

**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
(Issued October 25, 2018)

**REPLY COMMENTS ON THE 2020-2022 WILDFIRE
MITIGATION PLAN OF PACIFIC GAS AND ELECTRIC
COMPANY (U 39 E)**

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I. INTRODUCTION

Pacific Gas and Electric Company (PG&E) respectfully provides these reply comments regarding our 2020-2022 Wildfire Mitigation Plan (2020 WMP), which was submitted to the California Public Utilities Commission (CPUC or Commission) and the Wildfire Safety Division (WSD) on February 7, 2020.

The 2020 WMP proceeding to date has been thorough and expansive. PG&E's 2020 WMP included over 500 pages of materials and information, in a format that was consistent with the outline provided by the Commission and WSD. After its submission, parties propounded hundreds of data requests seeking additional information and clarification of various aspects of PG&E's 2020 WMP. PG&E provided discovery responses generally within three business days, as required by Resolution WSD-001, and in some cases requested extensions for requests that required substantial work or detailed materials. In total, PG&E provided thousands of additional pages of materials through the discovery process. PG&E also participated in presentations and workshops hosted by the Commission and WSD to provide an overview and additional details regarding the 2020 WMP. All in all, the 2020 WMP process to date has been robust, and the exchange of information and ideas has been useful to assist in the continued refinement and evolution of PG&E's 2020 WMP and future WMPs.

Fifteen parties submitted comments on the utilities' WMPs, including PG&E's 2020 WMP.^{1/} In addition, numerous customers also submitted comments directly to the WSD regarding the 2020 WMP. The comments filed by customers and parties raise a myriad of issues. Some of the comments propose changes to the 2020 WMP, while other comments focus on additional requirements for, or information to be included in, future WMPs. Some comments also address issues that are currently pending in other Commission proceedings.

In these reply comments, PG&E has grouped together the issues raised into ten substantive categories. PG&E's reply comments then summarize the key issues raised by specific parties or customers and provide our response. In some cases, PG&E provides clarification regarding, or agrees with proposed changes to, the 2020 WMP. In other cases, PG&E disagrees with proposed changes and explains why the 2020 WMP as currently drafted should be approved. PG&E also addresses proposals for future WMP requirements and, in some cases, explains that certain topics are outside of the scope of this proceeding or are being addressed elsewhere by the Commission. Finally, PG&E addresses at a high level the feedback we have received from our customers. PG&E appreciates the thoughtful comments provided by parties and customers and believes the engagement in this proceeding will result in continued refinement of the 2020 WMP and future WMPs.

In the remainder of these reply comments, PG&E addresses the following:

- Section II – Situational Awareness
- Section III – Grid Design and System Hardening
- Section IV – Emerging Technology
- Section V – Vegetation Management

^{1/} The fifteen parties include: California Environmental Justice Alliance (CEJA); East Bay Municipal Utility District (EBMUD); Energy Producers and Users Coalition (EPUC); Green Power Institute (GPI); Joint Local Governments; Kevin Collins (Collins); Mussey Grade Road Alliance (MGRA); Orange County Fire Authority (OCFA); Protect Our Communities (POC); Public Advocates Office (Cal Advocates); Perimeter Solutions; Rural County Representatives of California (RCRC); Santa Clara County (Santa Clara); Al Stein (Stein); and The Utility Reform Network (TURN).

- Section VI – Inspections
- Section VII – Risk Assessment and Mapping
- Section VIII – Public Safety Power Shut-Off (PSPS) and Microgrids
- Section IX – Stakeholder Cooperation and Community Engagement
- Section X – Metrics and Data
- Section XI – Customer Feedback

II. SITUATIONAL AWARENESS

PG&E provided a thorough discussion on situational awareness in Section 5.3.2 of our 2020 WMP, including weather prediction and wildfire spread models, weather stations and high-definition cameras, lightning detection, sensors and fault detectors, PG&E’s Wildfire Safety Operations Center, and information sharing and coordination to facilitate continuous improvement in the understanding of wildfire risks. In addition, Table 22 in the 2020 WMP contains details and data associated with the initiatives discussed in this section. Below, PG&E addresses issues raised by CEJA, Joint Local Governments and MGRA regarding situational awareness.

A. CEJA

CEJA comments that the utilities need to gather more data regarding the response time where there are wires down or an ignition.^{2/} PG&E agrees that this type of information is important and, as CEJA acknowledges, PG&E is “exploring methods to capture response time information consistently and with quality so that trends can be tracked to support continuous improvements.”^{3/}

^{2/} CEJA Comments, pp. 9-10.

^{3/} CEJA Comments, p. 9.

B. Joint Local Governments

The Joint Local Governments request that PG&E provide greater data access to and sharing of data from our situational awareness initiatives.^{4/} PG&E agrees that information sharing is important and is in the process of working on sharing additional information with counties and tribes through engagement initially with County Offices of Emergency Services (OES). In fact, on April 9, 2020, PG&E representatives met with Sonoma County officials for a Wildfire Safety Working Session that included the results of PG&E's 30-year weather analysis as it relates to Sonoma County, one of the areas of information referenced in the Joint Local Governments' comments. However, information sharing requires time and resources from both the party providing the information as well as the party receiving it. Because of resource limitations, particularly in light of many County OES's focus on the COVID-19 pandemic, it will be important to prioritize the information that will be shared. PG&E will continue to work with local communities and stakeholders on the type and amount of information that will be provided.

C. MGRA

MGRA maintains that WSD should seek further information from the utilities concerning weather modeling to determine if there are significant differences between the models.^{5/} PG&E agrees this type of coordination through WSD could be useful. In addition, MGRA suggests that PG&E provide additional situational awareness data in its next WMP, such as satellite data, wind data, and GIS files.^{6/} PG&E does not oppose this suggestion but believes that WSD and the stakeholders should agree what types of situational awareness information will be useful. Given the amount of data already available, providing additional information that may not be useful to WSD and parties would not be reasonable or beneficial.

^{4/} Joint Local Governments Comments, pp. 2-4.

^{5/} MGRA Comments, pp. 55, 60.

^{6/} MGRA Comments, pp. 26-27.

MGRA also raises concerns about how PG&E reported wildfire ignitions in Table 2 of the 2020 WMP.^{7/} However, as PG&E explained in our discovery response to MGRA:

Under D.14-02-015, utilities provide annual fire incident reports, which include fires that traveled just one linear meter from the ignition point. However, Table 2, Items 4a, 4b, and 7-9b requests data regarding “utility-ignited wildfire,” and Table 2, Item 10a-f seeks information regarding “utility wildfire ignitions.” The Glossary of Defined Terms provided with the WMP Guidelines specifically defines a utility-ignited wildfire as “[w]ildfires ignited by utility infrastructure or employees . . .” but does not indicate that all fire ignitions qualify as a “wildfire”. As shown by WMP Guidelines, Table 11, the WSD specified “ignition” when seeking information about all ignitions from one linear meter and up. Therefore, PG&E interpreted a difference between the population of “wildfires” to be leveraged for Table 2 from the population of “ignitions” used in Table 11 (and others).^{8/}

PG&E’s 2020 WMP is consistent with the WMP Guidelines and Commission direction and thus MGRA’s recommendation that PG&E re-submit Table 2 should be rejected.

III. GRID DESIGN AND SYSTEM HARDENING

Public Utilities Code Section 8386(c)(13) provides the utilities’ respective WMPs should include:

description of the actions the electrical corporation will take to ensure its system will achieve the highest level of safety, reliability, and resiliency, and to ensure that its system is prepared for a major event, including hardening and modernizing its infrastructure with improved engineering, system design, standards, equipment, and facilities, such as undergrounding, insulation of distribution wires, and pole replacement.

PG&E described our grid design and system hardening proposals in Sections 5.1.D (emerging technologies) and 5.3.3 (grid design and system hardening), including more than 50 pages of detailed discussion. A number of parties, including the Joint Local Governments and TURN, support PG&E’s grid design and system hardening efforts.^{9/} System hardening is also consistent

^{7/} MGRA Comments, pp. 10, 12.

^{8/} PG&E response to MGRA Data Request Set #4, Question 11.

^{9/} Joint Local Governments Comments, pp. 4-5; TURN Comments, p. 30.

with legislative guidance.^{10/} In this section of our Reply Comments, PG&E addresses comments submitted by Cal Advocates, CEJA, EBMUD, Kevin Collins, RCRC, Santa Clara, and TURN.

A. Cal Advocates

Cal Advocates does not oppose PG&E’s system hardening proposal but suggests that PG&E be required to “provide the number of circuit-miles slated to be hardened using covered conductor, and the number miles to be undergrounded.”^{11/} In our 2020 WMP, PG&E explained in detail the process for determining which circuits should be hardened and whether hardening should be accomplished by installing covered overhead conductors or undergrounding. For example, PG&E noted that:

After determining which circuits should be included in the System Hardening program, PG&E must also determine whether those circuits should be rebuilt as hardened overhead circuits or should be undergrounded. This decision is made collaboratively as part of the initial field scoping process, which seeks to ensure a collaborative and inclusive discussion between our individual teams in an attempt to balance risk reduction, feasibility/constructability, and cost.^{12/}

Determining the circuits that will be hardened, the number of circuit miles involved, and the specific hardening approach is a time intensive and location-specific process but is critical to make sure PG&E’s resources and customer funds are used in the highest and best manner for system hardening. Cal Advocates’ comments do not address the level of detailed engineering and design process described in PG&E’s 2020 WMP and, given the importance of this type of work to make the most of customer funds, PG&E believes that Cal Advocates interest may actually be aligned with the existing approach. PG&E is continuing to undertake this engineering and design effort and, as a result, any estimate of the number of circuit miles intended for overhead hardening vs. undergrounding would undoubtedly change, even before the

^{10/} Assembly Bill 1054, Stats 2019, Ch. 79, Section 2(b) (“The state’s electrical corporations must invest in hardening of the state’s electrical infrastructure and vegetation management to reduce the risk of catastrophic wildfire.”)

^{11/} Cal Advocates Comments, p. 9.

^{12/} PG&E 2020 WMP, p. 5-144.

2020 WMP can be reviewed and approved. Given the ongoing engineering and design work being undertaken by PG&E, Cal Advocates' suggestion to provide the number of undergrounding miles would provide no significant benefit.

Cal Advocates also recommends that the utilities be required to "provide justification for the specific locations where they propose undergrounding projects and explain why covered conductor or an equivalent technology is not an acceptable alternative."^{13/} The 2020 WMPs provide hundreds of pages regarding the utilities' respective initiatives and proposed wildfire mitigation programs. Including additional information regarding every specific undergrounding project proposed by a utility would result in thousands of extra pages of material and would serve little purpose. The WMPs are not intended to be the venue for review of each specific system hardening project proposed by a utility or for parties to comment on the details of each proposed project. This would unnecessarily lengthen the WMP review process.

Undergrounding should be determined based on local conditions on a case by case basis, in alignment with a defined process, rather than determined as part of the utilities' WMPs.

PG&E notes that under the proposed settlement in our 2020 General Rate Case (GRC), which is currently pending before the Commission in Application (A.) 18-12-009, a balancing account will be established that will allow for tracking all system hardening projects and costs. Through the balancing account, Cal Advocates and other parties will have ready access to the specific system hardening projects that were undertaken and their actual costs, including undergrounding projects.

B. CEJA

CEJA agrees that system hardening should be prioritized for high fire-threat areas, which is exactly the approach taken by PG&E.^{14/} CEJA suggests adding to these hardening criteria socioeconomic factors such that certain communities in high fire-threat district areas would have

^{13/} Cal Advocates Comments, p. 51.

^{14/} CEJA Comments, p. 3.

a higher priority.^{15/} PG&E recognizes the importance of addressing issues and concerns that are more prevalent in low-income and disadvantaged communities. However, system hardening is intended to prevent wildfires that can impact all communities, whether disadvantaged or not. In Section 5.3.3.17 of the 2020 WMP, PG&E explained in detail our approach to prioritizing system hardening.^{16/} This includes considerations such as population density, the density of structures, and egress.

Given the substantial amount of time and resources required for system hardening, PG&E's efforts are prioritized based on the impact of the system hardening on reducing overall wildfire risk. As PG&E explained:

Based on these analyses, PG&E developed an aggregated risk scoring to rank the relative risk score of different protection zones on circuits within the Tier 2 and Tier 3 HFTD. Analyzing this scoring further found that the top 26% rated protection zones cover the vast majority (98%) of the relative risk score total. These zones represent approximately 29% of the total HFTD circuit miles, consistent with PG&E's plan to address 7,100 circuit miles.^{17/}

Focusing system hardening on achieving the highest amount of risk reduction will benefit all customers. While maintaining this focus, PG&E is open to considering CEJA's suggestion of evaluating socioeconomic factors during the system hardening project selection process (for example as a tiebreaker between evenly risk scored projects), provided this can be done without diminishing the goal of reducing the most wildfire risk as quickly and efficiently as possible.

C. EBMUD

EBMUD comments that system hardening should be prioritized to minimize PSPS events and for critical facilities, such as hospitals.^{18/} PG&E generally agrees with EBMUD that PSPS mitigation is a factor that should be considered in prioritizing system hardening. PG&E is

^{15/} CEJA Comments, p. 6.

^{16/} PG&E 2020 WMP, pp. 5-143 to 5-144.

^{17/} PG&E 2020 WMP, p. 5-144.

^{18/} EBMUD Comments, p. 2.

continuing to refine our system hardening prioritization modeling and will likely incorporate additional factors, which can include mitigating PSPS and considering critical facilities. As PG&E explained in Section 5.3.3.17 of the 2020 WMP:

Going forward, PG&E hopes to further refine its risk modeling and prioritization [] in order to better target our work. As we review the relatively large protection zones included in the existing prioritization model, we realize that risk is not consistent within those zones. PG&E is looking for ways to create a more granular model so that with further analysis we can drive the risk scoring down to 3-5 mile sections of circuit. We hope to include other risks into the analysis including PSPS mitigation. If there are line sections that are regularly impacted by PSPS and expected to be impacted regularly in the future, what would be required in terms of hardening to exempt those lines from that risk mitigation tool? Currently, only undergrounding is exempt from PSPS. This is a very costly proposition and though these areas are not the highest risk in the system for catastrophic wildfires, when evaluated under our current risk models, they are a risk we must try to address to provide our customers the best service possible.^{19/}

D. Kevin Collins

Mr. Collins comments address in a very high-level way a number of system hardening issues. For example, Mr. Collins states that non-exempt fuses create higher wildfire risk.^{20/} PG&E agrees and thus is making efforts to replace the remaining non-exempt fuses.^{21/} Mr. Collins also quotes a number of emerging technologies that PG&E is testing and offers a sentence or two of commentary on each of these technologies.^{22/} PG&E agrees with Mr. Collins that many of these technologies require further review and testing, which is why they are listed as emerging. As additional data becomes available, the efficacy of these technologies and whether they should be more broadly implemented can be considered.

^{19/} PG&E 2020 WMP, p. 5-144.

^{20/} Collins Comments, p. 8.

^{21/} PG&E 2020 WMP, p. 5-121.

^{22/} Collins Comments, pp. 11-12.

Mr. Collins also questions the amount of information provided by PG&E regarding SCADA and automatic reclosers.^{23/} Information regarding reclosers is provided in detail in Section 5.3.6.1 of the 2020 WMP and appears to address Mr. Collins' concerns.^{24/}

E. RCRC

RCRC "strongly support[s] the 'portfolio' approach to minimize the risk of fire and reduce the need for PSPS events that blends segmentation, system hardening, sectionalization, exclusion of low-risk facilities, deployment of microgrids, and improved weather monitoring."^{25/} However, RCRC states that PG&E is "unclear" as to how long it will take to remove of non-exempt fuses.^{26/} As PG&E explained in our 2020 WMP, "[s]tarting in 2019, PG&E forecasts replacing approximately 625 fuses/cutouts, and other non-exempt equipment identified on the pole each year for seven years in Tier 2 and Tier 3 HFTD areas."^{27/}

F. Santa Clara

Santa Clara maintains that PG&E should have provided more detailed system hardening cost information.^{28/} In Section 5.6.1.2 of our 2020 WMP, PG&E explained that we did not have a cost estimate for all of the specific system hardening projects that we are undertaking.^{29/} Given that there are potentially hundreds of system hardening projects that will occur over the 2020-2022 time period covered by the WMP, it is entirely reasonable not to include all of this cost data. Nor would this data be useful as projects will inevitably change in scope and cost as more detailed engineering is performed, as PG&E explained.^{30/} However, PG&E's 2020 WMP

^{23/} Collins Comments, p. 8.

^{24/} PG&E 2020 WMP, pp. 5-202 to 5-203.

^{25/} RCRC Comments, p. 3.

^{26/} RCRC Comments, p. 4.

^{27/} PG&E 2020 WMP, p. 5-121.

^{28/} Santa Clara Comments, p. 8.

^{29/} PG&E 2020 WMP, p. 5-276.

^{30/} PG&E 2020 WMP, p. 5-276.

does provide general cost information regarding system hardening in Table 23, as required by the WMP Guidelines.

Table 23 also includes references to other proceedings where costs are addressed in more detail. For example, PG&E provided forecasts of system hardening costs in our 2020 GRC (A.18-12-009).^{31/} These costs estimates were litigated for almost a year in that proceeding. Finally, Santa Clara does not explain why more detailed cost information, other than that provided in Table 23, is needed or how this information would assist the parties or WSD in their review of the 2020 WMP.

G. TURN

TURN's comments briefly address the issue of grid hardening.^{32/} Although TURN raises several general issues, it acknowledges that it recently entered into a settlement agreement in PG&E's 2020 GRC which addresses the scope and costs of PG&E's system hardening program.^{33/} PG&E does not oppose TURN's proposal that WSD "require the utilities to continue collecting all data necessary to evaluate the effectiveness of covered conductor, the effectiveness of alternative technologies, and to improve their risk analyses so as to properly evaluate the desired scope of covered conductor deployment"^{34/} and the utilities "coordinate and emphasize the potential development of technologies that could reduce or eliminate ignition risk . . ."^{35/}

IV. EMERGING TECHNOLOGY

PG&E addressed how we monitor our facilities including use of new technologies, at various places in our 2020 WMP, including in Sections 5.3 and 5.1.D, respectively. PG&E disagrees with Mr. Collins' suggestion that off-the-shelf technology applications are

^{31/} See PG&E Exhibits 4 and 18, Chapter 2A and Chapter 9 in A.18-12-009 addressing system hardening costs and associated workpapers.

^{32/} TURN Comments, pp. 29-31.

^{33/} TURN Comments, p. 30.

^{34/} TURN Comments, p. 30.

^{35/} TURN Comments, p. 32.

appropriate^{36/} to provide instant wildfire mitigation on PG&E's system. Based on PG&E's analysis and benchmarking with utilities, equipment manufacturers and industry groups, there is no one "silver bullet" to eliminating wildfire risk. Instead, PG&E believes that the solution is comprised of multiple tools, techniques and technologies that can prevent, reduce or respond quickly to the many fault types that could create a spark. The implementation of system protection technologies, in particular, are not off-the-shelf applications but instead must be developed based on requirements of the operating system and thoroughly tested for safety and reliability.

TURN voices concerns over the utilities individually, and perhaps in parallel, piloting, testing, researching and proposing the use of the same emerging technologies and suggests collaboration and sharing of findings.^{37/} PG&E continuously explores new technologies and collaborates with the other utilities to not only benchmark but also to share best practice ideas, lessons learned and gain understanding of use of the emerging technology. While each utility must still assess technologies against the unique factors in their service territory, including topography, system design or circuit length, PG&E's cooperation with other utilities remains ongoing and in-progress.

V. VEGETATION MANAGEMENT

In Section 5.3.5 of our 2020 WMP, PG&E described in detail our vegetation management program, including the current approach to PG&E's Enhanced Vegetation Management (EVM) program. The 2020 WMP included more than 25 pages of detailed discussion regarding PG&E's vegetation management practices, how these practices have continued to evolve to address the rapidly growing wildfire risks in PG&E's service territory, and how PG&E continues to evaluate the effectiveness of all aspects of our vegetation management program. A number of parties commented on the vegetation management practices of the utilities' respective WMPs, including

^{36/} Collins Comments, p. 13.

^{37/} TURN Comments, p. 31.

PG&E's 2020 WMP. Below, PG&E addresses proposals that relate to future WMPs, proposals being implemented in the 2020 WMP, and proposals that should not be adopted.

A. Proposals for Future WMPs

Use of Fire Retardants

PG&E appreciates the comments of Perimeter Solutions and the suggested uses of the product to mitigate wildfires and their impacts.^{38/} PG&E already uses fire retardants for wildfire protection of utility assets (*i.e.*, applying to utility poles) and is analyzing such products for additional uses in mitigating wildfires by PG&E. One such use that PG&E is exploring is its potential use on right of ways around PG&E facilities that can be applied a few days prior to a forecasted potential PSPS weather event, which may then allow that line to remain energized during the high-risk weather conditions. However, because there is still needed analysis on the efficacy of its use and how to best deploy retardants in a pre-PSPS situation, PG&E believes an order by the WSD requiring such use is premature. Should the testing for this use bear out favorably to mitigate wildfire risk and/or PSPS events, PG&E intends to incorporate it into PG&E's 2021 WMP.

PG&E is currently testing possible applications of fire retardant during routine vegetation maintenance. If these test cases prove positive and effective, PG&E intends to incorporate targeted use of fire retardants into our vegetation management program in 2021 WMP. Therefore, WSD does not need to turn such recommendations for various uses of fire retardant into a directive.

B. Proposals Being Implemented for the 2020 WMP

Use of LiDAR

PG&E appreciates TURN's request that WSD encourage PG&E "to make better use of LiDAR, and to share findings regularly with parties and the Commission";^{39/} however, no

^{38/} Perimeter Solutions Comments, pp. 4-5.

^{39/} TURN Comments, pp. 29-30.

encouragement is necessary. The complete set of 2019 LiDAR data for PG&E's distribution assets is expected to be received from the vendor by early June 2020. PG&E is in the process of interpreting this information received to date and aims to use it in 2020 both to identify distribution spans with the most risk of encroachment into our facilities,^{40/} and potential hazard trees. This 2019 data capture was of approximately 25,000 distribution circuit miles and is believed to be the world's largest ever hyperspectral data survey. Given that such LiDAR set was so voluminous, the complete analysis of it will take time; however, it is being used. We have already begun to analyze and incorporate the information into our VM and EVM work processes. TURN misstates PG&E's response to a TURN Data Request;^{41/} this answer means exactly what it says which is that we will not *perform* additional LiDAR inspections in 2020. This is because we have already performed such an expansive LiDAR inspection of our facilities in High Fire Threat District (HFTD) areas in 2019 and the costs of doing so again in 2020 may not be justified given the expected nominal new information that would be captured. PG&E will continue to evaluate the benefits extracted from the LiDAR data and tailor our ongoing approach to capturing and using that data accordingly.

In addition, PG&E has shared LiDAR data with the Commission, and with parties via responses to respective data requests, and will continue to do so.

Efficacy of EVM and EVM Data and Reporting

PG&E appreciates GPI's recommendation for PG&E to show the efficacy of our EVM methodology based on treatment specific and HFTD-localized vegetation contact and ignition data.^{42/} At a high level, the number of vegetation ignitions in HFTDs dropped in 2019.

However, this information alone is not enough to prove the efficacy of the EVM program.

PG&E continually assesses the efficacy of existing approaches to wildfire mitigation, like EVM, to incorporate new information into the program. Because vegetation is dynamic, natural, local,

^{40/} PG&E Response to TURN DR10-003Supp01(a).

^{41/} TURN Comments, p. 30.

^{42/} GPI Comments, p. 10.

and ever-changing, pinpointing the efficacy of the EVM program is admittedly difficult. We will adjust the program and its implementation as research, data, learnings and other inputs drive changes to our EVM program.

PG&E also appreciates TURN's Comments that recommend requirements to:

- 1) report number and percentage of trees trimmed to 12 feet;
- 2) report number and percentage of overhangs removed in HFTD and non-HFTD areas;
- 3) trim all HFTD area trees to 12 feet where possible; and
- 4) clear more overhangs in Tier 2 and 3 areas.^{43/}

Regarding number one in the list above, PG&E has provided the number of trees trimmed to 12 feet; however, we cannot calculate the percentage of trees because PG&E does not count all trees that are not trimmed. If TURN is looking for the percentage of trees trimmed to 12 feet out of the percentage of trees that are in PG&E's database, that information can be provided. The data related to number two is similar, PG&E tracks the number of overhangs removed but does not have data on all overhangs to allow for a percentage calculation. PG&E is aligned with and continuing to perform recommendations 3 and 4 above. Given that these recommendations are in line with our current programs and due to the expectation that we will continue to learn more about reducing vegetation risks it is neither prudent nor necessary to create explicit requirements on these topics.

Use of Arborists and Collaboration on Vegetation Management Best Practices

CEJA requests "that utilities work together to proactively share data related to vegetative management practices" "through continued development of best practices" and to "continue to utilize an arborist" when removing trees.^{44/} PG&E regularly benchmarks and shares vegetation data with the other utilities related to best management practices and will continue to do so. In

^{43/} TURN Comments, pp. 27-28.

^{44/} CEJA Comments, p. 20.

addition, PG&E does use, and will continue to use, arborists for various decision making and review of vegetation management and EVM implementation, including removal of hazard trees. Because these requests of CEJA are already in-progress, an additional order is unnecessary.

Vegetation Residue Removal

GPI has proposed that the utilities “formulate an initiative to actively promote the complete removal of vegetation management residues from the site after trimming is complete, including segregating any commercially usable material for shipment to sawmills, particle board mills, or similar manufacturing facilities, and chipping the remaining material and shipping it to biomass generating facilities.”^{45/} These comments are consistent with PG&E’s general approach to EVM after work is completed, and where property owners agree, and considers this request to be incorporated into our in-progress implementation.

C. Proposals That Should Not Be Adopted

Hazard Tree Removal Restrictions

At the outset, TURN wrongly implies that PG&E considers “healthy trees” to be potential hazard trees applicable for hazard tree removal. This is not accurate as to PG&E’s definition or implementation of our program. “A hazard tree is a tree that poses an increased potential risk of falling into the lines due to, for example, poor health (all or a portion of the tree dying, diseased or decayed) or other defects.”^{46/} These are structurally and/or physically compromised trees that should not be near energized power lines in their weakened or at-risk state and TURN’s continued description of hazard trees as “predominantly healthy trees” is misguided.^{47/}

PG&E opposes TURN’s request that WSD not authorize PG&E’s hazard tree removal program.^{48/} First, California Public Resources Code § 4293 requires utilities to address hazard

^{45/} GPI Comments, p. 17.

^{46/} PG&E 2020 WMP, p. 5-184.

^{47/} TURN Comments, p. 24.

^{48/} TURN Comments, p. 27.

trees: “Dead trees, old decadent or rotten trees, trees weakened by decay or disease and trees or portions thereof that are leaning toward the line which may contact the line from the side or may fall on the line shall be felled, cut, or trimmed so as to remove such hazard.”^{49/} Moreover, PG&E’s vegetation management and EVM programs appropriately seek to mitigate risks to the safety and reliability of our overhead electric lines without deploying more resources or removing more trees than is necessary. TURN and WSD will find utility right of way vegetation best management practices throughout the state and the country that include programs to remove hazard trees, which, similar to the statutory language noted above, are generally identified as trees that are dead, diseased, dying, leaning, or otherwise compromised, and may strike the line should they fail. These are not “healthy trees.” The hazard tree program is required to mitigate these wildfire risks to energized power lines and any restriction on this ability will directly constrain wildfire mitigation efforts. Identifying and removing hazard trees ranges from trees that directly violate the California Public Resources Code because they are visibly dead or dying and could fall on power lines, to identifying and removing trees which professional arborists have assessed to be a hazard and pose a risk to our facilities and the communities we serve. Not authorizing the hazard tree program would have a dramatic effect on PG&E’s wildfire risk reduction efforts, our ability to protect overhead facilities from damage due to such trees and would not follow best management practices for utility right of ways.

Program Design

TURN’s Comments include the statement that PG&E, despite having four times the number of trees in HFTD areas as Southern California Edison Company (SCE), has only trimmed one and half the amount of trees in these areas compared to SCE.^{50/} While TURN admits it has no reason to conclude there is a problem with PG&E’s data and that there may be

^{49/} See http://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=4.&title=&part=2.&chapter=3.&article=

^{50/} TURN Comments, pp. 21-22.

legitimate justifications for such differences, TURN goes on to suggest that this requires the WSD to order all utilities to explain how they select trees for their database and require PG&E explain the reasoning behind the supposed disproportionate numbers.^{51/} PG&E opposes these two unnecessary recommendations. The use of data requests is the appropriate tool for TURN to better understand potential differences in utilities program design. Additionally, without any indication of problematic trends, data or discrepancy, issuing a study to show the reasoning for the supposed disproportionate number of tree trims would be a poor use of resources.

VI. INSPECTIONS

PG&E's 2020 WMP describes our asset management and inspection process in Section 5.3.4. This section of the 2020 WMP included discussions of electric distribution, transmission, and substation facilities. PG&E described in detail the Wildfire Safety Inspection Program (WSIP) that we undertook in 2019 and how we intend to continue to aggressively inspect our facilities going forward. Below, PG&E addresses proposals from parties regarding future WMPs and the 2020 WMP, as well as proposals regarding cost recovery.

A. Proposals for Future WMPs

Analyze Set Percentage of Inspections

CEJA points out that while PG&E performed inspections of facilities, "it is still not clear how all the utilities are analyzing the effectiveness of all the different types of inspections techniques."^{52/} CEJA goes on to suggest that while PG&E has performed audits of some of our inspections, separately analyzing all types of inspections, or determining what type of inspection techniques may be more effective than other types is needed.^{53/} PG&E supports CEJA's suggestion for PG&E to "complete this analysis in future WMPs, and that it analyze a set

^{51/} *Id.*

^{52/} CEJA Comments, pp. 7, 9.

^{53/} *Id.*

percentage of its inspections to determine whether they are consistently identifying issues.”^{54/} PG&E plans to incorporate such recommendation into our 2021 WMP.

Process Quality Group

Cal Advocates suggest that WSD direct PG&E to supplement our 2020 WMP with details as to the need for the Process Quality Group and define its role.^{55/} PG&E will provide more information in our 2021 WMP about this group and would have been happy to do so during the discovery phase of this proceeding. In brief, the Process Quality Group is to provide near-real time inspection quality monitoring and is not duplicative of internal audit or any other existing group. This group, exclusively focused on the system inspections effort, will leverage the power of the new electronic format inspections to define and monitor Key Performance Indicators for inspection quality and provide recommendations for course correction or in-field quality validation in near-real-time. Therefore, a further supplement of additional information in the 2020 WMP is premature, and we suggest that the appropriate place for expansion of these details would be through a data request or in the 2021 WMP.

B. Proposals Being Implemented for the 2020 WMP

HFTD Inspections

It appears that RCRC may have misunderstood PG&E’s 2020 WMP discussion of inspections of Tier 2 assets;^{56/} however, the good news is that PG&E is in fact implementing what RCRC is suggesting for inspections of PG&E’s assets. In 2019, PG&E inspected 100% of our assets in Tiers 2 and Tiers 3. In 2020, PG&E will again inspect 100% of our assets in Tier 3. Additionally, in 2020, PG&E will inspect 1/3 of our assets in Tier 2 and Zone 1 (the non-overlapping Tier 1 High Hazard Zone), another 1/3 in 2021, and the final 1/3 of our assets in

^{54/} *Id.*

^{55/} Cal Advocates Comments, pp. 7-8.

^{56/} RCRC Comments, p. 3.

2022.^{57/} Since PG&E has baselined all of our assets in Tier 2 as recently as 2019, it is reasonable to then spread this next inspection of Tier 2 assets over the 2020-2022 timeframe.

Run-To-Condition Facilities

PG&E acknowledges GPI Comments which discuss a run-to-condition model and the request for more information on replacement programs.^{58/} PG&E's condition assessment and replacement programs are well documented and can be provided to GPI and other parties on request.

C. Proposal on Cost Recovery

TURN argues that the WSD should not deem compliance inspection and repair programs as new wildfire mitigation activities and should direct utilities not to include the cost of traditional maintenance and repair costs in wildfire mitigation memorandum accounts.^{59/} Resolving this cost recovery issue contradicts TURN's own argument that approval of a WMP not consider authorization of cost recovery.^{60/} Regardless, Public Utilities Code § 8386.4 authorizes recovery of costs that are reasonable, incurred for fire risk mitigation, and not already covered in revenue requirements. Whether approved revenue requirements cover *similar* types of activities is irrelevant; the question is whether the costs are included in approved revenue requirements. TURN's interpretation would arbitrarily limit the scope of wildfire mitigation activities and threaten the efficacy and ingenuity of wildfire mitigation activities by discouraging innovation and enhancement of customary activities. Further, all costs recorded to the wildfire mitigation memorandum accounts will be transparently reviewed and addressed through a separate cost recovery filing allowing for evaluation, discovery, discussion and decision making on those activities and costs.

^{57/} PG&E 2020 WMP, p. 5-156.

^{58/} GPI Comments, p. 19.

^{59/} TURN Comments, p. 2.

^{60/} TURN Comments, p. 1.

VII. RISK ASSESSMENT AND MAPPING

Public Utilities Code §§ 8386(c)(11) and (12) require the utilities to make certain showings in their respective WMPs regarding wildfire risk. PG&E’s 2020 WMP readily satisfies the statutory requirements. In Sections 4.2 and 5.4 of the 2020 WMP, PG&E explained in detail our wildfire risks analysis, including how that analysis is consistent with criteria established in the Safety Model and Assessment Proceeding (S-MAP) and the Risk Assessment Mitigation Phase (RAMP). This section also included PG&E’s bowtie analysis for the wildfire risk, which identified wildfire drivers, controls, and consequences. PG&E also explained how our risks analysis was consistent with approaches adopted in the Commission’s S-MAP and RAMP proceedings. Section 5.1.A described our approach to risks generally before providing a detailed discussion of its proposed risk mitigations. Throughout the 2020 WMP, PG&E frames this discussion in terms of how proposals will mitigate wildfire risk.

Many parties recognize the robust risk showing presented in PG&E’s 2020 WMP. For example, GPI notes that PG&E had provided the “most comprehensive summary” of its bowtie analysis.^{61/} MGRA also comments favorably on the “detailed technical description” that PG&E provided of our Multi-Attribute Variable Function (MAVF) tool.^{62/} Some parties, such as RCRC, propose additional tools for measuring risk.^{63/} These proposals are appropriately addressed in future WMP proceedings, or other risk related proceedings such as RAMP. While these proposals may have merit, parties such as RCRC do not assert that the WSD should reject the current 2020 WMPs because these types of tools are not included.

Below, PG&E addresses risk-related comments from Cal Advocates, EPUC, GPI, MGRA, Santa Clara, and TURN.

^{61/} GPI Comments, pp. 1-2.

^{62/} MGRA Comments, p. 16.

^{63/} RCRC Comments, p. 15.

A. Cal Advocates

Cal Advocates maintains that PG&E did not calculate Risk Spend Efficiencies (RSEs) for all of our proposed mitigations and thus should be required to update our 2020 WMP to include these RSEs.^{64/} However, as PG&E explained in our 2020 WMP, controls and foundational measures should not be assigned an RSE. For example, with regard to controls, PG&E explained:

‘Risk-spend efficiency’ are not provided because the baseline risk score already takes these initiatives into account; the risk reduction due to the control is incorporated into the risk score and cannot be confidently separated.^{65/}

For foundational initiatives, PG&E explained:

Foundational activities generally do not result in stand-alone risk reduction. As a result, foundational initiatives and exploratory projects do not have associated Risk drivers and Risk reduction scores.^{66/}

Cal Advocates does not dispute or address the explanation provided by PG&E as to why controls and foundational initiatives do not have separately calculated RSEs.

Cal Advocates also includes several risk-related suggestions for future WMPs, such as more robust risk scoring methods, evaluating the validity of wildfire risk models, and forming a technical working group to review wildfire risk models.^{67/} PG&E agrees that wildfire risk modeling can and should continue to evolve and supports considering Cal Advocates’ proposals, as well as others, for future WMPs. After the 2020 WMPs have been reviewed and approved, WSD and the parties should continue to work on refining and improving wildfire risk models. PG&E opposes, however, Cal Advocates’ suggestion that as a condition of approving the 2020 WMPs, the utilities be required to provide supplemental data demonstrating the accuracy of

^{64/} Cal Advocates Comments, p. 9.

^{65/} PG&E 2020 WMP, p. 5-36.

^{66/} PG&E 2020 WMP, p. 5-36.

^{67/} Cal Advocates Comments, p. 4, Items 35, 37 and 38.

their risk models.^{68/} This proposal would require a substantial amount of work, was not required by the WSD template, and review of such submissions which would significantly delay this proceeding. While PG&E agrees with the desire for a more collaborative approach to reviewing risk models for future WMPs, the approval of the 2020 WMP should not be contingent on making a detailed showing of model accuracy, especially when this is not required by California statutory law nor by the template provided by the Commission and WSD.

Finally, Cal Advocates argues that there are differences between risk modeling done by PG&E for the 2020 GRC and the modeling done for the 2020 WMP.^{69/} These differences are readily explained. As Cal Advocates acknowledges, in discovery PG&E explained that the 2020 GRC was based on 2014 and 2015 data, while the 2020 WMP is based on 2015 through 2019 data. Since 2015, California has experienced three years of unprecedented catastrophic wildfires and the Commission and utilities have accordingly continued to refine and update the approaches to modeling wildfire risk. Based on new data and modeling techniques, it is entirely reasonable that PG&E's risk ranking for wildfire risks would substantially change. Cal Advocates requests that PG&E make an "apples-to-apples" comparison between GRC and WMP modeling, using all of the recent data, but this exercise seems unnecessary and would provide little benefit. There is no reason to update models used in a separate proceeding that were accurate as of the time of submission nor to compare them to the models used here. PG&E's 2020 WMP explains in detail the models and data used in this proceeding. These are the models that are relevant. Trying to compare earlier models from a separate proceeding that used older data is unnecessary given all of the other significant issues in this proceeding, nor is such a comparison required by California statute or the WSD template.

^{68/} Cal Advocates Comments, p. 4, Item 36.

^{69/} Cal Advocates Comments, pp. 55-56.

B. EPUC

EPUC raises concerns similar to Cal Advocates regarding PG&E not providing RSEs for controls and foundational initiatives.^{70/} This issue is addressed above. EPUC also asserts that it was unable to calculate specific RSEs from PG&E's workpapers and data responses because of the format in which this information was provided.^{71/} This is an issue that EPUC should have addressed through the discovery process. If EPUC needed additional information, including the formula that could be used to replicate PG&E's calculations, it should have requested that information as follow-up discovery and it would have been provided. This is not a basis for determining that PG&E's risk showing is deficient.

EPUC also criticizes PG&E for using the judgment of subject matter experts.^{72/} However, as PG&E explained, this is currently the best information available and doing so is consistent with the S-MAP approved methodology where data that is specific to the utility is not available.^{73/} As PG&E gathers additional data in 2020 and beyond, we will be able to validate and revise this aspect of its risk analysis but, until then, PG&E is using the best information currently available. Notably, EPUC does not propose an alternative approach or other data which could be used.

EPUC also argues that the utilities should provide detailed RSE calculations when they seek to recover WMP-related costs.^{74/} This argument appears to apply to cost recovery proceedings, such as the GRC or applications involving memorandum accounts. The specific information needed in those proceedings should be addressed there, not here.

^{70/} EPUC Comments, pp. 9-10.

^{71/} EPUC Comments, pp. 8-9.

^{72/} EPUC Comments, pp. 10-11.

^{73/} See D.18-12-014, Appendix A, Step 2A, No.10 (Identification of Potential Consequences of Risk Event) and No.11(Identification of the Frequency of the Risk Event).

^{74/} EPUC Comments, pp. 7-8.

C. GPI

GPI comments generally that all of the utilities submitting future WMPs should expand their bowtie discussions and analyses.^{75/} Notably, GPI explains that PG&E’s 2020 WMP had the “most comprehensive summary of their bowtie and MAVF analyses as it relates to WMP activities” and “appears to have most successfully integrated a bowtie risk analysis into the development of their WMP.”^{76/} PG&E believes that GPI made some important points on how bowtie analyses can be more thoroughly used and discussed in future WMPs and recommends that the WSD consider these points in providing direction for future WMPs.

GPI also notes generally for all of the utilities that “[f]uture WMPs should include underlying RR and RSE calculations (i.e. applied RAMP/S-MAP methods), and a description of the data and/or assumptions used to determine these values.”^{77/} PG&E agrees that future WMPs could include more detailed workpapers regarding RSE calculations.

D. MGRA

MGRA discusses at some length PG&E’s use of the MAVF tool with regard to risk.^{78/} MGRA notes that “PG&E provides a reasonably detailed technical description of its implementation of the Multi-Attribute Value Function analysis used in its estimation of risk and risk-spend efficiencies, and thereby complies with the instructions provided in the template.”^{79/} However, MGRA expresses some concern about various aspects of the MAVF analysis. MGRA further recognizes that these MAVF issues should be addressed in the Commission’s ongoing RAMP proceeding, rather than this proceeding.^{80/} PG&E agrees that these issues are more

^{75/} GPI Comments, pp. 1-4.

^{76/} GPI Comments, pp. 1-2.

^{77/} GPI Comments, p. 13.

^{78/} MGRA Comments, pp. 16-19.

^{79/} MGRA Comments, p. 16.

^{80/} MGRA Comments, p. 18.

appropriately addressed in the RAMP proceeding and thus need not be resolved as a part of the review and approval of PG&E's 2020 WMP.

MGRA also suggests additional information and analyses that should be included in PG&E's 2020 RAMP Report, such as granularity regarding specific initiatives, tree trimming information and analysis of covered conductor and undergrounding.^{81/} As MGRA notes, these suggestions are more appropriately addressed in the RAMP proceeding. MGRA also argues that the WSD should decide whether the development of cost/benefit or RSE methodology that incorporates customer harm due to PSPS should be developed by the WSD or the Commission.^{82/} Issues regarding the components and calculation of RSEs should be addressed in the RAMP proceeding, not here.

E. Santa Clara

Santa Clara claims that PG&E did not include a discussion of how our initiatives reduce PSPS-related risk in Section 5.3.1.4.^{83/} In fact, the 2020 WMP included an extensive discussion of PSPS-related initiatives in section 5.6.2.1 and how these initiatives reduce the frequency and duration of PSPS events and mitigate the impacts associated with PSPS events.^{84/} Thus, this issue was addressed in other portions of PG&E's 2020 WMP.

F. TURN

TURN is the only party that asserts PG&E's risk showing is deficient.^{85/} TURN's comments regarding risk primarily address PG&E's and SCE's calculation and use of RSEs.^{86/} TURN raises several points that need to be addressed.

^{81/} MGRA Comments, pp. 40-42.

^{82/} MGRA Comments, p. 22.

^{83/} Santa Clara Comments, p. 7.

^{84/} PG&E 2020 WMP, pp. 5-286 to 5-292.

^{85/} TURN Comments, p. 7.

^{86/} TURN Comments, pp. 7-13.

First, TURN asserts that PG&E may not have properly calculated our RSEs consistent with the S-MAP settlement.^{87/} However, TURN does not provide any specific example to support its point. Instead, TURN asserts with no evidentiary support that “it is doubtful” that PG&E’s RSE are accurate because PG&E has not “presented its RAMP or a GRC based on that RAMP”^{88/} The Commission established a schedule for the utilities’ RAMP Reports which requires PG&E to file in June 2020.^{89/} The fact that PG&E has not yet filed a RAMP Report, consistent with Commission direction concerning timing, does not mean that our RSE calculations are incorrect. Notably, TURN propounded extensive discovery in this proceeding and has had every opportunity to point out specific shortcomings in PG&E’s RSE calculations but failed to do so in its comments. PG&E’s 2020 WMP has a lengthy discussion of the calculation of RSEs.^{90/} TURN’s comments are notably silent as to specific concerns about these RSE calculations. Moreover, as TURN candidly acknowledged, the RAMP proceeding is the appropriate venue to raise issues concerning proper application of the S-MAP settlement and calculation of RSEs.^{91/} Thus, to the extent TURN has concerns about the calculation of RSEs, it should raise those concerns in response to PG&E’s RAMP Report rather than in this proceeding.

Second, TURN criticizes PG&E for not providing an RSE for every mitigation.^{92/} This issue is addressed above in the discussion of Cal Advocates’ risk comments.

Third, TURN argues the RSEs provided by PG&E and SCE are not sufficiently granular.^{93/} However, TURN appears to acknowledge that the granularity it proposes is not required by the S-MAP decision by noting that this is something which should be done “[i]n the

^{87/} TURN Comments, p. 9.

^{88/} TURN Comments, p. 9.

^{89/} Decision (D.) 20-01-002, pp. 3, 43.

^{90/} PG&E 2020 WMP, pp. 5-227, 5-268 to 5-270.

^{91/} TURN Comments, p. 8.

^{92/} TURN Comments, pp. 10-11.

^{93/} TURN Comments, pp. 11-13.

future . . .^{94/} PG&E agrees that as the Commission and parties gain more experience with risk analyses, these analyses will likely continue to be refined and improved. The more granular analysis proposed by TURN may be one such improvement and would be a good topic for further discussion in proceedings regarding the utilities' RAMP Reports. However, the fact that PG&E and SCE did not include a more granular analysis that is not currently required by the Commission does not mean that their 2020 WMPs are deficient. Rather, TURN appears to be simply stating that in the future risk analyses will continue to evolve and become more granular. This is certainly something to consider for future WMPs but is not a reason to find a deficiency here.

VIII. PSPS AND MICROGRIDS

A. PSPS

Public Utilities Code §§ 8386(c)(6), (7), and (10) require the utilities to include protocols for deenergizing their electric distribution and transmission systems in their respective WMPs, including protocols to mitigate public safety impacts and notify customer and public safety partners. PG&E's 2020 WMP satisfies these statutory requirements. In Section 5.6.2 and several additional sections of the 2020 WMP, PG&E explained in detail our PSPS protocols. In Sections 5.6.2.1 and 5.6.2.5, PG&E explained specific strategies to mitigate public safety impacts, including measures to reduce the scope, duration, and frequency of PSPS events and customer services and programs to mitigate impacts on de-energized customers. In Section 5.6.2.2, PG&E described the protocols to determine whether and which lines to de-energize. In Section 5.3.2, PG&E explained how we are improving our situational awareness, which will facilitate better informed PSPS decisions, refining the scope and reducing the length and frequency of PSPS events. In Section 5.6.2.3 (as well as in Section 5.3.6.4), PG&E described our re-energization strategy, explaining that PG&E built upon the restoration process enhancements made in 2019 to reduce outage durations. In Section 5.6.2.4, PG&E described our

^{94/} TURN Comments, p. 12.

customer, agency, and other external communication and notification processes. Through these sections of the 2020 WMP, PG&E describes a robust and improving PSPS process.

Several parties addressed PG&E's PSPS protocols in their comments, specifically with regard to the scope of PSPS events, local government and customer notifications, locations of Community Resource Centers (CRCs), communications facilities, and customer feedback on PSPS events. Most of these issues are being addressed in multiple separate, ongoing Commission proceedings, most notably in the quasi-legislative Phase II of the PSPS OIR (Rulemaking (R.) 18-12-005), which is focused on developing a record to potentially augment existing Commission authority with new and modified guidelines for de-energization events. In addition, the Commission is also evaluating whether the three large investor-owned utilities appropriately prioritized safety and complied with the de-energization guidelines with respect to PSPS events in late 2019 in Investigation (I.) 19-11-013, as well as PG&E specifically in the Order to Show Cause in R.18-12-005. Moreover, the Commission is developing proposals to maintain dependable and reliable communications networks during PSPS events in R.18-03-011.

There is no need to address in this proceeding those issues that are being addressed in separate Commission proceedings. Moreover, trying to address the same issue in this proceeding as well as in the PSPS-specific proceedings may result in inconsistent or contradictory outcomes. Further, PG&E has already provided extensive discussion on the steps PG&E has taken and continues to take to improve execution of PSPS events in 2020. For example, PG&E's comments in Phase II of the PSPS OIR discuss at length the work PG&E has performed already in 2020 to improve and incorporate feedback on CRCs. Thus, the Commission should not require PG&E to incorporate further specific PSPS measures in our 2020 WMP through this proceeding but should instead recognize that the utilities will continue to enhance their PSPS protocols in compliance with the outcome of R.18-12-005, where the parties are developing a complete record and are exclusively focused on this issue.

Nonetheless, PG&E addresses various PSPS-related comments from the Joint Local Governments, Santa Clara, RCRC, CEJA, EBMUD, and GPI to clarify PG&E's 2020 WMP or explain how PG&E is implementing the requested measures.

1. Joint Local Governments

The Joint Local Governments generally do not appear to argue that the WMP is deficient, but that PG&E should improve the implementation of the WMP. PG&E agrees and is continually improving and enhancing our wildfire mitigation measures. The Joint Local Governments ask that PG&E improve the accuracy and availability of data and maps shared with public safety partners and the public.^{95/} The Joint Local Governments also demand that PG&E improve our process to refine the scope of PSPS events to minimize disruption, improve staffing to reduce fatigue and improve external communication, improve accuracy and timeliness of re-energization, ensure our website is robust enough to remain functional during largescale PSPS events, ensure local government points of contact are sufficiently knowledgeable about the system to be helpful, and monitor and respond to the 24 hour liaison email address.^{96/} PG&E is working to improve our implementation of each of these measures as part of our 2020 PSPS plan.

The Joint Local Governments also assert that local government and tribal representatives be allowed to remain in the Emergency Operations Center (EOC) with representatives from the CPUC and Cal OES, rather than be relegated to an isolated conference room.^{97/} The Joint Local Governments misunderstand the nature of PG&E's EOC. While there is a large room where a number of EOC personnel are located and to which the EOC commander's conference room adjoins, PG&E's EOC comprises more than that single room. Due to space limitations and safety concerns, not all PG&E employees staffing the EOC can be located in that single room. For example, when activated PG&E's EOC incorporates a separate space for the public

^{95/} Joint Local Government Comments, p. 5.

^{96/} Joint Local Governments Comments, pp. 5-6.

^{97/} Joint Local Governments Comments, p. 6.

information team and several conference rooms used by specific or various EOC teams throughout an event. As the number of essential personnel needed to staff PSPS events grew, the PG&E EOC footprint expanded further, adding additional conference rooms for other teams supporting information technology needs and providing information and outreach within the EOC. Due to the constraints of the building, these conference rooms, those still on the same floor, were not immediately adjacent to the EOC commander's conference room. Other than the CPUC, CAL FIRE, Cal OES, and Federal Monitor representatives, other visitors were also accommodated in one of these other conference rooms.

This does not mean these individuals were located "outside" of PG&E's EOC as some of the PG&E EOC staff were similarly stationed in the same or similar rooms that comprise the overall EOC. PG&E continues to assess how best to manage the limited space for EOC operations to ensure accessibility for critical personnel while also allowing appropriate engagement with the various visitors to the EOC and may adjust the arrangements in 2020. Additionally, with input from public safety partners, PG&E is continuing to make improvements to our planned communication approaches with these partners during events, which may mitigate the need or desire for a representative to physically sit within the space-constrained EOC.

2. Santa Clara

Santa Clara makes a number of suggestions on additional information or measures to include in the utilities' WMPs. PG&E already provides a number of programs sought by Santa Clara. For example, Santa Clara asks that customers and local governments be allowed to submit claims for PSPS events via PG&E's internal claims process, so PG&E can report the number of claims submitted.^{98/} While potential payments for claims associated with PSPS events should only be the subject of the PSPS-specific proceedings, entities and individuals have always been able to submit claims for PSPS events through PG&E's usual claims process since

^{98/} Santa Clara Comments, pp. 6, 8.

PG&E's first PSPS event in 2018. PG&E has described that option in response to inquiries about past PSPS events, and it will continue to be available.

Likewise, PG&E already has a process for notifying local governments of medical baseline individuals whom the utilities are unable to confirm contact during a PSPS event, as requested by Santa Clara.^{99/} PG&E already provided "unable to contact" notification status for medical baseline customers to agencies in 2019 and intends to continue doing so in 2020. PG&E is also exploring how to optimize this process going forward.

Santa Clara asks that PG&E specify how we will incorporate input received from customers and communities during listening tours in late 2019 to early 2020.^{100/} Through February 2020, PG&E had already completed 36 listening sessions with counties, cities and tribal governments.^{101/} These sessions, along with outreach to critical service providers and other key stakeholders, have helped PG&E to better understand the needs of local communities and further develop a plan for the future. Additional in-person outreach and information sharing had been scheduled but has been suspended due to social distancing requirements and the local governments' need to focus on the COVID-19 response. Instead, PG&E has shifted to web-based outreach and has begun hosting meetings with counties as they can make time available. In the meantime, PG&E has been incorporating feedback in preparation for potential PSPS events in 2020. PG&E also shared our initial steps to respond to this feedback with the Commission and the participating counties. Since February, PG&E has also been submitting bi-weekly reports on our PSPS program corrective actions, including outreach efforts, in Commission dockets R.18-12-005 and I.19-11-013.^{102/}

^{99/} Santa Clara Comments, p. 8.

^{100/} Santa Clara Comments, p. 10.

^{101/} Eleven counties who were invited declined to participate, and six other counties had not been impacted by a PSPS event in 2019. In person listening sessions were suspended in March due to the COVID-19 emergency.

^{102/} These bi-weekly reports are available on PG&E's regulatory affairs website here: <http://pgera.azurewebsites.net/Regulation/>.

Santa Clara raises concerns about the location of CRCs and asks that PG&E provide transportation for access and functional needs individuals.^{103/} As Santa Clara is aware, transportation to CRCs is an open topic in Phase II of the PSPS proceeding and will be resolved there. Nonetheless, PG&E has arranged for the California Foundation for Independent Living Centers (CFILC) to provide accessible transportation to CRCs for customers through their Disability Disaster Access and Resources Program. Customers can coordinate transportation needs with their Regional Independent Living Center (ILC); Santa Clara County is served by the Silicon Valley Independent Living Center (SVILC).

PG&E is also already considering how to implement other modifications to the PSPS program for 2020 and beyond that Santa Clara has requested. For example, Santa Clara supports PG&E's efforts to provide cold storage to low income and medically sensitive customers and seeks more information on how PG&E will identify and communicate with eligible customers. PG&E filed an application with the Commission for approval of the proposed new cold storage program.^{104/} If approved, this program will be available in the Energy Savings Assistance 2021–2026 program cycle.

PG&E agrees with Santa Clara that there is an error on page 5-236 where a bullet says only: “Providing.”^{105/} That bullet constitutes a typographical error and should be disregarded.

Some of Santa Clara's requests require additional coordination to ensure efficient use of resources and safety and reliability of the system, or to adapt in light of competing requests by other local governments and state authorities. PG&E is already considering or will consider whether to include these measures within PG&E's 2020 PSPS program. For example, Santa Clara also asks that the CRCs be operational for 24 hours a day.^{106/} However, each local government has their own concerns and ideas about how best to locate and operate CRCs. While

^{103/} Santa Clara Comments, p. 6.

^{104/} See A.19-11-003.

^{105/} Santa Clara Comments, p. 8.

^{106/} Santa Clara Comments, p. 6.

Santa Clara supports 24-hour CRCs, other local governments have informed PG&E that they do not want CRCs to be operational for 24 hours a day due to concerns about impacts on the neighboring areas. PG&E is working with multiple local governments to incorporate feedback and determine the appropriate approach for these issues, including CRC operating hours, for the 2020 PSPS season.

Santa Clara also asks that PG&E bear the costs of operating and supplying CRCs.^{107/} PG&E is bearing the cost of the CRCs that PG&E has set-up and is also exploring the possibility of funding CRCs operated by local governments. As PG&E previously stated in our November 2019 PSPS After-Action Report, PG&E is generally willing to reimburse for CRCs operated by counties. PG&E and specific counties need to discuss the location of the CRCs to avoid inefficiencies, including redundancy with PG&E's own CRCs. As Santa Clara acknowledges, the few CRCs operated in Santa Clara in 2019 had few visitors. A blanket requirement to fund all CRCs could result in excessive and inefficiently sited CRCs. PG&E proposes to continue discussions with interested local governments to develop appropriate parameters.

Santa Clara asks that PG&E be required to develop and implement a real time PSPS outage and re-energization platform that provides emergency managers with up-to-date information on areas that will be affected by PSPS.^{108/} PG&E will consider the feasibility of a platform with this information but cautions that providing this information must comply with cybersecurity protocols. To protect against cyber-hacking or other cybersecurity issues, PG&E's internal network is separated from external facing websites and portals. Thus, PG&E needs to evaluate how to update an external portal with detailed, potentially voluminous, real-time outage and re-energization information. However, as part of our 2020 PSPS improvements, PG&E is considering how to improve communication and coordination with local governments and

^{107/} Santa Clara Comments, p. 6.

^{108/} Santa Clara Comments, pp. 10-11.

emergency response personnel, including providing more granular and accurate information more quickly.

Santa Clara asks that PG&E allow customers and local governments to submit surveys through the website after each PSPS event.^{109/} PG&E will consider this proposal, though PG&E is uncertain whether this is helpful in light of other available means to provide input on PSPS events. Not only does PG&E host website surveys that allow the public to provide direct feedback on the site page and topic, but the public is also invited to comment on each PSPS event under the Commission’s guidelines, which PG&E notes when circulating our after action PSPS reports to the Commission.

Santa Clara also asks what “other measures” constitute alternatives to PSPS and asks PG&E to explain why PG&E’s 2020 WMP does not specify that PSPS events would be “largely eliminate[d]” within 5 years.^{110/} Generally PG&E considers much of our 2020 WMP to represent measures that reduce the need for PSPS. Specifically, PG&E’s plan is to enhance our distribution segmentation strategies to reduce the need for PSPS, including: (a) adding sectionalizing devices; (b) circuit reconfiguration; and (c) targeted undergrounding as part of system hardening to support PSPS switching. For more information on PG&E’s efforts to reduce the use of PSPS, see Section 5.3.3.8 of PG&E’s 2020 WMP. As discussed in Section 5.1.D.3, PG&E is also exploring and piloting new or emerging technologies that, if successful, may also reduce the need for PSPS. That said, PG&E has only been initiating PSPS events for less than two years; in contrast, San Diego Gas & Electric Company (SDG&E) has been initiating PSPS events for over ten years. While PG&E is continuously working to reduce the scope, duration, and frequency of PSPS events and hopes that new technologies will allow for less need for PSPS, PG&E cannot predict with certainty that there would be no need for any PSPS events within a set period of time.

^{109/} Santa Clara Comments, p. 11.

^{110/} Santa Clara Comments, p. 7.

Santa Clara also makes several suggestions that are not feasible or reasonable, to which PG&E objects. First, Santa Clara asserted that PG&E's 2020 WMP should cite to the not-yet-finalized additions to the CPUC PSPS guidelines that were proposed in R.18-12-005 and anticipated to be finalized in June 2020.^{111/} PG&E disagrees. PG&E's 2020 WMP already cites to the existing CPUC decisions regarding PSPS. Any new PSPS guidelines – once adopted by the Commission – will apply and be enforceable according to the Commission's decision. It would not be appropriate to reference draft guidelines – which the Commission may modify before adopting – in the 2020 WMPs.

Santa Clara also asks that PG&E provide a home generator safety education program to residents in high fire threat areas.^{112/} PG&E already includes backup power solution safety information in our 2020 emergency preparedness outreach, in addition to the safety information already available on PG&E's website. PG&E continually updates and enhances safety information for customers, but whether utilities should provide an education program as proposed should be assessed in the PSPS OIR proceeding where a complete record can be developed.

Santa Clara also argues that PG&E should identify telecommunication sites within the county that are not equipped with backup power, coordinate with telecommunication utilities to identify towers that do not have backup power, and provide a GIS shapefile to local public safety partners identifying the locations of these cell towers.^{113/} While PG&E is working closely with telecommunications utilities to ensure their understanding of potential PSPS impacts and operational details, PG&E objects to this proposal as requiring PG&E to communicate information that is neither within PG&E's control nor PG&E's to share. PG&E is not authorized to provide information about our telecommunication customers without permission from the telecommunication utilities or a directive from the Commission. Moreover, as discussed above,

^{111/} Santa Clara Comments, pp. 7, 9-10.

^{112/} Santa Clara Comments, p. 7.

^{113/} Santa Clara Comments, pp. 5, 8.

the Commission is developing proposals to maintain dependable and reliable communications networks during PSPS events in R.18-03-011. Ways to confirm telecommunications service capabilities should be discussed and vetted in that proceeding.

Likewise, this is not the correct proceeding to consider Santa Clara's suggestion that PG&E be required to provide refueling resources or backup power to telecommunications infrastructure and access and functional needs customers in HFTD areas^{114/} and provide information on where and in what circumstances backup generation would be provided.^{115/} In Resolution ESRB-8, the Commission directed the utilities to assist critical facility customers in evaluating needs for backup power and authorized utilities to provide generators:

IOUs shall assist critical facility customers to evaluate their needs for backup power and determine whether additional equipment is needed. To address public safety impacts of a de-energization event, the IOU may provide generators to critical facilities that are not well prepared for a power shut off.^{116/}

Suggestions that those obligations be expanded should be evaluated in the PSPS OIR, where a complete record can be developed.

3. RCRC

RCRC makes several recommendations regarding PSPS, some of which PG&E is already implementing, some of which are not within PG&E's control, and many of which require technical understanding and explanation, and which should be raised and assessed as part of the PSPS OIR.

PG&E is already implementing a number of measures raised by RCRC. Like Santa Clara, RCRC suggests expanding the number and hours of CRCs; seeks enhanced notification and communication with local governments, including on selection of CRC locations; and cautions the utilities to coordinate with local governments to ensure PSPS events do not impair

^{114/} Santa Clara Comments, p. 6.

^{115/} Santa Clara Comments, p. 7.

^{116/} Resolution ESRB-8, p. 7 (July 12, 2018).

elections.^{117/} As discussed above in response to Santa Clara’s Comments, PG&E is already working closely with local governments on implementing measures that relate to each of these issues.

RCRC asks that the utilities convene advisory boards of local officials or emergency response personnel to weigh in on PSPS procedures and develop plans.^{118/} As described in PG&E’s bi-weekly Corrective Action report (Section 2.a) submitted in dockets R.18-12-005 and I.19-11-013,^{119/} PG&E developed an ad hoc advisory committee comprised of a targeted group of county and tribal agencies impacted by the recent PSPS events in PG&E’s service territory to obtain focused input, solicit recommendations, and gather feedback regarding PSPS improvement efforts.

RCRC seeks additional information on PG&E’s work with CBOs, including what locations are served by CBOs and the number of residents served by those CBOs.^{120/} PG&E is still developing these programs and does not have finalized information at this time.

RCRC objects that PG&E’s 2020 WMP does not commit to providing advance notice of PSPS events “whenever possible,” but instead uses the arguably equivalent language of “as weather permits.”^{121/} PG&E does not see a real difference between the phrases. PG&E agrees to provide advance notice at all times, except when the weather does not allow it: In other words, whenever it’s possible to provide advance notice.

PG&E is unable to accede to RCRC’s request that the utilities not require local governments to sign nondisclosure agreements in order to access important information, and that this information be shared before an event.^{122/} PG&E must protect certain information provided

^{117/} RCRC Comments, pp. 2-3, 12.

^{118/} RCRC Comments, p. 7.

^{119/} Available on PG&E’s regulatory affairs website here: <http://pgera.azurewebsites.net/Regulation/>.

^{120/} RCRC Comments, p. 10.

^{121/} RCRC Comments, p. 8.

^{122/} RCRC Comments, p. 7.

in preparation for PSPS events, namely: customer information and critical energy infrastructure information (CEII). As PG&E has explained in the PSPS OIR proceeding, privacy rules prevent PG&E from disclosing customer information without authorization. The Commission has granted PG&E only limited authorization to disclose customer information during PSPS events. Based on feedback received from many of the counties and tribes during the listening sessions and in order to better serve their needs to prepare and respond to a PSPS event, PG&E has requested that the Commission modify the protocols to authorize and require disclosure of confidential customer information to local governments and tribes before, during and after PSPS Events without requiring non-disclosure or confidentiality agreements.^{123/} If this request is granted, PG&E will provide customer information to local governments without nondisclosure agreements before an event.

PG&E must also protect the security of the electric grid by guarding against public disclosure of sensitive information about CEII. PG&E has provided and intends to continue to provide local governments, emergency response personnel, and the public with maps showing anticipated locations that may be de-energized during PSPS events without requiring nondisclosure agreements. However, PG&E must be able to require local governments and emergency response personnel to sign nondisclosure agreements if the information to be provided constitutes CEII, which comprises information that could be used to threaten the electric grid. PG&E must guard against uncontrolled dissemination of CEII and requires confidentiality restrictions to ensure recipients are aware of and take seriously the need to protect the information.

RCRC also raises concerns around providing information quickly and accurately to local governments and the public. PG&E generally agrees that these are important goals and is working to improve PG&E's performance. For example, PG&E is working to ensure that maps provided to local governments, or the public, regarding PSPS events accurately depict the

^{123/} PG&E's Reply Comments, PSPS OIR, R.18-12-005, pp. 21- 25.

boundaries of the event and are available through the utilities' web portals in a readily consumable format.^{124/} RCRC also requests that utilities provide information to local governments contemporaneously with the provision to state agencies like Cal OES.^{125/} Cal OES, however, has expressed a need to have information in advance of other entities. In complying with Cal OES direction, PG&E necessarily must delay transmission to local governments. PG&E will work to reduce the delay as much as possible, while still meeting Cal OES's needs. Alternatively, PG&E would be happy to implement a revised dissemination process, including contemporaneous data sharing, were one to be agreed upon by the local governments and Cal OES.

A number of RCRC's requests require technical understanding and should be considered in the PSPS OIR. For example, RCRC asks that PG&E prioritize the re-energization of vulnerable customers and critical infrastructure.^{126/} This suggestion, which involves competent technical understanding of how re-energization after PSPS events functions, is more appropriately considered in the PSPS OIR proceeding. Briefly, this is not feasible on a large scale. First, PG&E does not re-energize the grid on a customer-by-customer basis. Instead, re-energization occurs line segment-by-line segment, re-energizing as each segment is cleared. Critical infrastructure and vulnerable customers are likely distributed across most if not all segments. Moreover, the time it would take to target re-energization to prioritized segments can unduly delay re-energization efforts for everyone. Instead PG&E is working to shorten the time it takes to re-energize all segments by increasing aerial and ground resources, evaluating night patrol capabilities, and implementing other grid operation efficiencies. For 2020, PG&E is aiming to restore 98% of customers within 12 daylight hours. For more information, see Sections 5.3.6.3 and 5.6.2.1.1 of PG&E's 2020 WMP.

^{124/} RCRC Comments, p. 8.

^{125/} RCRC Comments, p. 8.

^{126/} RCRC Comments, p. 6.

Likewise, RCRC’s suggestion that PG&E notify customers, particularly critical facilities, in advance of re-energization to allow for switching from backup power^{127/} also requires technical analysis and should be raised and discussed in the PSPS OIR.

RCRC asserts that the WMPs need to provide specific goals on how the utilities will scale-back on use of PSPS over the immediate, short-term, and 10-year horizon.^{128/} As discussed above in response to Santa Clara’s comments, PG&E is continuously working to reduce the scope, duration, and frequency of PSPS events. Moreover, PG&E has provided specific goals on for certain measures (*e.g.*, sectionalization). More detailed analysis should be discussed as part of the PSPS OIR.

4. Other Entities

PG&E addresses novel concerns raised by CEJA, EBMUD, and GPI where these issues were not already discussed above in response to other comments.

CEJA asserts that decisions whether to initiate a PSPS event should consider specific societal factors of communities, such as the number of medical baseline customers, community members without cars or living in poverty, or community members who do not speak English, when deciding whether to de-energize.^{129/} Addressing CEJA’s suggestion requires a technical understanding of the factors involved in deciding whether and where a PSPS event is necessary, and how the electric system operates. Therefore, this issue should be raised and addressed in the PSPS OIR, which can allow for technical explanations and development of the record.

EBMUD appreciates PG&E’s commitment to hold one-on-one meetings with local governments and agencies impacted by previous PSPS events but wants more specific commitments to hold meetings before and after wildfire season.^{130/} As discussed above, PG&E has reached out to local governments and agencies and held a number of meetings to discuss

^{127/} RCRC Comments, p. 7.

^{128/} RCRC Comments, p. 6.

^{129/} CEJA Comments, p. 19.

^{130/} EBMUD Comments, p. 2.

PSPS. However, not all local governments and agencies were interested (even before March) in meeting at that time. PG&E will continue to work the with local governments and agencies to coordinate meetings, but a one-size-fits-all approach is not appropriate. Any meetings must be tailored to the specific needs, and interests, of the individual local governments and agencies.

GPI asks that the utilities' WMPs include comprehensive plans to obtain and assess customer outreach efforts regarding PSPS events and communications and continually update utility procedures using that information.^{131/} As discussed above, PG&E is already implementing this process.

B. MICROGRIDS

Several parties addressed microgrids in their comments, specifically with regard to the use of microgrids to mitigate the impact of PSPS events.^{132/} Most of these parties recognize that microgrids are being addressed in a separate, ongoing Commission proceeding (*i.e.*, R.19-09-009). For example, GPI notes that microgrids are being addressed in R.19-09-009 and recommends that microgrid issues be addressed there, and that any decision in that proceeding inform future WMPs.^{133/} PG&E agrees. In our 2020 WMP, PG&E described microgrids as one way to mitigate the impact of PSPS events and identified R.19-09-009 as the proceeding where microgrids are being addressed.^{134/} There is no need to address in this proceeding issues that are being addressed in a separate Commission proceeding. Moreover, trying to address the same issue in two proceedings may result in inconsistent or contradictory outcomes. Thus, the Commission should not direct specific outcomes regarding microgrids in this proceeding but instead should make those decisions in R.19-09-009, where the parties are squarely focused on this issue.

^{131/} GPI Comments, p. 20.

^{132/} *See* Joint Local Governments Comments, p. 8; CEJA Comments, pp. 15-17; GPI Comments, pp. 18-19; and RCRC Comments, p. 3; Santa Clara Comments, p. 6.

^{133/} GPI Comments, pp. 18-19.

^{134/} PG&E 2020 WMP, pp. 5-2, 5-6, and 5-124.

IX. STAKEHOLDER COOPERATION AND COMMUNITY ENGAGEMENT

In Section 5.3.10 of our 2020 WMP, PG&E described in detail our outreach to and coordination with stakeholders and communities. This includes sharing best practices and informing as well as receiving feedback from the communities that PG&E serves. Below, PG&E addresses comments related to stakeholder cooperation and community engagement in future WMPs, proposals that are being implemented in the 2020 WMP, and proposals that should not be adopted.

A. Future WMPs

Commission's Decision on Outreach

CEJA references the Commission's recent decision (D.20-03-004) which addresses issues including vulnerable customers impacted by wildfires, outreach in specific languages, and services available.^{135/} PG&E agrees to incorporate those that we can in our 2021 WMP, while other requirements from such decision may need to be implemented in 2022 or beyond. Additionally, PG&E requests that the WSD update their 2021 WMP Guidelines to include prompts for the necessary requirements of such decisions.

B. 2020 WMP

Impacted Customers

CEJA also requests that the utilities "clearly define 'impacted customer' so that customers can know in advance whether protections may apply."^{136/} PG&E provided detailed information on our customer support in emergencies, which specifies what protections apply, in Section 5.2 its 2019 WMP, linked here:

https://www.pge.com/pge_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/Wildfire-Safety-Plan.pdf

^{135/} CEJA Comments, p. 14.

^{136/} CEJA Comments, p. 2.

C. Proposals That Should Not Be Adopted

Normalization of Data in Entire Service Territory

PG&E opposes Santa Clara’s implication that PG&E normalize data for our entire service territory.^{137/} PG&E believes that the way PG&E has presented the data in our WMP which is to normalize by HFTD area, is the appropriate methodology. This proceeding is focusing on mitigations of wildfire risk caused by utilities and this scope focuses necessarily on the HFTD areas in PG&E’s footprint. PG&E does not believe it is necessary to provide normalized data for our entire footprint.

X. METRICS AND DATA

PG&E’s 2020 WMP includes more than thirty pages of detailed information on metrics and related data, including lessons learned from 2019, performance in the last five years on metrics, and additional metrics and targets that PG&E is proposing in the 2020 WMP. Below, PG&E addresses comments related to future WMPs and proposals that should not be adopted.

A. Future WMPs

Alignment on Definitions

PG&E supports Cal Advocates’ suggestion for WSD to clearly define “ignition” and “near miss” definitions through 2020 workshops for incorporation of such definitions in 2021 WMPs.^{138/} PG&E also notes that the Wildfire Safety Advisory Board’s recommendation related to the definition of a “near miss” may be appropriate for adoption for the 2021 WMP.

B. Proposals That Should Not Be Adopted

Resubmission of Metrics

Cal Advocates also suggests that PG&E resubmit normalization metrics in-line with the WMP Guidelines’ normalization protocol for 2020.^{139/} While PG&E agrees with Cal Advocates

^{137/} Santa Clara Comments, p. 5.

^{138/} Cal Advocates Comments, p. 45.

^{139/} *Id.*, p. 7.

that PG&E’s own data normalization methodology present in our 2020 WMP “makes sense”,^{140/} PG&E opposes Cal Advocates’ recommendation to require the resubmission of supplemental metrics within 30 days (or, for that matter, any time prior to a 2021 update in conjunction with a workshop for alignment). PG&E does not see value in the amount of time and resources it will take to perform such supplemental metrics when such WMP Guidelines’ normalization protocol for 2020 should be revised for 2021. Instead, PG&E supports Cal Advocates’ suggestion that “WSD hold public workshops to discuss revisions to the WMP Guidelines and the 2021 WMP Process”^{141/} with the normalization protocol for 2021 being an appropriate topic for such workshop.^{142/}

Confidentiality Process

CEJA requests that WSD develop a process related to confidentiality.^{143/} PG&E opposes this request as unnecessary. The Commission already has well-established confidentiality and privacy rules and processes that are based on statutory requirements and Commission precedent. If information contains customer-specific data or personally identifiable information (PII), it must be maintained as confidential under privacy rules and processes adopted by the Commission and under California privacy laws. In the PSPS and wildfire planning context, PII includes, e.g., lists identifying individual customers and critical facilities, including their personally identifiable demand, loads, names, addresses phone numbers, email addresses and billing data. Under Public Utilities Code § 8380, and D.14-05-016, D.04-08-055, and D.06-12-029, direct or indirect disclosure of customer information is prohibited unless used for a utility purpose and protected as confidential, such as through an NDA. The only exception is if the Commission orders the disclosure of the PII to the public on a non-confidential basis. If the

^{140/} *Id.*, p. 6.

^{141/} *Id.*, p. 43.

^{142/} MGRA Comments also include the recommendation to WSD to “arrange workshops to re-examine the templates and address quality issues.” MGRA Comments, p. 6. PG&E supports this recommendation.

^{143/} CEJA Comments, p. 21-23.

information contains physical facility, cyber-security sensitive, or critical energy infrastructure data, including without limitation critical energy infrastructure information (CEII) as defined by the regulations of the Federal Energy Regulatory Commission at 18 C.F.R. § 388.113 such information is also protected from disclosure. Some information may be disclosed pursuant to an appropriate non-disclosure agreement.

Proprietary and trade secret information and other intellectual property and protected market sensitive/competitive data are also protected under Civil Code §§ 3426 *et seq.*, Government Code §§ 6254, *et seq.*, Government Code § 6276.44, Evidence Code § 1060 and D.11-01-036. However, proprietary, trade secret and other business confidential information is usually appropriately protected with a non-disclosure agreement. PG&E has drafted a non-disclosure agreement which would allow the disclosure of such information for the purpose of addressing wildfire mitigation measures within this proceeding only. The Commission's own processes for protection of these categories of confidential information under the California Public Records Act are described in detail in the Commission's recently updated General Order 66-D. Therefore, because the Commission and the Legislature have already provided detailed rules and processes governing what confidential information a utility can disclose to the public and what confidential information can be disclosed for utility purposes under non-disclosure agreements available to protect such information, WSD should reject the additional process proposed by CEJA as unnecessary.

XI. CUSTOMER FEEDBACK

PG&E acknowledges the thoughtful comments received on our 2020 WMP from numerous customers.^{144/} Because they generally overlap in concern, PG&E addresses them all in this section. Many customers suggested that PG&E should focus on upgrading facilities including system hardening instead of performing vegetation management or EVM practices as part of our wildfire mitigation efforts. While system hardening is a critical component of

^{144/} Comments received on April 9, 2020 from various customers in regard to PG&E 2020 WMP.

wildfire mitigation, it is not the only or a complete mitigation tool by itself. Rather, as identified in Section 5.3.3.17.3 of PG&E's 2020 WMP system hardening and enhanced vegetation management complement one another in addressing wildfire risks more comprehensively. Therefore, PG&E would offer that wildfire risk reduction cannot be addressed solely through "wires not trees" but through addressing both wires and trees.

In addition, system hardening requires a substantial amount of resources and time and PG&E will not be able to harden all Tier 2 and Tier 3 HFTD areas in the short term. Continued robust vegetation management practices are needed to mitigate wildfire risks on a larger portion of circuits in the HFTD areas and will continue to provide value once the system hardening work is also performed. As noted previously PG&E will continue to evaluate the effectiveness of all aspects of our vegetation management work to reduce wildfire risk without removing more trees or deploying more resources than is necessary including as PG&E further hardens our system, vegetation management practices could be re-visited or revised. However, at this point, it is not vegetation management or system hardening – instead, both are needed to protect PG&E's customers and the communities we serve.

Customers also voiced concerns about the speed at which PG&E is performing inspections, addressing wires and fuses, and replacing covered conductor. PG&E agrees that these are important to mitigate wildfire risk and PG&E is rapidly on these fronts. It is also important to note that with regard to infrastructure (*e.g.*, wires and fuses) the risk profile of each asset is far from uniform and there are some assets and geographic locations that are at meaningfully higher risk than others. PG&E is appropriately and aggressively addressing the highest risk areas first.

PG&E appreciates the feedback and comments provided by our customers and recognizes the passion for safety, environmental stewardship and prudent investment of customer funds expressed in those comments. PG&E is focused on these principles and is continually learning and improving our programs to deliver on the goals with the safety of our customers and communities as our greatest responsibility.

XII. CONCLUSION

In summary, PG&E's 2020 WMP complies with the statutory requirements and WSD Guidelines and is supported by extensive data and analysis, as demonstrated in the 2020 WMP and the thousands of pages of data request responses and material provided. PG&E urges the WSD to approve our 2020 WMP and looks forward to the continued evolution of the WMP process for 2021 and beyond, including the incorporation some of the ideas and feedback provided through this process.

Respectfully Submitted,

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