RURAL COUNTY REPRESENTATIVES OF CALIFORNIA

April 11, 2022

Caroline Thomas Jacobs
Director, Office of Energy Infrastructure Safety
California Natural Resources Agency
715 P Street, 20th Floor
Sacramento, CA 95814

E-Filed via 2022-WMPs Docket

RE: Comments of the Rural County Representatives of California on the Large IOU 2022 Wildfire Mitigation Plan Updates

Dear Director Thomas Jacobs:

On behalf of the Rural County Representatives of California (RCRC), we are pleased to provide comments on the large investor-owned utility (IOU) 2022 updates of their respective Wildfire Mitigation Plans (WMPs or Plans). RCRC is an association of thirty-nine rural California counties, and our Board of Directors is comprised of elected supervisors from each member county. While Pacific Gas and Electric's (PG&E's) service territory encompasses the vast majority of our member counties, Southern California Edison's (SCE's) service territory also comprises some of our member counties and is relevant to our interests.

Safeguarding California's residents from future harm resulting from a utility-caused wildfire event is one of RCRC's primary public policy goals. Communities across California have experienced great financial hardships in attempting to recover from catastrophic wildfire events and in mitigating the risk of consequences of those events, including implementing home hardening measures, maintaining defensible space, and suffering economic (as well as health-related) fallout from power outages. Much of the reported data of IOUs should be subject to intense scrutiny and physical inspections by the Office of Energy Infrastructure Safety (Energy Safety) in order to verify aspects or outcomes of wildfire mitigation planning, such as the completion of various system hardening or vegetation management activities across a service territory. Needless to say, these Plans should be actionable and verifiable.

Stakeholders and the public should have a greater understanding of the technology models relied upon in these Plans. We suggest that Energy Safety

comprehensively examine technology models and inputs employed, and do so in consultation with competent, neutral third parties in the scientific community in an open public forum. Doing so would ensure best practices are being utilized consistently across all utilities, such as credible inputs into various software technology to determine the most effective pathways to reduce risk, thereby increasing safety and overall energy reliability.

From an overarching perspective, the 2022 Plans often involve numeric values with no greater context provided to the reader about what the program goals and targets truly signify, let alone how to measure that progress over time in a simpler fashion. This information is largely obscured through the volume and complexity of the document. While much progress has been made on the nuts and bolts of these Plans, they are a long way from being fine-tuned, and we look forward to future improvements.

Grid Design and System Hardening

Sectionalizing Devices and Fast Trip Settings

RCRC's member counties operate many critical facilities and provide vital services where the loss of power could pose a significant danger to public safety and wellbeing. These can include law enforcement facilities, fire stations, jails, emergency dispatch centers, health facilities, cooling centers, water and wastewater treatment and distribution infrastructure, etc. Rural communities often lack the resources necessary to fully mitigate the impacts of electrical outages on critical infrastructure and sensitive populations, especially when those outages impact large numbers of individual and facilities.

PG&E appears to be shifting away from surgical, deliberative Public Safety Power Shut-offs (PSPS) in favor of generating smaller, automatic, and frequent unplanned outages (average of 1,000 customers impacted per event and with an average duration of 17.5 hours).[1] As you are aware, PG&E's Enhanced Powerline Safety Settings (EPSS) program produces power outages that are far less regulated and come without the shackles of customer accountability and communication, or resiliency measures such as back-up power to critical facilities. Based on past experience of their poor execution, expanding the scope of EPSS to all of PG&E's risk areas is a major concern for rural constituencies.

We understand the nuance and differences of the EPSS and PSPS programs, but by shifting greater emphasis to EPSS, PG&E in particular is forsaking the thoughtful and hard-fought progress of the California Public Utilities Commission's (CPUC's) De-Energization protocols[2]. One specific example is how PG&E activates microgrids as a resiliency measure during PSPS, but not EPSS, in the same geographic location even though both outages are a result of wildfire ignition prevention measures. The same

[1] Page 32, California State Auditor *Electrical System Safety* Report (2021-117), published March 2022
[2] See CPUC proceeding R.18-12-005

microgrid projects that were built to mitigate the detrimental impacts of PSPS events on critical facilities could and should be able to help alleviate the parallel impacts of those unplanned EPSS outages.

PG&E deployed microgrids in El Dorado County, Tuolumne County, and Butte County, among other places, to provide crucial resiliency for many critical facilities and/or core businesses that serve residents in very rural areas during PSPS events. These microgrids were designed and permitted under the California Air Resources Board's (CARB) Portable Engine Registration Program (PERP), which allows generators to be permitted by CARB rather than local air districts, and only during PSPS events. Despite repeated requests from the respective local governments, and an expressed willingness by local air districts to permit generators so the microgrids can be used during non-PSPS events, there has been little interest and little progress by PG&E to pursue a solution that would utilize such back-up power in the EPSS context. Utilities must proactively work to ensure that microgrids already developed and present in communities to mitigate PSPS events can likewise be energized to provide crucial local power resiliency during other types of outages, such as EPSS, where it is safe to do so.

Customer solutions for proactive outages (PSPS) and programmed outages (EPSS) should be treated more equally. More community outreach needs to occur when fast trip settings are finetuned, e.g., when the devices' sensitivity level is adjusted for longer periods of time such as fire season. Lastly, given that all utilities are capable of programming these "fast trip" outages but do not adopt uniform naming conventions for such a program, Energy Safety should consider standardizing the terminology[3] for outages produced by sectionalizing devices across all utilities in order to make better comparisons of these initiatives, including how they mature over time.

Undergrounding

RCRC has been working to establish a more collaborative partnership with PG&E for the mutual benefit of our shared communities, particularly as it relates to the prevention of catastrophic wildfires. The discussion of undergrounding power lines represents one opportunity to improve coordination with local governments. While dialogue is occurring, there is still much work to be done and questions to be answered. Unfortunately, meaningful details pertaining to PG&E's 10,000-mile undergrounding initiative largely remain to be seen, even though additional information has been promised through this 2022 WMP update.

PG&E, as a percentage, is far behind its counterparts in undergrounding distribution lines or installing insulated lines in high fire threat areas.[4] PG&E has correctly identified climate-induced challenges that have exacerbated risk to its overhead assets,

[3] PG&E names fast trip settings as the "Enhanced Powerline Safety Setting" (EPSS) program, while SCE coins their early fault detection as Fast Curve (FC) Settings.
[4] California State Audit, *Electrical System Safety*, March 2022.

such as persistent drought, hotter temperatures and higher winds; however, the justification to triple[5] the amount of undergrounding currently located in high fire threat areas is still largely missing. While we don't dispute the safety benefits that undergrounding distribution lines could produce, and certainly wish more concerted efforts to pursue undergrounding would have taken place incrementally over the last several years, it isn't necessarily the best pathway, nor a generally accepted cost-effective pathway, to expeditiously reduce risk on existing overhead assets. It is unclear what analysis PG&E has done comparing the costs and benefits of installing covered conductors against the cost of undergrounding those lines in high wildfire risk areas.

To date, PG&E has done little to identify more exacting areas where their ambitious undergrounding work would take place and begin necessary conversations with local officials (easements, permitting). PG&E is still developing scoping criteria to identify the highest risk areas and determine whether undergrounding is achievable, prompting the inevitable question of why, and how, they identified 10,000 miles. It appears to be a value without any justification or rationality. While we agree with PG&E's approach to use PSPS and critical facilities as factors to identify vulnerable circuits that may be suitable for undergrounding, communication is key to executing this ambition and PG&E must start involving local officials at an earlier stage to better target optimal areas for undergrounding if it has any hope to achieve the success it promises.

Rule 20 undergrounding projects[6] — which were largely for beautification purposes, not safety — are relatively small in scale and can take years to finish. The approximate undergrounding project duration timeline in PG&E's 2022 WMP Update provides no historical context, nor does it provide an example of the scale of a project, such as how many miles of line can be accomplished under their 9-month construction timeline[7]. PG&E does not elaborate on what achievements in undergrounding have taken place over the last few years, nor how it substantially reduced their estimated costs. An audit published in October 2019 discovered PG&E's undergrounding costs per mile were higher than the industry standard maximum.[8]

Not all topography is conducive to burying these wires; undergrounding distribution lines in rocky, mountainous terrain through high fire threat areas is not the same as flatter terrain. Moreover, we question the reliability implications for undergrounded assets. Will it slow the response for repairs? Will it increase maintenance costs? PG&E admits that

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[5] According to the California State Auditor's *Electrical System Safety* Report (2021-117) published March 2022, only 12% or 4,996 miles have been undergrounded in PG&E high fire threat service territory, while 33,268 miles—80%—remain bare.

[6] CPUC Undergrounding Programs, https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/infrastructure/electric-reliability/undergrounding-program-description

[7] PG&E 2022 Wildfire Mitigation Plan Update, Table 7.3.3.-5 on page 533.

[8] Audit of PG&E Rule 20A Undergrounding Program, https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/infrastructure/electric-reliability-reports/cpuc-undergrounding-faqs/rule-20a-audit-of-pge---comprehensive-azp-report_public_revised-cover.pdf

undergrounded assets are not invulnerable to "equipment issues, lightning strikes, flooding, earthquakes, and excavation damage by a third party. When underground systems are damaged, locating fault areas and undertaking excavation processes can be time-consuming. Underground lines can take almost twice as long to repair when damage occurs." [9] We question not only the validity of PG&E's fundamental shift of using undergrounding as the most preferred option, but also its probability of execution. Energy Safety and the CPUC must reconcile these competing interests and determine whether PG&E's 10,000-mile program is warranted and feasible, especially if it could result in long-term delays to safeguard high risk circuits in High Fire Threat Districts and leave many communities at the mercy of "last resort" PSPS and EPSS measures for years to come.

Remote Grids

Remote Grid Systems show promise in safeguarding isolated communities and improving resiliency. We note that PG&E and SCE are working to develop or explore remote grids in some rural communities at the end of long distribution lines often running through high fire risk areas. Building remote grids to serve those communities with standalone clean energy, storage, and backup power could reduce wildfire risk and avoid the need for costlier infrastructure upgrades to serve those communities. We look forward to the robust evaluations of remote grids as scalable alternatives to other types of wildfire risk reduction activities in subsequent WMPs, especially undergrounding and installing covered conductors.

Vegetation Management

RCRC is concerned about the integrity of PG&E's vegetation management program, especially as portrayed in aspects of their 2022 WMP Update. PG&E states, "Vegetation management needs are also expected to reduce as undergrounding assets become more prevalent... As PG&E increases undergrounding efforts, vegetation work and the associated costs can be reduced and, for some circuit segments, eliminated."[10] A clarification is needed that routine vegetation management pursuant to CPUC General Orders is not part of the vision articulated in the 2022 WMP Update.

Given past experiences with slow clean-up by PG&E of the woody biomass from felled trees during vegetation management efforts, various regulatory bodies (including CAL FIRE) should ensure the slow clean-up of routine and enhanced vegetation management work performed by utilities and their subcontractors does not create a fire hazard. Furthermore, given the reliance on outside vendors and third-party contractors employed by PG&E, residential communities desire a local phone number to contact for assistance during PG&E's vegetation management activities to promptly address concerns when they arise.

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[9] https://www.pgecurrents.com/2017/10/31/facts-about-undergrounding-electric-lines/, accessed March 28, 2022.
[10] PG&E 2022 WMP Update, page 534.

Public Safety Power Shut-offs (PSPS)

We appreciate the role that surgical, well-implemented PSPS events can play in reducing the risk of utility-caused wildfire; as such, the circumstances for executing PSPS events should diminish over the next few years as utilities make significant improvements in the resiliency of their electrical systems during extreme weather incidents. Overall, there have been many lessons learned and general improvements made since the first de-energizations conducted in October 2019.

As we move toward greater reliance of electricity as a primary energy source to reduce greenhouse gas emissions across the transportation sector, the potential of unreliable electricity could leave greater numbers of Electric Vehicle (EV) drivers in high fire-threat areas stranded from evacuating or reaching their destination. To that end, large utilities are aptly integrating these circumstances into their WMP update. SCE, for example, has enhanced their website to provide a map display of active PSPS events to include EV charging locations.[11]

While utilities incorporate system hardening, among other things, into their PSPS protocols (as they should), PG&E's WMP update inadequately prognosticates how its progress will reduce the scope and duration of PSPS events by failing to contextualize what those estimated reductions mean or what the resulting increase in EPSS outages will be. By contrast, SCE's overview and directional vision of PSPS is far more detailed and executed in a more meaningful way.

In future WMPs it would be useful for utilities to illustrate a case study that analyzes the suite of mitigation efforts completed on particular high-risk circuits in a community and demonstrate if PSPS events were still used as a last resort. Such a case study would help measure how PSPS events were actually reduced as a measure of last resort, and if not, why system hardening and other investments did not result in greater customer resiliency, or other lessons learned.

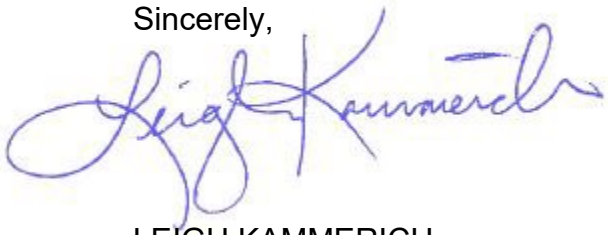
Conclusion

Since the first iteration of the Wildfire Mitigation Plans, much progress has been made that will better safeguard California's communities and natural resources. While it will take many more years for these investments to come into fruition, it is imperative that electric safety and reliability not be treated, or accepted, as mutually exclusive endeavors. While WMPs are valuable planning documents, we urge Energy Safety and its partners to conduct thorough audits to verify utility outcomes. As you well know, ratepayers cannot afford, nor can communities continue to endure the failures that result from inadequate management of electrical infrastructure especially in locations most vulnerable to risk.

[11] Southern California Edison 2022 WMP Update, page 536.

Thank you for your consideration of our comments. If you have any questions, please do not hesitate to contact me at (916) 447-4806 or lkammerich@rcrcnet.org.

Sincerely,



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