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

Order Instituting Rulemaking to Implement Electric Utility Wildfire Mitigation Plans Pursuant to Senate Bill 901 (2018).

Rulemaking 18-10-007 (Filed October 25, 2018)

# ACTON TOWN COUNCIL COMMENTS ON THE 2021 WILDFIRE MITIGATION PLAN UPDATES FILED BY THE LARGE INVESTOR OWNED UTILITIES

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In accordance with Resolution WSD-011 adopted November 20, 2020 by the Wildfire Safety Division ("WSD") of the California Public Utilities Commission ("Commission") on November 20, 2020, the Acton Town Council hereby submits the following comments on the 2021 Wildfire Mitigation Plan ("WMP") Updates filed by the large Investor Owned Utilities ("IOUs").

# **1.0 INTRODUCTION**

The Community of Acton is located in an unincorporated rural area of North Los Angeles County, and it has been tremendously burdened by frequent and extended deenergization events initiated by Southern California Edison ("SCE") pursuant to the "Public Safety Power Shutoff" ("PSPS") element of SCE's WMP. In light of the intrinsic connection between PSPS events and WMPs, the Acton Town Council recognizes the essential importance of ensuring that the PSPS protocols set forth in any WMP are reasonable, appropriate, and comply with applicable Commission Decisions and Resolutions described below.

On July 12, 2018, the Commission adopted Resolution ESRB-8 which established the factors that are used to assess whether a de-energization event initiated by an IOU is deemed "reasonable" and therefore qualifies for an exemption from liability under Electric Tariff Rules; these factors are:

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- The IOU has the burden of demonstrating that its decision to shut off power is necessary to protect public safety.
- The IOU must rely on other measures, to the extent available, as alternatives to shutting off power.
- The IOU must reasonably believe that there is an imminent and significant risk that strong winds will topple its power lines onto tinder dry vegetation or will cause major vegetation-related impacts on its facilities during periods of extreme fire hazard.
- The IOU must consider efforts to mitigate the adverse impacts on the customers and communities in areas where it shuts off power. This includes steps to warn and protect its customers whenever it shuts off power.
- Other additional factors, as appropriate, to assess whether the decision to shut off power is reasonable.

ESRB-8 further affirms that "it is important that these factors be used to assess the reasonableness of all electric IOU de-energization events in order to ensure that the power shut off is executed only as a last resort and for a good reason" (page 4). Accordingly, de-energization events which do not comport with these factors cannot be deemed "reasonable".

Shortly after adopting ESRB-8, the Commission opened Proceeding R.18-10-007 on October 25, 2018 to implement the provisions of Senate Bill 901 related to electric utility wildfire mitigation plans (the "WMP Proceeding") a component of which pertains to PSPS events and de-energization activities. Very soon thereafter, the Commission opened Proceeding R.18-12-005 to examine its rules allowing utilities to de-energize power lines in case of dangerous conditions (the "PSPS Proceeding"). Since that time, the WMP Proceeding and the PSPS Proceeding have addressed different issues which are nonetheless connected.

On May 30, 2019, the Commission adopted decision D.19-05-042 establishing "guidelines" for IOUs to follow in addition to ESRB-8 when initiating any sort of PSPS event. Among other things, D.19.05-042 mandates that utilities clearly articulate the conditions (humidity, temperature, etc.) that define an "extreme" fire hazard and it requires utilities to demonstrate that they initiated PSPS only as a measure of last resort by explaining how each de-energization event provided benefits that outweighed the public safety risks that it posed.

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In 2019, the Commission opened a third proceeding relevant to WMP and PSPS issues; this Investigation Proceeding (I.19-11-013) was opened in response to the horrendous PSPS events that were initiated by the large IOUs in the Fall of 2019. The Acton Town Council immediately became a party in the Investigation Proceeding because of the terrible PSPS events that the residents of Acton were forced to endure, and we subsequently became a party in the PSPS Proceeding as well.

The Commission has gone to great lengths to initiate extensive and robust proceedings, convene workshops, and establish clear requirements for developing WMPs and implementing PSPS. However, and since 2018, the WMP Proceeding and the PSPS Proceeding have progressed on entirely separate tracks that appear to have very little overlap. Perhaps this is why the PSPS elements of the 2020 WMPs submitted by the large IOUs do not substantively address D.19-05-042 requirements and they address ESRB-8 requirements in only a limited manner which focusses on reporting, notification, and outreach. It appears to the Acton Town Council that this bifurcation of PSPS issues into two separate proceedings has allowed the large utilities to develop WMPs in the WMP Proceeding which do not embody or reflect the de-energization mandates established in the PSPS Proceeding. Accordingly, the Acton Town Council has reviewed the large IOU's 2021 WMP Updates through the lens of the PSPS Proceeding and, after factoring in recent de-energization events, we have concluded that the large IOU WMPs do not comport with the PSPS "reasonableness" requirements and other aspects of ESRB-8 or D.19-12-005. The deficiencies that the Acton Town Council has noted are set forth below; it is recommended that the Commission not approve the 2021 WMP Updates submitted by SCE, San Diego Gas & Electric ("SDGE") and Pacific Gas & Electric ("PGE") until they are made consistent with, and properly reflect, prior Commission resolutions and decisions regarding the reasonableness and efficacy of IOU de-energization activities.

# 2.0 PG&E'S AND SCE'S PSPS DECISION PROCESSES DO NOT COMPORT WITH ESRB-8; WHETHER SDGE'S PSPS DECISION PROCESS COMPLIES IS UNCLEAR.

As indicated previously, Resolution ESRB-8 clearly enumerates the factors that are to be used "to assess the reasonableness of all electric IOU de-energization events in order to ensure that the power shut off is executed only as a last resort and for a good reason". Among other things, the utility "must reasonably believe that there is an imminent and significant risk that strong winds will *topple its power lines* onto tinder dry vegetation or will *cause major vegetation-related impacts on its facilities* during periods of extreme fire hazard" (page 4 – emphasis added). De-energization events that are not initiated out of concern that power lines will "topple" or result in "major vegetation-related impacts" are, by definition, not consistent with ESRB-8. This is a substantial restriction that ESRB-8 imposes on IOU deployment of PSPS, and it was emphatically re-affirmed by the Commission in D.19-05-042 which defined de-energization to be "the proactive shut-off of power to power lines *that may fail* in certain weather conditions in order to reduce the likelihood *that utility infrastructure can cause or contribute to a wildfire.*" (FOF #3 - emphasis added). Both ESRB-8 and D.19-05-042 make it clear that de-energizations can ONLY be initiated under circumstances in which electrical equipment will ignite a wildfire.

Implicit in the PSPS restrictions imposed by ESRB-8 is a presumption that the IOUs meet their obligation to provide "safe and adequate" electrical service as required by General Order 95 ("GO95") by ensuring that their electrical facilities are constructed, operated, and maintained to accommodate "local conditions" and are capable of withstanding wind speeds that greatly exceed 56 miles per hour<sup>1</sup> ("mph"). This requirement is underscored in D.09-09-030, which affirms that 1) Utility infrastructure must be designed, constructed, and maintained to operate safely under regularly occurring conditions in accordance with GO95; and 2) Power shut offs cannot be implemented in situations that occur regularly (such as sustained windspeeds of only 35 mph) and can only be initiated when emergency conditions are present (page 55). The GO95 compliance requirement that is implicit in ESRB-8 is also revealed by D.12-04-024 which concludes that the authority granted to a utility to shut off power in order to protect public safety under §§ 451 and 399.2(a) is rooted in whether strong winds exceed the *design* basis for a

<sup>&</sup>lt;sup>1</sup> GO-95 and its predecessor (General Order 64-A) require facilities constructed after 1928 to meet the "light" and "heavy" cylindrical loading standards of 6 pounds per square foot ("psf") and 8 psf, respectively; both regulations also imposed the same safety factors and compelled IOUs to replace/reconstruct their equipment when these safety factors were not met. As set forth in D.14-02-015, the combined wind load and safety factor requirements of GO-95 mandate that electrical equipment withstand wind levels that greatly exceed 56 mph (see Pages 56-58).

utility's system (Conclusion of Law #1 – emphasis added). In other words, IOUs are not permitted to deploy de-energization to "mask" deficient equipment and thereby reduce the liability risk posed by facilities that are not maintained in accordance with GO95; this is set forth clearly in D.19-05-042 which explicitly asserts that utilities are not under any circumstance permitted to employ de-energization solely as a means of reducing their own liability risk from utility-infrastructure wildfire ignitions (page 68).

It appears to the Acton Town Council that SCE's and PGE's de-energization decision processes described in their respective 2021 WMP Updates do not comport with the abovementioned requirements. Elements of SDGE's 2021 WMP Update appear to comply with ESRB-8, but when reconciled with actual PSPS activities that SDGE has initiated recently, the extent to which SDGE's PSPS decision process comports with ESRB-8 is less clear.

## 2.1 SCE's De-energization Decisions as Described in SCE's WMP Update

On page 341 of the 2021 WMP Update, SCE states that its PSPS activation decisions are driven by: 1) The likelihood of a spark turning into a major wildfire; and 2) windspeed. SCE quantifies the likelihood that a spark will turn into a major wildfire by using the "Fire Potential Index" or "FPI". In a discovery response, SCE confirmed that the FPI parameter addresses wildfire spread and the consequence of an ignition<sup>2</sup> (i.e., how large the fire will become should an ignition occur for whatever reason); it does not address the probability that an ignition can occur.

For the "windspeed" factor, SCE's 2021 WMP Update states that the " activation thresholds" are based on either the National Weather Service ("NWS") Wind Advisory levels (31 mph sustained wind speed and 46 mph gusts speed) or the 99<sup>th</sup> percentile of historical wind speeds in the area to set activation thresholds. In Acton, SCE only considers the NWS Wind Advisory levels for uncovered conductor, so that is the focus of this discussion<sup>3</sup>. On page 341, SCE asserts (without evidence or supporting technical data) that the "Wind Advisory level is chosen because of the propensity for debris or vegetation

<sup>&</sup>lt;sup>2</sup> See Attachment A in the comments submitted by the Acton Town Council to the Safety Environment Division regarding SCE's Post Event Report dated February 4, 2021.

<sup>&</sup>lt;sup>3</sup> Ibid.

to become airborne". SCE has been asked to provide data to justify use of the 31/46 mph thresholds and thereby support the claim that debris and vegetation have a propensity to become airborne at this windspeed; SCE did not provide such supporting data<sup>4</sup>, and instead pointed to the "Beaufort Scale" and stated that 31/46 is "where larger vegetation begins to move in response to the force associated with the wind flow". However, Beaufort clarifies that winds must meet or exceed 39 mph before twigs will even break off trees<sup>5</sup>, thus it would seem more appropriate for SCE's 2021 WMP to establish the NWS "High Wind" Standards of 40 mph sustained and 58 mph gusts as the thresholds for which "vegetation related impacts" can occur. In any event, just because SCE declares something to be true does not make it true, and given that SCE provides no evidentiary support showing that the 31/46 mph wind thresholds represent the point at which "vegetation impacts" pose and "imminent and significant" risk, it is entirely inappropriate for SCE's 2021 WMP Update to rely on the 31/46 mph NWS thresholds.

On Page 251 of its 2021 WMP, SCE refers vaguely to other aspects that are considered in its de-energization decisions (such as circuit conditions) but provides no specific details on how these decisions are actually made. To address this, the Acton Town Council submitted a discovery request to SCE, and was informed that, for PSPS events in Acton, SCE starts with the 31/46 mph NWS "wind advisory levels", but then adjusts these windspeeds *downward* based solely on 1) whether SCE believes there is a chance that a wildfire could grow large; and 2) the presence of deficient electrical items on their circuit (referred to as "High P2" items that have a high risk of failure within 6-12 months under high wind conditions)<sup>6</sup>. Notably, in Acton, SCE identified more than 450 "High P2" items on just two of the three distribution circuits in Acton and that is why SCE continually initiates

<sup>&</sup>lt;sup>4</sup> SCE's discovery response states "The 31/46 mph wind thresholds correspond roughly to the National Weather Service minimum sustained/gust speed magnitudes for issuing a Wind Advisory". SCE then stated "The 31/46 MPH wind speeds generally correspond to the magnitudes where larger vegetation begins to move in response to the force associated with the wind flow, and debris may become airborne as described by the Beaufort Wind Scale."

<sup>&</sup>lt;sup>5</sup> See <u>https://www.weather.gov/mfl/beaufort</u>

<sup>&</sup>lt;sup>6</sup> See Attachment A in the comments submitted by the Acton Town Council to the Safety Environment Division regarding SCE's Post Event Report dated February 4, 2021.

de-energization events in Acton at windspeeds below the 31/46 mph that SCE claims<sup>7</sup> (the number of "High P2" items on the third circuit is unknown). Moreover, SCE openly admits that it triggers de-energizations based on "circuit health"<sup>8</sup> (which is apparently referred to in the 2021 WMP Update as "circuit maintenance conditions"). The fact that SCE's deenergization decisions in Acton are driven by the large number of "High P2" circuit items in our community evinces a pattern of using PSPS to mask equipment deficiencies and thereby limit liability which, in and of itself, contradicts D.19-05-042. Neither "circuit maintenance conditions" nor "circuit health" are factors that may be considered in a legitimate de-energization decision process, yet SCE's 2021 WMP Update incorporates these factors anyway in a manner that is intrinsically inconsistent with ESRB-8.

Additionally, SCE has stated in workshops and Commission meetings that it does not cut power based on forecast data and only cuts power based on actual windspeed data. This is re-iterated in SCE's 2021 WMP Update, which states on page 351 that SCE's deenergization decisions are made "only when current conditions in the immediate area warrant action". However, these statements are not true; in fact, SCE has informed the Acton Town Council that PSPS events in Acton occur "when winds are *forecast* to exceed these [PSPS] thresholds"<sup>9</sup> (emphasis added) which is not consistent with ESRB-8.

Further evidence that SCE's 2021 WMP is inconsistent with ESRB-8 include:

Using the PSPS protocols described in the 2021 WMP Update, SCE established wind thresholds of only 25 mph (sustained) and 41 mph (gusts) for the "Shovel" circuit in Acton on Thanksgiving Day in 2020, and SCE cut power based on these thresholds<sup>10</sup>. SCE's facilities should have no difficulty withstanding such low windspeeds if they are maintained in accordance with GO95, and SCE itself recognizes that windblown debris is not a concern at these low windspeeds. Therefore, this PSPS event (which was conducted in accordance with protocols established by SCE's 2021 WMP Update) was initiated when there was no "imminent and significant risk" that SCE facilities would topple or experience "vegetation related impacts"; this event constitutes clear proof that SCE's 2021 WMP Update does not comport with ESRB-8 restrictions.

<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Page 14 of SCE Post Event Report dated February 4, 2021.

<sup>&</sup>lt;sup>9</sup> See Attachment A in the comments submitted by the Acton Town Council to the Safety Environment Division regarding SCE's Post Event Report dated February 4, 2021.

<sup>&</sup>lt;sup>10</sup> Page 12 of SCE's Post Event Report Dated December 11, 2020.

- Another consideration factored into SCE's decisions to initiate PSPS is "Firefighting resource availability"<sup>11</sup>; this is re-iterated in SCE's 2021 WMP Update<sup>12</sup>. However, "firefighting resource availability" has no bearing on whether SCE's electrical equipment poses a wildfire ignition risk; in fact, it is more relevant to a reduction in liability risk rather than a reduction in ignition risk. This information further underscores the extent to which the PSPS protocols established by SCE's 2021 WMP Update are inconsistent with ESRB-8 and contravene D.19-05-042.
- For each de-energization event initiated by an IOU, D.19-05-042 requires the utility to disclose the conditions (humidity, fuel dryness, temperature, etc.) relied upon to conclude that an "extreme fire hazard" existed which was sufficient to warrant de-energization. However, through discovery, the ATC has learned that the parameters which SCE relies upon to calculate the FPI and initiate a PSPS event are not recorded and that the FPI values identified in SCE's Post Event Reports are actually "estimates"<sup>13</sup>. In other words, the PSPS decision process that SCE describes in its 2021 WMP Update is not set up to ensure compliance with reporting requirements imposed by D.19-05-042.

Finally, even if the Commission considers it appropriate for utilities to place some reliance on a fire spread parameter or a fire consequence algorithm or an "FPI" factor in their PSPS protocols, there is nothing reasonable or appropriate in the way that SCE utilizes FPI. For instance, page 341 of SCE's 2021 WMP Update states that SCE automatically designates as "high risk" any FPI score exceeding 12 *even though FPI values between 12 and 14 are only considered "elevated" and not "extreme"*<sup>15</sup>. The distinction between "elevated" FPI and "extreme" FPI is very important because "major wildfires" correlate with "extreme" FPI values that exceed 14; they do not correlate with FPI values that are less than 14 and are thus merely "elevated"<sup>16</sup>. Accordingly, there is no technical or scientific basis for SCE to establish an FPI value of only 12 as the threshold above which de-

<sup>&</sup>lt;sup>11</sup> On January 26, 2021, SCE Vice President Herrington remarked to the Commission that a key PSPS factor is "the availability of fire-fighting resources; there's a 1-5 scale and in situations where firefighting resources are more scarce, it goes into our thinking of when we declare PSPS events".

<sup>&</sup>lt;sup>12</sup> Page 39 states that a "lessons learned" from 2020 was that "Existing PSPS thresholds were developed with a different methodology than our wildfire risk model leading to separate decision-making processes. The current model also did not account for firefighting resource constraints."

<sup>&</sup>lt;sup>13</sup> See Attachment A in the comments submitted by the Acton Town Council to the Safety Environment Division regarding SCE's Post Event Report dated February 4, 2021.

<sup>&</sup>lt;sup>15</sup> Page 14 of SCE's Post Event Report dated January 11, 2021.

<sup>&</sup>lt;sup>16</sup> See page 359 of SDGE's 2021 WMP Update.

energization is initiated. Nonetheless, and based on the PSPS protocols established by the 2021 WMP Update, SCE initiates PSPS events in Acton at exceedingly low windspeeds when the FPI is barely above 12. For instance, on November 17, 2020, SCE cut power on the "Shovel" circuit in Acton for more than 25 hours based on an FPI value of only 12.18 and windspeeds of only 22.8 mph (sustained) and 31.9 mph (gust)<sup>17</sup>. Also, on December 3, 2020, SCE cut power on the "Shovel" circuit for more than 27 hours based on an FPI value of only 12.11 and windspeeds of only 23.4 mph (sustained) and 39.9 mph (gust)<sup>18</sup>. That same day, SCE also cut power on the "Bootlegger" circuit in Acton based on an FPI value of only 13.01 and windspeeds of only 22.4 mph (sustained) and 44.6 mph (gust)<sup>19</sup>. **The inappropriately low FPI threshold in combination with the inappropriately low windspeed thresholds that are established by the PSPS protocols in SCE's 2021 WMP Update are the reason why SCE's PSPS events are far more frequent and far lengthier than any other utility<sup>20</sup>.** 

It is clear that the PSPS protocols established by SCE's 2021 WMP Update result in de-energization events that are initiated when there is no risk of SCE facilities "toppling over" or experiencing "vegetation related impacts". Accordingly, the de-energization process described in SCE's 2021 WMP Update is entirely inconsistent with ESRB-8. SCE is not permitted to cut power based on the slight chance that a wildfire may grow large if an ignition occurs for whatever reason (i.e., an FPI less than 14) or because of equipment deficiencies or based on wind forecasts or fire fighter resource availability, yet these are precisely the factors that are imbedded in SCE's 2021 WMP Update and upon which SCE's PSPS protocols are founded. They are also the reason why SCE's 2021 WMP Update is materially deficient and cannot be approved as written; SCE should be compelled to correct these deficiencies and bring its 2021 WMP Update into compliance with ESRB-8.

<sup>&</sup>lt;sup>17</sup> SCE's Post Event Report dated December 4, 2020 at pages 5 and 9.

<sup>&</sup>lt;sup>18</sup> SCE's Post Event Report dated December 21, 2020 at pages 10 and 21.

<sup>&</sup>lt;sup>19</sup> Id at 22.

<sup>&</sup>lt;sup>20</sup> In 2020, SDGE de-energized circuits 3 times; its PSPS events were very limited in scope. PGE deenergized circuits 6 times. SCE de-energized circuits more than 14 times; its PSPS events were very broad in scope and extent (note: some of SCE's Post Event Reports describe multiple PSPS events).

#### 2.2 PGE's De-energization Decisions as Described in PGE's 2021 WMP Update

Page 879 of PGE's 2021 WMP Update describes PGE's process for determining when to initiate a PSPS event. According to the description, PGE relies on the "Outage Producing Wind" ("OPW") and the "Utility Fire Potential Index" ("Utility FPI") models as the main inputs into the framework utilized to make decisions to execute PSPS events. PGE's "OPW" model was developed based on an analysis of historical windspeeds for "every unplanned sustained and momentary outage that occurred over the last decade"; the "Utility FPI" model assesses the probability that a fire will become large whatever the ignition event<sup>21</sup>. According to page 880 of PGE's 2021 WMP Update, PGE's PSPS protocols recommend deenergization when the product of the "OPW " and the "Utility FPI" exceed 6.0. However, neither the OPW factor nor the FPI factor appear to comport with ESRB-8.

First, PGE's WPO Model uses windspeed data from "every unplanned sustained and momentary outage that occurred over the last decade"; however, this approach is only legitimate if the data set specifically excludes windspeed data from outages that were caused by equipment deficiencies (such as equipment that does not comply with GO95 structural standards). Specifically, if PGE's WPO data set incorporates windspeeds that should not have resulted in outages but, due to equipment deficiencies, the outages occurred nonetheless, then the data set itself will be biased toward low windspeeds. Under these circumstances, the WPO model would improperly mask historic equipment deficiencies by including windspeeds which should not have caused outages but did anyway; by extension, PSPS decisions based on this type of "low-bias" windspeed data set would be intrinsically contrary to ESRB-8<sup>22</sup>. To avoid any potential bias, PGE would have

<sup>&</sup>lt;sup>21</sup> Page 453 of PGE's 2021 WMP Update states "The FPI Model is run at 2 x 2 km resolution using PG&E's high-resolution weather and fuels coupled models and provides hourly forecasts out four days currently. The FPI Model outputs the probability from 0 – 100 percent of observing a large fire (>1000 acres), given an ignition" and on page 880, PGE states " The Utility FPI Model takes the forecast meteorological and fuel conditions for each grid cell as an input and provides, for each forecast hour, the probability of a fire growing to 1,000 acres or more."

<sup>&</sup>lt;sup>22</sup> As discussed previously, ESRB-8 does not permit utilities to initiate PSPS based on equipment deficiencies and it implicitly assumes that utility equipment complies with applicable structural standards. Additionally, D.19-05-042 does not permit utilities to deploy PSPS as a means of limiting their liability.

to adjust the WPO windspeed data set to incorporate only windspeeds from outages that were attributed to structurally competent equipment. PGE does not provide details regarding the windspeed data that is input to the WPO model, so it is not known for certain whether there is a low windspeed bias in the PSPS protocols described in PGE's 2021 WMP Update. However, it is a concern that should be addressed given the presence of at least some assets on PGE's system that have a chance of failure within a year (which PGE refers to as "Priority A tags", Priority "B" tags, etc.<sup>23</sup>). In any event, for the reasons identified above, PGE's PSPS protocols should reflect "healthy" equipment to ensure that the wind speed thresholds that PGE uses do indeed pose an imminent and significant ignition risk to "healthy" equipment.

Second, the circumstances under which ESRB-8 authorizes utilities to initiate a PSPS event is highly constrained; ESRB-8 certainly does not permit any utility to de-energize a circuit based on an estimate of the size a wildfire could become should an ignition occur for whatever reason. Yet, that is precisely what PGE does when it factors the "Utility FPI" into its de-energization decisions as described in PGE's 2021 WMP Update.

The de-energization conditions which PGE describes as "Black Swan" appear to particularly controvert the requirements imposed by ESRB-8. According to PGE Vice President Aaron Johnson, the "Black Swan" scenario was developed in response to the events surrounding the "Kincade fire" of 2019<sup>24</sup>. The 2021 WMP Update explains that a

<sup>&</sup>lt;sup>23</sup> See pages 8-10 of PGE's Quarterly Report on 2020 Wildfire Mitigation Plan dated September 9, 2020 [<u>https://www.pge.com/pge\_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/wildfire-mitigation-plan/PGE-WildfireMitigationPlans-QuarterlyReport.pdf</u>

<sup>&</sup>lt;sup>24</sup> Vice President Aaron Johnson commented during the 2021 WMP Updates Technical Workshop on February 23, 2021 that "From the last season, we had the Kincade fire which, again, we haven't seen a CalFire Report on it but we understand at a high level that our equipment was responsible for that fire and so we looked at what are the criteria there. That was a very healthy piece of equipment that had been inspected multiple times, there had been high definition cameras taken in; nothing was identified. However, the fire conditions on the ground were quite extreme during that time, so we adopted something in our transmission protocols we call "Black Swan" criteria. It's basically saying what would happen if an ignition did start, are the conditions so extreme on the ground that we have to consider de-energizing even though there is nothing on that transmission system that points us to the normal criteria that we would look at. And so, we adopted that criteria after 2019 into 2020 and put that in our protocol to continue to learn from." Webinar time stamp 5:12:42 at http://www.adminmonitor.com/ca/cpuc/workshop/20210223/

"Black Swan" event is one in which de-energization is recommended even though the product of the "Outage Producing Winds" and the "Utility FPI" Models does not exceed 6.0 because the "the potential consequences of a fire igniting are severe enough that, regardless of the likelihood of such a fire, de-energization is still recommended." (see page 880). In other words, PGE's "Black Swan" scenario completely de-couples PGE's de-energization decisions from the likelihood of its equipment igniting a wildfire; this controverts ESRB-8 because it allows PGE to cut power even when its equipment pose little or no chance of igniting a wildfire. What is particularly surprising is that PGE developed the "Black Swan" scenario without a material understanding of what actually caused the Kincade Fire event upon which the "Black Swan" scenario is based<sup>25</sup>. In other words, not only does PGE's "Black Swan" scenario contravene ESRB-8, it seems to be entirely without foundation.

A review of the criteria for "Black Swan" scenarios under PGE's 2021 WMP Update further reveals its inappropriateness pursuant to ESRB-8; for instance, page 79 indicates that the windspeed threshold for a distribution system "Black Swan" event is only 30 mph! Initiating a PSPS event based on a windspeed of only 30 mph is indefensible regardless of other conditions (humidity, fuel moisture, etc.) because structurally competent electrical distribution facilities do not pose an "imminent and significant risk" of toppling over at 30 mph, nor do they pose an "imminent and significant risk" of experiencing "vegetation related impacts" with proper vegetation management practices. In any event, the very existence of a "Black Swan" scenario in PGE's 2021 WMP Update constitutes evidence that the PSPS decision process established by PGE's WMP does not comport with ESRB-8.

#### 2.3 SDGEs De-energization Decisions as Described in SDGE's 2021 WMP Update

Beginning on page 357 of its 2021 WMP Update, SDGE describes its PSPS decision process by stating that it prepares for PSPS using "FPI" (which predicts the potential for large fires), "but does not implement PSPS on FPI alone, but on the real time conditions which will be described in greater detail below". SDGE provides evidence to support

<sup>&</sup>lt;sup>25</sup> According to Vice President Johnson, as of February 23, 2021, PGE had not seen the CALFIRE report on the Kincade Fire.

conclusions that 1) catastrophic wildfires are closely correlated with "extreme" FPI conditions that exceed 14; 2) a fault in a high fire threat district is 5 times more likely to result in an ignition during "extreme" FPI conditions; and 3) the risk of a fault causing an ignition in a high fire threat district under "elevated" FPI conditions is substantially less than the risk of a fault causing an ignition in a high fire threat district under "FPI conditions" are not indicative of an "imminent and significant risk" that utility equipment will ignite a wildfire.

Though not explicitly stated, SDGE's 2021 WMP Update suggests that SDGE only considers "extreme" FPI conditions (i.e., values that exceed 14) in its PSPS decision process<sup>27</sup>. However, an analysis of the recent Post Event Reports submitted by SDGE reveals that SDGE does not appear to report the FPI values that are factored into its PSPS decisions<sup>28</sup>; so, it is not certain whether SDGE actually initiates de-energization based on "extreme" FPI threshold of 14. *[As an aside, if it is true that SDGE initiates PSPS based on an FPI threshold of 14, then SCE's customers will always be far more burdened by PSPS events than SDGE's customers because SCE's PSPS protocols impose an FPI threshold of 12. This seems hardly "reasonable" as that term is contemplated in ESRB-8 and, in any event, ESRB-8 compels SCE to produce substantial technical evidence which conclusively proves that it is "reasonable" for SCE to burden its customers with an FPI PSPS threshold of only 12 when SDGE's FPI PSPS threshold is 14; this evidence should be included in SCE's 2021 WMP Update.]* 

The other factors SDGE considers in its de-energization protocols include real time observations of windborne debris and wind thresholds that appear to reflect "local conditions" because they are based on measured 99<sup>th</sup> percentile wind levels. These elements are indicative that SDGE's PSPS protocols appear to focus on actual "extreme" conditions, and SDGE's Post Event Reports include actual windspeed data which suggests

<sup>&</sup>lt;sup>26</sup> Pages 359-360.

<sup>&</sup>lt;sup>27</sup> Pages 357-362 of SDGE's 2021 WMP Update refer primarily to "extreme" FPI values which gives the impression that SDGE does not initiate PSPS based on "elevated" FPI values.

<sup>&</sup>lt;sup>28</sup> SDGE's September 8 PSPS event resulted in 49 meters de-energized, its October 26 event resulted in 4,373 meters de-energized, and its December 23 event resulted in 5,797 meters de-energized; SDGE's report does not appear to indicate the FPI values on the circuits that were de-energized.

extreme wind conditions did occur. However, the Acton Town Council could not find locational data in the Post Event Reports to confirm that the high wind speeds reported therein occurred at the same locations where circuits were de-energized<sup>29</sup>; accordingly, it could not be confirmed that SDGE's de-energization decisions factor in "extreme" local conditions. What is certain is that SDGE's de-energization activities have been shown to be limited in scope and extent, therefore it appears that SDGE's PSPS protocols do a much better job at capturing the type of "extreme" events which pose the type of "imminent and significant" wildfire ignition risk contemplated by ESRB-8.

# 3.0 THE LARGE UTILITY WMPS FAIL TO ACCOUNT FOR WILDFIRE RISKS & OTHER PUBLIC SAFETY RISKS THAT RESULT FROM DE-ENERGIZATION ACTIVITIES.

The PSPS Element of each WMP should reflect the Commission's adopted resolutions and guidelines for implementing PSPS. For instance, the Guidelines adopted with D.19-05-042 require each utility to conclusively prove that de-energizations were initiated solely as a measure of last resort by showing that the very real and substantial public safety risks posed by PSPS were clearly outweighed by a material safety benefit [page A24]. Correspondingly, the PSPS protocols established in each WMP must clearly articulate the factors that are weighed to make such a showing by 1) Identifying the very real and significant public safety risks that are posed by PSPS events; 2) Describing the methodology that is used to quantify these risks; and 3) Describing the methodology to quantify the benefits provided by PSPS events. A PSPS event can only be considered "reasonable" if the quantified benefits are shown to outweigh the quantified safety risks.

<sup>&</sup>lt;sup>29</sup> Page 3 of SDGE's Post Event Report submitted for the October 26 event states "on October 26, wind gusts at the De Luz weather station were in the top 1% of all Santa Ana wind gusts measured at that location, and only 4 mph below the station record" and on October 27, "Near the community of Live Oak Springs, wind gusts peaked at 63 mph at the Crestwood weather station. Recorded wind speeds at the Crestwood weather station on October 27 were in the top five strongest Santa Ana wind gusts measured at that location, and in the top 1% of all Santa Ana winds measured at that location. On page 9, the report states that circuits were de-energized in Fallbrook, Boulevard, La Posta Reservation, Campo Reservation, Manzanita Reservation, and Jacumba. It is not clear if these circuits are located near the Crestwood or De Luz weather stations, so one cannot confidently conclude that the circuits which were de-energized were in the locations that actually experienced extreme conditions.

The Acton Town Council found no provisions in the PSPS Protocols established by SDGE's and PGE's 2021 WMP Updates which address how the utilities weigh the very real and very significant public safety risks posed by de-energization against perceived benefits before deploying PSPS as a "last resort"<sup>30, 31</sup>. SCE's 2021 WMP update states that SCE considers "concerns from state and local fire authorities, emergency management personnel, and law enforcement regarding public safety issues, expected de-energization impacts on essential services such as public safety agencies, water pumps, traffic controls, medical facilities". <sup>32</sup> However, there is no information on how these parameters are even addressed, let alone quantified and "weighed" in SCE's PSPS decisions. It is equally

<sup>31</sup> In PGE's 2021 WMP Update, the term "PSPS Risk" does not refer to the risk posed by a PSPS event, rather it refers to the risk that a PSPS event will occur (see definition on page 965). Page 904 includes a section titled " Protocols for Mitigating Public Safety Impacts of PSPS" but this section refers to prior sections that discuss how PSPS events will be reduced in future and it also mentions communicating, coordinating, and deploying backup generators at substations (which does nothing if the distribution lines are out anyway). Nothing in PGE's WMP documents appear to address the actual public safety risks posed by PSPS nor how these impacts are factored into PGE's PSPS decision process. Admittedly, PGE's 2021 WMP Update is lengthy, and its 2020 WMP is even longer, so it is possible that the Acton Town Council may have missed it somehow.

<sup>32</sup> Pages 351-352 of SCE's 2021 WMP update list the factors considered in its PSPS decisions, including "concerns from state and local fire authorities, emergency management personnel, and law enforcement regarding public safety issues, expected de-energization impacts on essential services such as public safety agencies, water pumps, traffic controls, medical facilities, etc." However, there is no information on how these parameters are even addressed, let alone "weighed" by SCE's PSPS decisions. Page 357 includes a section titled "Protocols for mitigating the public safety impacts of these [PSPS] protocols" but this section only mentions partnering, meetings, data sharing, and the possibility of deploying mobile generators which SCE may or may not authorize. Nothing in SCE's WMP documents appear to address the actual public safety risks posed by PSPS nor how these impacts are factored into SCE's PSPS decision process; however, SCE's 2021 WMP Update is lengthy, and its 2020 WMP is even longer, so it is possible that the Acton Town Council may have missed it somehow.

<sup>&</sup>lt;sup>30</sup> On page 357, SDGE lists the following factors considered in its PSPS decision making: Weather conditions, vegetation conditions, observed flying/falling debris, first responder input, meteorological data, expected duration of conditions, location of existing fires, wildfire activity elsewhere in the state affecting resource availability, temporary construction information. None of these address the actual public safety risks posed by PSPS. Page 366 includes a section titled "Protocols for mitigating the public safety impacts of these [PSPS] protocols" but this section only mentions outreach, engagement, collaboration, preplanning, and contact list updates. Nothing in SDGE's WMP documents appear to address the actual public safety risks posed by PSPS nor how these impacts are factored into SDGE's PSPS decision process. Admittedly, SDGE's 2021 WMP Update is lengthy, and its 2020 WMP is even longer, so it is possible that the Acton Town Council may have missed it somehow.

disturbing that all three utilities simply declare that they utilize PSPS as a "last resort" without explanation, support, or evidence; the Acton Town Council believes that neither the Commission nor the public should be forced to "just take it on faith" that PSPS is deployed "as a last resort". Furthermore, the actual PSPS events that unfolded in 2019, 2020, and 2021 indicate that some utilities appear to use PSPS for purposes other than as a tool of last resort because they initiated de-energizations under circumstances that posed no "imminent and significant" physical risk that their equipment would "topple" or experience "vegetation related impacts" (as discussed above). The Commission's Safety and Enforcement Division ("SED") is fully aware of the extent to which SCE's, PGE's, and SDGE's PSPS protocols have failed to comply with the Commission's PSPS Guidelines because SED openly acknowledges that their Post Event Reports do not explain how they weighed the risks of de-energization against perceived benefits<sup>33</sup> and thereby showed that PSPS was used as a "last resort". Nothing has yet been done about these violations; worse yet, the PSPS Protocols in the IOU's 2021 WMP Update continue to ignore the very real and very significant public safety risks that are posed by de-energization activities. The Public Safety Risks posed by de-energization activities which must be addressed in the IOU's WMPs include (but are not limited to) the following:

• PSPS activities can actually *result* in wildfires<sup>34</sup>, yet the high risk of such dangerous wildfire occurrences is *never* incorporated into any IOU PSPS decision process. According to the Post Event Reports submitted to the Commission since the Fall of 2019, the IOUs all appear to believe that PSPS only prevents wildfires, however this is materially and factually incorrect. The causal link between PSPS events and wildfire ignitions is documented and the public safety risks posed by these wildfires cannot be overstated, yet it is completely ignored in all PSPS protocols. This practice must end; the wildfire risks posed by PSPS must be clearly identified in the IOU WMPs and the utilities must explain how these risks will be factored into all future PSPS decisions.

<sup>&</sup>lt;sup>33</sup> SED's "Public Report on The Late 2019 Public Safety Power Shutoff Events" (pages 56-61)

<sup>&</sup>lt;sup>34</sup> The "Tick" fire in 2019 forced the evacuation of 40,000 residents and was caused by a resident cooking outside in response to an extended SCE PSPS event. The "Thief" Fire was started by a generator during an SCE PSPS event. The "Maria" Fire was ignited by an electrical conductor; the owner maintains the fire started when SCE "reenergized its power distribution to our field" without giving prior notice and opportunity to inspect equipment [https://myemail.constantcontact .com/Press-Release---Maria-Fire-Cause-Report.html?soid=1128244006041&aid=fv04IclGJig]. Three generator fires were also reported in 2019 during a PG&E PSPS event [https://www.kcra.com/article/nevada-county-generator-fires-pg-e-outages-california/29256051]

- De-energization events are routinely accompanied by the loss of critical communication infrastructure across very wide areas; internet and cell phone services are routinely lost throughout Acton during SCE's PSPS events; even customers who have full solar and battery backup still lose all communication platforms! Such circumstances directly and substantially endanger the public by preventing residents from receiving evacuation orders and critical life-safety information. *This is not opinion, it is fact,* as evidenced by the experiences of Acton residents during the Tick fire of 2019<sup>35</sup>. The public safety hazards posed by the loss of communication platforms that occur with regularity during PSPS events are clearly documented and cannot be overstated, yet they are completely ignored in the IOU's PSPS decision process. This practice must end, and the public safety risks posed by the loss of critical communication connectivity due to PSPS must be clearly set forth in the Utility WMPs and each utility must explain how these risks will be factored into all future PSPS decisions.
- PSPS events have materially threatened lives and impacted public health and safety by creating dangerous pedestrian and traffic conditions resulting from the loss of traffic signal infrastructure. On January 26, 2021, several residents from areas throughout Southern California identified the dangerous traffic and pedestrian situations in which they found themselves during PSPS events initiated by SCE, yet these risks are completely ignored in the utilities' PSPS decision making process. This practice must end; the pedestrian and traffic risks that are posed by PSPS must be clearly set forth in the Utility WMPs and each utility must explain how these risks will be factored into all future PSPS decisions.
- Residents on wells lose the ability to pump water for domestic and firefighting purposes, and as a result, wildfires have spread; *this is not opinion, it is fact.* In October of 2019 a resident of Agua Dulce (the rural community adjacent to Acton) watched helplessly as an ember from the Tick Fire landed on the roof of a house owned by Dave and Amy Lamon and set it alight; there was nothing that he or the Lamons could do

<sup>&</sup>lt;sup>35</sup> In comments filed on January 10, 2020 in Proceeding I.19-11-013, the Acton Town Council explained "And, because the back-up batteries which serve the local cell phone towers are depleted in as little as 12 hours after power is cut off, rural residents lost all contact with the outside world during several of SCE's PSPS events in October. On at least two occasions, Acton residents drove to the homes of relatives living in nearby rural neighborhoods and evacuated them because they were completely oblivious to fast-moving fires that were raging nearby. One of these evacuations occurred in the middle of the night in pitch blackness; the evacuated elderly couple had not had internet or phone service all day because of the PSPS event, so they went to bed without any knowledge of the looming fire danger. The fire moved so quickly that emergency response personnel did not have time to get to them and warn them of the danger. Fortunately, their relatives living in Acton were able to get to them and then safely evacuate them."

about it because the well pumps were down due to an SCE PSPS event<sup>36</sup>. The ensuing fire destroyed the house and further expanded the scope of the Tick Fire. SCE has been repeatedly informed (at public meetings, in complaints, and in comments submitted to the Commission) about the risks that are posed to rural residents during lengthy PSPS events, but it is never factored into the utilities' PSPS decision making process. This practice must end, and the risks posed by the loss of water access which is caused by PSPS events must be clearly set forth in the Utility WMPs and each utility must explain how these risks will be factored into all future PSPS decisions.

To ensure that IOUs do not repeat the mistakes of the past by failing to properly weigh the public safety risks posed by PSPS before initiating de-energization events, the IOU's WMPs must describe in detail the methodology that will be used to identify and quantify the very real and substantial public safety hazards posed by PSPS and furthermore explain the process that will be used to show how these hazard risks are deemed to be outweighed by a material public safety benefit. The Commission should not approve the IOU's 2021 WMP Updates until these revisions are made.

# 4.0 THE MAJOR UTILITIES HAVE NOT SHOWN THEIR IGNITION CONSEQUENCE/ FIRE SPREAD/WILDFIRE PROPOGATION MODELS TO BE ACCURATE.

All of the large IOUs (PGE, SCE, and SDGE) initiate PSPS events based on models which ostensibly predict the size that a wildfire will become if an ignition were to occur at a given location for any reason<sup>37</sup>. Putting aside for a moment that ESRB-8 does not permit IOUs to initiate PSPS based on whether a wildfire could possibly become large, it is very clear that wildfire modeling has become a critical determinant in the scope and human cost of de-energization decisions in California. Accordingly, it seems both reasonable and appropriate to require IOUs to prove the efficacy and accuracy of the wildfire models that

<sup>&</sup>lt;sup>36</sup> See video of community meeting convened by the Agua Dulce Town Council on November 20, 2019 found here: <u>https://www.youtube.com/watch?v=RsmrK10yBds&t=3802s</u>.

<sup>&</sup>lt;sup>37</sup> SDGE uses a Technosylva "Wildfire Risk Reduction Model" or "WRRM". SCE uses the REAX "ignition consequence" model but SCE's 2021 WMP Update states that SCE is transitioning to a Technosylva model that is alternately referred to as a "fire spread model", a "consequence simulation", a "fire propagation simulation", and a "WRRM". However, according to SCE staff, SCE will still use REAX scores for determining FPI (this was conveyed during a conversation that was convened to resolve discovery issues on February 26, 2021). PGE uses a Technosylva "Fire Simulation Model".

they depend on to make PSPS decisions which affect hundreds of thousands of people. For the 2021 WMP Update, the Commission did require IOUs to "Explain where the model has been applied, how it has informed decisions, and any metrics or information on model accuracy and effectiveness collected in the prior year"<sup>38</sup>, so the Commission is interested in establishing whether the IOUs' fire spread models are indeed accurate. However, a careful review of the 2021 WMP Updates reveal that neither SCE nor SDGE nor PGE have provided any information pertaining to the accuracy or representativeness of their fire spread models<sup>39</sup>. This is no small thing; particularly given that wildfire modeling is difficult and has historically been regarded as an approximate and inexact process<sup>40</sup>. In other words, the IOU's apparent silence regarding the accuracy of their fire spread/ignition consequence/wildfire propagation models seems to speak volumes. Meanwhile, a growing

<sup>&</sup>lt;sup>38</sup> Section 4.5.1 of the 2021 Wildfire Mitigation Plan Guidelines Template.

<sup>&</sup>lt;sup>39</sup> The table in SCE's 2021 Update that addresses this issue is found on page 82, it clarifies that the fire-spread model relies on a "semi-empirical" formula (which makes it unclear whether the equations are empirical or derived) but it does not seem to say anything about the actual accuracy of SCE's models. On Page 407, SCE states that the WRRM's accuracy was tested by splitting input data into two parts: the first dataset was used to "train" the model, and the second to validate the model performances to make sure no "overfitting" occurs. However, this is more of a model correction process; it does not reveal model accuracy in terms of the ability of the model to properly predict "real world" outcomes. Page 407 also states that models are validated by comparing model predictions to actual results; however, the Acton Town Council could not locate the results of this comparison anywhere in the 2021 WMP Update documentation. In SDGE's 2021 WMP update, this issue is addressed beginning on page 75, but the document appears to be silent about the accuracy of SDGE's wildfire spread model. On page 177 and elsewhere, SDGE repeatedly states that it continues to work to enhance the accuracy of its fire growth algorithms, but the Acton Town Council could not find where SDGE reports the current model accuracy or explains how the current model accuracy was established or whether it was developed by comparing modeled results with actual event outcomes. PGE's 2021 WMP Update addresses this issue beginning on page 119, and on page 149, PGE states " As our ignition models improve to the asset level, the consequence data PG&E is working closely with Technosylva to improve the accuracy of the wildfire consequence modeling by comparing model capabilities to match actual fires as they occur. Future improvements include the further automated integration of Technosylva model features with ignition probability models to product wildfire risk values." The grammar here makes it difficult to decipher, but it sounds like PGE has assessed the accuracy of its "wildfire consequence" models by comparing model outputs to "real world" outcomes; however, the Acton Town Council could not find the results of this assessment anywhere in PGE's 2021 WMP Update documentation.

<sup>&</sup>lt;sup>40</sup> Alexander, M.E., Cruz, M.G. "Limitations on the Accuracy of Model Predictions of Wildland Fire Behaviour: A State-of-the-Knowledge Overview". Published in The Forestry Chronical; Volume 89; May/June, 2013.

body of anecdotal evidence suggests that the IOU's models appear to overestimate fire growth and fire size probability. For instance, on January 19, 2021, SCE cut power on the entire "Pick" circuit and portions of the "Shovel" circuit based on wind thresholds of only 28 mph (sustained) and 41 mph (gusts); these low wind thresholds were established because SCE's "REAX" ignition consequence model assigned the "highest" fire consequence score to Acton circuits (meaning that, if a wildfire ignition did occur that day, it would grow to 1000 acres or more). Notably, on that day, a wildfire did occur in Acton; it was ignited in the "Big Springs" area served by the Shovel circuit and adjacent to the Pick circuit, and it was quickly knocked down by the Los Angeles County Fire Department. The "Big Springs" fire that occurred on January 19 in Acton amidst ongoing SCE PSPS events burned less than 4 acres and caused no damage, yet SCE's ignition consequence model predicted that it would grow to 1,000 acres or more.

The events in Acton on January 19, 2021 are not the only evidence showing that IOU fire spread/ignition consequence/wildfire propagation models can be quite over predictive; information gathered by SDGE indicates that at least two fires which ignited in 2019 (not from utility equipment) were projected to be catastrophic but in fact they were contained to a very small footprint<sup>41</sup>. For all these reasons, the Commission should continue questioning the accuracy and representativeness of the IOU's ignition consequence/fire spread/wildfire propagation models and insist that the IOUs reveal the extent to which these models correctly capture "real world" conditions and accurately predict "real world" outcomes. Moreover, none of the IOU's 2021 WMP Updates should be approved until this information is provided.

<sup>&</sup>lt;sup>41</sup> SDGE Meteorologist Brian D'Agostino commented during the 2021 Wildfire Mitigation Plan Updates Technical Workshop on February 23, 2021 that "The day before Halloween 2019, we were in a very extreme event, we did have a public safety power shutoff in place and there was a SAWTI fire that broke out in our service territory not related to the utility. But there was not a big pull on the fire fighting resources so they were able to keep that contained at 100 acres where a lot of our experts and our modeling was immediately showing that, had that not been contained and all resources available that could have turned into a catastrophic event. And then, after they got that contained, just a couple of hours later, the Miller Fire broke out in the Community of Valley Center. It also had the potential, and a lot of our consequence modeling showed that that would have been a catastrophic event". Webinar time stamp 5:16:44 at

# 5.0 THE ACTON TOWN COUNCIL DISPUTES INFORMATION PROVIDED BY SCE IN THE SUPPLEMENTAL FILING CORRECTED ON FEBRUARY 26

SCE was asked by the Commission to explain how it determined 58 mph gusting winds to be a sufficient de-energization threshold for overhead circuits and to provide the percentage reduction of PSPS events based on this increased wind speed threshold. The Acton Town Council is very grateful that the Commission requested this information<sup>42</sup>. SCE's response to this Commission request (which is reproduced herein in Attachment A) asserts that the 58 mph threshold is only used for circuits that are equipped with covered conductor, and it provides a "backcast" of SCE's 2020 PSPS de-energizations showing the average reductions in PSPS activities that would have occurred had the 58 mph threshold been utilized<sup>43</sup>.

SCE also states that, in 2020, "some circuits were de-energized at wind speeds lower than their thresholds", and SCE explains that the main causes for this were 1) the circuit was "downstream" or fed by another HFRA circuit that is de-energized, causing the "downstream" circuit to be de-energized at wind speeds much lower than would otherwise be the case; and 2) because the PSPS Incident Management Team sometimes decides to deenergize a circuit at lower wind speeds because it serves no customers and has no reliability impacts. However, the Acton Town Council disputes these statements:

Though SCE does not explicitly disclose the windspeeds it uses for bare conductor facilities, SCE informed the Commission that SCE usually uses 31 mph (sustained) and 46 mph (gusts)<sup>44</sup> which is consistent with page 341 of SCE's 2021 WMP. However, SCE cuts power in Acton below these thresholds and not because Acton circuits are "downstream" of other circuits or because they serve no customers; power is shut off in Acton at lower windspeeds because of the large number of "high P2" facilities in Acton

<sup>43</sup> It is recognized that SCE's backcast is an "average" analysis, therefore much higher reductions in PSPS activities are likely in those areas slated to have a broad deployment of covered conductor.

<sup>&</sup>lt;sup>42</sup> The Acton Town Council has, on several occasions, asked SCE to explain the windspeed thresholds that are used to determine whether de-energization is warranted, and to clarify the extent to which these windspeed thresholds will change after covered conductor installations are completed; a definitive answer has eluded us.

<sup>&</sup>lt;sup>44</sup> SCE provided this clarification at the Commission Meeting on SCE's 2020 Public Safety Power Shut Off Corrective Action Plan on March 1, 2021.

and because SCE's models persistently and inaccurately project high "fire consequence" outcomes.

- Another reason why SCE cuts power in Acton at windspeeds below the 31/46 mph thresholds is because SCE initiates de-energization in Acton based on wind speed *forecasts* and not based on actual wind speed *data*. Specifically, SCE informed the Acton Town Council that PSPS occurs in Acton when winds are forecast to exceed wind thresholds<sup>45</sup>. This further contradicts SCE's assertion to the Commission that circuits lose power below the established thresholds because they are either "downstream" or serve no customers.
- SCE also cuts power in Acton at low windspeeds because of poor sectionalization capabilities. This is not opinion, it is fact<sup>46</sup>. For example, based on windspeed thresholds of only 28 mph (sustained) and 41 mph (gusts), SCE initiated a PSPS event in Acton on January 19, 2021 and actually cut power to neighborhoods that are served via fully underground facilities between the homes and the substation! Therefore, SCE's claim that the main reason circuits lose power at low windspeeds is because they are either "downstream" circuits or they serve no customers is simply not true.

It is important to the Community of Acton that the Commission understand that, contrary to what SCE has claimed in its 2021 WMP and in supplemental filings to the WSD and in remarks before the Commission, SCE *always* cuts power in Acton well below the 31/46 wind speed thresholds that SCE asserts.

# 6.0 CONCLUSIONS

For all the reasons set forth above, the Acton Town Council respectfully requests that the Commission not approve the PSPS component of any IOU WMP until the following conditions are met:

• The PSPS protocols are revised to properly reflect the restrictions and conditions that the Commission has imposed on de-energizations activities as set forth in ESRB-8 and D.19-05-042; specifically, the protocols must show how de-energization decisions are based on whether there is an "imminent and significant risk" that structurally competent electrical equipment will topple or experience "vegetation related impacts".

<sup>&</sup>lt;sup>45</sup> See Attachment A in the comments submitted by the Acton Town Council to the Safety Environment Division regarding SCE's Post Event Report dated February 4, 2021.

<sup>&</sup>lt;sup>46</sup> See page 12 of the comments submitted by the Acton Town Council to the Safety Environment Division regarding SCE's Post Event Report dated February 4, 2021.

- SCE must provide substantial technical evidence to support its claims regarding the windspeed thresholds at which windblown vegetation becomes an "imminent and significant" threat.
- SCE must provide substantial technical evidence which conclusively proves that it is "reasonable" for SCE to burden its customers with an FPI PSPS threshold of only 12 particularly in light of the compelling evidence provided in SDGE's 2021 WMP which demonstrates that an FPI of 14 is a far more appropriate PSPS threshold.
- The IOUs provide substantive evidence that their "ignition consequence", "fire spread potential" and/or "wildfire propagation" models accurately represent "real world" circumstances and accurately project "real world" outcomes.
- The PSPS protocols in the IOU WMPs must describe in detail the methodology that will be used to identify and quantify the very real and substantial public safety hazards and risks posed by PSPS and furthermore explain the process that will be used to show how these hazards and risks are deemed to be outweighed by a material public safety benefit.

Respectfully submitted,

<u>/S/ Jeremiah Owen</u>

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March 18, 2021

ATTACHMENT 1

EXCERPT FROM "SOUTHERN CALIFORNIA EDISON'S 2021 WILDFIRE MITIGATION PLAN UPDATE SUPPLEMENTAL FILING - CORRECTED REGARDING ACTION STATEMENTS IN WILDFIRE SAFETY DIVISION'S EVALUATIONS OF ITS REMEDIAL COMPLIANCE PLAN AND FIRST QUARTERLY REPORT" FEBRUARY 26, 2021 **Action SCE-4:** In its 2021 WMP Update, SCE shall: 1) explain how it determined 58 mph gusting winds to be a sufficient de-energization threshold for overhead circuits, 2) provide the percentage reduction of PSPS events based on the increased wind speed threshold, and 3) provide the range and average of historical wind speeds used for de-energization thresholds for bare overhead conductor.

## SCE Response:

1) SCE's current threshold methodology leverages the National Weather Service's High Wind Warning values of 40 mph sustained winds and 58 mph gusting winds as a baseline for circuits or circuit-segments that are fully installed with covered conductor. According to the National Weather Service, a High Wind Warning is issued "when high wind speeds may pose a hazard or [are] life threatening."<sup>3</sup> SCE recognizes the potential improvements that can be made to PSPS thresholds, as evidenced by the engineering-based approach that was taken during the creation of its Wildfire Risk Reduction Model-derived dynamic thresholds. As discussed in the 2021 WMP Update, Section 8.1.2, SCE is further testing and validating these new thresholds with plans to integrate them into PSPS protocols when completed. 2) In a backcast of SCE's 2020 PSPS de-energizations, SCE compared the thresholds that would be in place due to planned covered conductor work anticipated to be completed by October 1, 2021. Because SCE's forecast PSPS reduction due to covered conductor installation is based on currently planned work, it aggregates potential benefits across all of SCE's de-energized circuits. Some of these circuits are not currently forecast to have any fully covered isolatable segments in 2021, while other circuits are planned to be 100% completed with covered conductor and have most foreseeable outages mitigated.

This work is expected to fully cover more than 250 isolatable circuit segments, resulting in the PSPS reductions shown in the table below.

Scope (customer de-energizations)	Frequency (circuit de-energizations)	Duration (customer minutes of
		interruption)
√9%	↓12%	↓15%

3) Below, SCE provides the requested information entailed by all 2020 PSPS outages. It should be noted that some circuits were de-energized at wind speeds lower than their thresholds. A main cause of this would be a circuit that is "downstream" or fed by another HFRA circuit that is de-energized, causing the first circuit to be de-energized at wind speeds much lower than would otherwise be the case. Also, SCE's 3 https://www.weather.gov/lwx/WarningsDefined 201 PSPS IMT sometimes decides to de-energize a circuit at lower wind speeds because it serves no customers and has no reliability impacts. In 2020, SCE de-energized bare overhead conductor at average wind speeds of 26 mph sustained and 46 mph gusting wind. The wind speed ranges for overhead bare conductor were from 8 to 65 mph sustained winds and 15 to 96 mph gusting winds, with lower values being explained by the two circumstances above. SCE's

<sup>&</sup>lt;sup>3</sup> <u>https://www.weather.gov/lwx/WarningsDefined</u>

PSPS IMT sometimes decides to de-energize a circuit at lower wind speeds because it serves no customers and has no reliability impacts. In 2020, SCE de-energized bare overhead conductor at average wind speeds of 26 mph sustained and 46 mph gusting wind. The wind speed ranges for overhead bare conductor were from 8 to 65 mph sustained winds and 15 to 96 mph gusting winds, with lower values being explained by the two circumstances above.