energization notifications. They do not directly reduce the risk of wildfires but they directly support public safety power shutoffs (PSPS), which do reduce wildfire risk. Accordingly, the cost of de-energization notifications is

taken into account when developing the RSE for PSPS. In other words, the RSE for de-energization notifications is subsumed within the broader RSE for PSPS.

4) Supporting activities: No RSE was developed for these initiatives because they do not directly reduce the risk of wildfire or directly enable any specific wildfire mitigation activity. To be clear, an RSE cannot be developed if there is no reduction to a risk driver. However, a utility must undertake these foundational activities. For example, an “adequate and trained workforce for service restoration” or “customer support” in emergencies do not directly reduce any specific risk driver for wildfires; yet are essential services that a utility must provide to its customers.

5) Activities with insufficient data: SCE did not develop an RSE for two such activities because there was insufficient data to determine the amount of risk that will be reduced. SCE does not have historical ignition information regarding inspections of and expanded clearance of vegetation from legacy facilities, and thus, it is difficult to estimate the amount of risk that will be reduced by this program. Yet a utility is justified in engaging these kinds of initiatives given the nature of the equipment and their location in high fire risk areas (HFRA).<sup>4</sup>

TURN notes that it is important to have RSEs for all initiatives “to compare the cost-effectiveness of different programs.”<sup>5</sup> But it is important to remember the primary objective of WMPs is to review the activities included in each utility’s WMP and approve the plan. Cost-effectiveness is an important factor to review but is only as useful as the accuracy of the underlying data and assumptions. A common thread among initiatives for which SCE did not compute an RSE is unavailability of sufficient data to estimate risk reduction benefits. While all risk analyses rely on some judgment by Subject Matter Experts, for an RSE to have any real usefulness, it must be grounded in at least some validation data. Without sufficient data, an RSE

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<sup>4</sup> As explained in Section 4.2.1.1 of its 2020-2022 WMP, SCE completed its analysis of historical HFRA designations, has filed a Petition for Modification (PFM) of D.17-12-024 in which SCE proposed retaining less than 1% of its non-CPUC HFRA to be treated as CPUC HFTD Tier 2, and requested the Commission formally include these areas in the HFTD. No public comments on SCE’s 2020-2022 WMP opposes SCE’s HFRA evaluation and proposal. As such, SCE requests the WSD recommend approval of SCE’s HFRA proposal in this 2020-2022 WMP process.

<sup>5</sup> TURN Comment at p. 11.

may be useless at best and potentially counterproductive to the extent that it presupposes outcomes.

**B. SCE Calculation of its RSE is Compliant with Regulatory Requirements**

As TURN points out, “The RAMP proceeding and the General Rate Cases (GRC), and not the WMP proceeding, are the venues for the utility to present their risk approach and parties to provide feedback.”<sup>6</sup> SCE concurs with this statement and although RSEs were requested to be provided in the WMP Tables, and were provided by SCE, they should not be the only metric considered when developing a WMP for the reasons detailed by SCE in Section 5.3.8.3 of its WMP. Further, contrary to TURN’s assertion, SCE’s methodology for calculating its RSEs is compliant with regulatory requirements and the framework established for the 2018 RAMP and consistent with the SMAP Settlement Agreement (SA). Currently, each IOU is in a different phase of their RAMP reporting cycle in using the SMAP SA and SCE is scheduled to file its next RAMP, incorporating the SA, in May 2022. Recognizing the importance of continually improving the RSE modeling as well as incorporating feedback from the 2018 RAMP, SCE revised its RSE model by adding useful life and calculating incremental risk reduction and RSE by year. The outputs, incremental risk reduction, and RSE by year are consistent with the format requested in the WMP Tables (21-30).

**C. Risk Reduction and RSE Standardization**

Rural County Representatives of California (RCRC) requests for RSEs to be compared across utilities.<sup>7</sup> Currently standardized RSEs are unavailable and unnecessary to evaluate WMPs. RSEs can be used to compare activities within a utility as opposed to across different utilities. The challenge with standardization is highlighted in D.18-12-014 (SMAP Decision), which notes that one of the disadvantages of the “proposed SA [Settlement Agreement] does not provide a procedure to produce comparable risk scores across utilities. This is theoretically

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<sup>6</sup> TURN Comment at p. 8.

<sup>7</sup> RCRC Comments at p. 15.

possible but would require a uniform MAVF, common weights, and a great deal of normalization across the utilities, which would be difficult to achieve in practice.” An example of this normalization difficulty is that both PG&E and SDG&E have large gas operations and SCE does not. If the Commission decided to allocate a 25% weight to reliability in order to standardize a Multi-Attribute Value Function across IOUs, SCE would allocate all 25% to an electric reliability metric (e.g., Customer Minutes of Interruption), while SDG&E and PG&E would have to distribute that 25% amongst electric and gas reliability metrics. Given a comparable risk event, SCE will value reliability more than the other IOUs, even though the initial attempt was to assign the same reliability weighting across all the IOUs.

The SMAP Decision also cites a long-term road map for SMAP and one of the goals being to “[d]evelop [a] methodology to produce comparable risk scores across utilities.” SCE looks forward to working with interested parties in the development of this framework through the SMAP proceedings.

#### **D. SCE Provided Sufficient Data on How RSEs Were Developed**

Energy Producers and Users Coalition (EPUC) and Green Power Institute (GPI) wrongly assert that utilities didn’t provide the underlying data and calculations for RSEs.<sup>8</sup> SCE provided workpapers demonstrating the assumptions and modeling that were used to develop its RSEs in its response to data request set WSD-SCE-002, Question No. 033 (SCE-43895-X-379).

#### **E. SCE Supports Including PSPS Impacts in Risk Analysis for Future WMPs**

EPUC and Mussey Grade Road Alliance (MGRA) remark that the RSE for PSPS does not consider impacts to customers.<sup>9</sup> As noted in its comments to WSAB Recommendations for WMPs, SCE agrees that utilities should eventually factor PSPS impacts into its risk analysis. SCE developed a single RSE for the suite of activities associated with PSPS as a mitigation option against wildfires and included this in its 2020-2022 WMP. While SCE is evaluating the

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<sup>8</sup> EPUC Comments at p. 6 and GPI Comments at p. 4.

<sup>9</sup> EPUC Comments at p. 12 and MGRA Comments at p. 43.

risk associated with initiating a PSPS event individually, namely the probability of the occurrence, consequences at a customer class level, and potential mitigation options, there are a few factors that need to be considered before implementation.

Developing a robust methodology for inclusion of PSPS impacts into risk analysis will take some time. A stakeholder process to standardize the analytical approach will be essential to ensure consistency. How PSPS impacts are quantified needs to be agreed upon and SCE recommends that only primary impacts are included consistent with how risk is quantified for other risk events instead of trying to account for derivative and societal impacts that have inherent uncertainty associated with quantification. SCE would find collaboration with the Commission, stakeholders, and other IOUs in determining how best to quantify PSPS impact probability and consequence very helpful. SCE proposes the WSD initiate such a process so that all IOUs can include the progress it makes on a consistent PSPS impact risk analysis in the next WMP update.

Lastly, SCE supports inclusion of PSPS impacts in risk analyses (not limited to RSEs) for prioritization of WMP activity deployment. As discussed in detail throughout SCE's 2020-2022 WMP, SCE utilizes RSEs to select enterprise-level programs and activities to undertake for wildfire mitigation (along with other key safety risk mitigation programs and activities). To prioritize deployment within those selected enterprise level wildfire mitigation programs and activities, SCE's decisions are informed by asset-specific risk analyses that use detailed ignition probability, fire propagation, and consequence information.

**F. SCE Does Not Oppose Granularity in Calculating RSEs in the Future**

In response to data request set TURN-SCE-003, Question No. 002, SCE affirmatively stated that it recognizes that more granular tranches are preferred, if reasonably possible, and will have it implemented by SCE's next RAMP filing, consistent with the SMAP SA. Furthermore, SCE's self-score in the Maturity Survey identified that its RSE estimates are currently at the regional / system level and will be more granular in future years. In addition to the system /

portfolio level RSE model, SCE undertook the development of the Wildfire Risk Model (WRM) in 2019 to target deployment to higher risk locations based on structure-level ignition risk and circuit-segment-level consequence risk. In 2020, SCE will be adopting the Wildfire Risk Reduction Model (WRRM) to enhance SCE's ability to model wildfire risk and improve deployment of mitigations to highest risk areas.

### III.

#### **VEGETATION MANAGEMENT**

##### **A. SCE Has Sufficiently Justified and Supported its Hazard Tree Management Program**

SCE does not agree with TURN's conclusions regarding its Hazard Tree Management Program (HTMP). TURN offers no evidence to support its contention that trees removed as part of HTMP pose a minimal risk of falling over.<sup>10</sup> TURN also mischaracterizes the criteria for removing a tree, implying that the criteria only requires a tree to be taller than its distance from power lines.<sup>11</sup> In fact, trees removed as part of HTMP are removed because the assessment performed by an ISA Certified Arborist has determined the tree poses a risk of failure. SCE has taken considerable time and resources to develop its Tree Risk Calculator and associated training and thanks California Environmental Justice Alliance's (CEJA) for acknowledging this as a best practice.<sup>12</sup> Further, TURN points out that palms are a major cause of vegetation-caused circuit interruptions,<sup>13</sup> perhaps failing to realize that palm removal is a component of SCE's HTMP.

Regarding TURN's recommendation to coordinate a statewide study on best practices for hazard tree removal and compare to other alternatives,<sup>14</sup> as part of a settlement (to which TURN is a party) to SCE's Grid Safety and Resiliency Program (GSRP) Application, approved by the Commission on April 16, 2020, SCE agreed to commission a study on the efficacy of SCE's

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<sup>10</sup> TURN Comments at p. 26.

<sup>11</sup> TURN Comments at p. 25.

<sup>12</sup> CEJA Comment at p. 19.

<sup>13</sup> TURN Comments at p. 26.

<sup>14</sup> TURN Comments at p. 28.

methodology of removing trees in reducing the chances of wildfires. MGRA and CEJA make similar recommendations for a common set of principles and approaches towards vegetation management.<sup>15</sup> SCE and the other major IOUs have started to hold collaboration meetings to discuss best practices for vegetation management.

**B. SCE Uses Data Effectively to Support its Vegetation Management Program Initiatives**

SCE is open to providing an explanation in response to TURN's request for how trees are selected for inclusion into SCE's vegetation management database.<sup>16</sup> As part of SCE's routine vegetation compliance program, annual inspections are performed on all distribution and transmission circuits. During those annual inspections, identified vegetation that has never required a prescription, such as pruning or removal, is not entered into the database. Once the vegetation has been prescribed for pruning, that vegetation is then entered into the vegetation database.

SCE is open to TURN's recommendation to report the number and percentage of trees trimmed to 12 feet.<sup>17</sup> SCE commenced tracking the number and percentage of trees trimmed to 12 feet in the fourth quarter of 2019. Further, a system enhancement was initiated in the first quarter of 2020 and implemented in March 2020, which enables and requires SCE's contractors to provide a valid reason when the 12-foot clearance could not be obtained. As part of SCE's Quality Assurance oversight process, continued assessments will verify the implementation of this requirement.

SCE does not support TURN's suggestion that utilities report on the percentage of overhangs removed in HFTD and non-HFTD.<sup>18</sup> SCE has the capability of providing the number

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<sup>15</sup> MGRA Comments at p. 8 and CEJA Comments at p. 20. With regard to MGRA's specific comments regarding proper tree trimming protocols, SCE manages its vegetation in accordance with regulatory requirements/recommendations for clearance to conductors, and SCE engages qualified and very experienced contractors to perform tree trimming.

<sup>16</sup> TURN Comments at p. 22.

<sup>17</sup> TURN Comments at p. 27.

<sup>18</sup> TURN Comments at p. 27.

of overhang prescriptions in HFTD and Non-HFTD but currently does not have the capability to report the number of overhangs that did not receive a prescription. SCE's vegetation management program requires the removal of overhangs when practical. This applies to both HFTD and Non-HFTD areas. SCE does not track overhangs at the tree inventory level, but tracks overhangs and other prescription options, such as directional pruning and crown reduction at the prescription level.

SCE supports TURN's recommendation to accelerate the use of LiDAR data to optimize vegetation management.<sup>19</sup> SCE commenced using LiDAR in 2019 and continues to use LiDAR as part of its vegetation management program.

In regard to GPI's request for additional information and data from SCE's Integrated Vegetation Management (IVM) plan,<sup>20</sup> SCE anticipates starting the implementation of its IVM plan between 2021 and 2023. SCE is currently focusing its vegetation management practices on compliance pruning and hazard tree management. When SCE's IVM is implemented, it will supplement SCE's existing fuel management programs that currently consist of mechanical and manual methods of vegetation management. During the development of IVM, SCE will continue to evaluate the use of chemicals and other methodologies to achieve low growth vegetation zones, but will also evaluate the use of cultural methods such as the introduction of specific plants or mulches to control vegetation growth or to promote a desirable plant community. Given that SCE's IVM plan is at least several years away from being fully implemented, providing data regarding the efficacy of the IVM program and anticipated near-term and long-term costs for IVM is not practical at this time. SCE will continue to provide updates and more information in each annual WMP update.

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<sup>19</sup> TURN Comments at p. 28.

<sup>20</sup> GPI Comments at p. 8.

#### IV.

#### INSPECTIONS

##### **A. Inspections of Facilities are Appropriate WMP Initiatives**

TURN attempts to re-litigate SCE's inclusion of detailed inspections of its facilities in its WMP and argues that SCE should not be allowed to record related costs in its memorandum accounts. These arguments were addressed in D.19-05-038. The Commission ruled that it would allow the inclusion of these inspections in SCE's WMP and cautioned that they should not consist merely of "drive by" patrols. SCE's detailed inspections are not "drive by" patrols, as described in its WMP and its Tier 1 Advice Letter dated July 5, 2019 (4031-E).

##### **B. SCE Has Validated the Effectiveness of Its Inspections**

Regarding CEJA's suggestion the SCE does not evaluate its inspections,<sup>21</sup> this is simply untrue. As described in Section 5.3.4.14 of its 2020-2022 WMP, SCE's Compliance and Quality group assesses the performance of inspections of SCE's facilities. In 2020, the Compliance and Quality group will perform quality control inspections of completed inspections for approximately 15,000 transmission, distribution, and generation structures in HFRA.

#### V.

#### PSPS AND COMMUNITY OUTREACH

##### **A. SCE Undertakes Robust Outreach Efforts to its Customers and Community Based Organizations**

In response to RCRC's suggestion that WMPs must include more information on its partnerships with Community Based Organizations (CBOs),<sup>22</sup> SCE can provide a list of the CBOs that it partners with. RCRC also requests the number of residents and how much of the

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<sup>21</sup> CEJA Comments at p. 8.

<sup>22</sup> RCRC Comments at p. 10.

access and functional needs (AFN) universe that are supported by those CBOs.<sup>23</sup> SCE cannot report this information today because SCE does not track the large and expansive AFN population in its systems. In 2020, through engagements with CBOs, SCE anticipates it will be able to gather, understand, and develop plans to improve its ability to identify these populations. However, the overly broad AFN definition adopted in this proceeding represents more than 70% of SCE's overall population of customers, based on SCE's analysis. As such, SCE does not see a scenario where the entire AFN customer population universe can be identified. For this reason, SCE has designed its outreach activities to account for the various needs of all populations of customers we serve, considering unique needs of certain populations being served. SCE is, and will continue to place special emphasis on partnering and supporting those CBOs that serve the most vulnerable within its HFRA; those who are disabled, low income, medically vulnerable and non-English speaking to help ensure a high-touch interaction, and then leveraging agencies to support more broader engagements and outreach where customized or tailored needs might apply.

Regarding RCRC's suggestion that SCE increase efforts to expand enrollment in medical baseline programs and identify and mitigate impacts for other individuals who have similar medical needs,<sup>24</sup> SCE is committed to ensuring that its customers are aware of its Medical Baseline (MBL) program and have access to enrollments. Awareness of SCE's program is accomplished through a variety of methods such as quarterly bill inserts, enhanced MBL website pages, partnering with local governments by providing a dedicated link to the MBL program pages and sharing on their own websites, working with CBOs to support increased awareness and enrollments, direct mail campaigns, and opportunities in the media space where public service announcements can reach customers in its service territory. Further, in SCE's outreach activities before, during, and following events, SCE addresses its vulnerable populations and their needs, particularly those who are using medical equipment and may not be aware of the

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<sup>23</sup> RCRC Comments at p. 10.

<sup>24</sup> RCRC Comments at p. 11.

MBL program. SCE will continue to prioritize this program in its external awareness campaigns to help increase the enrollments for those eligible. For those customers who may be vulnerable but not requiring the use of medical devices, SCE is partnering with CBOs and other agencies who are available to support customers by raising awareness of other programs and services available to them (e.g., 211 and independent living centers).

RCRC suggests that utilities convene safety-focused advisory boards.<sup>25</sup> SCE has been holding meetings and workshops with customer groups to discuss the company's PSPS protocols and get input on ways to improve its protocols. A full list of those meetings and workshops are included in the company's PSPS Progress Reports. As stated in the company's Opening Comments to Administrative Law Judge's Ruling requesting comments on Proposed additional and Modified De-Energization Guidelines filed with the Commission in R.18-12-005 on February 19, 2020 (Modified PPS Guidelines Ruling), SCE supports "inviting (as we cannot compel attendance) stakeholders, identified by the Commission for both Working Groups and Advisory Boards, to participate in a PPS-related "Engagement Forum." Such a newly formed Engagement Forum would meet twice a year for the next three years, each time in a different region in SCE's service territory to provide additional accessibility. The Engagement Forum meetings will conform to the requirements and goals for working groups and advisory boards set forth in the Modified PPS Guidelines Ruling.

SCE disagrees with RCRC's suggestion that utilities should provide transportation and accommodation for medically sensitive individuals.<sup>26</sup> Transportation services such as the type RCRA recommends are beyond a utility's core service responsibility and would create untenable liability issues. Moreover, emergencies go beyond PPS de-energizations and can occur at any time. As such, it is important that those who are reliant on transportation, or have unique transportation needs, have built into their emergency plans the resources available to support them during those times. Even for wildfire emergencies, customers need to have prepared plans

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<sup>25</sup> RCRC Comments at p. 7.

<sup>26</sup> RCRC Comments at p. 11.

in the event they need to evacuate given that approximately 90% of all historic fires in California have no connection to utility infrastructure. As recommended through the ready.gov website for those with AFNs, individuals should:

- Be ready to explain to first responders that they need to evacuate and choose to go to a shelter with their family, service animal, caregiver, personal assistant, and their assistive technology devices and supplies.
- Plan ahead for accessible transportation that they may need for evacuation or getting to a medical clinic. Work with local services, public transportation or paratransit to identify their local or private accessible transportation options.
- Inform their support network where they keep their emergency supplies; they may want to consider giving one member a key to their house or apartment.
- Contact their city or county government's emergency management agency or office. Many local offices keep lists of people with disabilities so they can be helped quickly in a sudden emergency.

During de-energization events, SCE is taking extra caution to help ensure all impacted customers are notified, and that those most vulnerable (Critical Care) are confirmed to have received alerts and are prepared to implement their personal emergency plans, including plan for transportation needs.

SCE also disagrees with CEJA's contention that SCE's direct in-person customer outreach is limited.<sup>27</sup> SCE has long been participating in opportunities that bring SCE representatives into the communities following disaster events, particularly as the local assistance centers (LACs) are set up through county-wide coordinated efforts. Following each wildfire since 2017, SCE has had dedicated resources at the LACs from the date they open until the date they close. SCE's representatives purpose is to aid customers in understanding the consumer protections available to them, assist them with handling of orders for service, discuss

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<sup>27</sup> CEJA Comments at p. 14.

programs that are available to them and help them apply, and most importantly to assure them that SCE is committed to helping them transition through those very traumatic times.

Additionally, SCE has provided dedicated training to individuals who now form SCE's disaster response teams that are deployed to these locations so they are adequately prepared to manage those in-person relationships which can be sensitive and emotional.

Regarding CEJA's suggestion that utilities should better integrate community feedback when designing Community Resource Centers (CRCs),<sup>28</sup> customer experience and feedback is essential to SCE. For example, SCE collects feedback from customers during CRCs and Community Crew Vehicles (CCVs) activations and is considering more efficient and effective ways to do so in future deployments.

Additionally, SCE already does what CEJA and GPI suggested in terms of utilities soliciting and integrating public comments on their response to PSPS events into their practices.<sup>29</sup> SCE is required by the Commission to submit post-event reporting no later than 10 business days after a PSPS event. Reports can be found at [www.sce.com/wildfire](http://www.sce.com/wildfire) under Reports to the CPUC. SCE is also required to send a copy of the post-event report to all jurisdictions involved and solicit feedback about the event to increase collaboration and communication in future events. SCE also conducted post-wildfire season / PSPS activity surveys in late 2019 and early 2020 with both residential and business customers who were impacted in September and October 2019 (either notified and de-energized or notified only) or not (not notified in HFRA or in non-HFRA) to determine awareness / understanding / overall opinion of PSPS, sources of information, effectiveness of alerts / notifications, power shutoff experiences, customer care effectiveness, advertising recall, customer preparedness, as well as favorability toward SCE. SCE is developing (and will implement) a comprehensive customer research and feedback program for 2020 to assess the impact of our entire PSPS program and wildfire mitigation activities consistent with the requirements in D.20-03-004. This will include assessments of the

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<sup>28</sup> CEJA Comments at p. 2.

<sup>29</sup> CEJA Comments at p. 12 and GPI Comments at p.18.

effectiveness of our customer communications and outreach efforts, as well as all other customer-facing actions initiated by SCE this year.

Regarding CEJA's suggestion that utilities update their WMPs about their plans to include the outreach requirements of D.20-03-004,<sup>30</sup> SCE will comply those requirements that expand language requirements to the best of its capabilities and will include information about its plans in upcoming filings as required by that decision. That decision's filing dates are beyond the time when WSD is required to issue its draft Resolution on approval or denial of the WMPs. As such, CEJA's suggestion should be rejected.

Regarding GPI's suggestion that utilities provide more thorough descriptions and examples of the outreach and communication program assessments,<sup>31</sup> SCE will further describe its customer awareness and public outreach plans as part of future filings ordered by D.20-03-004 and will continue to enhance these efforts and describe them in future WMP updates.

**B. SCE Provides Services Such as Community Resource Centers to Help Mitigate the Impacts of PSPS Events**

Regarding RCRC's request that CRCs provide certain services and be open 24 hours-a-day,<sup>32</sup> CRCs are intended to primarily be temporary public destinations for customers to obtain information on PSPS events during daylight hours. SCE included ancillary services such as charging personal mobile devices, access to restrooms, and amenities such as water, light snacks, and WiFi (as available). Providing these services 24 hours-a-day is not within the current scope for CRCs. CRCs are not designed for, nor intended to be, emergency overnight shelters. As described above, emergencies go beyond PSPS de-energizations and can occur at any time. 24 hour-a-day emergency centers should not be the responsibility of a utility. There are significant requirements and additional public risks that overnight sheltering can present that go beyond a

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<sup>30</sup> CEJA Comments at p. 14.

<sup>31</sup> GPI Comments at pp.18-19

<sup>32</sup> RCRC Comments at p. 12.

utility's core service responsibility. If and when emergency overnight shelters are needed, agencies such as the Red Cross are better suited and equipped to provide these services.

As with emergency transportation plans discussed previously, overnight shelters and charging needs are not limited to PSPS de-energization and can be driven by many situations. Customers who are reliant on devices should have a plan for ensuring back-up batteries are available. SCE encourages all customers to develop their individual resiliency plans for any type of emergency. SCE provides advance notification of PSPS events so that customers may plan for possible service disruptions. As previously referenced, ready.gov is a useful resource for assisting customers with the development of emergency plans that include how to be prepared during emergencies where power is not available.

SCE has been focusing on securing partnerships with facilities that are within reasonable distances of locations where PSPS events might unfold. Following the 2019 PSPS events, SCE is also targeting those areas where events are more likely to occur based on 2019 data. CRCs are made available based on guidance from and coordination with the local office of emergency services and the specific facility. SCE is also collaborating with many Independent Living Centers to better support the needs of AFN individuals. SCE's goal is to make CRCs available within a reasonable distance for customers to travel to and is working to secure those opportunities in 2020.

Regarding CEJA's suggestion that CRCs be located indoors and offer more services,<sup>33</sup> SCE is in the process of securing indoor spaces to serve customers. As indicated above, the purpose of CRCs is to provide a public destination for customers to obtain information on a PSPS event, charge personal mobile devices, have access to restrooms and amenities such as water, light snacks, and WiFi where available. CRCs are not intended to replace all of a customer's needs during a PSPS event such as the provision of meals. SCE is working with various entities including local governments and private and community-based organizations to

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<sup>33</sup> CEJA Comments at p. 12.

create a network of indoor CRCs that would be easily accessible to the community. Depending on the specific needs of the community, SCE may provide certain critical services such as bulk water and ice to support customers as customers become more prepared and resilient in the future.

Regarding RCRC's suggestion that WMPs be modified to provide additional details on how the utilities will mitigate PSPS impacts on medically sensitive populations,<sup>34</sup> SCE takes very seriously the impacts to its vulnerable populations and its 2020-2022 WMP addresses what elements it will be evaluating that will help mitigate impacts to its medically vulnerable populations. Additionally, SCE will file updates annually for each WMP cycle that will address this very recommendation. In 2020, SCE will launch its Income Qualified Critical Care Customer (IQCC) Battery Backup Incentive Program that will serve the critical needs of its medically-fragile, income-eligible, customers in HFRA who are most vulnerable to the impacts of PSPS events. Additionally, SCE will also be expanding outreach efforts around the newly ordered SGIP equity and equity resiliency incentives program enhancements that can aid vulnerable critical care customers. The enhanced partnerships with our Independent Living Facilities will also help raise awareness of the MBL program and serve to aid customers with needs during PSPS events. While these programs are being launched, SCE will be evaluating their effectiveness.

Regarding CEJA's suggestion that utilities partner with organizations like Meals on Wheels,<sup>35</sup> SCE is interested in partnering with CBOs who would like to collaborate to serve the needs of our customers and currently collaborates with CBOs such as the American Red Cross and Independent Living Centers to support the needs of AFN individuals.

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<sup>34</sup> RCRC Comments at p. 15.

<sup>35</sup> CEJA Comments at p. 13.

**C. SCE Coordinates Extensively With Its Public Safety Partners and Critical Facilities**

Regarding RCRC's request for outage-specific maps to accurately depict the outage boundaries,<sup>36</sup> SCE has introduced a Representational State Transfer (REST) service, which is a web-based tool that provides access to GIS files related to PSPS events to SCE's public safety partners. REST allows SCE's public safety partners to log onto a web service that shows monitored circuits and de-energized circuits. Users can map their facilities to this information using a GIS application. Authorized users can view both PSPS circuit outage boundaries and the associated aggregate customer information related to the circuit. SCE's REST service is available to all public safety partners upon request and SCE continues to make its public safety partners aware of this service. Access to REST was provided initially, in June 2019, to emergency management agencies at Cal OES and County Emergency Management Departments in SCE's service territory. Thereafter, any public safety partners that requested access to circuit GIS data was granted access. Additionally, public safety partners who have not requested access to SCE's REST service can also access static GIS shapefiles via <https://library.sce.com/>. For the general public, SCE provides a real-time interactive map that shows boundaries of locations in scope for PSPS and outage boundaries of locations that have been de-energized at SCE.com.

SCE is aligned with RCRC's suggestion that information provided to Cal OES be provided to local governments and public safety partners.<sup>37</sup> The information provided in the Cal OES report provides a high-level status summary of a PSPS event including information such as number of circuits, counties, and customers in scope for PSPS. An updated report is sent when circuits are de-energized and/or SCE customer care resources are deployed such as CCVs and CRCs. This same information is provided to local jurisdictions and public safety partners during an event and at the same frequency. Procedures for how SCE notifies PSPs is specified in Section 5.3.6.7 of SCE's 2020-2022 WMP.

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<sup>36</sup> RCRC Comments at pp. 7-8.

<sup>37</sup> RCRC Comments at p. 8.

Regarding RCRC’s suggestion that utilities should not charge for deploying backup generation to critical facilities,<sup>38</sup> SCE currently does not charge critical facilities for the provision of temporary mobile backup generation that serve critical life safety emergencies, public health emergencies, and communication failures as part of a PSPS event. SCE continues to work collaboratively with local governments, first responders, and essential service providers to provide awareness of PSPS and to educate them on the importance of developing a resiliency plan that addresses backup power needs for their facilities which provide critical life and safety functions. However, if essential service providers are unable to sustain critical life/safety operations during an extended power outage, SCE will consider requests to provide temporary mobile backup generation.

Regarding RCRC’s suggestion that utilities report on their efforts to partner with critical facilities,<sup>39</sup> SCE should be able to report on its 2020 efforts in its 2021 update to the WMP.

Regarding RCRC’s suggestion that local food banks, flood control facilities, and local elections officials be added as critical facilities,<sup>40</sup> SCE suggests this issue is not within the scope of this proceeding and is better addressed in R.18-12-005 where the Commission has adopted an interim definition of the term “critical facilities.”

**D. SCE Considers the Impacts of De-Energization When It Implements a PSPS Event**

SCE responds to CEJA’s contention that utilities do not consider the impacts of PSPS on communities<sup>41</sup> by emphasizing that the decision to de-energize a circuit in a PSPS event is carefully considered and informed by weighing a variety of factors. These factors include important guidance from county emergency management officials and first responder agencies whenever possible to understand the risks associated with de-energizing circuits. The decision to

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<sup>38</sup> RCRC Comments at p. 13.

<sup>39</sup> RCRC Comments at pp. 13-14.

<sup>40</sup> RCRC Comments at p. 14.

<sup>41</sup> CEJA Comments at pp. 17-18.

de-energize a circuit is one that SCE takes very seriously, understanding the disruptive consequence of the impacts on its customers.

When deciding whether to de-energize a circuit for public safety reasons, SCE considers factors such as environmental conditions, wind speeds, and meteorological data. SCE also consults its FPI and reviews any circuit-specific concerns in the area of potential de-energization. SCE also factors in any warnings or concerns from public authorities, any recent grid hardening and other wildfire mitigation efforts, as well as the potential impacts to customers, including essential services.

SCE's PSPS considerations have been under constant review for improvements since the peak fire season of 2019. Recent enhancements to SCE's PSPS considerations include factoring in grid hardening and operational changes to reduce the impact of PSPS on customers. SCE is continuously refining its PSPS protocols by adjusting thresholds to account for ongoing wildfire mitigations and grid hardening efforts (e.g., higher thresholds for circuits with covered conductor versus lower thresholds for bare circuits), by using tools and data to improve inputs to its modeling and FPI, and by continuously assessing opportunities for further enhancements.

Further, SCE prioritizes its PSPS mitigation and grid hardening efforts, such as covered conductor installation, by considering community-specific attributes to reduce the frequency and scope of PSPS events in the communities most impacted by power outages. Examples of circuit-specific prioritization criteria include consideration of non-residential building types (e.g., schools, hospitals, critical services, etc.) and AFN characteristics, including the number of disabled or low-income customers on a circuit, and the number of children in households on the circuit.

SCE also uses community-specific characteristics to inform its circuit-specific customer care strategies to minimize the impact of PSPS events by dispatching in-event services based on the unique needs of customers in a particular community. Examples of circuit-specific mitigations include providing critical services such as CRCs where customers could go to charge their small electronic devices (e.g., cell phones, iPads, etc.), get an update on the outage, and get

bottled water, lite snacks and other information. SCE will also distribute potable water and provide rebates for backup generators in communities that rely on wells and electric pumps for drinking water. Another example is how SCE proactive identifies essential services within a community by working with local governments and community members to identify and provide resiliency (i.e., temporary backup power) to a limited number of sites. Typically, these sites are located in rural communities dependent on a gas station, a market, or a pharmacy for essential services. SCE is developing circuit-specific customer care plans for each circuit in its HFRA that will provide incident commanders with detailed information about community demographics and other characteristics to help inform decision making during an event. The customer care plans will specify the circuit-specific customer care services that will be considered if that particular circuit needs to be de-energized.

Prior to and during PSPS events, SCE also coordinates closely with public authorities to understand community specific concerns from state and local fire authorities, emergency management personnel and/or law enforcement regarding public safety issues. SCE coordinates closely with county emergency management officials to address community-specific public safety emergencies that may emerge during an event.

Notwithstanding the forgoing, given the evolving impacts of the COVID-19 pandemic on SCE's customers and employees, SCE is assessing elements of its PSPS protocols to explore whether certain aspects of the program should be adjusted or enhanced to mitigate the impacts of a potential de-energization in case of a PSPS event while "safer-at-home" orders are in place in our service territory.

## VI.

### SITUATIONAL AWARENESS DATA

#### A. SCE Carefully Considers Wind Speeds When Implementing Its Wildfire Mitigations

MGRA proposes collecting data on outages, wire-down instances, and vegetation contacts that occur near weather stations that record wind gusts above a predefined thresholds.<sup>42</sup> With the number of weather stations SCE has deployed across its service area, the nearest weather station from the incident may still be too far away to provide an accurate wind speed at the location of the incident as weather patterns can change over short distances, especially in areas with significant variability in terrain. This is expected to be the case for many locations even at full saturation of weather stations. Further, it is unclear how high-wind days would be defined, e.g., at that point location or more broadly.

SCE agrees with MGRA's suggestion to remove Red Flag Warning Day miles as a tracking metric as it is not used operationally.<sup>43</sup>

MGRA proposes replacing the current 95<sup>th</sup> and 99<sup>th</sup> percentile wind gust metric with metrics tied to absolute wind scales.<sup>44</sup> SCE believes that 95<sup>th</sup> and 99<sup>th</sup> percentile wind gusts provide more information on the necessary reliability for a location given its local weather pattern, whereas using specific wind speeds (or territory-wide 95<sup>th</sup>/99<sup>th</sup>) will only be relevant for reliability measures in locations that happen to experience the selected threshold. Utility systems are built to withstand typical conditions in an area and assigning these metrics to absolute wind speeds will ignore winds that are considered high in portions of the service territory that do not typically receive strong wind gusts, but might not reach the specific threshold.

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<sup>42</sup> MGRA Comments at p. 12.

<sup>43</sup> MGRA Comments at p. 13.

<sup>44</sup> MGRA Comments at p. 16.

Regarding MGRA's request that all IOUs should be required to provide 95<sup>th</sup> and 99<sup>th</sup> percentile exceedance wind data,<sup>45</sup> SCE notes that most of its weather stations have much less than two years of data. At least five years of weather data (ideally 10 years) should be collected before attempting to develop a climatology from it.

MGRA proposes that utilities be required to provide a geographic information system (GIS) shapefile showing the wind loading districts that they apply to for the sake of engineering.<sup>46</sup> SCE's vendor, Atmospheric Data Solution (ADS), collects wind loading information and SCE provided that data in GeoTiff format in this proceeding. However, due to the size of the dataset, ADS was unable to provide the data in a shapefile or other GIS format and this will likely be an issue for the foreseeable future.

MGRA suggests incorporating outage-producing winds into their risk-ranking model,<sup>47</sup> SCE does use wind as one of many factors such as load, conductor type, short-circuit duty, and location, in its risk modeling. Moreover, by incorporating wind forces exerted over time, SCE is able to use the cumulative effects of winds from both extreme and non-extreme events and evaluate that impact relative to other variables known to increase the risk of equipment or structure failure that could cause a spark.

**B. SCE Supports Sharing Situational Awareness Data with Appropriate Limitations**

SCE agrees with Joint Local Governments that sharing situational awareness data provides an opportunity to improve collaboration and coordination with local public safety partners.<sup>48</sup> SCE already makes data from its weather stations and HD cameras publicly available and in real-time, but has some concerns about party recommendations, as discussed below.

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<sup>45</sup> MGRA Comments at p. 60.

<sup>46</sup> MGRA Comments at p. 60.

<sup>47</sup> MGRA Comments at p. 65.

<sup>48</sup> Joint Local Governments Comment at p. 2.

SCE does not support RCRC's suggestion that utilities should not require local governments enter into a nondisclosure agreement (NDA) or other similar commitment in order to access important information.<sup>49</sup> SCE views NDAs as important tools to ensure that sensitive information is not widely disseminated. SCE has regularly executed NDAs and NDAs do not unreasonably hinder sharing of information between the utilities and local governments.

MGRA suggests that the WSD should request additional information to understand differences between weather models.<sup>50</sup> SCE supports collaboration efforts hosted by the WSD for utilities to compare weather models and modeling methodologies and exchange lessons learned. However, weather models *should* be different in different regions as California experiences significantly different weather conditions across each IOU's service territory. Therefore, weather model workshops intended to generate uniform models may be counter-productive and force IOUs into "one-size-fits-all" solutions, which would degrade model performance for individual utilities.

Further, in some cases, collaboration on weather modeling and forecasting is already taking place. For example, SCE is an active participant in the California Utility Forecasting Meeting (CUFM). The CUFM is an annual gathering of meteorologists from various utilities, including SDG&E, PG&E and Bonneville Power Administration, select universities, and government agencies like the National Weather Service and US Forest Service. These meetings bring together utility companies to share internal advances in fire-weather modeling and forecasting, monitoring networks, and load forecasting. SCE is also open to collaboration and input from external experts. However, SCE has concerns with outside experts influencing how our vendors might conduct their analyses, especially if these experts are unfamiliar with the topography or other factors that are unique to SCE's service territory.

And although SCE supports sharing, with appropriate limitations, information with the WSD and other utilities, SCE has concerns about sharing sensitive advanced weather-modeling

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<sup>49</sup> RCRC Comments at p. 7.

<sup>50</sup> MGRA Comments at p. 55.

and fire-modeling information, some of which are intellectual properties of SCE’s vendors, such as ADS, who helped SCE develop its Live Fuel Moisture model and its Normalized Difference Vegetation Index (NDVI) model. Other information, such as model data, has been customized for SCE’s service territory and is proprietary. SCE also recommends that asset-specific risk assessment modeling data be excluded from information sharing due to Critical Energy/Electric Infrastructure Information (CEII) requirements.

Regarding CEJA suggestion that utilities start to measure response times to ignitions,<sup>51</sup> while SCE’s Fire Management professionals coordinate overall wildfire response and restoration efforts closely with fire agency personnel during wildfire events, fire agencies are accountable and responsible for responding to wildfire ignitions, not utilities.

## VII.

### **PILOTS AND ALTERNATIVE TECHNOLOGY**

#### **A. The Purpose of Pilots is to Evaluate Promising Ideas for Large Scale Deployment**

SCE opposes Cal Advocates’ suggestion that “the WSD should approve SCE’s WMP on the condition that SCE submit a supplement to its plan within 30 days, via a tier 2 advice letter, that details the parameters of the grid technology pilots.”<sup>52</sup> While SCE understands Cal Advocates’ desire for further information about technology pilots and evaluations, the purpose of the pilots is to test out new ideas that show promise, validate effectiveness, and gather information on benefits, costs and operational considerations for larger scale deployment. Utilities cannot prejudge the results of the pilot and provide all the details of field deployment parameters. Some pilots may not lead to larger scale deployment, but pilot projects are low-cost means of identifying high-impact activities that can be scaled. SCE supports sharing the results of the pilots in applicable filings for larger-scale implementation or in WMP off-ramp reports depending on the timing and outcome of the pilots.

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<sup>51</sup> CEJA Comments at p. 10.

<sup>52</sup> CalPA Comments at p. 12.

SCE has provided details for the pilots proposed in its 2020-2022 WMP including objective, scope, cost, and rationale. SCE agrees with supplementing this information with how success will be measured upon pilot completion in its future WMPs. Furthermore, with respect to the Advanced UAS Study pilot, SCE agrees with Cal Advocates and will certainly be evaluating whether the UAS drone pilot merits continuation as-is, continuation with modifications based on findings, or termination/conclusion.<sup>53</sup>

In the context of SCE's Early Fault Detection (EFD) Evaluation, Cal Advocates requests to "know how well SCE's technology can detect faults thus far and how its technology compares to other utilities' work in the same area."<sup>54</sup> To a certain extent, fault detection and more specifically fault isolation are required to limit damage to the larger electric system when a fault occurs. With conventional distribution electric systems, ignitions can still occur even when the fault detection and isolation system operates as intended, such as a fuse operating or a circuit breaker tripping following a mylar balloon becoming tangled in overhead conductors. The various technologies, such as Distribution Fault Anticipation (DFA), EFD, High Impedance Relay, and collection of Rapid Earth Fault Current Limiter (REFCL) identified in the 2020-2022 WMP, are intended to further collect details on how these systems operate on the SCE system and whether they can mitigate faults before they become ignitions. Technologies like DFA and EFD may offer additional ability to prevent fault events in situations where the detection systems are able to alert SCE of an issue, such as a branch blowing into overhead lines, with sufficient time to respond and remediate the issue before such an event increases in severity and may lead to larger impacts of a fault and related outage. These technologies are in early stages of the pilot project process and data is or will be collected to identify wildfire-related benefits and potential other electric system benefits.

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<sup>53</sup> CalPA Comments at p. 12.

<sup>54</sup> CalPA Comments at p. 59.

**B. SCE is Coordinating with Other Utilities as Appropriate and Necessary**

Regarding TURN's implication that the utilities are not cooperating to investigate the use of emerging technologies, SCE proposed a Wildfire Prevention & Resiliency Technologies Demonstration as an Electric Program Investment Charge (EPIC) replacement project proposal, as part of the Joint Utilities' Research Administration Plan (RAP) Application.<sup>55</sup> During stakeholder outreach of the RAP, SCE coordinated with the other IOUs and the California Energy Commission (CEC) to ensure this wildfire mitigation demonstration would not duplicate existing efforts from the other Administrators' respective 2018-2020 Investment Plans. SCE presented this demonstration at two public stakeholder workshops to gain public feedback. Additionally, the Electric Power Research Institute (EPRI) determined that industry gaps could be addressed by this technology demonstration. As SCE continues to plan and implement its Wildfire Prevention & Resiliency Technologies Demonstration, the utilities and the CEC continue to regularly meet on a bi-weekly basis via meetings and conference calls to coordinate, leverage funding, identify areas of collaboration and avoid duplication of efforts.

Regarding TURN's observation that "utilities are each conducting separate small pilots and EPIC programs and moving somewhat cautiously on field deployment," SCE coordinates administration of its EPIC Investment Plan with the other utilities and the CEC to ensure there is no duplication of technology demonstrations.<sup>56</sup> Furthermore, there are also differences in their respective systems and service territory conditions that can impact the operation and expected benefits of a given technology. Even if the technology is proven and mature, pilots offer a controlled environment for evaluating and maturing the work processes, IT systems integration, training, and organizational change management necessary to support broader field deployment. Pilots are an important and necessary step, post-demonstration, pre-deployment to ensure prudent decisions are made and help to realize the expected technology benefits.

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<sup>55</sup> TURN Comments at p. 32.

<sup>56</sup> TURN Comments at p. 32.

**C. Fire Retardants Do Not Appear to be a Viable Fire Mitigation**

Regarding Perimeter Solutions’ recommendation “that the utilities be required to include the use of cost effective fire-retardant products for these purposes in their WMPs,” SCE did not consider fire retardants or fire gels for pole applications as they do not provide a thermal barrier for the wood pole and are typically used in temporary spray applications.<sup>57</sup> For other applications, there are continued concerns around the environmental toxicity of those products, especially around aquatic animal life. As ignition sources (e.g., incandescent particles and vegetation) can potentially travel great distances in high winds, they may be ineffective for vegetation treatment.

**D. SCE Welcomes Partnership Opportunities with OCFA**

SCE highly values its cooperative relationship with OCFA (and other agencies) and welcomes opportunities for continued partnership that advance the state of fire suppression activities and associated pilot projects.

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<sup>57</sup> Perimeter Solutions Comments at p. 3.

**VIII.**

**CONCLUSION**

SCE appreciates the opportunity to submit its Reply to Public Comments and recommends the WSD approve SCE's 2020-2022 WMP taking into consideration its comments herein.

Respectfully submitted,

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