

November 16, 2022

Alice Reynolds, President
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94103

Dear President Reynolds:

Re: CPUC Oversight of Large Electric Utilities' Fast-Trip Outage Programs

I am writing to you regarding PG&E's wildfire prevention work as it relates to Enhanced Powerline Safety Settings (EPSS) and the concerns raised in the November 8 legislative letter you received.

With the wildfire risk in our state continuing to grow, our most important responsibility is the safety of the customers and communities we serve. That is why we are taking bold actions to respond to our state's changing climate and to reduce wildfire risk.

While we are also focused on several long-term solutions, such as undergrounding powerlines, we have taken immediate action to protect our customers and communities such as enabling EPSS on all powerlines in high fire-risk areas. The scope of our effort this year includes enabling EPSS on over 25,000 miles of distribution powerlines when elevated wildfire risk is forecast. Since this effort launched in 2021, EPSS has proven to be a vital wildfire prevention tool.

EPSS is Significantly Reducing Ignitions and Fire Size

Through October 31 of this year, we have seen a greater than 30% reduction in CPUC-reportable ignitions in High Fire Threat Districts (HFTD) compared to the 2018–2020 average. This is primarily driven by a 65.5% reduction in ignitions on EPSS-enabled lines. Along with this significant reduction in ignition count, we have also seen a reduction in fire size on EPSS-enabled circuits. The size of reportable fires, Q3 to date, is down to 0.94 acres—a 40% reduction from 1.57 acres in Q3 of 2021. Once again, the primary driver for ignition reduction is our EPSS program. This highlights the impact EPSS has had on not only eliminating the occurrence of ignitions but reducing fire size when they do occur.

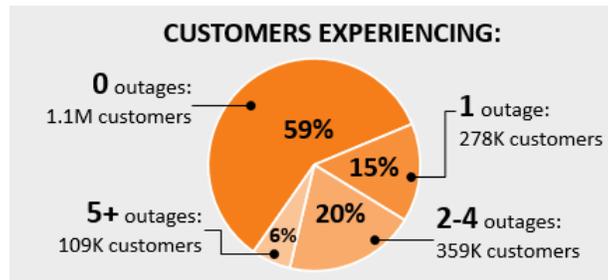
That said, we know that losing power for any length of time affects our customers. Since the EPSS program began in 2021, we have been taking significant steps to improve reliability and minimize unplanned power outages without compromising safety. This year brought new learnings that will help us continue to make important progress in 2023.

We Have Made EPSS Outages Shorter

This year, approximately 1.8 million customers have been served by EPSS-capable powerlines. Of those customers, 74% have experienced zero or one outage as of October 28. We monitor and analyze customer impact daily including the number of Customers Experiencing a Sustained Outage (CESO). As of October 28, approximately 468,000 customers experienced two or more outages on an EPSS-enabled line.



Alice Reynolds
November 16, 2022
Page 2



If multiple outages affect customers on a single EPSS-enabled circuit, PG&E conducts a Multi-Outage Review (MOR). During the MOR, we analyze the information found during the initial fault, the patrol process, and power restoration process to identify potential outage causes and possible solutions. With this information, we perform operational actions that can improve reliability and mitigate future outages. We also communicate updates to impacted customers.

Since early May, we have initiated these intensive MORs on more than 150 circuits to help improve reliability. Our efforts include but are not limited to:

- Adjusting the sensitivity of settings.
- Installing fault indicators to help patrol crews identify with precision where on a line a fault occurs and safely restore power more quickly.
- Conducting targeted vegetation management on trees near powerlines.
- Installing bird guards where they would be most helpful in preventing potential hazards coming in to contact with the lines. This is happening in areas where we suspect birds contacting wires, resulting in outages.
- Installing sectionalizing devices to limit the number of customers impacted during outages.
- Temporarily transferring some customers, where it is feasible, to different circuits to further decrease the impact of outages.
- Continuing to conduct comprehensive reviews and engineering analyses to identify solutions that will improve service reliability—now and in the future.

New protective devices, installed as part of the aforementioned efforts to improve reliability on EPSS-protected circuits, will also support improved customer reliability during extreme heat events such as we experienced this past September. Our engineering team is analyzing annual peak load flow studies on the safety settings to ensure that protection trip thresholds will remain above projected device loading during extreme heat events.

We recognize that adverse weather, such as heat events and high winds, can also lead to the need for Public Safety Power Shutoffs (PSPS). While to date this year we have not initiated a PSPS, we have actively planned for potential PSPS outages and concurrent outages on EPSS-enabled lines before, during, and after a PSPS.



Alice Reynolds
November 16, 2022
Page 3

These plans were in place in October when our Emergency Operations Center was activated for a potential PSPS. This included updates to our PSPS notification messages to ensure customers served by an EPSS-capable line were aware of the potential for an unplanned outage in addition to a PSPS being initiated.

PG&E has also engaged with telecommunications service providers on wildfire safety and the potential for safety outages. Beyond encouraging preparedness for any type of outage, we continue to participate in discussions on resiliency planning of infrastructure to mitigate impacts on our customers during outages and to help ensure customers can receive emergency warnings and alert messages.

We Are Taking Decisive Action to Improve Reliability

This year, we worked to restore power more quickly following an outage by adapting our patrol methods. Previously, crews had to patrol the entirety of the circuit experiencing an outage. PG&E crews now only need to patrol the section of the line from where the outage originated to the next protective device. By conducting patrols, we ensure no issues exist that could still spark an ignition when the power comes back on. As of November 9, the average outage on an EPSS-enabled line has been approximately three hours—a 56% decrease from the 2021 average. This is significantly less than the six-hour outages cited in the recent letter you received from members of the Legislature. While we understand that any outage affects our customers, especially those who are most vulnerable, we are proud of the progress we have made to reduce the length of outages for our customers.

However, longer duration outages have occurred for some customers. As of September 30, the 2022 average percentage of customers who have experienced an outage on an EPSS-enabled line longer than 12 hours was 25% lower than for all PG&E outages in 2022. In other words, customers were less likely to experience an extended outage duration on an EPSS-enabled line than an outage not related to EPSS in 2022. We are committed to further expediting restore times and minimizing the impact and duration of outages.

Customer Outreach for Outage Preparedness

We have reached out to customers throughout the year to educate them about EPSS. This includes pre-season outreach that also provided them with preparedness resources we have available if they experience outages. Throughout the season, we continued to communicate with customers, through a variety of channels, particularly in response to outages in their community:

- Communications to potentially impacted customers via email and direct mail.
- Social media and local media outreach efforts to raise awareness, including posts on social media sites Nextdoor and Facebook.
- Paid advertising on local radio and social feeds.
- Public webinars to foster discussions on how we can better serve our communities, while allowing customers to learn more about the enhanced safety settings and the steps we are taking to improve reliability.



Alice Reynolds
November 16, 2022
Page 4

- Discussing important aspects of EPSS in our wildfire safety webinars for customers with Access and Functional Needs and holding EPSS-dedicated webinars for community-based organizations that support the Access and Functional Needs community.

In 2023, we will build on our 2022 customer outreach plans to continue providing educational material to help customers better understand the safety settings, how it protects them, the potential impacts on service reliability, and the importance of outage preparedness.

Supporting Vulnerable Customers

We strive to ensure that all our customers are prepared for potential outages and recognize it is especially important for those who rely on power for medical equipment and daily living. We have several efforts in place to identify and support vulnerable customers and customers with Access and Functional Needs.

PG&E partners with the California Foundation for Independent Living Centers (CFILC) through 17 regional Independent Living Centers to deliver the Disability Disaster Access and Resource (DDAR) program to individuals who rely on power for medical or independent living needs. This partnership—coupled with our partnership with the California Network of 211s to engage individuals with Access and Functional Needs, both proactively and reactively—provides the opportunity for customers throughout the service territory to connect with resources that help mitigate the impacts of wildfire safety outages.

As part of our 2023 planning efforts, PG&E will compare existing program eligibility criteria to EPSS outage data from 2022 to inform any possible expansion of our programs and offerings. This can support customers with Access and Functional Needs who have been impacted by outages on EPSS-enabled circuits.

We are also working on clean backup power solutions to further support customers during unplanned outages. We are piloting a program that supports customers with whole-house clean solutions, including battery storage. This also includes investing in community microgrids that are powered by solar and battery energy. We aim to minimize emissions and exhaust by using cleaner burning engines as much as possible. Additionally, we are testing more sustainable and renewable options for future use.

By utilizing all the tools at our disposal, we are building the state-of-the-art electric system our customers deserve and making it safer every day. We appreciate your continued partnership. If you have any additional questions, please do not hesitate to contact me.

Sincerely,

Mark Quinlan
Vice President
Transmission & Distribution System Operations



Alice Reynolds
November 16, 2022
Page 5

cc: Senator Bill Dodd
Senator John Laird
Assembly Member Jim Wood
Senator Brian Dahle
Senator Jim Nielsen
Assembly Member Megan Dahle
Assembly Member James Gallagher
Caroline Thomas Jacobs, Director, Office of Energy Infrastructure Safety
Commissioner Clifford Rechtschaffen
Commissioner Genevieve Shiroma
Commissioner Darcie Houck
Commissioner John Reynolds
Rachel Peterson, Executive Director, CPUC
Service List R.18-12-005
Senator Ben Hueso, Chair, Senate Energy, Utilities, and Communications Committee
Assembly Member Eduardo Garcia, Chair, Assembly Utilities and Energy Committee
Kip Lipper, Chief Policy Advisor, Senate President Pro Tempore Toni Atkins
Chase Hopkins, Special Assistant to Assembly Speaker Antony Rendon
Nidia Bautista, Chief Consultant, Senate Energy, Utilities, and Communications Committee
Laura Shybut, Chief Consultant, Assembly Utilities and Energy Committee
Kerry Yoshida, Consultant, Senate Republican Caucus
Greg Melkonian, Consultant, Assembly Republican Caucus Office of Policy and Budget
Hazel Miranda, Deputy Legislative Secretary, Governor Gavin Newsom