PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

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Wildfire Safety Division Action Statement on
Pacific Gas And Electric Company's 2020 Wildfire Mitigation Plan

This Action Statement is the conditional approval of Pacific Gas and Electric Company's (PG&E's) 2020 Wildfire Mitigation Plan (WMP) and is presented to the California Public Utilities Commission (CPUC) for ratification, via the associated Resolution and Guidance Resolution.

Introduction

Wildfires have caused significant social, economic, and environmental damage on a global scale. In California, electric utilities are responsible for some of the most devastating wildfires in recent years. The Wildfire Safety Division (WSD) recognizes that the wildfire threat is only increasing, with utility-related ignitions responsible for a disproportionate share of wildfire-related consequences. To that end, the WSD has a vision of moving towards a sustainable California, with no catastrophic utility-related wildfires, that has access to safe, affordable, and reliable electricity. The WSD recognizes it is critical for utilities to act quickly to reduce utility-related wildfire risk effectively and prudently.

As utility wildfire mitigation has become an increasingly urgent priority, the California Legislature has passed several bills related to utility wildfire prevention and oversight. The main regulatory vehicle for the WSD to regulate utilities in reducing utility wildfire risk is the Wildfire Mitigation Plan (WMP), which was introduced in Senate Bill (SB) 1028 (Hill, 2016) and further defined in SB 901 (Dodd, 2018), Assembly Bill (AB) 1054 (Holden, 2019), and AB 111 (Committee on Budget, 2019). Investor-owned electric utilities are required to submit WMPs assessing their level of wildfire risk and providing plans for wildfire risk reduction. The first WMPs under the SB 901 framework were submitted by the utilities and evaluated by the CPUC in 2019.

AB 1054 and AB 111 transferred responsibility for evaluation and approval of WMPs to the WSD,[1] which, as of July 2021, will transfer and become the Office of Energy Infrastructure Safety within the California Natural Resources Agency. In this role, the WSD must ensure utility wildfire mitigation efforts sufficiently address increasing utility wildfire risk. To support its efforts, the WSD developed a draft long-term strategy and roadmap. This strategy and roadmap will inform the WSD's work in updating the WMP process and guidelines, and the WSD's evaluation of the WMPs.

AB 1054 mandates that the WSD complete its evaluation of WMPs within 90 days of submission. The utilities submitted 2020 WMPs on February 7, 2020. Upon completion of the past 90 days of evaluation, the WSD recognizes that the utilities have made

[1] With CPUC ratification of the WSD's actions.

significant progress. Compared to their first submissions in 2019, the utilities utilize much more data and objective content in their 2020 WMP filings and share more critical information with key partners. However, while utilities are already undertaking wildfire mitigation activities and building capabilities subject to regulation, all utilities must continue to make meaningful progress. Utilities' activities need to incorporate longer-term thinking by focusing more systematically on increasing their maturity over time. All utilities should take a more robust strategic approach that leverages additional Risk Spend Efficiency (RSE) data to focus on the most impactful actions – all with a local lens. This statement outlines more specifically what the WSD sees as critical priorities for the upcoming year for PG&E and approves, with significant conditions, PG&E's 2020 WMP. Together, this statement, the associated Resolution and the Guidance Resolution represent the totality of the WSD's conditional approval of PGE's 2020 WMP.

Background

To ensure that utility wildfire mitigation efforts sufficiently address increasing utility wildfire risk, new WMP Guidelines, a Utility Survey and a Maturity Model were launched for 2020. Together, these tools represent a milestone in the evolution of utilities' wildfire mitigation efforts and ensure consistency with the WSD's enabling legislation.

2020 Guidelines

The 2020 WMP Guidelines implement several changes to further enhance the depth, comparability and quality of utility WMP submissions. Specifically, the WMP Guidelines require reporting of consistent metrics, ignitions, risk data and specific utility initiatives to reduce wildfire risk. Utilities have provided historical metrics and data as a baseline, which can be used to evaluate a utility's wildfire risk level and to assess whether the utility's initiatives sufficiently address this risk. These metrics and data will be used to track utility progress in mitigating the risk of catastrophic wildfire over time.

Maturity Model and Utility Survey

In order to enhance the focus on safety, ensure consistent goals and evaluate performance, the WSD has developed a model for evaluating current and projected wildfire risk reduction performance. It is important to note that this model is not designed to immediately penalize utilities for poor performance, but rather it is an effort by the WSD to work collectively with the utilities it regulates[2] to facilitate improvement by identifying best practices, current strengths and current weaknesses across the utility landscape. The WSD believes it is in the best interest of the utilities, ratepayers and other

[2] The WSD (ultimately the Office of Energy Infrastructure Safety) and the CPUC have complementary regulatory roles to fill in ensuring a strong oversight in reducing the risk of ignition of wildfires from utility infrastructure. The WSD, CPUC, and other relevant agencies will work together to ensure roles are defined and regulatory outcomes are met.

key stakeholders to take this collaborative, growth-oriented approach. While certain utilities are currently on the low end of the range for various categories of performance, the WSD is hopeful that providing clear review and evaluation of performance, including identifying such weaknesses, will help drive change in the utilities, allowing all regulated electric utilities in California to improve wildfire risk reduction performance.

As a consequence, the model results are best interpreted as levels – the results are not absolute scores. A utility, for example, could be on the borderline for level 2 in the model, but it would remain at level 1 until it completed 100% of the steps required to cross the threshold to level 2. In this example, the way the model works is the utility would get a result of 1, not 1.8. The purpose of the model is not to penalize the utility for achieving a result of 1 but to identify the specific actions it can take to reach level 2.

Summary of the WSD's Assessment

An effective WMP should have three, overarching components in which utilities should be striving to be "world class." First, the WMP should demonstrate an understanding of a utility's unique risk. Each utility should measure outcome and progress metrics and use a sophisticated model to lay the foundation for safe operation within its service territory. Second, with a deep understanding of its risk, the utility should deploy a suite of initiatives designed to incrementally and aggressively reduce that risk. Finally, this deployment should be done with a key, strategic eye toward maximizing every scarce resource, whether it be direct costs, personnel, or time, to maximize its impact. The result should be that with each passing year California is safer from wildfire threats, with a significant reduction and eventual elimination of the need to use Public Safety Power Shutoffs (PSPS) as a mitigation action.

The WSD evaluated 2020 WMPs considering the following factors:

- Completeness: The WMP is complete and comprehensively responds to the WMP requirements
- Technical feasibility and effectiveness: Initiatives proposed in the WMP are technically feasible and are effective in addressing the risks that exist in the utility's territory
- Resource use efficiency: Initiatives are an efficient use of utility resources
- Forward looking growth: The utility is targeting maturity growth

The WSD used the utilities' 2020 WMP submissions and subsequent updates, public comments, responses to the WSD's data requests, utility reported data and utility responses to the Utility Survey in its assessment of 2020 WMPs.

Upon completion of this review, the WSD then determined whether each utility's 2020 WMP should either be:

- Approved without conditions (Full Approval)
- Approved with conditions (Conditional Approval)
- Denied (Denial)

Pursuant to Public Utilities Code Section 8386.3(a), this Action Statement and the discussion found in the associated Resolutions is the outcome of the WSD's review of PG&E's WMP and input from the public and other governmental agencies. As stated previously, this Action Statement is the conditional approval of PG&E's WMP and is presented to the CPUC for ratification, via the associated Resolution and Guidance Resolution.

The conditions for approval of PG&E's WMP are designed to address the gaps identified in PG&E's WMP. Some of the key deficiencies for PG&E's WMP are summarized below. The associated Resolution and Guidance Resolution capture the WSD's comprehensive review of PG&E's WMP submission.

Discussion of WMP Assessment

Summary

PG&E has a large service territory, and significant portions of its grid are in High Fire-Threat District (HFTD) areas. For PG&E's plan to be most effective with its finite resources, strategic prioritization of initiatives geographically and by ignition driver to target the highest risk elements of PG&E's grid is crucial.

PG&E outlines improvements being made to its risk assessment tools, but it is unclear how these tools are used to drive prioritization of specific wildfire mitigation initiatives to minimize wildfire risk and PSPS. PG&E outlines various wildfire mitigation programs that address the major risk drivers in its territory. However, PG&E does not consistently describe these programs in detail at the initiative level, making it difficult to assess the effectiveness of some initiatives against their cost. PG&E also does not provide a detailed justification of how it determined its portfolio of planned initiatives to be the most effective use of its finite resources, nor adequately describes detailed coordination efforts with locally impacted jurisdictions.

Finally, based on the WSD's assessment of PG&E's responses to the Utility Survey against the Utility Wildfire Mitigation Maturity Model, PG&E's maturity is lower than peers and, appropriately, PG&E targets improvement across multiple wildfire mitigation capabilities within the 3-year WMP horizon to increase their maturity.

Risk Assessment

PG&E's initiatives are targeted to major risk drivers at a high level, but PG&E could do more to prioritize wildfire risk reduction. Given the growing wildfire risk brought on by climate change, all utilities must move away from traditional prioritization practices to ones informed and prioritized by risk. PG&E must rigorously apply a risk-based prioritization lens to its portfolio of initiatives to reduce wildfire risk and minimize PSPS incidents. The risk assessment deficiencies that the WSD cites in its evaluation all point toward an effort to build PG&E into a modern utility.

PG&E has made improvements in fire weather modeling and claims to score circuits by risk in order to prioritize implementation of initiatives, but PG&E provides little description of how risk assessment and mapping are used to select mitigation measures and prioritize their deployment at the circuit or asset level.

For example, PG&E does not describe in a granular way where asset remediation, vegetation management, and grid hardening initiatives are most necessary, how it prioritizes deployment of those initiatives, nor how it coordinates prioritization with local jurisdictions. Further, while PG&E has started conducting fire spread simulations, it is unclear how these simulations will influence PG&E's deployment of initiatives. As a result, more information is required to determine whether PG&E is deploying initiatives based on coordinated risk prioritization.

Initiatives

PG&E's initiatives, which are the actions and programs PG&E will take to reduce wildfire risk, address the major risk factors that PG&E faces. The utility outlines several priority programs and various improvements to its asset and vegetation management programs. PG&E plans to spend 28% of its total budget on vegetation management and 53% of its total budget on system hardening work, including overhead hardening, and undergrounding. However, PG&E reports hardening programs in large bundles, reducing the WSD's visibility into the scale of planned activities (e.g. undergrounding, covered conductor are both grouped into a single system hardening program). Similarly, PG&E has implemented enhanced inspection programs, but it is unclear from PG&E's description how effective these are and how they differ from traditional inspections.

While PG&E's approach to piloting innovative technologies to detect system problems that can lead to ignitions is promising, PG&E does not describe in detail a concise review period to determine if these technologies are effective and scalable or outline a detailed plan for deploying these technologies at scale. The WSD expects the 2021 WMP update to include a detailed report on the status of these initiatives. It is imperative that PG&E makes a meaningful reduction in the scale and scope of PSPS for the 2020 fire season and beyond. While PSPS cannot be eliminated before this year's

fire season, PG&E claims to reduce the size and scope of PSPS by a combination of programs and improved re-energization protocols. However, PG&E does not articulate quantitatively how it expects hardening to increase PSPS thresholds for individual circuits, thus impeding the WSD's ability to determine how the $5.3 billion in hardening work will affect the probability of a PSPS in communities in California.

Finally, the plan lacks significant details for the WSD to be fully convinced that PG&E will be able to execute on its plan fully and on time. A good example is PG&E's statement that it intends to replace 625 fuse cut-outs over the next seven years. A more robust plan would indicate which fuses will be replaced when, prioritized by greatest risk reduction, outline how PG&E would access the necessary personnel to conduct the work, and state how it might proceed on an expedited timeline.

PG&E's targeted maturity growth reflects a desire to improve wildfire mitigation capabilities, and PG&E must work diligently to achieve this targeted growth.

Resource Allocation Methodology

While the WSD's assessment of the 2020 WMP does not approve cost recovery for its initiatives, which will be addressed in each utility's General Rate Case, the assessment does consider the effective use of resources to reduce wildfire ignition risk. Overall, PG&E does not demonstrate sufficiently that it is allocating finite resources to initiatives that most effectively reduce wildfire risk and PSPS incidents. The 2020 Guidelines required utilities to provide RSE estimates for all initiatives, yet, PG&E provided estimates for only 4 initiatives. As mentioned above, some initiatives were aggregated into "programs," making it difficult to assess the cost of individual initiatives within a larger program.

This is unacceptable given the breadth of initiatives included in PG&E's WMP. PG&E does not adequately explain why it failed to provide the required information and has not provided other forms of evidence or a discussion to support its allocation of resources among the selected wildfire initiatives or explain why its chosen initiatives are more effective than alternatives. During the WMP workshops conducted in February 2020, PG&E committed to improving its analysis in the future, but that does not excuse its lack of responsiveness this year. The WSD is imposing conditions to address this major gap.

A detailed discussion of the above concerns, as well as, further analysis of PG&E's WMP is articulated in the associated Resolutions, including a complete list of deficiencies and conditions in Appendix A of the associated Resolution for PG&E.

Conclusion

Catastrophic wildfires remain a serious threat to the health and safety of Californians. Electric utilities, including PG&E, must continue to make progress toward reducing utility-related wildfire risk. Through the conditional approval granted for its 2020 WMP submission, the WSD will ensure PG&E is held accountable to successfully executing the wildfire risk reduction initiatives articulated in its 2020 WMP and required updates. The WSD expects PG&E to meet the commitments in its 2020 WMP and fully comply with the conditions listed in Appendix A of its associated Resolution to ensure it is driving meaningful reduction of utility-related wildfire risk within its service territory.

Sincerely,

___/S/ CAROLINE THOMAS JACOBS____

Caroline Thomas Jacobs
Director, Wildfire Safety Division
California Public Utilities Commission