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Via Electronic Mail

Caroline Thomas Jacobs, Director Wildfire Safety Division California Public Utilities Commission San Francisco, CA 94102 Wildfiresafetydivision@cpuc.ca.gov

Subject:Reply Comments of the Public Advocates Office on the 2021 Wildfire
Mitigation Plan Updates of the Large Investor-Owned Utilities

Dear Director Thomas Jacobs,

The Public Advocates Office at the California Public Utilities Commission (Cal Advocates) respectfully submits the following reply comments on the 2021 Wildfire Mitigation Plan Updates of Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE) and San Diego Gas & Electric Company (SDG&E). We respectfully urge the Wildfire Safety Division to adopt the recommendations discussed herein.

Please contact Nathaniel Skinner (<u>Nathaniel.Skinner@cpuc.ca.gov</u>) or Henry Burton (<u>Henry.Burton@cpuc.ca.gov</u>) with any questions relating to these comments.

Sincerely yours,

/s/ Carolyn Chen

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TABLE OF CONTENTS

		Pages
I.	INTRODUCTION	1
II.	DISCUSSION	2
	A.PG&E has not demonstrated that its WMP minimizes wildfire risks	2
	1. PG&E has not demonstrated the ability to effectively implement its WMP	2
	2. PG&E has not addressed the risk posed by its own operational failures.	3
	3. PG&E's wildfire risk modeling is seriously flawed	4
	4. PG&E's Enhanced Vegetation Management (EVM) Program is not designed to efficiently reduce risk.	5
	5. PG&E's system hardening program does not address high-risk locations.	
	6. PG&E's risk-spend efficiency (RSE) analysis does not support effective decision-making	
	B. The WSD should require the utilities to validate their wildfire risk models.	
	C. The Commission should not allow utilities to use WMPs to circumvent Commission decisions in general rate cases (GRCs)	9
	1. PG&E's transmission and distribution maintenance programs contain routine operating costs	9
	2. SCE's covered conductor program is subject to litigation in its GRC.	10
	3. The Commission should require utilities to abide by GRC decisions	11
III.	CONCLUSION	11

I. INTRODUCTION

Pursuant to the Rules of Practice and Procedure of the California Public Utilities Commission (Commission) and Resolution WSD-011, the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) submits these reply comments on the 2021 Wildfire Mitigation Plan (WMP) Updates submitted by the large investorowned utilities (IOUs or utilities).¹

Resolution WSD-011, the *Resolution implementing the requirements of Public Utilities Code Sections* 8389(*d*)(*1*), (*2*) and (*4*), related to catastrophic wildfire caused by *electrical corporations subject to the Commission's regulatory authority*, established guidelines and a schedule for WMP submissions in 2021. Pursuant to Resolution WSD-011, Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) submitted 2021 WMP Updates on February 5, 2021. PG&E, SCE, and SDG&E all submitted Supplemental WMP Filings on February 26, 2021.

Resolution WSD-011 permits any interested person to serve opening comments on the large IOUs' 2021 WMPs by March 17, 2021 and reply comments by March 24, 2021. On February 23, 2021, Cal Advocates, Green Power Institute (GPI), Mussey Grade Road Alliance (MGRA), the Protect Our Communities Foundation, The Utility Reform Network (TURN), and Will Abrams requested an extension of the reply comment deadline to April 6, 2021. On February 26, 2021, the Wildfire Safety Division (WSD) approved the deadline change. On March 31, 2021, PG&E, SCE, and SDG&E requested an extension of the reply comment deadline to April 13, 2021,² and on April 2, 2021, the WSD approved this request.

Cal Advocates makes the following comments:

 $[\]frac{1}{2}$ Many of the Public Utilities Code requirements relating to wildfires apply to "electrical corporations." *See, e.g.,* Public Utilities Code Section 8386. These comments use the more common term "utilities" and the phrase "electrical corporations" interchangeably to refer to the entities that must comply with the wildfire safety provisions of the Public Utilities Code.

 $[\]frac{2}{2}$ The Public Advocates Office supported this request.

- A. PG&E has not demonstrated that its WMP minimizes wildfire risks.
- B. The WSD should require the utilities to validate their wildfire risk models.
- C. The Commission should not allow utilities to use WMPs to circumvent Commission decisions in general rate cases (GRCs).

II. DISCUSSION

A. PG&E has not demonstrated that its WMP minimizes wildfire risks.

Public Utilities Code Section 8386(a) requires each electrical corporation to operate its facilities "in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment." Additionally, Public Utilities Code Section 8386(c)(3) requires each electrical corporation to describe in its WMP how it will minimize the risk of catastrophic wildfires. Comments submitted by several stakeholders present compelling evidence that PG&E's 2021 WMP Update does not maximize safety, because PG&E has not designed its WMP to achieve the greatest feasible risk reduction with the resources available.

1. PG&E has not demonstrated the ability to effectively implement its WMP.

In their comments, the Joint Local Governments correctly stress the importance of implementation³ and call attention to the "increasing disconnect between PG&E's vegetation management activities as they appear on paper and as they are enacted in practice."⁴

Cal Advocates agrees with the Joint Local Governments' perspective. As we observed in opening comments, "a plan is only as good as its execution"⁵ and PG&E has

³ Comments of the Joint Local Governments on PG&E's 2021 Wildfire Mitigation Plan Update, March 29, 2021 (Joint Local Governments Comments), p. 2: "The 2021 WMP update promises to remedy ... past failings, but the real test of any plan is how well it is implemented."

⁴ Joint Local Governments Comments, p. 4.

⁵ Comments of the Public Advocates Office on the 2021 Wildfire Mitigation Plan Update of Pacific Gas and Electric Company, March 29, 2021 (Cal Advocates Comments on PG&E), p. 6

a troubling record of over-promising and under-delivering.⁶ PG&E's 2021 WMP Update does not meaningfully address the fundamental cause of PG&E's past implementation failures: systemic managerial weakness.⁷ Until PG&E improves its management, it will not achieve the highest feasible degree of safety.

2. PG&E has not addressed the risk posed by its own operational failures.

In its comments, TURN correctly observes that PG&E's risk analysis is incomplete because "PG&E fails to model operational failure as a risk driver," even though several catastrophic wildfires in recent years "were caused by PG&E operational failures."⁸ Similarly, Will Abrams notes that the large utilities fail to conduct a thorough analysis of recent catastrophic failures and identify solutions, with PG&E being the "most egregious" example.²

Cal Advocates agrees with TURN and Will Abrams. As demonstrated in our opening comments, PG&E has a systemic problem of operational failures and uneven quality of work,¹⁰ and yet PG&E frequently fails to examine the root causes of its safety failures.¹¹ As Will Abrams observes, PG&E's operational failures are not unforeseeable black swan events, but "common white swans."¹²

Until PG&E examines *why* adverse events occur, the resulting risk analysis will not inform PG&E of the steps it needs to take to improve. Because PG&E's current risk analysis omits a central driver of risk (operational failure), the risk analysis cannot lead to good decision-making.

¹¹ Cal Advocates Comments on PG&E, pp. 11, 20, 23, and 33-35.

⁶ Cal Advocates Comments on PG&E, pp. 6-12.

² Cal Advocates Comments on PG&E, pp. 6-12.

⁸ Comments of The Utility Reform Network on 2021 Wildfire Mitigation Plan Updates, March 29, 2021, as corrected March 30, 2021 (TURN Comments), pp. 15-16.

⁹ William B. Abrams Comments on 2021 Wildfire Mitigation Plans, March 29, 2021 (Will Abrams Comments), pp. 4-5.

¹⁰ Cal Advocates Comments on PG&E, pp. 6-12 (Section A), 18-24 (Section D), 24-27 (Section E), 27-30 (Section F), and 32-35 (Section H).

¹² Will Abrams Comments, p. 7.

PG&E's 2021 WMP Update will not solve PG&E's wildfire risk problem, because it does not address the core problem that PG&E faces: a systemic failure of management. Therefore, the WSD should deny PG&E's WMP and direct PG&E to submit a revised WMP that addresses this problem.

3. PG&E's wildfire risk modeling is seriously flawed.

MGRA identifies in its comments several flaws in PG&E's risk modeling practices, which is troubling since wildfire risk modeling is fundamental to utilities' abilities to select and prioritize mitigation measures. Moreover, as MGRA observes, this problem is "highly impactful because PG&E has completely changed its mitigation priorities based on the new model."¹³

MGRA's analysis shows that PG&E's ignition probability model is seriously flawed in that it "makes some dubious assumptions and produces a result that strongly conflicts with data and analysis from numerous sources: specifically, it concludes that ignition probability is not wind dependent"¹⁴ In fact, the data show that "utilityignited wildfires are to a great extent a problem of wind."¹⁵ MGRA identifies several technical aspects of its ignition probability model that PG&E should correct. Among other things, PG&E relies on annual average wind speeds rather than the wind speed at the time of the ignition, and PG&E fails to account for wind-caused damage to its facilities during de-energization events.¹⁶

MGRA notes that PG&E's wildfire consequence modeling is also flawed. PG&E, like the other two large utilities, limits the duration of fire simulations to eight hours.¹⁷

¹³ Mussey Grade Road Alliance Comments on 2021 Wildfire Mitigation Plans of PG&E, SCE, and SDG&E, March 29, 2021 (MGRA Comments), p. 12.

¹⁴ MGRA Comments, p. 11; see also pp. 14-32.

¹⁵ MGRA Comments, p. 32.

¹⁶ MGRA Comments, p. 33.

¹⁷ MGRA Comments, p. 12.

This modeling choice materially changes the conclusions one draws from the model and may result in a misallocation of resources to less risky locations.¹⁸

Cal Advocates agrees with MGRA that the flaws in PG&E's risk modeling must be addressed immediately before the WSD can approve the WMP.¹⁹ Without sound risk modeling, PG&E cannot show that it has selected the right mitigation measures in the right places, and therefore its WMP fails to meet the standard required in Public Utilities Code Section 8386 to "minimize the risk of catastrophic wildfire."²⁰

4. PG&E's Enhanced Vegetation Management (EVM) Program is not designed to efficiently reduce risk.

TURN observes that PG&E's enhanced vegetation management program does not appear to be well designed to reduce risk²¹ and PG&E has not justified the scope of the program.²² Cal Advocates has raised similar concerns, noting that (1) PG&E does not justify the design and scope of the enhanced vegetation management program²³ and (2) PG&E has not prioritized enhanced vegetation management work on the highest-risk circuit segments.²⁴

As discussed in our comments, PG&E plans to spend too much effort performing enhanced vegetation management in relatively low-risk areas, which detracts from its ability to promptly address critical wildfire risks. Because PG&E's enhanced vegetation

¹⁸ MGRA Comments, p. 12.

¹⁹ MGRA Comments, p. 38.

²⁰ Public Utilities Code Section 8386(a) (requires each electrical corporation to "construct, maintain and operate its electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment"); Public Utilities Code Section 8386(c)(3) (requiring each WMP to include "a description of the preventive strategies and programs to be adopted by the electrical corporation to minimize the risk of its electrical lines and equipment causing catastrophic wildfires"); *see also* Public Utilities Code Section 8386(c)(17), requiring "A methodology for identifying and presenting enterprisewide safety risk and wildfire-related risk that is consistent with the methodology used by other electrical corporations unless the commission determines otherwise."

²¹ TURN Comments, pp. 20-24.

²² TURN Comments, p. 22.

²³ Cal Advocates Comments on PG&E, pp. 12-13.

²⁴ Cal Advocates Comments on PG&E, pp. 14-16.

management program does not maximize the safety gains that can be achieved with the resources PG&E is dedicating to its WMP, PG&E has failed to meet the requirements of Public Utilities Code Section 8386 to "minimize the risk of catastrophic wildfire" and its WMP should be denied.²⁵

5. PG&E's system hardening program does not address high-risk locations.

Like PG&E's enhanced vegetation management program, PG&E's system hardening plan is not designed to efficiently minimize wildfire risks. TURN notes that PG&E's system hardening program does not appear to efficiently reduce risk²⁶ and PG&E fails to make a reasonable showing that the scope of the program is justified.²⁷ Cal Advocates similarly showed that PG&E's system hardening program is not efficiently reducing risk or effectively focused on risk.²⁸

By prioritizing system hardening on the highest-risk circuit-segments, PG&E could achieve greater safety with the same resources. Therefore, PG&E's WMP does not establish how it prevents or minimizes wildfire risks, as required by Public Utilities Code Sections 8386(a) and 8386(c)(3), and the WMP should be denied.²⁹

 $[\]frac{25}{25}$ Public Utilities Code Sections 8386(a) and 8386(c)(3); *see also* Public Utilities Code Sections (c)(11), requiring "A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the electrical corporation's service territory."

²⁶ TURN Comments, p. 24.

²⁷ TURN Comments, pp. 25-27.

²⁸ Cal Advocates Comments on PG&E, pp. 16-18.

²⁹ Public Utilities Code Section 8386(a) requires each electrical corporation to "construct, maintain and operate its electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment." Public Utilities Code Section 8386(c)(3) requires each WMP to include "a description of the preventive strategies and programs to be adopted by the electrical corporation to minimize the risk of its electrical lines and equipment causing catastrophic wildfires." See also Public Utilities Code Sections 8386(c)(11) (identified and prioritized wildfire risks), and 8386(c)(13) (ensuring system achieves highest level of safety, reliability, and resilience including through hardening and modernizing).

6. PG&E's risk-spend efficiency (RSE) analysis does not support effective decision-making.

MGRA and TURN observe that PG&E bundles several types of system hardening as a single program³⁰ and, therefore, does not estimate the risk-spend efficiency of specific hardening activities such as covered conductor, undergrounding, and traditional overhead hardening.³¹

TURN additionally notes that PG&E's failure to perform sufficiently granular risk-spend efficiency analysis harms decision-making.³² As TURN correctly notes, risk-spend efficiency analysis should be performed on tranches of assets that have "homogeneous risk profiles" so that the utility can determine which assets should be treated first.³³

Cal Advocates also identified numerous flaws in PG&E's risk-spend efficiency analyses³⁴ and concluded that PG&E's risk-spend efficiency estimates are not a reliable basis for deciding how to allocate resources³⁵ and "could contribute to a flawed overall strategy for risk mitigation."³⁶

PG&E's failure to perform sufficiently granular risk-spend efficiency analysis prevents the WSD and other stakeholders from determining whether PG&E has selected the best mitigation options to reduce risk. Consequently, PG&E cannot demonstrate that it has designed its 2021 WMP Update to minimize wildfire risk as required by law.

B. The WSD should require the utilities to validate their wildfire risk models.

Wildfire risk modeling is a crucial issue, because the large utilities rely on their risk models to determine where and when to perform mitigation measures. If the risk

³⁰ MGRA Comments, pp. 67 and 69; TURN Comments, pp. 26-27.

³¹ MGRA Comments, p. 69.

³² TURN Comments, pp. 18-20 and 25.

³³ TURN Comments, p. 19, citing D.18-12-014.

³⁴ Cal Advocates Comments on PG&E, pp. 46-51 (Section R).

³⁵ Cal Advocates Comments on PG&E, p. 51.

³⁶ Cal Advocates Comments on PG&E, p. 46.

models are wrong, then the utilities will spend time and money fixing the low-priority problems before more urgent ones. The utilities could end up spending years – and billions of dollars – working on circuits that only seem to be high-risk, while critical risks remain unaddressed.

MGRA identifies important concerns with the techniques that utilities use to model wildfire risk. Specifically, all three large utilities limit the duration of simulated wildfires to eight hours.³⁷ This modeling technique produces smaller fires than are observed in reality.³⁸ The results underestimate the risk of wildfires that ignite in remote areas but can spread into population centers over a period longer than eight hours. This modeling choice may skew decision-making, leading utilities to prioritize mitigations near population centers and ignore other circuits that also carry serious risks. In short, technical choices in risk modeling materially affect the practical conclusions one draws from the model.

Next, MGRA's comments provide strong evidence that the utilities have not validated their models adequately. The WSD should require the utilities to show their work of validating their models.

In our comments on the utilities' 2020 WMPs, Cal Advocates urged the WSD to require the utilities to "perform and publish validation analyses of the models they use to assess wildfire risk."³⁹ In opening comments this year, we recommended that the WSD convene a technical working group in summer 2021 to examine wildfire risk models⁴⁰ and require the utilities to "produce public technical papers that describe, step-by-step, how each modeling product works."⁴¹

³⁷ MGRA Comments, p. 12.

³⁸ MGRA Comments, p. 12.

³⁹ Comments of the Public Advocates Office on the 2020 Wildfire Mitigation Plans, April 7, 2020, pp, 57-59.

⁴⁰ Comments of the Public Advocates Office on the 2021 Wildfire Mitigation Plan Updates of the Large Investor-Owned Utilities, March 29, 2021 (Cal Advocates Comments on SCE, SDG&E, and General Issues), pp. 29-35.

⁴¹ Cal Advocates Comments on SCE, SDG&E, and General Issues, p. 34.

Absent risk models that are accurate and reliable, the utilities cannot demonstrate that they have set the right mitigation priorities. Therefore, the WSD should move quickly to ensure that the utilities adopt empirically sound and well tested practices for risk modeling, as recommended by MGRA and Cal Advocates, to better meet the requirements of Public Utilities Code Section 8386.⁴²

C. The Commission should not allow utilities to use WMPs to circumvent Commission decisions in general rate cases (GRCs).

TURN raises concerns that the electric utilities are using WMPs to circumvent Commission decisions in general rate cases (GRCs) or to otherwise undermine GRC ratemaking principles, in violation of Public Utilities Code Section 8386.4 (disallowing double recovery of costs), Section 451, and Section 451.3.⁴³ Cal Advocates shares TURN's concerns, discussed in more detail below.

1. PG&E's transmission and distribution maintenance programs contain routine operating costs.

TURN notes that PG&E treats repairs to its distribution and transmission infrastructure as WMP initiatives (which are supposed to be incremental to compliance requirements),⁴⁴ while simultaneously stating that the repairs are "in compliance" rather than exceeding compliance standards.^{45, 46}

Furthermore, as TURN notes, PG&E apparently "intends to record all of these [equipment repair] costs in the WMP memorandum account as 'incremental' to its

 $[\]frac{42}{2}$ Public Utilities Code Sections 8386(a) and 8386(c)(3); *see also* Public Utilities Code Sections 8386(c)(11) (identified and prioritized wildfire risks) and 8386(c)(17) (methodology for identifying wildfire-related risk).

⁴³ TURN Comments, pp. 7-11, 31-32, and 47-49.

⁴⁴ See PG&E's 2021 WMP, Table 12, initiatives "7.3.3.12.3 Other corrective action, Maintenance, Transmission" and "7.3.3.12.4 Other corrective action, Maintenance, Distribution."

⁴⁵ TURN Comments, p. 31.

⁴⁶ PG&E's 2021 WMP, Table 12, initiatives 7.3.3.12.3 and 7.3.3.12.4.

authorized rate case costs."⁴⁷ This is improper because transmission and distribution repairs are normal operating costs and, therefore, are not appropriately booked in the WMP memorandum accounts. The forecast cost of such repairs is one component of the base revenue requirement approved in each general rate case; therefore, if PG&E records such costs to a memorandum account and seeks recovery, it would be seeking double recovery.⁴⁸

The WSD should require PG&E to explain why its compliance activities related to equipment repairs and the associated costs are incremental to the work and funding already authorized in its general rate case.

2. SCE's covered conductor program is subject to litigation in its GRC.

TURN observes that SCE's covered conductor program in its 2021 WMP update mirrors SCE's position in its 2021 GRC Phase 1 application,⁴⁹ for which a decision is pending.⁵⁰ Thus, it appears the scope of SCE's proposed covered conductor work has already been litigated in the 2021 GRC proceeding.⁵¹ However, the scope and workplan for SCE's covered conductor program in the 2021 WMP are *not* contingent on a general rate case decision.^{52, 53} This raises the possibility that SCE will implement its covered conductor program essentially as proposed in the general rate case, regardless of whether

⁵⁰ TURN Comments, pp. 9 and 47-48.

51 TURN Comments, pp. 47-48.

⁴⁷ TURN Comments, p. 31.

 $[\]frac{48}{16}$ If a utility spends less on operational expenses than the GRC revenue requirement authorized for this purpose, the leftover revenue is profit.

⁴⁹ Application 19-08-013, Application of Southern California Edison Company (U338E) for Authority to Increase its Authorized Revenues for Electric Service in 2021, among other things, and to Reflect that Increase in Rates.

 $[\]frac{52}{52}$ SCE's 2021 WMP, pp. 210-213. In the discussion of covered conductor installation, SCE makes no reference to the general rate case proceeding or decision.

⁵³ SCE's data request responses regarding covered conductor make no reference to the general rate case proceeding or decision. See SCE's responses to Data Request CalAdvocates-SCE-2021WMP-07, Questions 1 and 2, March 8, 2021; SCE's response to Data Request CalAdvocates-SCE-2021WMP-12, Question 1, March 16, 2021; SCE's supplemental response to Data Request CalAdvocates-SCE-2021WMP-12, Question 1, March 17, 2021.

the Commission approves, rejects or modifies SCE's proposal in the general rate case decision. Contrary to the Commission's clear intention, SCE could then seek cost recovery after the fact. $\frac{54}{2}$

3. The Commission should require utilities to abide by GRC decisions.

The Commission and the WSD should explicitly state that electric utilities may not use the WMP process to circumvent or relitigate general rate case decisions. Once an issue has been litigated and decided in a general rate case, the utility is obligated to abide by that decision. If a utility seeks to change the outcome of a general rate case, the proper mechanism is to file a petition for modification or an application for rehearing of the decision.

If the Commission rejects a proposal in a general rate case, or decides that a different budget is just and reasonable, the utility should not be able to record the costs in a memorandum account and seek to have the costs deemed reasonable after the fact. Therefore, Cal Advocates supports TURN's recommendation that the WSD and the Commission make clear its intent "in the WMP decision or resolution that, in the case of any divergence between an approved WMP and the programs approved in a final GRC decision, the utility's cost recovery is bound by the program budget and unit costs approved in the GRC decision."⁵⁵

III. CONCLUSION

Cal Advocates respectfully requests that the Wildfire Safety Division adopt the recommendations discussed herein.

 $[\]frac{54}{54}$ SCE could record any excess costs (above what is approved in the GRC) in a memorandum account and seek cost recovery later, subject to reasonableness review.

⁵⁵ TURN Comments, p. 9.

Respectfully submitted,

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