

# **PG&E's Comments on the Wildfire Safety Advisory Board's Recommendations on the 2021 Utility Wildfire Mitigation Plans**

## **INTRODUCTION**

PG&E appreciates the thoughtful engagement of the Wildfire Safety Advisory Board (Board) in providing these recommendations on the “2021 Wildfire Mitigation Plans Guidelines, Performance Metrics, and Safety Culture.” All Californians can benefit from the Board’s focus on and support of the overarching goal that PG&E, the Board, and all parties share of eliminating catastrophic wildfires associated with utility equipment.

PG&E appreciates that the Board has provided a valuable perspective on the activities and timeline for the 2021 (and future) WMP processes. Many of these recommendations relate to utilities providing additional data, plans or details. Doing so requires adequate lead time for the utilities to understand the requirements, including the templates or expected format, and to gather the information in advance of the WMP filing date. As noted by the Board in Recommendation 1.3, ensuring adequate time from when the 2021 WMP templates and requirements are finalized to the WMP filing date will best enable utilities to provide the most complete and consistent data possible. This will also allow for the most efficient and effective review of those plans during the post-filing review period.

PG&E also commends the Board on the format and delivery of these recommendation in a direct and clear way that is easy to read and understand. PG&E’s remaining comments are organized around the subset of the Board’s recommendations for which we have comments, suggestions or questions and are provided in the same order and a similar bullet-point-oriented format as the Board provided.

## **PG&E’s Comments in Relation to the Board’s June 2<sup>nd</sup> Recommendations:**

### **1. Structural Recommendations to the 2021 WMP Guidelines:**

#### **1.1 Topical Organization by Wildfire Mitigation Program with a Focus on Lessons Learned**

**A. The Board recommends the 2021 WMP Guidelines be organized around each of the 10 categories being used for the WMPs and the Maturity Model to give the reader a complete picture of each. The organization of the Guidelines should highlight Public Safety Power Shutoffs, workforce training, and stakeholder cooperation and community engagement.**

- PG&E is aligned that the future WMP Guidelines may be better organized around each of the 10 categories being used for the WMPs and the Maturity Model. This proposed structure will also improve the connection the WMP has to the Maturity Model and potentially provide more visibility for measuring progress against the maturity model framework.
- PG&E appreciates the example table of contents for the 2021 WMP Guidelines that the Board provided to help illustrate its recommendation.

**B. The Board recommends each of the Wildfire Mitigation Program sections of the 2021 WMP Guidelines start with lessons learned.**

- PG&E agrees with the Board’s recommendation. Incorporating lessons learned for each mitigation program will not only help demonstrate that utilities are continually evaluating ways to enhance wildfire risk reduction efforts but will also highlight the need for

continued flexibility while implementing WMPs as further lessons are learned and incorporated.

### **1.3 Submission Schedules That Set All Parties Up for Success**

#### **A. The Board recommends the WSD set a WMP submission schedule that promotes the success of all parties. The CPUC could set the deadline for 2021 WMP submissions at least four months after the approval of the final 2021 WMP Guidelines, for example.**

- PG&E appreciates and is completely aligned with the Board's overall recommendation to set a WMP schedule that promotes the success of all parties.
- PG&E is supportive that the suggestion of a four-month plan development period between approval of the plan guidelines and submission of the plans generally provides the utilities enough time to file complete plans. However, if there are interim deadlines within the 4 months, for example, if a Supplemental Data Request is due within that window, before the complete WMP is submitted, that would create challenges for the utilities submitting a complete plan. To the extent possible, all information required for the WSD and stakeholders to evaluate the utilities' 2021 WMPs should be defined in the 2021 WMP Guidelines established at least four months prior to the first 2021 WMP submission deadline. Any emergent requests and associated interim deadlines should be carefully considered in conjunction with the original scope outlined in the 2021 WMP guidelines. Seeking the necessary, appropriate details up front, with limited clarifications or emergent requests during the utilities' development of their WMP, will have an overall positive impact on communication between utilities, the CPUC, and other interested parties.
- It is worth noting that the Board's other recommendation aimed at simplifying and streamlining reporting requirements to include the data that are critical for WSD staff to complete its evaluation would further promote the successful delivery and evaluation of utility 2021 WMPs. This would maximize the limited time of all interested parties by focusing on preparing and evaluating the data that will be considered for WMP decision making purposes and provide greater clarity on what information is critical for measuring the effectiveness of mitigation initiatives across utilities.

### **1.4 Strike a Balance Between Data Submission Requirements, Quarterly Reporting, and Program Implementation**

#### **A. The Board recommends the 2021 WMP Guidelines require simplified and streamlined reporting requirements to include the data that are critical for WSD staff to complete its evaluation.**

- PG&E appreciates and is completely aligned with the Board's recommendation to simplify and streamline reporting requirements to include the data that are critical for WSD staff, intervenors and other interested parties to complete their evaluations.
- Implementation of this recommendation is in the best interests of all parties such that the data and documentation being provided in utility WMPs is manageable, not overwhelming, and focused on the most important topics.
- With a myriad of other CPUC proceedings addressing wildfire related topics, like the PSPS Order Instituting Rulemaking (OIR), the Microgrid OIR, and others, there is also an opportunity to avoid duplication of effort. Clearer lines could be drawn for what data,

programs and details should be presented and reviewed through those focused proceedings and at what level of detail those topics should be addressed through the WMPs.

- PG&E completely agrees with the Board’s observations that “There will likely be better outcomes and more collaboration between CPUC and utility staff if the CPUC could demonstrate that the data submitted by the utilities is in fact used in the decision-making process.”<sup>1</sup> Given this, PG&E looks forward to collaborating with the WSD and other parties to determine how the reporting requirements might be refined going forward based on this discussion.

**B. The Board recommends that, in the future, WSD consider the reporting ordered as part of its 2020 WMP review to be considered components of the next year's WMP Update.**

- PG&E is aligned with the Board’s recommendation that the additional elements for the quarterly reports directed in Resolutions WSD-002 through WSD-009 be considered components of the utilities’ 2021 WMP Updates. As noted above, there are already numerous ongoing and overlapping proceedings before the CPUC on wildfire related topics. The addition of new reporting timelines and documents may have the unintended consequence of further diffusing and confusing the important conversations and reviews that need to take place. Having fewer, more clearly defined filings, proceedings and review processes would serve the utilities, CPUC and other parties in effectively preparing, reviewing, discussing, and determining the best courses of action to achieve the overarching goal of all parties to eliminate catastrophic wildfires associated with utility equipment.

## **2. Recommendations for 2021 WMP Guidelines that Generally Align with Draft Guidance Resolution WSD-002**

### **2.1 Risk Spend Efficiency Analysis Required for Each Mitigation Measure**

**A. The Board recommends that the 2021 WMP Guidelines require utilities to complete a Risk Spend Efficiency (RSE) analysis for each mitigation measure so that each measure can be considered individually, in aggregate, and against each other, to determine the most appropriate wildfire mitigation effort for each circuit section.**

- PG&E agrees with the concept underlying this recommendation and is already working towards this goal through ongoing regulatory proceedings including RAMP and the 2023 GRC.
- While PG&E is making progress towards calculating additional RSE values and incorporating them into the resource allocation process across the company, there are a number of challenges with calculating and leveraging RSE values to evaluate all initiatives in the WMP. Some of the initiatives identified in the 2020 WMP Guidelines do not directly reduce risks and may not be best served by being evaluated in such a manner. For example, data governance and its associated sub-initiatives are very important, but these initiatives, in and of themselves, do not reduce wildfire ignition risk or wildfire consequences. For this reason, many of these types of initiatives would be considered as

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<sup>1</sup> Board Recommendations, p.18

having an RSE of 0. However, that RSE value of 0 may not helpfully inform whether or not data governance initiatives are worth pursuing.

- As the Board has pointed out, and the WSD identified in its revised Draft Resolution<sup>2</sup>, current RSE calculations have limitations in properly evaluating PSPS as a mitigation effort. Similar consideration must be applied to other initiatives to consider if RSE is the appropriate tool for evaluation.
- Ultimately, PG&E agrees that better, more thorough information about the impact, benefit, and cost of all wildfire-related activities will be beneficial for evaluating those actions and determining the optimal path forward. Further collaboration and discussion across all parties is needed to determine if RSE is the right evaluation tool for most initiatives and what other tools may be more appropriate in some cases.

**B. The Board recommends that the 2021 WMP Guidelines require the utilities to stop characterizing PSPS events as a solution to lower ignition risk of wildfire in the RSE analysis without considering its consequences. Instead, the 2021 WMP Guidelines should require utilities to factor into their RSE calculations the assumed risk and cost to customers that result from a PSPS event.**

- PG&E understands the value in assessing and incorporating “costs to customers” into PSPS RSE analysis and is open to further discussion on the best way to do so. To meaningfully assess a “revised-RSE” (or alternative cost-benefit calculation) for PSPS effectiveness for all utilities a consistent framework needs to be developed to quantify the “risk and cost to customers that result from a PSPS event.” Many stakeholders, especially local governments and community groups may want to provide input into developing the assumptions that would go into such a framework. PG&E looks forward to participating in a process to gain alignment and agreement on the best way to accomplish this.
- Given the multi-party nature of establishing a framework for factoring “risk and cost to customers that result from a PSPS event”, PG&E anticipates that the WSD would facilitate the creation of a model to quantify PSPS-associated customer costs. PG&E foresees an S-MAP-like process to create alignment between various stakeholders on this quantification methodology.

## **2.2 Train and Retain Qualified Electrical Workers**

- A. The Board recommends that the 2021 WMP Guidelines require utilities to properly train wildfire mitigation workers. Because of the severe and often devastating consequences of arc flash incidents, wildfire mitigation worker safety must include training so that the qualified worker is knowledgeable in the construction and operation of equipment and work methods to identify and avoid the electrical hazards that might be present.**
- B. The Board recommends that the CPUC and the 2021 WMP Guidelines require that the utilities hire Qualified Electrical Workers, meaning electrical asset inspectors with qualifications that go beyond a basic knowledge of General Order 95 requirements, to perform certain types of inspections.**

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<sup>2</sup> WSD Revised Draft Resolution WSD-002-rev1, p.20

**C. The Board recommends that the 2021 WMP Guidelines require the utilities to develop more robust outreach and onboarding training programs for new employees that (A) train workers to identify hazards that could ignite wildfires, and (B) increase the pool of qualified electrical workers. Utilities could target outreach to communities hardest hit by wildfire or affected by other environmental justice factors.**

- PG&E agrees with the Board that it is important that workers performing electric utility work, and particularly wildfire-related work and inspections, be well trained and qualified professionals. If there is concern as to that fact, PG&E is very open to more fully explaining the training provided to and qualifications required of inspectors, vegetation management professionals, and other qualified electrical workers.
- Similarly, PG&E agrees with the importance of having access to an adequate workforce (both employees and contractors) to complete wildfire-related work. PG&E is open to further discussion and review of outreach, recruitment and training programs in these critically important workforces.

### **2.3 Risk Assessment and Mapping to Determine Location of Wildfire Mitigation Measures and Update CPUC Fire-Threat Maps More Frequently**

**A. The Board recommends that instead of relying solely on the HFTD maps to determine where to focus mitigation measures, the 2021 WMP Guidelines should require that utilities rely on both infrastructure risk assessment and mapping, and the relationship to the HFTD.**

- PG&E is fully aligned with this recommendation. PG&E is currently implementing this activity in 2020, which we refer to as our High Fire Risk Areas (HFRA) analysis. This was mentioned in our 2020 WMP but not thoroughly explained as it was neither complete nor very mature at the time of filing. Going forward, PG&E agrees that there would be a benefit to review through the WMP process of this HFRA analysis, any future analyses and the similar efforts being undertaken by other utilities.

**B. The Board recommends that the CPUC, through WSD, consider developing a more streamlined process to update the CPUC Fire-Threat maps relative to how fast the input variables are changing. As vegetation conditions or construction development patterns change, so should the CPUC Fire-Threat maps.**

- PG&E understands and, in concept, agrees that more frequent updates and a streamlined process to update the CPUC Fire-Threat maps would provide a more accurate representation of the wildfire threat areas to inform wildfire risk reduction activities. However, in order to support reasonable operational planning and work execution, PG&E submits that it would likely be most effective to establish a defined timeline for updating CPUC Fire-Threat maps and incorporate those updates into the wildfire mitigation plans. As an illustrative example, the CPUC Fire-Threat maps could be updated every third year and released by September 1 with an effective date of January 1 of the succeeding year. The defined cycle would allow all parties to contribute to and prepare for an upcoming map release and a September 1 release date would give the utilities adequate time to incorporate the updated map(s) into operational planning & risk modeling for the upcoming WMP submissions.

### **2.4 Standardized Data to Allow Cross-Utility Comparisons**

**A. The Board recommends the CPUC consider WSD’s recommendation for a data taxonomy and data schema that will ensure consistent formatting and streamline the reporting of data, using the same measurements.**

- PG&E agrees that consistent formatting and streamlined data process will be very valuable to all parties in the WMP process. However, it is critical that WSD and other stakeholders understand the utilities’ limitations on data, and that all parties work together jointly to develop an approach that works for everyone. As an example, many of PG&E’s wildfire-related programs and initiatives have been in place for years and there is no simple or quick way to re-classify programs and initiatives from a measurement, accounting, tracking, and risk quantification perspective.
- PG&E looks forward to collaborating with other utilities, stakeholders and the WSD on developing an effective process, system, and taxonomy to align with the dynamic regulatory and risk environment.

**B. The Board recommends WSD hold data working groups that are open to any interested parties to contribute to the generation of data standards for utility reporting as well as to assist in leveraging existing data standards from other fields.**

- PG&E completely agrees with this recommendation. PG&E fully supports developing a collaborative, consistent approach to data gathering and review that all of the utilities can use for WMP data submissions and that serves the needs of all stakeholders. This approach will benefit all stakeholders by clearly defining data submission requirements to meet the needs of interested parties at the outset. This will limit the utilities from interpreting data reporting requirements inconsistently or submitting data without appropriate context.

### **3. Recommendations for 2021 WMP Guidelines that Generally Align with Draft Guidance Resolution WSD-002**

#### **3.1 Scientific Review of Modeling Methods and Assumptions**

**A. The Board recommends that the 2021 WMP Guidelines require the utilities to disclose detailed modeling methods and assumptions. An independent scientific advisory panel should be created to vet modeling methods. This scientific advisory panel would go through a nomination and confirmation process approved by the Board, the WSD, or the CPUC.**

- PG&E understands and in concept agrees that an independent scientific advisory panel could add value in contributing expertise to the various models used by the utilities. Additionally, having the utilities participate in the vetting process for the panel members would also contribute to the strength of the panel and their applicability to reviewing utility-oriented models.
- The Board notes in its observations that some models may be proprietary. PG&E agrees and recognizes that protocols need to be created for this condition. Not all models must be treated as proprietary, but some are and will be. Cutting-edge and industry leading consultants, experts and vendors may not be willing to partner with California utilities if they know that their proprietary models and methodologies will be made public through the scientific advisory panel process. This process must be established with appropriate intellectual property safeguards so as not to

unintentionally limit the access of California utilities to the best and brightest minds, ideas and tools in the marketplace.

**B. The Board recommends that the CPUC require the utilities create a process to incorporate feedback from the scientific advisory panel.**

- PG&E is in alignment with the Board’s recommendation. We are eager to incorporate the best science, ideas and tools into our wildfire risk mitigation efforts. Feedback from the scientific advisory panel would be welcome and utilities could explain how this feedback has been incorporated into model in the annual WMP process (or a similar venue). Whether it is ever ultimately needed or not, it would be prudent for the scientific advisory panel model to include a process through which differences in opinion can be managed, including if there are conflicting opinions between different panel members, panel members and non-panel experts or utility operations experts and panel members.

**3.2 Development of a Data Access Portal for Interconnected Data Repositories and a Hierarchy of Permission to Access Wildfire Data and Modeling Methods**

**A. The Board recommends the CPUC, with oversight by the WSD, require the utilities to contribute to a federated data repository where data sources can be accessed by interested parties through a portal with varying levels of data access. To ensure data security, WSD would develop data policies defining a hierarchy so that different granularities of data can be accessed by interested parties with certain levels of permissions types (e.g. CPUC staff, scientists, those with Non-Disclosure Agreements (NDA), the public).**

- PG&E agrees with this recommendation that a well-managed data repository will enhance the WMP process and potentially streamline access and collaboration across a number of parties.
- PG&E appreciates the Board’s focus on data security and ensuring appropriate data policies to carefully manage any sensitive utility data being gathered through this process. The Board’s recommendation helpfully details some of the “CPUC and Federal Procedural Linkage(s)”<sup>3</sup> that must be carefully considered when developing these protocols. PG&E looks forward to partnering with the CPUC and other parties and partners to design the protocols and details of the Data Repository being recommended.

**B. The Board recommends the WSD develop data policies through a transparent stakeholder process, taking into consideration the needs of regulators and the scientific community, as well as the security of utility infrastructure.**

- PG&E agrees with this recommendation that the WSD develop data policies through a transparent stakeholder process. PG&E looks forward to collaborating with the various stakeholder groups to develop these data policies. As noted above, PG&E

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<sup>3</sup> Board Recommendations, p.27-28

appreciates the Board's focus on data security and data policies to manage sensitive utility data.

### **3.3 Reporting Expert Qualifications and Scientific Justification for Decision-Making**

**A. The Board recommends that the 2021 WMP Guidelines require the utilities to disclose the qualifications of scientific personnel relied upon to prepare the WMPs in order to increase transparency and demonstrate that each utility is relying upon accurate expert advice. Perhaps the minimum hiring qualifications for these roles ought to be developed.**

- PG&E understands the Board's interest in the qualifications of scientific personnel relied upon to prepare the WMP. Given the cross-functional nature of the utilities' wildfire mitigation effort, there is an expansive and diverse set of personnel that work on wildfire mitigation initiatives and contribute to preparing the WMP. All parties would benefit from further clarity on the specific "roles" that the Board seeks to understand the qualifications for.
- In addition, PG&E recognizes that good ideas and insights sometimes come from different angles, not just those with higher levels of education. An individual that does not have a certain degree, for example an estimator or lineman with years of experience designing or working on utility assets in a fire prone area, may still have very relevant ideas, input or experience to contribute to some of the WMP-related programs, analyses and decision making. PG&E believes that ideas and contributions can and should be sourced from a diverse population of internal and external individuals.

## **4. Recommendations on Performance Metrics:**

### **4.1 Develop an Electric Utility Prudent Operator Standard**

**A. In addition or as an alternative to the Performance Metrics, the Board recommends that the 2021 WMP Guidelines require the development and use of a "Prudent Operator" standard or threshold, that sets an acceptable level of electric operation risk and establishes the risk reduction that a prudent operator should assume so that utilities can design their systems accordingly. The development and use of the Prudent Operator standard should be a condition of the utilities receiving safety certificates.**

- PG&E appreciates the Board's recommendation for the development and use of a "Prudent Operator" standard or threshold to set acceptable levels of risks. Over the long run PG&E agrees that this would be a beneficial model for understanding the appropriate actions and outcomes for all utilities. However, a significant number of questions need to be resolved in a relatively short amount of time for the 2021 WMP process to be meaningfully oriented around the "Prudent Operator" standard. For example, would the "Prudent Operator" standard (acceptable residual risk level) be consistent across all utilities or utility-specific? Furthermore, the development of the standard or threshold may be dependent on the maturity of utility risk quantification and risk reduction models. The effectiveness of measuring utilities against a



“Prudent Operator” standard would likely benefit from further maturation of overall utility-related wildfire risk modeling.

- Overall, the development of a “Prudent Operator” standard is an important, valuable, and resource-intensive undertaking. PG&E’s only suggestion is that the Board, WSD and other parties consider whether 2021 is a feasible timeline for developing and effectively implementing such a standard.

#### **4.2 Community Outreach and Emergency Preparedness Performance Metrics and Data Reporting**

##### **A. The Board recommends that the 2021 WMP Guidelines include progress metrics on community outreach and emergency preparedness**

- PG&E appreciates the Board’s recommendation, PG&E already has progress metrics in place for community outreach and emergency preparedness partnership and would be happy to share those or incorporate feedback on how to further mature our tracking of these efforts.

### **5. Recommendations on Utility Safety Culture**

#### **5.1 Develop a Unit Within or Outside of the Utility, to Study Black Swan Events and Predict Potential Future Events**

##### **A. The Board recommends that the CPUC, with WSD oversight, require the utilities to create engineering teams to surface and flag black swan events for further consideration and remediation.**

- PG&E is open to the Board’s recommendation. PG&E already has enterprise-wide and line-of-business-specific risk management teams that work with subject matter experts to identify potential risk “events” and conduct risk assessments for catastrophic events. PG&E would be interested in further discussion and collaboration on these risk management processes that already exist, many in alignment with the CPUC’s S-MAP proceeding and RAMP process, and how they can be further modified or enhanced to further improve risk identification and mitigation.

### **CONCLUSION**

PG&E appreciates the thoughtful engagement of the Board in providing these recommendations on future Wildfire Mitigation Plans and related topics. Several of these recommendations are productive and ready to move forward as written. Others may require a bit more refinement or consultation across multiple parties. We appreciate the opportunity to provide these comments and hope that they contribute to a continued, collaborative discussion across numerous stakeholders to further improve these processes and, more importantly, further our collective goal of eliminating utility-caused catastrophic wildfires. PG&E looks forward to further discussions and engagement as we all work together to further reduce wildfire risk and continue to make the WMP process more effective and efficient.

Sincerely,

Matthew Pender

Matthew Pender