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13 in their official capacities as
14 Commissioners of the California Public Utilities Commission

11 **UNITED STATES DISTRICT COURT**
12 **FOR THE NORTHERN DISTRICT OF CALIFORNIA**
13 **SAN FRANCISCO DIVISION**

14 UNITED STATES OF AMERICA,

15
16 Plaintiff,

17 vs.

18 PACIFIC GAS AND ELECTRIC COMPANY,

19
20 Defendant.

Case No. 14-CR-00175-WHA

**COMMENTS OF THE
CALIFORNIA PUBLIC UTILITIES
COMMISSION IN RESPONSE TO
ORDER TO SHOW CAUSE**

Hearing Date: January 30, 2019

Time: 9:00 a.m.

Courtroom: 12, 19th Floor

Judge: Hon. William H. Alsup

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NORTH DISTRICT OF CALIFORNIA

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1 **I. INTRODUCTION**

2 At the invitation of the Court, the California Public Utilities Commission (“CPUC”)
3 comments on the Court’s “Order to Show Cause Why PG&E’s Conditions of Probation
4 Should Not Be Modified” (ECF 961).

5 According to CAL FIRE and the California State Board of Forest and Fire
6 Protection, “California now often experiences a year-round fire season, with an increase in
7 both the number and the intensity of large, damaging wildfires.” Cal. Assembly Bill 2911
8 (2018, Friedman), § 1(a)(4). The increased frequency and intensity of large wildfires in
9 recent years is caused in significant part by climate change. *See id.*, § 1(a)(5). Some of
10 those devastating wildfires have been traced to a utility-asset ignition source; in some cases
11 the utility violated safety regulations and prudent operator standards, in others the utility did
12 not. Since the catastrophic wildfires in Southern California in 2007, the CPUC has stepped
13 up efforts to mitigate the risk of utility-sourced wildfires. Among other actions and orders,
14 the CPUC now requires that public utilities prioritize their asset management and
15 expenditure plans according to a safety risk-ranking; strengthened its regulations governing
16 the minimum safety standards of overhead electrical infrastructure (e.g., the CPUC’s
17 General Order 95); and continually improves the required protocols for electric grid de-
18 energization so as to maximize public safety. Despite our best efforts to date, utility-caused
19 wildfires are still occurring, and the CPUC recognizes the need to redouble wildfire
20 prevention efforts, which we are presently doing. The State Legislature recently passed a
21 comprehensive statewide wildfire mitigation framework, Cal. Senate Bill 901 (2018, Dodd)
22 (“SB 901”), which builds upon and enlarges existing CPUC regulatory tools: de-
23 energization protocols, vegetation management, and utility wildfire mitigation plans. The
24 CPUC is working closely with CAL FIRE and other state and local agencies to order utilities
25 to begin implementing those wildfire mitigation plans by May 2019.

26 The Court’s proposed order is motivated by a desire to “reduce to zero the number of
27 wildfires caused by PG&E in the 2019 Wildfire Season.” OSC at 3. The proposed order
28

1 would have Defendant Pacific Gas and Electric Company (“PG&E”) operate only those
2 parts of its electrical system that actually have been re-inspected, rated and certified under
3 oath as safe in specific wind conditions (little wind to high wind), and operation is restricted
4 to the wind conditions for which it was rated safe and certified.

5 In practice, the proposed order will in all likelihood conflict with and frustrate the
6 extensive federal statutory and state Constitutional and statutory regulatory scheme under
7 which the CPUC regulates PG&E. California statutory law and CPUC orders allow electric
8 utilities to selectively de-energize portions of their system under carefully considered,
9 specified conditions. *See, e.g.*, Rulemaking 18-12-005 (**Exhibit 1**), at 4, citing Cal. Pub.
10 Util. Code §§ 451 and 399.2(a). More recently, the CPUC, CAL FIRE, and the California
11 Office of Emergency Services have jointly communicated their expectations that electric
12 utilities follow specified guidelines and protocols for an effective, safe, and orderly de-
13 energization event and to minimize unintended negative consequences. *See* Letter from
14 CPUC, CAL FIRE, and California Office of Emergency Services to PG&E, Southern
15 California Edison Company, and San Diego Gas & Electric Company, dated October 26,
16 2018 (**Exhibit 2**). Recognizing “the stark new reality of wildfire events in California,” the
17 CPUC only last month instituted a rulemaking to improve upon existing de-energization
18 protocols in order to minimize unintended negative consequences to emergency response
19 services and to public health and safety. CPUC Rulemaking 18-12-005 (**Exhibit 1**).

20 The proposed order would also likely conflict with state law requiring public utilities
21 to provide both safe and reliable electric service, *without compromising either policy*. *See*
22 Cal. Pub. Util. Code §§ 451, 854.2. This statutory mandate is in tension with the proposed
23 order’s exclusion of reliability considerations. Reliable electric service provides
24 irreplaceable sustained support for emergency, public health, and safety services throughout
25 the State in the form of: emergency calls, dispatch, triage, evacuation orders, and other
26 forms of emergency communication; water pumping, fire hydrant services, the provision of
27 potable water to millions of households, and the operation of sewer and wastewater services;
28

operational support for hospitals, outpatient and nursing care facilities, as well as powering medical equipment in private homes; and public street lighting at night and during conditions with impaired visibility such as smoke-congestion caused by wildfires and heavy storms. Loss of electric service puts vulnerable populations at particular risk, as they might depend on others or community support services to function independently or perform daily activities, and de-energization disrupts these “lifelines.” The operation of all branches and agencies of government, including the courts, legislative bodies and local governments, public welfare agencies, police, and schools, depends on electrical service. Public transportation (electricity-powered buses and trains) could also be negatively affected. California’s electric public utilities are also necessary to support military bases and components of the defense industrial base, large business enterprises such as heavy industry and manufacturing, agriculture, and server farms and computing/programming, and vital medium- and small-business enterprises like grocery stores and gas stations. Even basic financial transactions (electronic direct deposit of paychecks, on-line bill-paying, use of credit card payment machines, and ready access to cash) could be rendered inoperable without electricity to run computer systems and ATM machines.

The CPUC submits that the most appropriate response plan for insuring the safety of California before, during, and after the 2019 Wildfire Season is to avoid conflicting with the CPUC’s ongoing exercise of exclusive jurisdiction to regulate the safe and reliable operation of the electric system at just and reasonable rates. The Court should accordingly allow the CPUC’s investigations, rulemakings, and other regulatory processes to continue, and to refrain from implementing the proposed order.

II. THE CPUC’S AUTHORITY TO REGULATE ELECTRIC UTILITIES IS COMPREHENSIVE AND BALANCES A WIDE RANGE OF PUBLIC INTERESTS AND POLICIES.

A. The CPUC’s Regulation of Public Utilities Derives from the Police Power of the State.

Reliable electric utility service is in many ways a human necessity. *See* Cal. Pub. Util. Code § 739(b). The use of and dependence on electrical service is so varied, far-

reaching, and consequential that any question of de-energization would best be considered in an open and public rulemaking. *See, e.g.,* discussion of consequences of the Court’s proposed order in Section IV, below. The simultaneously *safe* operation of the electrical system and the *reliable* provision of electric utility service are necessary to support public health, safety, and well-being. “Reliable electric service is of utmost importance to the safety, health, and welfare of the state’s citizenry and economy.” Cal. Pub. Util. Code § 330(g). Because of this, “[t]he regulation of utilities is one of the most important functions traditionally associated with the police power of the States.” *Arkansas Elec. Coop. Corp. v. Arkansas Public Serv. Comm’n*, 461 U.S. 375, 377 (1983), citing *Munn v. Illinois*, 94 U.S. 113, 24 L.Ed. 77 (1877). Central to this State police power to regulate public utilities is the safety regulation of those public utilities. The State’s police powers are so broad as to permit regulation that might affect interstate commerce (in the absence of Congressional intent to preempt). *See, e.g., California v. Thompson*, 313 U.S. 109, 115-116 (1941) (upholding the authority of the California Railroad Commission (the CPUC’s predecessor) to regulate the safety of transport agents operating in both interstate and interstate commerce, absent Congressional preemption); *Bradley v. Pub. Utils. Comm’n of Ohio*, 289 U.S. 92, 95-96 (1933).

The CPUC is an agency of state constitutional origin with far-reaching duties, functions and powers. *See* Cal. Const., art. XII, §§ 1-6. The California Constitution confers broad authority on the CPUC to regulate utilities, including the power to fix rates, establish rules, hold various types of hearings, award reparation, and establish its own procedures. Cal. Const., art. XII, §§ 2, 4, 6. The CPUC’s powers are not restricted to those expressly mentioned in the Constitution. “The Legislature has plenary power, unlimited by the other provisions of this constitution but consistent with this article, to confer additional authority and jurisdiction upon the commission . . . (Cal. Const., art. XII, § 5.)” *Consumers Lobby Against Monopolies v. Public Utilities Com.*, 25 Cal.3d 891, 905 (1979); *San Diego Gas & Electric Co. v. Superior Court*, 13 Cal.4th 893, 914-915 (1966). The CPUC’s authority to

1 regulate investor-owned electrical utilities is expansive because such regulation is a complex
 2 matter that must capture and balance wide-ranging interests. *See In re. Permian Basin Area*
 3 *Rate Cases*, 390 U.S. 747, 767 (1968) (state public utility commissions “must be free, within
 4 the limitations imposed by pertinent constitutional and statutory commands, to devise
 5 methods of regulation capable of equitably reconciling diverse and conflicting interests”).
 6 In California, the wide-ranging interests in electric utility regulation include: safety,
 7 reliability, cost-reasonableness and affordability, universal and non-discriminatory access,
 8 greenhouse gas emissions reduction, environmental justice, and State environmental
 9 policies. *See, e.g.,* Cal. Const., art. XII, § 4; Cal. Pub. Util. Code §§ 451, 454.54, 379.6, and
 10 740.8.

11 In public utility regulation, safety, reliability, and consideration of costs and timing
 12 are never considered in isolation. A utility’s costs of programs such as vegetation
 13 management, safety inspections, and asset repair and replacement must be orderly and
 14 executed over a schedule of years. A public utility has a constitutional right to recover in its
 15 rates all just and reasonable and prudently-incurred costs to own and safety and reliably
 16 operate its electrical system. *See, e.g., Duquesne Light Co. v. Barasch*, 488 U.S. 299 (1989);
 17 *Federal Power Comm’n v. Hope Natural Gas Co.* 320 U.S. 591 (1944); and *Permian Basin*,
 18 390 U.S. at 767. Because a public utility’s capital and operations expenditures are
 19 oftentimes so capital-intensive, utility ratemaking generally either orders cost-recovery over
 20 a period of time to normalize and equitably socialize these costs, or else paces the incursion
 21 of costs for the same reasons.¹

22
 23
 24
 25 ¹ To illustrate, in the aftermath of PG&E’s intrastate gas transmission pipeline explosion in
 26 San Bruno in September 2010, the CPUC ordered all intrastate gas pipeline owners to
 27 develop a comprehensive Pipeline Safety Enhancement Program to pressure test their entire
 28 systems, replace equipment if necessary, update records, and other safety actions. The
 CPUC ordered that the Pipeline Safety Enhancement Program work plans be executed over
 a number of years, and approved the ratemaking associated with work plans to normalize the
 rate impacts on customers.

1 **B. The Reach of and the Public's Dependence on Reliable Public**
2 **Utility Services Necessitates the CPUC's Broad Discretion to**
3 **Regulate Public Utilities.**

4 PG&E's electrical system is not islanded. Its system is inextricably connected to and
5 interdependent with other electrical systems: PG&E's electric transmission system delivers
6 electricity across its system to serve customers of the Southern California investor-owned
7 public utilities, as well as the Sacramento Municipal Utility District and other municipalities
8 that operate their own electric public utilities (e.g., Anaheim, Azusa, Banning, Colton,
9 Pasadena, and Riverside), and supports neighboring states in the Western Interconnection.
10 For this reason, and because the CPUC's regulation of electric utilities is so comprehensive,
11 the regulation of California's electrical utilities, and by extension the de-energization of an
12 electrical system, must be done in an orderly, deliberate, and unified manner. This is
13 particularly true where wildfires are a statewide challenge.

14 The California Legislature has conferred broad regulatory powers to the CPUC.
15 Pub. Util. Code § 701 provides, "The commission may supervise and regulate every public
16 utility in the State and may do all things, whether specifically designated in this part or in
17 addition thereto, which are necessary and convenient in the exercise of such power and
18 jurisdiction." Where necessary, the CPUC exercises its broad authority to pursue
19 nontraditional regulatory tools where traditional tools fail to achieve the statutorily-
20 mandated safe and reliable electric service.

21 For example, while committing to safety in the aftermath of the San Bruno pipeline
22 explosion, PG&E continued – and continues – to cause and experience safety failures. The
23 CPUC recognizes the limited effectiveness of traditional regulatory enforcement
24 mechanisms – civil fines and equitable penalties – to realize a safe and reliable utility
25 system. The CPUC has aggressively sought other remedial tools to improve PG&E's safety
26 performance, most notably through its investigation into PG&E's governance and safety
27 culture. *See CPUC's Order Instituting Investigation on the Commission's Own Motion to*
28 *Determine Whether Pacific Gas and Electric Company and PG&E Corporation's*

1 *Organizational Culture and Governance Prioritize Safety*, Investigation 15-08-019, 2015
2 WL 5256612 (September 2, 2015) (“Safety Governance Investigation”). After a thorough
3 investigation by the CPUC Safety and Enforcement Division’s consultant, NorthStar
4 Consulting Group, the CPUC ordered PG&E to implement all 61 of NorthStar’s safety
5 recommendations by July 1, 2019. *See Decision Ordering Pacific Gas and Electric*
6 *Company to Implement the Recommendations of the NorthStar Report*, Decision 18-11-050,
7 2018 WL 6566915 (December 5, 2018). Some of these recommendations include
8 developing a comprehensive safety plan and updating it every two years, improving the
9 safety credentials of its Board of Directors, its Corporate Safety Officer, and among
10 personnel in PG&E’s safety functions and organizations, methodologically separating safety
11 expenditures from routine reliability and integrity expenditures, aligning compensation with
12 safety performance, and improving training and communications. *See NorthStar Consulting*
13 *Group, Assessment of Pacific Gas and Electric Corporation and Pacific Gas and Electric*
14 *Company’s Safety Culture* (May 8, 2017), CPUC Decision 18-11-050, Appendix A.

15 Just within the past two months, the CPUC issued a new order in the pending Phase
16 2 of the Safety Governance Investigation. There, the Assigned Commissioner recognized
17 the “failure of PG&E to develop a comprehensive enterprise-wide approach to address
18 safety, eight years after the 2010 San Bruno pipeline explosion,” even after the 2017 and
19 2018 wildfires and this Court’s expressed concerns over PG&E’s role in some of those
20 wildfires. *See Assigned Commissioner’s Scoping Memo and Ruling* in Investigation 15-08-
21 019 (December 21, 2018) (**Exhibit 3**), at 4-6. The Assigned Commissioner, empowered to
22 establish the scope of this proceeding, has requested comment on a wide variety of far-
23 reaching alternatives to PG&E’s current organizational structure in order to promote better
24 safety outcomes, including potential changes to its Board of Directors, management, and
25 operational structures.

26 The CPUC requests that the Court allow the CPUC to pursue the full breadth of its
27 expansive powers in a deliberate manner – according all parties their due process rights in
28

1 the course of CPUC proceedings – while simultaneously ensuring that utility customers and
2 the general public are not undeserving and unwitting casualties of the loss of electric
3 reliability.

4 **III. THE CPUC IS CURRENTLY IN THE MIDST OF IMPLEMENTING**
5 **SB 901 AND JUST INITIATED ITS LATEST DE-ENERGIZATION**
6 **RULEMAKING, BOTH OF WHICH BUILD ON EXISTING**
7 **WILDFIRE PREVENTION AND MITIGATION INITIATIVES.**

8 Wildfires are a challenge throughout the state of California, not just in PG&E's
9 territory. The operation of an electrical system in a wildfire-prone state is a highly complex
10 matter that must account for the public's undeniable reliance on and different requirements
11 for electric service. The CPUC has in recent years enacted a number of measures to enhance
12 wildfire prevention and mitigation, and these will undergird important new statutory
13 requirements promulgated just a few months ago in SB 901, which overhauls requirements
14 placed on electric utilities and their wildfire mitigation plans.

15 The CPUC, CAL FIRE, other state agencies, and local governments are presently
16 working together under this legislation to develop comprehensive utility wildfire mitigation
17 plans that address the varying and sometime competing needs surrounding first responders,
18 the public (and which are particular to disparate local concerns), public utilities, public
19 infrastructure that continues to serve the public, and the sustenance of a healthy
20 environment.

21 These various programs are developing or are currently being implemented, or have
22 recently been implemented and require at least a modicum of time for their strengths,
23 efficacies, and potential shortfalls to be understood. The Court's proposed order would
24 essentially dislodge these programs at the very moment they are taking shape.

25 **A. California Senate Bill 901 Mandates an Enlargement of Statewide**
26 **Wildfire Mitigation Efforts and Enhanced Wildfire Mitigation**
27 **Plans.**

28 SB 901 builds on the public utilities' existing CPUC-regulated wildfire mitigation
plans and vegetation management plans. SB 901 is a comprehensive plan of action for
effective forest management and wildfire mitigation and suppression across the state in

multiple sectors.² With respect to utility infrastructure-related wildfire risks, SB 901 requires electric utilities to submit statutory wildfire mitigation plans each year to an independent evaluator. Cal. Pub. Util. Code § 8386(b). These annual wildfire mitigation plans must include, among other things:

- “Protocols for ... **deenergizing** portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure,” Cal. Pub. Util. Code § 8386(c)(6) (emphasis added);
- Actions the utility will pursue “**to ensure its system will achieve the highest level of safety, reliability, and resiliency, and to ensure that its system is prepared for a major event**, including hardening and modernizing its infrastructure with improved engineering, system design, standards, equipment, and facility, such as undergrounding, insulation of distribution wires, and pole replacement,” Cal. Pub. Util. Code § 8386(c)(12) (emphasis added);
- The utility’s “**preventative strategies and programs** ... to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks,” Cal. Pub. Util. Code § 8386(c)(3) (emphasis added);
- Metrics to **evaluate the utility’s wildfire mitigation plan’s performance**, Cal. Pub. Util. Code § 8386(c)(4);
- A **ranking of “all wildfire risks, and drivers for those risks,”** throughout the utility’s service territory, which shall include wildfire risk and risk mitigation information contained in the utility’s Safety Model Assessment Proceeding and Risk Assessment Mitigation Phase filings (these are CPUC-mandated programs to compel risk-based utility management and spending), Cal. Pub. Util. Code § 8386(c)(10) (emphasis added);

² Among other things, SB 901 requires the State Forestry Board to adopt new regulations implementing minimum fire safety standards in very high fire hazard severity zones, where such regulations would apply to perimeters and access to all residential, commercial, and industrial buildings in these zones; eases restrictions on commercial timber operations to promote the removal of trees from firebreak and fuelbreaks; and requires CAL FIRE to create a Wildfire Resilience Program to assist owners of approximately 87,000 parcels (each parcel sized up to 100 acres, totaling nearly 8 million acres) of private noncorporate forest land to improve wildfire resilience.

- **Vegetation Management Plans**, Cal. Pub. Util. Code § 8386(c)(8);
- **Inspection plans** for the utility's electric infrastructure, Cal. Pub. Util. Code § 8386(9); and
- Improvements to the CPUC's **fire mapping**, Cal. Pub. Util. Code § 8386(c)(14).

Pursuant to its implementation of SB 901, the CPUC instituted Rulemaking 18-10-007³ to oversee a formal rulemaking process for receiving comments from the public, local and state agencies, and other interested parties, after which the CPUC will approve, subject to CPUC modification, the statutory wildfire mitigation plans after verifying compliance with "all applicable rules, regulations, and standards, as appropriate." Cal. Pub. Util. Code § 8386(d). The utilities have been ordered to file their wildfire mitigation plans by February 6, 2019, and the CPUC must approve the plans within three months of that date, or the first week of May 2019. Cal. Pub. Util. Code § 8386(e).⁴

Once the wildfire mitigation plan is approved, the CPUC will conduct an annual review of the utility's compliance with the plan utilizing an independent evaluator "with experience in assessing the safe operation of electrical infrastructure." Cal. Pub. Util. Code § 8386(h)(2)(A)&(B). Eligible independent evaluators conducting compliance reviews shall be chosen by the CPUC in consultation with CAL FIRE, with the utility choosing the independent evaluator among the CPUC's list of qualified experts. *See* Cal. Pub. Util. Code § 8386(h)(A). Although the utility will pay the costs of the independent evaluators conducting compliance reviews, the evaluators are required to "consult with, and operate under the direction of, the [CPUC's] Safety and Enforcement Division." Cal. Pub. Util.

³ The Order Instituting Rulemaking 18-10-007 to Implement Electric Utility Wildfire Mitigation Plans Pursuant to Senate Bill 901 (2018) is found at <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M235/K696/235696605.PDF>.

⁴ The Court should be aware that SB 901 provides that the CPUC may extend the deadline to approve wildfire mitigation plans only by formal order. Cal. Pub. Util. Code § 8386(e).

1 Code § 8386(h)(B)(i). The CPUC is required to penalize a utility for failing to comply with
2 approved wildfire mitigation plans. Cal. Pub. Util. Code § 8386.1.

3 Only those costs incurred by the utility to implement its wildfire mitigation plan that
4 the CPUC determines are reasonable may be recoverable from ratepayers. Cal. Pub. Util.
5 Code § 8386(j).

6 SB 901 also requires the utility to submit to an independent third-party evaluation of
7 its safety culture each year, and begins to tackle the difficult question of cost-responsibility
8 for utility infrastructure-related wildfires. *See, e.g.,* Cal. Pub. Res. Code §4205(a), (b); Cal.
9 Pub. Util. Code § 8386.2.

10 In short, the CPUC's Rulemaking to consider the utilities' SB 901 mitigation plans
11 will be a comprehensive consideration of many aspects of wildfire mitigation and prevention
12 and will be an appropriate forum in which to hear from a broad cross-section of interests.

13 **B. The CPUC's Current Regulations for De-Energization Require A**
14 **Utility to De-Energize Its Electrical System Only After Fully**
15 **Informing Affected Persons of De-Energization and Only After**
16 **Reasonably Limiting the Impacts.**

17 De-energization of the electric grid must be carefully exercised because it leaves
18 communities and essential services without electrical power. *See* Letter from Counties of
19 Mendocino, Napa, and Sonoma to Michael Picker, dated January 23, 2019 (**Exhibit 10**); *see*
20 *also* City of Malibu's Petition for Modification of Resolution ESRB-8, dated October 5,
21 2018 (**Exhibit 13**), at 6. Deciding whether to de-energize is a nuanced and multi-
22 dimensional analysis. The goal of de-energization is to limit its scope and "avoid[] power
23 cutoffs to essential services that are critical during emergencies." Rulemaking 18-12-005
24 (**Exhibit 1**), at 5. It should be reserved as a "last line of defense to protect public safety due
25 to extreme fire weather conditions," CPUC Resolution ESRB-8, 2018 WL 3584003 (July
26 12, 2018) (**Exhibit 4**), not as a first step.

27 The CPUC expects the electric utilities to use all pertinent inputs and tools at its
28 disposal before determining that de-energization is the correct decision. These
considerations include: atmospheric conditions, the state of vegetation, wind speeds, weather

1 sensors and wind modeling software, the type and quality of utility infrastructure,
2 knowledge of population centers, their density, and vulnerable communities, evacuation
3 routes, and proximity of first responders. *See*, e.g., Rulemaking 18-12-005 (**Exhibit 1**), at 5.
4 The utility is not permitted to consider wind conditions alone.

5 Utilities must follow a series of specific protocols and reasonably limit a de-
6 energization's impact, including tailoring its geographic scope to the areas where conditions
7 warrant it. The guidelines are contained in CPUC Resolution ESRB-8, and require a utility
8 to perform the following:

- 9 • The utility must rely on other measures, to the extent available, as alternatives to
10 de-energization;
- 11 • The utility must "reasonably believe that there is an imminent and significant risk
12 that strong winds will topple its power lines onto tinder dry vegetation during
13 periods of extreme fire hazard;"
- 14 • The utility must consider efforts to mitigate the adverse impacts on the customers
15 and communities in areas considered for de-energization;
- 16 • The utility must take steps to warn and protect its customers when it de-
17 energizes; and
- 18 • The utility must consider other factors, as appropriate, to assess whether de-
19 energization is reasonable.

20 CPUC Resolution ESRB-8 (**Exhibit 4**). ESRB-8 also requires that the utilities meet with the
21 local communities that may be impacted by a future de-energization event before it occurs,
22 requires notification to appropriate first-responders, critical facilities, and customers as far
23 ahead of time as feasible prior to a de-energization event, requires notification to the
24 CPUC's Safety and Enforcement Division as soon as practicable after a decision to de-
25 energize facilities and within 12 hours after the last service is restored, and submit a report
26 to the CPUC within 10 business days after each de-energization.

1 **1. The CPUC, CAL FIRE, and the California Office**
 2 **of Emergency Services Have Collaborated on De-**
 3 **Energization Notification Improvements.**

4 In October 2018, the CPUC, CAL FIRE, and the Governor's Office of Emergency
 5 Services together informed California's three large electric utilities that they expect real-
 6 time information to increase the likelihood of an orderly de-energization event during high
 7 wildfire weather conditions. *See* letter dated October 26, 2018 (**Exhibit 2**). The protocol
 8 required by the State involves:

- 9 • Immediately notifying to the California State Warning Center of the utility's plan
 10 to de-energize, the utility's decision to de-energize, actual de-energization, and
 11 restoration of power. This protocol still contemplates a utility's compliance with
 12 other de-energization protocols, such as notifying the public.
- 13 • The utility providing maps identifying in granular detail the de-energized areas,
 14 circuits, and roads, so that the maps can be shared with local, state, and federal
 15 partner agencies.
- 16 • Data on de-energization start and end times, the number of Medical Baseline
 17 Customers affected, the identities of impacted critical customers (e.g., hospitals,
 18 fire stations, police stations, water/irrigation districts and waste water treatment
 19 plants, communications facilities, and schools).

20 **C. The CPUC Very Recently Initiated a Rulemaking to Improve**
 21 **Electric De-Energization in Dangerous Conditions, With A Focus**
 22 **on Providing a Broad Forum to Receive Comments from Utility**
 23 **Customers, First Responders, Local Communities, and Anyone**
 24 **Affected by De-Energization Events.**

25 Only last month, the CPUC instituted Rulemaking 18-12-005 (**Exhibit 1**) to consider
 26 improvements to Resolution ESRB-8 in light of recent de-energization events. This
 27 Rulemaking recognizes that electric utilities have in the past "used the option of proactively
 28 shutting down power to specific power lines to limit the impact or damage of these lines to
 communities in situations where the utilities are aware of dangerous conditions," but also
 recognizes that "de-energization can leave communities and essential facilities without
 power, which brings its own risks and hardships, particularly for vulnerable communities."
 Rulemaking 18-12-005 (**Exhibit 1**), at 2.

1 The primary focus of the Rulemaking will be to (a) examine conditions in which
2 proactive and planned de-energization is practiced; (b) develop best practices and ensuring
3 an orderly and effective set of criteria for evaluating de-energization programs; (c) ensure
4 electric utilities coordinate with state and local level first responders, and align their systems
5 with the Standardized Emergency Management System framework (“SEMS”);⁵ (d) mitigate
6 the impact of de-energization on vulnerable populations; (e) examine whether there are ways
7 to reduce the need for de-energization; (f) ensure effective notice to affected stakeholders of
8 possible de-energization and follow-up notice of actual de-energization; and (g) ensure
9 consistency in notice and reporting of de-energization events. *Id.*

10 Actual de-energization events produce a significant volume of input to the CPUC
11 from those affected. This is hardly surprising because de-energization causes far-reaching
12 impacts (discussed below) and utilities are not always able to adequately pre-warn the public
13 of de-energization. After passage of ESRB-8 in July 2018, and pursuant thereto, the
14 electrical utilities were required to and did hold meetings between July and November 2018
15 in communities that could be affected by de-energization and entertain concerns, particularly
16 related to impacts on vulnerable populations and emergency responders.

17 The de-energization Rulemaking 18-12-005 will seek “input from affected
18 communities, governments, first responders and other stakeholders,” and the CPUC has
19 planned “workshops in different parts of the state to receive input on de-energization” and
20 “examine how de-energization has affected California thus far, and to refine [the CPUC’s]
21 approach to the practice to ensure it enhances public safety while minimizing unintended
22 consequences.” Rulemaking 18-12-005 (**Exhibit 1**) at 3. Already, the CPUC has held two
23 statewide workshops to receive public input: the first on December 14, 2018 in Santa Rosa,
24 California, and the second on January 9, 2019 in Calabasas, California. Parties will file
25

26
27 ⁵ SEMS is the system required by Government Code Section 8607(a) for managing
28 emergencies involving multiple jurisdictions and agencies.

1 written comments, and hearings may be held. The CPUC received extensive comments
 2 from members of vulnerable populations, mayors, community leaders, residential customers,
 3 businesses, and first responders.

4 The CPUC has begun a formal rulemaking to determine California's best path
 5 forward in the relatively nascent area of power-line de-energization as a means of combating
 6 wildfire. Critically, the CPUC's rulemaking will be informed by the input of the
 7 communities most likely to be impacted, will consider the issue of notice to those affected,
 8 and develop a series of best practices that can be used in the future.

9 **D. SB 901 Sits Atop Recently-Adopted and Now-Coalescing CPUC**
 10 **Measures Intended to Enhance Wildfire Prevention, Suppression,**
 11 **and Mitigation.**

12 **1. A Recent MOU Between the CPUC and CAL FIRE**
 13 **Ensures Close Cooperation and Draws From CAL**
 14 **FIRE's Expert Knowledge of Wildfire Prevention,**
 15 **Suppression, and Mitigation.**

16 CAL FIRE is the lead investigator of wildfire ignitions in California. The CPUC has
 17 long worked closely with CAL FIRE to determine whether utility equipment that might be
 18 linked to wildfire ignitions meets the CPUC's safety standards. More recently, however, the
 19 CPUC and CAL FIRE have enhanced their reliance on each other's respective expertise in
 20 conducting investigations and routinely share investigatory data.

21 In August 2017, the CPUC and CAL FIRE executed a Memorandum of
 22 Understanding ("MOU") to memorialize a shared commitment to "develop consistent
 23 approaches to forest management, wildfire prevention, public safety, and energy programs,"
 24 to "[a]ssist one another in preparing for, responding to, and mitigating the effects of
 25 wildfires," and to establish the Interagency Fire Safety Working Group ("IFSWG"). (The
 26 MOU is attached as **Exhibit 5**.) The IFSWG, comprised of directors and programmatic staff
 27 from both agencies, have since been meeting monthly to: inform and assist each agency's
 28 respective wildfire investigation efforts and regulatory and enforcement duties; align their
 understanding of fire mapping and effective vegetation management; enhance the CPUC's

enforcement of General Order 95;⁶ optimize wildfire suppression mobilization efforts and communications and the utilities' participation in them; and contribute to and regulate the utilities' fire hazard prevention plans. The CPUC and CAL FIRE are working in lockstep on the issue of fire prevention, detection, suppression, and mitigation.

2. The CPUC Has Recently Developed, Adopted, and Employed a Comprehensive Statewide Fire Mapping Project.

The CPUC began interim fire mapping in 2009 but initiated the formal Rulemaking 15-05-006 to develop and adopt a single statewide map. In 2017, the CPUC adopted Fire-Threat Maps and established a new classification, the High Fire Threat District, and integrated them into General Order 95 such that stricter regulations would apply to the new High Fire Threat District. The High-Fire Threat District map is a composite of two maps: (1) a U.S. Forest Service-CAL FIRE joint map of Three Mortality High Hazard Zones ("HHZs"), or the Tree Mortality HHZ Map; Tier 1 HHZs are zones where tree mortality is in direct proximity to communities and critical infrastructure (roads and utility lines), and are a *direct* threat to public safety; Tier 2 HHZs are in watershed areas and are not pertinent here; and (2) a CPUC Fire-Threat Map was recently adopted on January 19, 2018, and is required by CPUC Decisions 17-01-009 and 17-06-024 to be updated every ten years; Tier 2 fire-threat areas are those with an *elevated* risk (including likelihood and potential impacts on people and property) from utility-associated wildfires; and Tier 3 fire-threat areas depict areas where there is an *extreme* risk (including likelihood and potential impacts on people and property from utility-associated wildfires). All maps are available at www.cpuc.ca.gov/FireThreatMaps.

In January 2018, the CPUC adopted a comprehensive statewide fire-threat map with Tier 2 (Elevated Fire Threat) and Tier 3 (Extreme Fire Threat) High Hazard Zones

⁶ CPUC's GO 95, which governs utility overhead line construction, was amended in May 2018 to strengthen pole and wire regulations.

(“HHZs”); these maps were developed using the U.S. Forest Service and CAL FIRE’s joint map of tree mortality HHZs. This wildfire map is overlaid with substantial data to enhance wildfire prevention, mitigation, and suppression. The data overlays identify the location of electric utility infrastructure, geographic and topographic details, forestry density, concentrations of tree mortality (dead and dying trees), among other things. This wildfire mapping effort is designed to help utilities, together with the CPUC and CAL FIRE, pinpoint and rank the areas of highest wildfire risk and prioritize inspections, repairs and replacement, and vegetation management.

3. Vegetation Management Is an Resource-Intensive Undertaking That Requires a Reasonable Schedule to Effectively Accomplish.

Electric utilities’ vegetation management practices must account for the sheer breadth of the undertaking. Northern California has over eight times the amount of CPUC Fire-Threat Map Tier 2 elevated acreage as Southern California (51,827 acres to 6,352 acres), although both the Northern and Southern California regions each have about 6,000-6400 acres of CPUC Fire-Threat Map Tier 3 acres. As well, the State’s comprehensive fire mapping discussed above should inform vegetation management risk identification and prioritize vegetation management plans according to highest risk. The framework of the CPUC’s ratemaking and safety regulation counsels an emphasis on a well-ordered and thorough vegetation management program, which requires a longer, more considered schedule than the proposed order envisions.

Vegetation management at the transmission level begins with the 2005 Energy Policy Act, 16 U.S.C. § 8240, which authorized FERC to certify the North American Electric Reliability Corporation (“NERC”) as the organization to develop and enforce standards for the electric transmission system. NERC’s Reliability Standards for Vegetation Management is FAC-003-4 and does not set forth mandatory minimum clearances, but it does endorse certain American National Standards Institute (“ANSI”) standards with specific vegetation removal as industry best practices.

CPUC General Order 95⁷ is the CPUC's regulation governing the construction and maintenance of overhead electrical facilities. Rule 31.2 of General Order 95 requires that overhead electric lines "be inspected frequently and thoroughly for the purpose of ensuring that they are in good condition so as to conform" with the remainder of the rules in the General Order. Rule 31.2 of General Order 95 requires overhead electric supply lines and communications lines to be inspected "frequently and thoroughly for the purpose of ensuring that they are in good condition."

In addition, electric utilities are required by the CPUC's General Order 165 to conduct patrol inspections and detailed inspections of their overhead electric distribution facilities at the following intervals:

Table 1			
GO 165 Inspection Intervals for Overhead Electric Distribution Facilities			
Patrol Inspection		Detailed Inspection	
Urban	Rural	Urban	Rural
1 Year	2 Years (See Note 1)	5 Years	5 Years
Note 1: Patrol inspections in rural areas are once per year in the Extreme and Very High Fire-Threat Zones of the following counties: Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura. Extreme and Very High Fire-Threat Zones are defined by the California Department of Forestry and Fire Protection's Fire and Resource Assessment Program Fire Threat Map (FRAP Map).			

CPUC Decision 12-01-032 defines "patrol inspections" as "simple visual inspections that are designed to identify obvious structural problems and hazards," and defines "detailed inspections" as "careful visual inspections using binoculars and measuring devices, as appropriate."

⁷ <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M217/K418/217418779.pdf>.

1 Rule 35 of General Order 95 prescribes vegetation management standards such as
 2 *minimum* radial vegetation clearances from electric equipment. Rule 35 is attached as
 3 **Exhibit 6**. This Rule derives in part from the minimum vegetation clearance requirements
 4 in Cal. Pub. Res. Code §§ 4292-4293. *See* Guidelines for Rule 35 (**Exhibit 7**). Rule 35
 5 provides for greater radial clearances for “Case 14” equipment, i.e., where lines are in High
 6 Fire Threat Districts. *See* Guidelines for Rule 35 (**Exhibit 7**). Rule 35’s Guidelines provide
 7 that prudent vegetation management may require greater clearances, taking into
 8 consideration such factors as:

9 line operating voltage, length of span, line sag, planned
 10 maintenance cycles, location of vegetation within the span,
 11 species type, experience with particular species, vegetation
 12 growth rate and characteristics, vegetation management
 13 standards and best practices, local climate, elevation, fire risk,
 and vegetation trimming requirements that are applicable to
 State Responsibility Area lands pursuant to Public Resource
 Code Sections 4102 and 4293.

14 Rule 35 was adopted in 1942 and has been improved and updated since then.
 15 Through 1995, there were no mandatory minimum vegetation clearance requirements. In
 16 September 1996, the CPUC first mandated a vegetation clearance requirement of six inches.
 17 *See* CPUC Decision 05-01-030. In January 1997, the CPUC increased the clearance to 18
 18 inches. Although the present day’s greater radial clearances for Case 14 cases was first
 19 implemented in 2009 only for Southern California High Fire Threat Areas, *see* CPUC
 20 Decision 09-08-029, 2009 WL 2910747, the larger Case 14 clearance requirement has
 21 applied statewide since 2017, *see* CPUC Decision 17-12-024, 2017 WL 6621842.

22 Public utilities also encounter sometimes voluntary and involuntary cooperation of
 23 landowners for utilities to access private property or trim trees originating on privately-
 24 owned land. In order to assist utilities in expeditiously executing their vegetation
 25 management plans, the CPUC amended Electric Tariff Rule 11 to allow electric utilities to
 26 disconnect electric service to a customer in the High Fire-Threat District who does not
 27 cooperate with a utility’s proper vegetation management. *See* CPUC Decision 17-12-024,
 28

1 2017 WL 6621842. Another emerging challenge associated with vegetation management in
2 California is the expansion of the urban-forest interface and PG&E's statutory duty to serve
3 – and construct lines to and around – many of these new communities in higher fire-risk
4 areas.

5 The complexity and magnitude of responsible vegetation management requires a
6 carefully considered plan that reflects regulatory safety standards, environmental protection
7 and local concerns. *See* Letter from Counties of Mendocino, Napa, and Sonoma to Michael
8 Picker, dated January 23, 2019 (**Exhibit 10**). The CPUC requests that the Court refrain
9 from potentially conflicting with the federal and state overhead electric safety and
10 vegetation management regulations.

11 All of the foregoing is merely to demonstrate that the State of California is more than
12 aware of the wildfire crisis it is undergoing. The CPUC, in alignment with coterminous
13 branches of State government, has already set upon a deliberate path to bring order to the
14 issue of de-energization and the multitude of other factors that contribute not only to
15 wildfires, but also to the difficulties inherent to protecting susceptible groups from
16 unnecessary, prolonged electricity outages.

17 **IV. THE CONSEQUENCES OF THE PROPOSED NEW TERMS OF**
18 **PROBATION WOULD HAMPER FIREFIGHTING CAPABILITIES**
19 **AND CAUSE BROADER NEGATIVE IMPACTS TO PUBLIC**
20 **HEALTH AND SAFETY**

21 De-energization events are very different from power blackouts. They are far longer
22 in duration and may last three days or even more; they require physical inspections of the
23 de-energized assets prior to re-energizing them; and they can affect a wide geographic area.
24 Without consideration of de-energization's potential characteristics, the Court's proposed
25 order could cause widespread unintended negative consequences by imperiling both fire-
26 suppression and emergency first-responder capabilities and by adversely impacting public
27 health and safety across a broad spectrum.

28 The CPUC's experience is that customers, the broader public, first responders, and
providers of essential services do not feel that their concerns and interests are adequately

considered in a utility's decision to de-energize. Throughout the 2018 wildfire season, California's electric utilities called several de-energization events. The CPUC received a large amount of feedback from the public, government agencies, and first responders about the utility's implementation of Resolution ESRB-8. The CPUC determined that it should review how Resolution ESRB-8 is working in practice in part by receiving feedback and input from a broad base of affected persons: local communities, government agencies, first responders, and the broader public. The CPUC's new Rulemaking 18-12-005 will consider the actual experiences of customers, including in particular vulnerable populations, state and local first responders, and others. Rulemaking 18-12-005 (**Exhibit 1**) at 2.

A. Loss of Electric Power Will Negatively Impact Communications Services Supporting Both Wildfire-Suppression Capabilities and the General Public.

Communications networks of the 21st century depend substantially on a functioning electrical distribution system. *See* Declaration of Karen Eckersley in Support of CPUC Comments, ¶ 5 ("Eckersley Decl.") (**Exhibit 8**). The world's reliance on the internet, smart phones, constant connection, and immediate access to emergency response require a constant, reliable operation of the electric grid. The communications network will fail in critical places without electrical power, and the result is that first responders, the public, and the machines which operate California's electrical grid will fail. For example, home devices, hospital equipment, and communications network infrastructure, including cell towers and landlines, rely on electricity provided by power companies. *Id.*

1. First Responders Rely on Utility Electric Services to Meet the Demands of Emergency Situations.

Emergency services require a functioning wireless and wireline infrastructure, upon which the public relies to make 9-1-1 calls and the first responders rely to receive those calls and gain situational awareness in emergency events. *See id.* ¶¶ 11, 12; *see also* Letter from Signatory Communications Companies to Alice Stebbins, dated January 24, 2019 (**Exhibit 9**). Incident coordination in large-scale disasters depends on cell towers, internet service, and land lines to communicate with each other to manage wildfire response, coordinate and

1 triage evacuation centers, and to direct the public and emergency personnel to specific
2 locations. Fire Chief Anthony Bowden of the Santa Clara County Central Fire Protection
3 District (“Santa Clara County Fire”) recently was involved in combating the Summer 2018
4 Mendocino Complex Fire. On August 20, 2018, he submitted a declaration to the U.S.
5 Court of Appeals for the District of Columbia Circuit in *Mozilla Corp. v. FCC*, Appeal No.
6 18-1051(L) and consolidated cases (concerning the FCC’s net neutrality rule repeal),
7 explaining the extent of the Santa Clara County Fire’s reliance on Internet-based systems,
8 which (as discussed above) depend on utility electrical service. “[Santa Clara] County Fire
9 relies upon Internet-based systems to provide crucial and time-sensitive public safety
10 services. The Internet has become an essential tool in providing fire and emergency
11 response, particularly for events like large fires which require rapid deployment and
12 organization of thousands of personnel and hundreds of fire engines, aircraft, and
13 bulldozers.” Bowden Decl., ¶ 4.⁸

14 The State of California Office of Emergency Services, too, relies on the Internet to
15 “track, organize, and prioritize routing of resources from around the state and country to
16 sites where they are most needed.” *Id.*, ¶ 6. When Santa Clara County Fire recently
17 deployed a support team in response to California Office of Emergency Services’ call for
18 statewide mutual fire assistance, Santa Clara County Fire’s support team “relied heavily on
19 the use of specialized software and Google Sheets to do near-real-time resource tracking
20 through the use of cloud computing over the Internet.” *Id.*, ¶ 6.

21 The public relies on communications infrastructure to make 9-1-1 calls, and first
22 responders rely upon this same infrastructure to receive those calls and manage emergencies.
23 Situation management of emergencies by first responders depends on cell towers, internet
24 service, and land lines to communicate with each other to manage wildfire and other disaster

25
26
27 ⁸ This declaration can be accessed at <https://arstechnica.com/wp-content/uploads/2018/08/fire-department-net-neutrality.pdf>.
28

1 response, coordinate and triage evacuation centers, and to direct the public and emergency
2 personnel to specific locations. Eckersley Decl., ¶ 13.

3 Public Safety Answering Points (“PSAPs”) also require power to maintain their
4 operations at a local level. A PSAP is the name for the location of the service with people
5 who answer, coordinate, and respond to the public’s 9-1-1 calls. Id. at ¶ 11. The California
6 Office of Emergency Services provides guidance to local agencies for maintaining
7 operations for a very short period of time without electricity, and each local government
8 determines the amount of time that their PSAP will be operational without electricity. There
9 are approximately 450 PSAPs in California, each is funded by its local government for
10 operations, and hence there is variability in the times each facility can operate on backup
11 power. Id. at ¶ 14.

12 Additionally, electricity is generally necessary to pump water at sufficient pressure
13 for fire-fighting purposes. Lack of water pressure directly compromises firefighting
14 capabilities. See Declaration of James Boothe In Support of CPUC Comments, ¶ 8 (Boothe
15 Decl.) (Exhibit 12).

16 2. Wireline Infrastructure Network Power.

17 Wireline communications are provided by both local exchange carriers and cable
18 companies. The network facilities of both of these types of providers require power to
19 operate. Central offices are wireline carrier facilities which serve a number of customers
20 with traditional phone service and/or DSL. Eckersley Decl., ¶ 9.

21 The CPUC has information on the network power resources which serve 54% of
22 California residential and small business subscribers. Of the approximately 900 central
23 offices that serve these subscribers, approximately 36% would lose the ability to operate
24 after 1-3 days (24-72 hours) without power from the electrical grid. Fifty-one percent of the
25 central offices would lose the capacity to operate on battery power after 10 days, while the
26 remaining 13% have the possibility to operate for longer depending on availability of fuel
27 that feeds the onsite generator. However, these calculations are approximate and dependent
28

1 on many variables such as traffic on the network e.g., the more traffic, the more drain on
2 batteries, availability of diesel fuel and accessibility of central office locations (for diesel
3 fuel delivery). Id. at ¶ 10.

4 The CPUC does not have rules for the provision of backup power for communication
5 network elements in wireless or wireline networks. The Federal Communications
6 Commission requires those central offices which serve PSAPs to have only 24 hours of
7 battery backup and selective routers (the switches which route calls to PSAPs) to have 72
8 hours. Id. at ¶ 11. Thus, there is no assurance that the telecommunications networks have
9 anything close to an adequate supply of backup energy to power their systems during a
10 prolonged electrical outage.

11 **3. Electric Utilities.**

12 Power companies themselves rely on communications infrastructure to provide inter-
13 machine and voice communications to remote stations. PG&E reported to the CPUC in
14 December of 2017 that 8,951 communication circuits based on copper technology leased
15 from a variety of communication providers provide critical communications to their power
16 assets. These critical communications consist of communication facilities which provide
17 voice and potentially remote control of devices within the electrical facilities. In other
18 words, the electric utility's own communication facilities and equipment require power to
19 operate. Id. at ¶ 12.

20 **4. Experience Demonstrates that De- 21 Energizations Result in Lost Phone Service.**

22 Beginning on October 13, 2018, PG&E conducted a public safety power shutoff
23 ("PSPS" or de-energization) event during a period of predicted high winds and fire danger,
24 which resulted in 67 cell sites in California losing power for between 4 and 40 hours. These
25 67 cell sites were operated by the five facilities-based wireless companies operating in
26 California, and hundreds of their resale partners (companies which resell minutes without
27 owning cellular infrastructure) were also unable to provide service to their customers during
28 that period. Id. at ¶ 6.

1 Cellular resellers are the primary providers of wireless LifeLine service, an essential
2 communications service provided for low-income households in California. The CPUC has
3 the responsibility both to designate carriers for providing federal Lifeline funds and for the
4 collection and payment of funds for the California LifeLine program. The California
5 LifeLine program provides discounted home phones and cell phone service to qualified
6 households. This service lowers phone bills for low-income households and insures access
7 to voice and broadband services. Id. at ¶ 7.

8 Additionally, during this particular PSPS event, nine cities and towns in California
9 experienced cell site outages from multiple carriers at the same time. It is likely a high
10 percentage of customers in these areas were not able to make wireless calls when the cell
11 sites were out of service. The communities which had outages at the same time from
12 multiple carriers are Calistoga, Camino, Colfax, Placerville, Pollock Pines, Fontana, Irvine,
13 Orange, and Silverado. The result of the PSPS was that no one could make a wireless call in
14 these communities during the de-energization. Id. at ¶ 8.

15 **5. Local Government Impacts.**

16 According to the El Dorado County Sheriff's Department, the County of El Dorado
17 experienced de-energization in the latter half of 2018 to reduce the risk of wildfire.
18 According to Lieutenant Beyers of the El Dorado County Sheriff's Department, the pre-
19 emptive PSPS cut off power to the street lights that comprised the only evacuation route out
20 of the area. Lieutenant Beyers believes that if a wildfire or other disaster that necessitated
21 evacuation were to have occurred at this time, the ensuing traffic gridlock would have been
22 catastrophic. Id. at ¶ 19.

23 Similar concerns have been raised by the City of Malibu, which, like El Dorado
24 County, has relatively few traffic lights and limited ways in and out of the populated areas,
25 conditions which can impair evacuation during de-energization. See **Exhibit 13** at p. 3.

6. Public Reliance and Vulnerable Populations.

The public relies on cell towers, internet, and land lines to communicate with first responders, for their own emergency needs as well as to communicate the location of new, spreading, or quickly-moving fires. The public also relies on electric service to charge their own cell phones and maintain power for their home electrical devices (routers, modems, cordless phones). Id. at ¶ 15.

The CPUC held a workshop on December 14, 2018, to address the impacts of PSPS, or electricity grid de-energization, on vulnerable populations. De-energizations have wide-reaching impacts, especially when they occur for indefinite periods of time. As part of the October 2018 PSPS event described in Section IV.A.4, de-energization occurred in Santa Rosa. According to Chris Coursey, Mayor of the City of Santa Rosa, the consequences of the de-energization were significant and widespread. Mayor Coursey noted examples of difficulties that emerge from extensive or indefinite periods of de-energization, including the spoiling of food and whether to evacuate due to homes becoming uninhabitable from the inability to regulate temperatures. These impacts would also apply to senior centers, group homes, and other medical facilities. Id. at ¶ 16.

According to another workshop attendee who spoke on the impacts of de-energization on vulnerable populations, there are Californians that rely on power for the use of medical technology that performs a life-saving function, such as a respirator while sleeping. This point would apply to other home medical equipment. Furthermore, these vulnerable populations may not have the financial means necessary to purchase back-up generators due to being on a fixed income. They may also lack the means to evacuate to an area not experiencing a PSPS. Id. at ¶ 18.

B. Impacts of Loss of Power On Potable and Agricultural Water Services and Wastewater and Sewer Services

The State Water Project is the largest state-owned, multi-purpose water project in the country. It pumps and transports water across nearly the entire state and delivers an average of 3.3 million acre-feet of water per year to 29 public agency water contractors throughout

1 California. Approximately 40% of the deliveries are used to irrigate about 750,000 acres of
2 farmland, and the remainder of deliveries serve the water needs of more than 24 million
3 Californians. Although the State Water Project generates electricity to meet some of its own
4 power needs through hydropower, a significant portion of its operations depends on
5 deliveries of electricity through PG&E's electrical system. Its dependence on PG&E's
6 electric system increases in drought years.

7 The California Water Association ("CWA"), a statewide association that represents
8 water utilities that provide water to six million Californians, has written to the CPUC with
9 its concerns about the Court's Order to Show Cause. *See* Correspondence from Jack Hawk
10 of CWA to Michael Picker, dated January 24, 2019 (**Exhibit 11**). In the letter, CWA notes
11 that first responders rely on the availability of water for fire protection and suppression, and
12 that the water systems "unequivocally" rely on electricity for operation. *Id.* at p.1. The letter
13 notes that water utilities would have to invest many millions of dollars in coming years to
14 have available backup power generation, and also notes the unfortunate fact that permits for
15 fossil-fuel burning generators are difficult to obtain from regional Air Quality Management
16 Districts because of the amount of greenhouse gases they emit. *Id.* at pp.2-3.⁹

17 While some of the larger water utilities have some backup power, with short notice it
18 may not be possible to relocate the necessary backup generators to impacted areas. There is
19 no public, centralized source of information that tracks the amount of backup power each
20 utility has at each facility, if it has any at all. Boothe Decl., ¶ 5.

21 Except for a small percentage of gravity-fed water systems and pumps fueled by
22 natural gas, the pumps at all water utilities require electricity in order to operate, and without
23

24 ⁹ The prospect of not only water utilities, but many Northern Californian businesses and
25 homes having to purchase, in all likelihood, diesel generators to prepare for large-scale,
26 prolonged de-energizations brings with it many unwelcome elements. Diesel generators are
27 themselves fire hazards, require a continuous supply of diesel fuel, are very difficult to
28 permit pursuant to air quality standards, and are generally not affordable to large segments
of society.

1 operable water pumps, a utility cannot deliver potable water to its customers. In fact, well
2 and distribution pumps, wastewater treatment plants, potable water treatment plants, storage
3 reservoirs, and other infrastructure dependent on electricity could be adversely impacted by
4 a prolonged de-energization. This is true of all water facilities, not just CPUC-regulated
5 water companies, but all retail water service entities such as municipal water utilities insofar
6 as they rely on PG&E. Id. at ¶ 6.

7 Commission General Order 103-A establishes rules governing water service,
8 including minimum standards for operation, maintenance, design, and construction over
9 Commission-regulated water utilities. Section VII.6.A requires that “each potable water
10 distribution system shall be operated in a manner to assure that the minimum operating
11 pressure at each service connection throughout the distribution system is not less than 40 psi
12 [pounds per square inch] . . .” Without operating pumps due to electricity outage, this
13 minimum operating pressure cannot be satisfied. Id. at ¶ 7.

14 Without access to electricity, a water utility lacks the ability to deliver potable water
15 to its customers, because the distribution system must be pressurized to move the water
16 throughout the system. The distribution system must also remain pressurized in order to
17 prevent bacteria and other harmful contaminants from entering the system. If water sits
18 unpressurized in the distribution system, there is a risk of contamination to the water, which
19 often requires utilities to advise customers to boil their water or drink bottled water once the
20 distribution has been re-pressurized, until the water can be tested to ensure safety. Id. at ¶ 8.

21 The prolonged loss of electricity at wastewater facilities could also pose a potential
22 health threat, since without electricity or some other fuel source for the pumps, the ability to
23 move the wastewater would be compromised. If the electricity is out at sewage treatment
24 facilities, there is a risk of untreated sewage contaminating waterways, like rivers, creeks,
25 and bays, depending on where the water is to be deposited. Moreover, without power, there
26 will be no water supply to businesses and residences and thus a curtailment of waste water
27
28

1 leaving homes and businesses. The inability to move human waste from a residence or
2 business is considered a health hazard. Id. at ¶ 9.

3 Many of the larger water utilities employ supervisory control and data acquisition
4 (“SCADA”) systems for the maintenance and operation of their infrastructure. A SCADA
5 system monitors and adjusts the operating parameters for the facilities of a water utility from
6 well production and water treatment to water distribution to ensure the various components
7 are operating within acceptable parameters to provide safe and reliable water quality to
8 residential, business, and institutional customers 24 hours a day and 365 days a year.
9 SCADA systems can be relatively simple, such as one that monitors environmental
10 conditions of a small office building, or incredibly complex, such as a system that monitors
11 all the activity in a nuclear power plant or the activity of a large municipal or investor-
12 owned water system. SCADA systems depend on electricity to run the computers and the
13 telecommunications network (landline, cellular, microwave) to communicate with a
14 multitude of infrastructure facilities. Without power, water utilities that employ a SCADA
15 system would have no efficient or continuous means to monitor facility safety. Id. at ¶ 11.

16 After any power outage of any substantial length, a water utility would need to
17 sample and test for the quality of its water throughout its entire system – and take corrective
18 measures where necessary – before assuring its customers that its water was safe for use. It
19 could take days for some water utilities to come back on to full service after an outage. Id. at
20 ¶ 12.

21 **C. Impacts of De-Energization on Vulnerable Communities and On**
22 **General Public Health, Safety, and Wellbeing**

23 In recognition that electricity is a human necessity, Cal. Pub. Util. Code § 739(b)
24 requires the CPUC to “designate a baseline quantity of gas and electricity which is necessary
25 to supply a significant portion of the reasonable energy needs of the average residential
26 customer.” This baseline quantity is to inform the CPUC in designing rates to ensure that
27 the minimum required amount of electricity is affordable. Cal. Pub. Util. Code § 739(d)(1).
28 The minimum quantity must recognize that some customers living in areas with high

1 summer temperatures or low winter temperatures have varying baseline requirements. Cal.
2 Pub. Util. Code § 739(a)(1). Such nuance in public utility regulation is particularly
3 important in light of heat waves experienced in many parts of the State during the summer
4 and for persons whose body temperatures must be regulated for medical reasons. *See* Cal.
5 Pub. Util. Code § 739(c)(3)-(5).

6 The CPUC is required to establish higher baseline quantities for “residential
7 customers dependent on life-support equipment.” Cal. Pub. Util. Code § 739(c)(1). This
8 includes customers whose lives depend on uninterrupted supplies of electricity to power
9 respirators, iron lungs, hemodialysis machines, suction machines, electric nerve stimulators,
10 pressure pads and pumps, aerosol tents, electrostatic and ultrasonic nebulizers, compressors,
11 IPPB machines, and motorized wheelchairs. *See* Cal. Pub. Util. Code § 739(c)(2). These
12 vulnerable communities merit particularly careful consideration when implementing de-
13 energization events.

1 **V. CONCLUSION**

2 The CPUC believes that safe and appropriate de-energization actions are only those
3 done in accordance with the CPUC's regulations, guidelines, and protocols. The CPUC
4 respectfully urges the Court to allow the CPUC to continue its redoubled efforts to prevent
5 and mitigate the risks of catastrophic fires within the context of regulating a human
6 necessity: the safe and reliable provision of electrical utility service at just and reasonable
7 rates.

8
9 Respectfully submitted,

10
11 January 25, 2019

By: /s/ Christine Jun Hammond
AROCLES AGUILAR
CHRISTINE JUN HAMMOND
CHRISTOFER NOLAN

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14 Attorneys for the CALIFORNIA PUBLIC
UTILITIES COMMISSION
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CERTIFICATE OF SERVICE

I, Christine J. Hammond, the undersigned, hereby declare as follows:

1. I am over the age of 18 years old and am not a party to the within cause. I am employed by the California Public Utilities Commission in the City of San Francisco, California. My business address is 505 Van Ness Avenue, San Francisco, CA 94102.

2. On January 25, 2019, I electronically served the document titled:

- **COMMENTS OF THE CALIFORNIA PUBLIC UTILITIES COMMISSION
IN RESPONSE TO ORDER TO SHOW CAUSE**
- **EXHIBITS 1-13**

in Case No. 14-CR-00175-WHA on whacrd@cand.uscourts.gov.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 25th day of January, 2019, at San Francisco, California.

/s/ Christine Jun Hammond

CHRISTINE JUN HAMMOND

EXHIBIT 1

ALJ/UNC/mph

Date of Issuance 12/19/2018

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to
Examine Electric Utility
De-Energization of Power Lines in
Dangerous Conditions.

FILED
PUBLIC UTILITIES COMMISSION
DECEMBER 13, 2018
SAN FRANCISCO, CALIFORNIA
RULEMAKING 18-12-005

ORDER INSTITUTING RULEMAKING

Summary

The Commission opens this Order Instituting Rulemaking (OIR) to examine its rules allowing electric utilities under the Commission's jurisdiction to de-energize power lines in case of dangerous conditions that threaten life or property in California. The Commission recently adopted de-energization rules in Resolution ESRB-8,¹ which built on Decision (D.) 12-04-004. Resolution ESRB-8 will remain in effect during the pendency of this proceeding unless and until the Commission explicitly modifies or rescinds it.

California is experiencing an increase in wildfire events due to a number of factors, including an extended period of drought, upwards of 10 years, increased fuel for fires, and unprecedented conditions that are leading to extreme weather events. Exacerbating wildfire conditions are energized power lines and the

¹ Resolution Extending De-Energization Reasonableness, Notification, Mitigation and Reporting Requirements in Decision 12-04-024 to All Electric Investor Owned Utilities (July 16, 2018), available at <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M218/K186/218186823.PDF>.

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potential of these lines to either spark or worsen an existing wildfire. To mitigate these and other risks, electric utilities have in the past used the option of proactively shutting down power to specific power lines to limit the impact or damage of these lines to communities in situations where the utilities are aware of dangerous conditions. However, de-energization can leave communities and essential facilities without power, which brings its own risks and hardships, particularly for vulnerable communities.

This proceeding will focus on the following issues:

- Examining conditions in which proactive and planned de-energization is practiced;
- Developing best practices and ensuring an orderly and effective set of criteria for evaluating de-energization programs;
- Ensuring electric utilities coordinate with state and local level first responders, and align their systems with the Standardized Emergency Management System framework (SEMS)²;
- Mitigating the impact of de-energization on vulnerable populations;
- Examining whether there are ways to reduce the need for de-energization;
- Ensuring effective notice to affected stakeholders of possible de-energization and follow-up notice of actual de-energization; and
- Ensuring consistency in notice and reporting of de-energization events.

² SEMS is the system required by Government Code Section 8607(a) for managing emergencies involving multiple jurisdictions and agencies.

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We will serve this OIR broadly, and seek input from affected communities, governments, first responders and other stakeholders. Staff has planned workshops in different parts of the state to receive input on de-energization. We intend to examine how de-energization has affected California thus far, and to refine our approach to the practice to ensure it enhances public safety while minimizing unintended consequences.

The Commission-jurisdictional electric corporations (collectively, Investor Owned Utilities or IOUs) that are required to participate in this proceeding are Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), Liberty Utilities/CalPeco Electric (Liberty), Bear Valley Electric Service, a division of Golden State Water Company (Bear Valley), and Pacific Power, a division of PacifiCorp (PacifiCorp). The Commission also invites the input of all stakeholders in guiding our approach.

In October 2018, the Commission opened a rulemaking, R.18-10-007, to implement the portions of SB 901 (Dodd) related to Wildfire Mitigation Plans. Pertinent to this proceeding, Public Utilities Code Section 8386(c)(6) requires the plans to include:

- 6) Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.

Because of the important role de-energized power lines can play in ensuring public safety and the public's keen interest in the impact of de-energization on their communities, the Commission will address the implementation and logistics for de-energization of power lines in this

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proceeding. Though this detailed examination will take place outside of the initial Wildfire Mitigation Plans OIR, we recognize that de-energization will be one element considered in the annual plans. In future years, the outcome of this proceeding may guide the portion of utilities' wildfire mitigation plans required per Section 8386(c)(6).

1. Background

Devastating wildfires have become a regular occurrence in California. The Commission is examining the impact of wildfires and other emergencies in several proceedings,³ but this proceeding will focus specifically on proactive electric power line de-energization. California Public Utilities Code (Pub. Util. Code) Sections 451 and 399.2(a) give electric utilities authority to shut off electric power in order to protect public safety. This authority includes shutting off power for the prevention of fires where strong winds, heat events, and related conditions are present.

The Commission considered and allowed SDG&E to engage in proactive de-energization in Application (A.) 08-12-021, resulting in Decision (D.) 12-04-024. That decision allowed SDG&E authority to shut off power as a fire-prevention measure against severe Santa Ana winds. SDG&E requested this authority after the 2007 wildfire season that resulted in the Rice, Witch and Guejito wildfires discussed in D.17-11-033 (on rehearing, D.18-07-025). The Commission allowed SDG&E to de-energize its lines in emergency situations

³ Those proceedings include Rulemaking (R.) 18-10-007, Order Instituting Rulemaking to Implement Electric Utility Wildfire Mitigation Plans Pursuant to Senate Bill 901 (2018); R.18-03-011, Order Instituting Rulemaking Regarding Emergency Disaster Relief Program; and R.15-06-009, Physical Security of the Electric System and Disaster and Emergency Preparedness.

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when necessary to protect public safety and adopted certain review and notice requirements when proactive de-energization takes place.

Over a period of several years, the utility deployed important new tools, such as weather sensors focused on many highly local sites capable of measuring real time wind speeds and atmospheric conditions, carefully placed video monitors, and employed sophisticated weather and wind modelling software. Over time, the company developed detailed profiles of specific geographic features (canyons and hills and not just peaks) and the settlements located nearby, and developed risk profiles for possible infrastructure failure under potential weather conditions, with the goal of limiting the scope of de-energization and avoiding power cutoffs to essential services that are critical during emergencies. Through careful observation of operation during weather events, the utility has improved the effectiveness of the program. Decision 12-04-024 provided for after-the-fact Commission reasonableness review of SDG&E's de-energization decisions, required community notice and mitigation measures, and mandated reporting to the Commission on de-energization events.

We explained the stark new reality of wildfire events in California in Resolution ESRB-8:

The 2017 California wildfire season was the most destructive wildfire season on record, and saw multiple wildfires burning across California, including five of the 20 most destructive wildland-urban interface fires in the state's history. Devastating fires raged in Santa Rosa, Los Angeles, and Ventura, and the Thomas Fire proved to be the largest wildfire in California history. These fires further demonstrated the fire risk in California. As a result of the fires and critical fire weather conditions, both the President of the United States and the Governor of California issued State of Emergency declarations. Resolution ESRB-8 at 2.

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The Commission's Safety and Enforcement Division (SED) reviewed SDG&E's de-energization events that occurred in December 2017. SED reached the following conclusions:

- SDG&E faced a real and significant risk of wildfires and its de-energization decisions were based on an adequate risk assessment.
- Prior to deciding to de-energize specific circuits, SDG&E considered and implemented other mitigation strategies, including adjustments of recloser settings, vegetation management, and inspection and monitoring during the extreme fire risk conditions.
- SDG&E considered location-specific wind speeds and the age, condition, and loading of facilities on the circuits and reasonably believed that there was an imminent and significant fire hazard.
- SDG&E made reasonable efforts to mitigate the adverse impacts on customers and communities in areas where SDG&E de-energized circuits.

SED concluded that SDG&E's actions appear to have been reasonable under the factors specified in D.12-04-024 and that SDG&E complied with the decision's reporting requirements.⁴

Resolution ESRB-8 extended the de-energization notice, reporting and reasonableness review requirements to all electric IOUs (PG&E, SCE, Liberty, Bear Valley and PacifiCorp) and adopted additional measures to supplement the

⁴ SED, Review of San Diego Gas & Electric Company December 2017 De-Energization Events, May 2018, [http://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/About_Us/Organization/Divisions/News_and_Outreach_Office/May%202018%20SED%20Review%20of%20SDGE%20December%202018%20Deenergization%20Events .pdf](http://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/About_Us/Organization/Divisions/News_and_Outreach_Office/May%202018%20SED%20Review%20of%20SDGE%20December%202018%20Deenergization%20Events.pdf).

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D.12-04-024 requirements. The new measures included more detailed reporting and additional public outreach, notification and mitigation.

The year 2018 has brought additional devastating wildfires all over the state – including the recent Camp Fire in Butte County, the largest in California’s history with the greatest death toll. At the same time as the Camp Fire, huge fires also burned in Los Angeles and Ventura Counties. In addition, the IOUs have called numerous de-energization events and the Commission has received a large volume of input from the public, government agencies and other first responders concerned about the practice. It is therefore prudent to examine how the Resolution ESRB-8 process is working, and to determine whether additional refinement is appropriate. We also seek to enhance stakeholder involvement in examining our de-energization requirements. To that end, staff will hold at least two workshops, as noted in the schedule below, and we expect to conduct other outreach around the state to allow input from local communities, first responders and others with concerns about wildfire and de-energization.

2. Preliminary Scoping Memo

The Commission will conduct this rulemaking in accordance with Article 6 of the Commission's Rules of Practice and Procedure, “Rulemaking.”⁵ As required by Rule 7.1(d), this OIR includes a preliminary scoping memo as set forth below, and preliminarily determines the category of this proceeding and the need for hearing.

⁵ All references to “Rules” are to the Commission’s Rules of Practice and Procedure unless otherwise indicated.

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2.1. Issues

The scope of this proceeding is electric IOU de-energization. The following issues are preliminarily determined to be within the scope of the proceeding:

1. Conditions in which proactive and planned de-energization is practiced;
 - a. Should the Commission limit de-energization in specific ways?
 - b. Should we develop metrics for determining when de-energization is appropriate?
 - c. How much discretion should the IOUs have in calling de-energization events?
 - d. Are there other guidelines we should apply to de-energization?
2. Best practices and a set of criteria for evaluating development of effective programs;
 - a. What are the best tools that can be applied to different landscapes and fire conditions across California?
 - b. Are there tools deployed by the National Weather Service (*e.g.*, Santa Ana Wind Warnings) used in specific locations in California that should be adapted and deployed elsewhere?
 - c. How should programs be designed for use of new technologies and for continuous improvement?
3. Notification to the public, local governments, critical facilities, and emergency responders.
 - a. What are the best ways to notify the aforementioned parties of a planned de-energization event and when power will be restored in the event of de-energization?
 - b. Do notification standards differ for vulnerable populations?

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4. Electric utility coordination with state and local level first responders when they call a de-energization event.
 - a. How do the IOUs coordinate with state and local first responders?
 - b. What is working and what is not working in this coordination?
 - c. What changes are required to ensure better coordination?
5. The extent to which the electric utilities' systems are in compliance with and align their systems with California's Standardized Emergency Management System framework (SEMS).
 - a. What are the SEMS requirements?
 - b. What do the IOUs do to meet these requirements?
 - c. What additional steps should we require to ensure the IOUs are acting in a way that furthers the SEMS process, if appropriate?
6. How to mitigate the impact of de-energization on vulnerable populations.
 - a. What are the impacts of de-energization on vulnerable populations, and what can the Commission and IOUs do to minimize these impacts?
 - b. What are the requirements and process for sharing contact information to the extent permissible by law?
7. How to reduce the need for de-energization, if possible.
8. Examine the need for community and first responder notification improvements.
 - a. How are the current notification requirements working?
 - b. What additional notice requirements should we consider?

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- c. What notification is occurring that we should discontinue, if any, due to lack of effectiveness? For example, are repeated notices causing notice fatigue and reducing the effectiveness of notice?
- 9. Examine best practices around the country or the world in implementing de-energization.
 - a. Should the Commission extend such practices to the California electric IOUs?
 - b. What is the cost of such best practices?
 - c. Would conforming California's rules to those of other jurisdictions or countries achieve greater safety for California's residents?
- 10. Develop reporting and notice requirements that best serve Californians.
 - a. What reporting and notification templates exist?
 - b. What are the best types of notification and reporting (understandable, timely, effective, complete)?
 - c. Should all IOUs use a standard notification and reporting format?
 - d. Whom should the IOUs notify of de-energization and how should they ensure their notification lists are current and relevant?
- 11. What data should be collected when IOUs initiate a de-energization event, during and after these events?
- 12. Other de-energization issues that the assigned Commissioner and Administrative Law Judge may deem appropriate.

3. Categorization; *Ex Parte* Communications; Need for Hearing

Rule 7.1(d) of the Commission's Rules of Practice and Procedure requires that an order instituting rulemaking preliminarily determine the category of the proceeding and the need for hearing. As a preliminary matter, we determine

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that this proceeding is quasi-legislative, because our consideration and approval of this matter would establish policy or rules affecting a class of regulated utilities. Accordingly, *ex parte* communications are permitted without restriction or reporting requirement pursuant to Article 8 of the Rules

We are also required to preliminarily determine if hearings are necessary. We preliminarily determine that hearings are not necessary.

4. Preliminary Schedule

The preliminary schedule for this proceeding is as follows:

SCHEDULE

EVENT	DATE
Comments on OIR filed and served, with responses to questions in "Preliminary Scoping Memo"	45 days from issuance of OIR
Staff Workshop 1: Northern California	December 14, 2018, 9:00 a.m.-12:30 p.m. Santa Rosa Veteran's Memorial Building, Lodge Room 1351 Maple Ave., Santa Rosa CA 95404 Remote Access: <ul style="list-style-type: none"> • WebEx: https://bit.ly/2KdtB61, meeting number 710 613992, Password: Mitigation • Listen-only call-in number 1-877-820-7831, access code 479881
Staff Workshop 2: Southern California	January 9, 2019, 9:00 a.m.-12:30 p.m. Calabasas Founders Hall, 100 Civic Center Way Calabasas, CA 91302 Remote Access: <ul style="list-style-type: none"> • WebEx: https://bit.ly/2RU90ef, meeting number 717 534 465, Password: Mitigation, • Listen-only call-in number 1-877-820-7831, access code 479881
Prehearing conference	February 6, 2019, 10:30 a.m., Commission hearing room A, 505 Van Ness Avenue, San Francisco, CA.

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EVENT	DATE
Scoping memo	February 2019
Prehearing conference	Wednesday, February 6, 2019 at 10:30 a.m.
Opening comments	March 2019
Reply comments	April 2019
Proposed Decision on de-energization rules	Summer 2019
Final Decision	Summer 2019

The prehearing conference (PHC) will be held for the purposes of (1) taking appearances, (2) discussing schedule and process, and (3) informing the scoping memo. The PHC shall be held beginning at 10:30 a.m. on February 6, 2019 in the Commission Courtroom, 505 Van Ness Avenue, San Francisco, California.

The assigned Commissioner or the assigned Administrative Law Judge(s) (ALJ) may change the schedule to promote efficient and fair administration of this proceeding.

As noted in the schedule above, staff are holding two workshops on de-energization issues to gather input from first responders, affected communities and other stakeholders. Notice of these workshops has been posted on the Commission's Daily Calendar. In the event that additional workshops are held, notice will be posted on the Commission's Daily Calendar to inform the public that a decision-maker or an advisor may be present at those meetings or workshops. Parties shall check the Daily Calendar regularly for such notices.

5. Respondents

PG&E, SCE, SDG&E, Liberty, Bear Valley and PacifiCorp are named as respondents to this proceeding.

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6. Service of OIR

This OIR shall be served on all respondents.

In addition, in the interest of broad notice, this OIR will be served on the official service lists for the following proceedings:

- Rulemaking 18-10-007, Order Instituting Rulemaking Implement Electric Utility Wildfire Mitigation Plans Pursuant to Senate Bill 901 (2018);
- Rulemaking 18-03-011, Order Instituting Rulemaking regarding Emergency Disaster Relief Program;
- Rulemaking 15-05-006, Order Instituting Rulemaking to Develop and Adopt Fire-Threat Maps and Fire-Safety Regulations;
- Rulemaking 15-06-009, Order Instituting Rulemaking Regarding Policies, Procedures and Rules for Regulation of Physical Security for the Electric Supply Facilities of Electrical Corporations Consistent with Public Utilities Code Section 364 and to Establish Standards for Disaster and Emergency Preparedness Plans for Electrical Corporations and Regulated Water Companies Pursuant to Public Utilities Code Section 768.6;
- Application 15-09-010, Application of San Diego Gas & Electric Company for Authorization to Recover Costs Related to the 2007 Southern California Wildfires Recorded in the Wildfire Expense Memorandum Account (WEMA);
- Application 17-07-011, Application of Pacific Gas and Electric Company for Authority to Establish the Wildfire Expense Memorandum Account;
- Application 18-04-001, Application of Southern California Edison Company to Establish the Wildfire Expense Memorandum Account;
- Application 18-09-002, Application of Southern California Edison Company for Approval of Its Grid Safety and Resiliency Program; and

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- Application 08-12-021, Application of San Diego Gas & Electric Company for Review of its Proactive De-Energization Measures and Approval of Proposed Tariff Revisions.

In addition, in the interest of broad notice, this OIR will be served on the following agencies named in SB 901, and organizations representing local governments:

- State Board of Forestry and Fire Protection (CAL FIRE)
- California Energy Commission
- State Air Resources Control Board
- California Governor's Office of Emergency Services
- California Department of Fish and Wildlife
- California Infrastructure and Economic Development Bank
- California Office of Planning and Research
- California Department of Parks and Recreation
- California State Association of Counties
- League of California Cities
- California Native American Heritage Commission
- California Municipal Utilities Association
- California State Sheriffs' Association
- California Fire Chiefs' Association

Service of the OIR does not confer party status or place any person who has received such service on the Official Service List for this proceeding, other than respondents. Instructions for obtaining party status or being placed on the official service list are given below.

7. Filing and Service of Comments and Other Documents

Filing and service of comments and other documents in the proceeding are governed by the Commission's Rules of Practice and Procedure.

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8. Addition to Official Service List

Addition to the official service list is governed by Rule 1.9(f) of the Commission's Rules of Practice and Procedure.

Respondents are parties to the proceeding (see Rule 1.4(d)) and will be immediately placed on the official service list.

Any person will be added to the "Information Only" category of the official service list upon request, for electronic service of all documents in the proceeding, and should do so promptly in order to ensure timely service of comments and other documents and correspondence in the proceeding. (See Rule 1.9(f).) The request must be sent to the Process Office by e-mail (process_office@cpuc.ca.gov) or letter (Process Office, California Public Utilities Commission, 505 Van Ness Avenue, San Francisco, California 94102). Please include the Docket Number of this rulemaking in the request.

Persons who file comments on this OIR become parties to the proceeding (see Rule 1.4(a)(2)) and will be added to the "Parties" category of the official service list upon such filing. In order to assure service of comments and other documents and correspondence in advance of obtaining party status, persons should promptly request addition to the "Information Only" category as described above; they will be removed from that category upon obtaining party status.

9. Subscription Service

Persons may monitor the proceeding by subscribing to receive electronic copies of documents in this proceeding that are published on the Commission's website. There is no need to be on the official service list in order to use the subscription service. Instructions for enrolling in the subscription service are available on the Commission's website at <http://subscribecpuc.cpuc.ca.gov/>.

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10. Intervenor Compensation

Intervenor Compensation is permitted in this proceeding. Any party that expects to claim intervenor compensation for its participation in this Rulemaking must file a timely notice of intent to claim intervenor compensation. (See Rule 17.1(a)(2).) Intervenor compensation rules are governed by §§ 1801 et seq. of the Public Utilities Code. Parties new to participating in Commission proceedings may contact the Commission's Public Advisor.

11. Public Advisor

Any person or entity interested in participating in this rulemaking who is unfamiliar with the Commission's procedures should contact the Commission's Public Advisor in San Francisco at (415) 703-2074 or 1-(866) 849-8390 or e-mail public.advisor@cpuc.ca.gov. The TTY number is 1-(866) 836-7825.

Therefore, **IT IS ORDERED** that:

1. This Order Instituting Rulemaking is adopted to examine the Commission's rules regarding electric utility de-energization practices pursuant to Public Utilities Code Sections 451 and 399.2(a) and Rule 6.1 of the Commission's Rules of Practice and Procedure.
2. The preliminary categorization is quasi-legislative.
3. The preliminary determination is that a hearing is not needed.
4. The preliminary scope of issues is as stated above.
5. A prehearing conference is set for 10:30 a.m. on Wednesday, February 6, 2019 at the Commission's offices in San Francisco, California.
6. The preliminary schedule for the proceeding is set forth in Section 3.1 above.
7. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, Liberty Utilities (CalPeco Electric), Bear

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Valley Electric Service, a division of Golden State Water Company, and Pacific Power, a division of PacifiCorp, are respondents to this Order Instituting Rulemaking.

8. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, Liberty Utilities (CalPeco Electric), Bear Valley Electric Service, a division of Golden State Water Company, and Pacific Power, a division of PacifiCorp shall, and any other person may, file and serve comments of not more than 20 pages responding to this Order Instituting Rulemaking (OIR) not later than 45 days from the issuance of this OIR.

9. Comments on this Order Instituting Rulemaking should address the scope and schedule of this proceeding, and its interaction with other related proceedings.

10. The Executive Director will cause this Order Instituting Rulemaking to be served on all respondents and on the service lists for the following Commission proceedings: Rulemaking (R.) 18-10-007, R.18-03-011, R.15-05-006, R.15-06-009, Application (A.) 15-09-010, A.17-07-011, A.18-04-001, A.18-09-002, and A.08-12-021. In addition, the Executive Director will cause this Order Instituting Rulemaking to be served on the following agencies and organizations: State Board of Forestry and Fire Protection (CAL FIRE), California Energy Commission, State Air Resources Control Board, California Office of Emergency Services, California Department of Fish and Wildlife, California Infrastructure and Economic Development Bank, California Office of Planning and Research, California Department of Parks and Recreation, California State Association of Counties, League of California Cities, California Municipal Utilities Association, California Native American Heritage Commission, California State Sheriffs' Association and California Fire Chiefs' Association.

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11. Any party that expects to claim intervenor compensation for its participation in this Rulemaking must timely file its notice of intent to claim intervenor compensation. (*See* Rule 17.1(a)(2).)

This order is effective today.

Dated December 13, 2018, at San Francisco, California.

MICHAEL PICKER

President

CARLA J. PETERMAN

LIANE M. RANDOLPH

MARTHA GUZMAN ACEVES

CLIFFORD RECHTSCHAFFEN

Commissioners

EXHIBIT 2



Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES



October 26, 2018

Geisha Williams
Chief Executive Officer
Pacific Gas and Electric Company
77 Beale Street
San Francisco, California 94105

Kevin Sagara
Chairman and Chief Executive Officer
San Diego Gas and Electric
8330 Century Park Court
San Diego, California 92123-4150

Kevin M. Payne
Chief Executive Officer
Southern California Edison
2244 Walnut Grove Avenue
Rosemead, California 91770

Subject: Public Safety Power Shut-Off

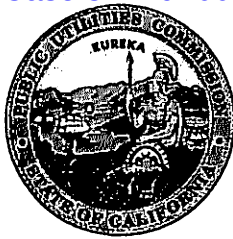
Dear Ms. Williams, Mr. Sagara, and Mr. Payne:

Ensuring the safety of Californians is of the utmost importance to the Governor's Office of Emergency Services (Cal OES), the Department of Forestry and Fire Protection (CAL FIRE), and the California Public Utilities Commission (CPUC). Recent actions of Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas and Electric (SDG&E), to proactively de-energize power lines during high wildfire danger weather conditions make clear that utilities must provide specific, real-time information so the State can take appropriate steps to ensure public safety. This letter sets forth Cal OES, CAL FIRE, and the CPUC's expectations regarding your potential Public Safety Power Shut-off (PSPS) that may occur during high wildfire danger weather conditions.

NOTIFICATIONS

The State expects PG&E, SCE, and SDG&E to provide notifications at several distinct stages of a PSPS event. These notifications must be made to the California State Warning Center [warning.center@caloes.ca.gov; (916) 845-8911] as follows:





Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES



- First, immediately notify the California State Warning Center upon the utility's decision to activate its PSPS program to consider de-energization during high wildfire danger weather conditions. This notice to the California State Warning Center must be made in advance of any public notice of this potential de-energization.
- Second, immediately notify the California State Warning Center upon the decision to carry out the de-energization of power lines.
- Third, immediately notify the California State Warning Center upon the actual de-energization of power lines.
- Finally, immediately notify the California State Warning Center upon the restoration of power.

INFORMATION AND BRIEFINGS

In its initial notification(s) to the California State Warning Center, the utility must provide the designated point of contact, to include name, phone number, and email address, within that utility who will serve as the primary source of updated information regarding the potential PSPS.

The utility must also provide the State with its proposed operational periods and provide briefings prior to the PSPS, during the power shut-down, and during restoration. The State expects no less than three briefings per day. In the event the State requests a modification to the briefing schedule, the utility is expected to make its best effort to comply with the State's request.

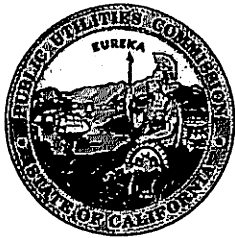
In these briefings, the State expects the utility to provide information including, but not limited to: the expected duration of the power outage; the number of customers potentially impacted; the method of public notification, including the proposed language to be disseminated to the public; the plan for public messaging, as well as coordination with Cal OES, CAL FIRE, and local public safety agencies; and information regarding the deployment of any asset.

Additionally, if Cal OES, CAL FIRE, or the CPUC deploys a representative to a utility's Emergency Operations Center, the State expects the utility to accommodate that deployment, include the State representative in its operational briefings, and provide workspace within its Emergency Operations Center.

DATA

It is critical that each utility provide the State with real-time data, in advance of the utility's actual de-energization, so the State can prepare for the proposed power outage. Therefore, upon its initial notification to the California State Warning Center of a potential de-energization, the utility must provide the State with all data related to the potentially-impacted areas, as set forth below. Additionally, the State must have the ability to share such data with any state or local agency it deems necessary to protect public safety.





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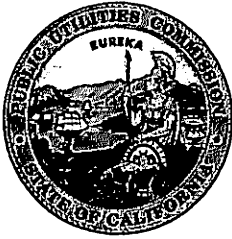


The utility must provide the State with maps in PDF format, containing: outage areas; circuits; impacted critical customers; and roads for distribution to emergency response personnel at the local, state, and federal partner agencies. Additionally, each utility must provide GIS datasets, as set forth below, in an ESRI-compliant web service updated and maintained by the utility. If web service is unavailable, data can be in geodatabase format, shapefile, or a KMZ file type. The utility must provide updated files as the data changes. Any point location data provided via a spreadsheet must include an address and/or latitude and longitude.

The specific GIS datasets are as follows:

- **Planned Outage Areas (Polygon)**
 - Customers per outage area
 - Time of outage
 - Time to restoration
 - # of Medical Baseline Customers
- **Current Outage Areas (Polygon)**
 - Customers per outage area
 - Time of outage
 - Time to restoration
 - # of Medical Baseline Customers
- **Impacted Circuits (Line)**
 - Circuit type
 - Customers per circuit
 - Voltage
 - # of Medical Baseline Customers
- **Impacted Critical Customers (e.g. Hospitals, Fire Stations, Police Stations, Water/Irrigation Districts, Waste Water Treatment Plants, Telecom, Schools) (Point)**
 - Facility Name
 - Street Address
 - City
 - ZIP
 - County
 - Latitude
 - Longitude
 - Customer Type
- **Medical Baseline Customer (this can be provided in a spreadsheet format)**
 - Impacted Population, by County
 - Impacted Population, by City





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Having real-time information in preparation for, during, and following a utility's de-energization of a community is essential for the preservation of public safety. This effort will ensure that the State, as well as all potentially-impacted local jurisdictions, are able to effectively prepare for any impacts that may result from a utility's de-energization and respond accordingly. We look forward to your cooperation.

Sincerely,

Mark S. Ghilarducci
Director, Governor's Office of
Emergency Services

Ken Pimlott
Director, California Department of
Forestry and Fire Protection

Michael Picker
President, California Public Utilities
Commission

Cliff Rechtschaffen
Commissioner, California Public Utilities
Commission



EXHIBIT 3



FILED
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MP6/eg3 12/21/2018

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Investigation on the
Commission's Own Motion to Determine
Whether Pacific Gas and Electric Company
and PG&E Corporation's Organizational
Culture and Governance Prioritize Safety.

Investigation 15-08-019

ASSIGNED COMMISSIONER'S SCOPING MEMO AND RULING

Summary

This Scoping Memo and Ruling (Ruling) sets forth the scope to be addressed and the schedule for the next phase of this proceeding, consistent with the Order Instituting Investigation and the prior Scoping Memo in this proceeding. This Ruling builds on this Commission's Decision (D.) 18-11-050 adopting the recommendations of the NorthStar Report and directing Pacific Gas and Electric Company (PG&E) to implement the recommendations as adopted in the decision.

1. Principles

Continuous, safe, and reliable gas and electric service at just and reasonable rates must be provided to Northern California in order to protect human life and sustain prosperity. The Commission's examination of PG&E's

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safety culture accordingly continues in this proceeding. The Commission will examine PG&E's and PG&E Corporation's (PG&E Corp.) current corporate governance, structure, and operations to determine if the utility is positioned to provide safe electrical and gas service, and will review alternatives to the current management and operational structures of providing electric and gas service in Northern California.

As the Commission evaluates proposed alternatives, it will consider a range of factors, including:

- the safety and reliability of utility service;
- the operational integrity and technical unity of components within PG&E's gas and electric transmission and distribution systems;
- the stability and adequacy of the utility workforce;
- the utility's relationships with and role in local communities;
- the ability of the state to implement its energy policies, including the need to reduce greenhouse gas (GHG) emissions and local criteria pollutants in both the utility sector and the economy as a whole;
- the ability of the utility to meet financial challenges posed by large catastrophic events such as earthquakes and wildfires;
- the utility's ability to raise capital and purchase gas, electricity, equipment and services; and
- the cost of utility service.

Careful consideration is also necessary to determine whether there is a viable transition process from the status quo to any preferred alternative. If there is not a clear path forward to implement an alternative (including consideration

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of legal, financial, and technical grid issues), then the alternative will not be considered a viable option in this proceeding.

The future of PG&E may also be impacted by other actors beyond the Commission. The Legislature, the court appointed Federal Monitor, the various courts considering claims against PG&E, the Federal Energy Regulatory Commission, and the communities served by PG&E all have a role in determining PG&E's future. As a publicly traded company, PG&E must also respond to the financial markets, and to the requirements of the vendors and other parties with which it conducts business.

The Commission has not drawn any conclusions about the outcome of this proceeding and recognizes these other actors may be the origin of proposals for consideration. The Commission undertakes this next phase of this proceeding in a thoughtful and deliberate manner, consistent with the importance of the issues being addressed.

2. Background

PG&E has had serious safety problems with both its gas and electric operations for many years. The following examples illustrate both the types of safety incidents PG&E has experienced and the remedial consequences imposed by this Commission and several courts.

On September 9, 2010, a PG&E natural gas transmission pipeline ruptured in San Bruno. The event is well detailed in a Commission decision:

At 6:11 p.m. on September 9, 2010, Segment 180 of Line 132, a 30-inch diameter natural gas transmission pipeline owned and operated by PG&E, ruptured in the Crestmoor neighborhood of San Bruno, California. Gas escaping from the rupture

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ignited. There was an explosion of such tremendous force that a crater approximately 72 feet long by 26 feet wide was created. A 28-foot long section of pipe weighing about 3,000 pounds was blown approximately 100 feet from the crater. The conflagration continued for over an hour and a half, releasing 47.6 million cubic feet of flammable natural gas before the flow was stopped. It required the response of 600 firefighting (including emergency medical service) personnel and 325 law enforcement personnel.

The resulting deaths, injuries, and damage to property were especially severe [...].

The Crestmoor neighborhood was effectively wiped off the map. An entire community was displaced.¹

PG&E faced historically significant administrative penalties and fines and criminal punishment as a result of the San Bruno explosion. This Commission imposed a fine and other penalties on PG&E totaling \$1.6 billion.² PG&E was also found guilty by a federal jury of federal criminal conduct, specifically multiple willful violations of the Natural Gas Pipeline Safety Act of 1968 and of obstructing an agency proceeding.³ As part of PG&E's sentence in the federal criminal proceeding, it was required to submit to a federal monitor for compliance and ethics.⁴ In November 2018, Judge William Alsup, who was

¹ D.15-04-023 at 3-4.

² D.15-04-024 at 2.

³ Case No. CR-14-00175-THE; *see also* Press Release, Department of Justice, U.S. Attorney's Office, Northern District of California, dated August 9, 2016, available at: <https://www.justice.gov/usao-ndca/pr/pge-found-guilty-obstruction-agency-proceeding-and-multiple-violations-natural-gas>.

⁴ Case No. CR-14-00175-THE, Order dated January 26, 2017. In February 2017, Mark Filip was selected as the Compliance and Ethics Monitor of PG&E for a period of five years.

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assigned the PG&E federal criminal manner, directed PG&E to respond by December 31, 2018, to questions regarding the Camp Fire, which occurred in November 2018.

On June 19, 2012, a PG&E subcontractor was killed during demolition of PG&E's decommissioned Kern Power Plant. As part of a settlement of the subsequent Commission Order Instituting Investigation (OII), PG&E was required to implement, on a company-wide basis, a Corrective Action Plan that included a Contractor Safety Program and an Enterprise Causal Evaluation Standard, and pay penalties totaling \$5,569,313.⁵

On August 18, 2016, the Commission imposed penalties on PG&E of \$25,626,000 in response to six incidents from 2010 through 2014 that called into question the safety of PG&E's natural gas distribution system.⁶ In response to the Commission's OII in that proceeding, "PG&E also set forth its efforts to enhance gas distribution system recordkeeping accuracy, accessibility, and controls, as well as operational safety improvements."⁷

On August 27, 2015, the instant OII was opened by the Commission, to examine PG&E's and PG&E Corp.'s safety culture. This Commission was, and remains, concerned that the safety problems being experienced by PG&E were not just one-off situations or bad luck, but indicated a deeper and more systemic

⁵ These penalties consist of \$3,269,313 in ratemaking offsets that benefit customers and \$2,300,000 in fines payable to the state's General Fund. (D.15-07-014 at 2.)

⁶ D.16-08-020 at 2-4. An additional penalty of \$10.8 million was imposed for the Carmel incident. (*Id.* at 10, 51.)

⁷ *Id.* at 4.

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problem. The fact that imposing penalties on PG&E (the Commission's standard tool for addressing safety problems) did not seem to change the situation reinforced this concern.

As the Commission stated: "[t]his investigation will...determine whether PG&E's organizational culture and governance are related to PG&E's safety incidents and performance record, and if so, to what extent; and if so, how can or should the Commission order or encourage PG&E to develop, implement, and update as necessary a safety culture of the highest order."⁸ In D.18-11-050, the Commission adopted the findings of the consultant to the Safety and Enforcement Division, the Northstar Consulting Group. The report concluded that "[w]hile PG&E is committed to safety and efforts have been made to reduce incidents and increase the organizational focus on safety, these efforts have been somewhat reactionary – driven by immediate needs and an understandable sense of urgency, rather than a comprehensive enterprise-wide approach to addressing safety."⁹ The failure of PG&E to develop a comprehensive enterprise -wide approach to address safety, eight years after the 2010 San Bruno pipeline explosion, is of vital concern to this Commission.

The Butte Fire, which began on September 9, 2015, burned approximately 70,000 acres of land and destroyed 921 structures, and left two civilians dead.¹⁰

⁸ Investigation 15-08-019, OII at 15.

⁹ Northstar Report at I-1.

¹⁰ Cal Fire Report, last modified October 15, 2015, available at http://cdfdata.fire.ca.gov/incidents/incidents_details_info?incident_id=1221.

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The Commission's Safety and Enforcement Division (SED) issued PG&E a citation for \$8 million for violation of the CPUC's General Order 95, Rule 31.1, for failing to maintain its 12 kilovolt (kV) overhead conductors safely and properly.¹¹ SED also cited PG&E \$300,000 for failure to timely report to the CPUC that PG&E's facilities may have been linked to the ignition of the Butte Fire and for failing to maintain the minimum required clearance between a 12 kV conductor and a tree.¹²

In the fall of both 2017 and 2018, historically large wildfires burned in PG&E's service territory. The scale of these fires set new records on almost every metric which exists to measure wildfires. Because the Commission's investigations into these fires are ongoing, the specific causes of the fires, potential enforcement actions, and PG&E's prudence related to the fires will not be addressed in this proceeding. However, the Commission will consider the fact that PG&E's service territory includes fire prone land according to the Commission's fire threat maps,¹³ which is a critical safety challenge for PG&E.

On December 14, 2018, the Commission opened an OII proceeding to consider penalties and ordered immediate action against PG&E for what

¹¹ Citation Issued Pursuant to D.16-09-055. Available here: http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/News_Room/E1704001E2015091601Citation20170425.pdf.

¹² Citation Issued Pursuant to D.16-09-055. Available here: http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/News_Room/E1704002E20150916_01Citation20170425.pdf.

¹³ D.17-01-009, revised by D.17-06-024.

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Commission staff says are systemic violations of rules to prevent damage to natural gas pipelines during excavation activities.¹⁴ The Commission directed PG&E to take immediate corrective measures and to attest under penalty of perjury that it is conducting natural gas pipeline locate and mark efforts and programs in a safe manner consistent with all applicable laws. The Commission has not prejudged the outcome of that proceeding; however, the fact that these allegations have been made are noted to provide context for the type of challenges we expect PG&E to address by adopting and maintaining a safety culture.

This Commission is tasked with regulating PG&E's safe operation of its natural gas pipeline and electricity infrastructure. Given PG&E's record and the dangers inherent in PG&E's service territory, the Commission must evaluate whether there is a better way to serve Northern California with safe and reliable electric and gas service at just and reasonable rates. This ruling identifies the scope of issues considered in the next phase of this proceeding.

3. Scope of Issues

The safe operation of PG&E's gas and electric systems and the threat of personal harm to PG&E employees and members of the public are of critical concern to the Commission and California. To address that concern and mitigate future risk, the next phase of this proceeding will consider a broad range of alternatives to current management and operational structures for providing electric and natural gas in Northern California. Accordingly, the following list of

¹⁴ I.18-12-007.

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proposals is illustrative rather than exclusive and is intended to show the range of possible alternatives under consideration. This list does not limit the Commission's potential actions or directives. The outcome of this investigation may include recommendations to other entities that have a role in ensuring safe electrical and gas service in Northern California, if a desired outcome requires action by someone other than this Commission. Parties may present other options than the ones listed below. The Commission may revise the scope of alternatives to be considered after receiving comments from parties.

This is not a punitive exercise. Indeed, the keystone question is, compared to PG&E and PG&E Corp. as presently constituted, would any of the following proposals provide Northern Californians safer gas and electric service at just and reasonable rates?

Corporate Governance – Board of Directors

- Should PG&E and PG&E Corp. be subject to a utility-specific business judgment rule (BJR) to require the Board of Directors to account for safety beyond the current fiduciary duties?¹⁵ If so, should such a utility-specific business judgment rule apply to corporate officers as well?
- Should the PG&E Board of Directors regularly file with the Commission a report of how the Board met its duties under the BJR to account for safety? Should this include a summary of the oversight exercised by the Board including information reviewed, when deliberations occurred, and the depth of the review? Should the report include the Board review of the corporate officers' leadership as it pertains to safety? Should compensation to the Board

¹⁵ See, e.g. California Corporations Code § 309 and *Gaillard v. Natomas Co.*, 208 Cal. App. 3d 1250 (1989).

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- Members be dependent on a Commission finding that the Board members discharged their safety duties appropriately?
- Should PG&E form an independent nominating committee to identify and select candidates for the Board of Directors?
 - Should PG&E identify specific criteria for potential Board of Directors members? For example, should PG&E have one or more Board of Directors members be experts in organizational safety, gas safety, and/or electrical safety? If so, should the appointment of safety experts be made subject to Commission or Governor approval?
 - Should PG&E form an audit committee constituted of independent directors possessing financial and safety competence, as defined by the Commission, to evaluate the Board of Directors' discharge of their duties and make recommendations for qualifications of future members of PG&E's Board of Directors?
 - The Securities and Exchange Commission requires publicly traded companies to file an 8-K Form when a material event occurs. Generally, an event is material if there is a substantial likelihood that a reasonable investor would consider the information important in making an investment decision. Should PG&E file an analogous safety report with the Commission when PG&E makes a significant decision regarding capital expenditures pertaining to safety, a change in management as it pertains to safety, or any other decision that may impact safety?
 - Should PG&E file a public annual report of all Directors and Officers insurance policies obtained by PG&E and identify the risk PG&E identified to obtain the insurance? If PG&E amends its Directors and Officers insurance, should it notify the Commission of the risk identified and the terms of the amended policy?

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- Should part or all of the existing Board of Directors resign and be replaced by directors with a stronger background and focus on safety?

Corporate Management – Officers and Senior Leadership

- Should PG&E retain new corporate management in all or in part?
- Should the questions posed above for Corporate Governance be similarly considered for corporate management?
- Should compensation for non-officer executives be modified? Does the current incentive structure properly incent PG&E decision-makers?¹⁶

Corporate Structure

- Should PG&E's gas and electric distribution and transmission divisions be separated into separate companies? If so, should the separate companies be controlled by a holding company? Should the holding company be a regulated utility?
- Should PG&E's corporate structure be reorganized with regional subsidiaries based on regional distinctions? For example, PG&E could be divided into multiple smaller utilities operating under a single parent company. If so, should such a reorganization apply to both gas and electric services? Do the physical characteristics of the gas and electric systems lend themselves to the same regional structure, or do the physical characteristics of the respective systems lend themselves to different regional structures?

¹⁶ Senate Bill 901 (Dodd) prohibits an electrical or gas corporation from recovering any annual salary, bonus, benefits, or other consideration of any value, paid to an officer of the corporation, from ratepayers.

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- Should the Commission revoke holding company authorization, so PG&E is exclusively a regulated utility? Should all affiliates and subsidiaries be spun off or incorporated into the regulated utility?
- Should the Commission form a standing working group with the union leadership of PG&E to identify the safety concerns of PG&E staff?

Publicly Owned Utility, Cooperative, Community Choice Aggregation or other Models

- Should some or all of PG&E be reconstituted as a publicly owned utility or utilities?
- Should PG&E be a “wires-only company” that only provides electric distribution and transmission services with other entities providing generation services? If so, what entities should provide generation services?

Return On Equity

- Should the Commission condition PG&E’s return on equity on safety performance?
- What are the safety considerations for the utility if its financial status is downgraded by the investment community?

Other Proposals

- What other measures should be taken to ensure PG&E satisfies its obligation to provide safe service?

4. Comments

Parties should make preliminary comments on the desirability of these alternatives with discussion of how each proposal impacts the following considerations:

- the safety and reliability of utility service;

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- the operational integrity and technical unity of components within PG&E's gas and electric transmission and distribution systems;
- the stability and adequacy of the utility workforce;
- the utility's relationships with and role in local communities;
- the ability of the state to implement its energy policies, including the need to reduce GHG emissions and local criteria pollutants in both the utility sector and the economy as a whole;
- the ability of the utility to meet financial challenges posed by large catastrophic events such as earthquakes and wildfires;
- the utility's ability to raise capital and purchase gas, electricity, equipment and services; and
- the cost of utility service.

In addition, the parties shall make initial observations on the legal, technical, and financial feasibility of these proposals and include observations on the feasibility of transitioning from the current utility structure to proposed alternatives.

Parties may also offer additional proposals with consideration given to the same factors and feasibility concerns. Parties may also comment on scope and process recommendations.

For ease of reference, parties' comments shall follow the same format provided in this ruling. Specifically, parties shall comment on proposals in the following sequence: Corporate Governance, Corporate Management, Corporate Structure, Public Utility or Cooperative, Return on Equity, and Other Proposals. Opening comments are limited to 40 pages. Reply comments are limited to 20 pages.

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To better inform this proceeding, on or before January 16, 2019, PG&E is also directed to file a summary of:

- PG&E's and PG&E Corp.'s corporate structures, including organizational charts for the respective Board of Directors, executives, and other senior leadership as of September 1, 2010, and as of December 31, 2018. The summary should also explain the different lines of business of PG&E and PG&E Corp.
- The senior positions in PG&E and PG&E Corp. responsible for management of safety, and how the different roles interact.

After review of comments filed by parties, the Commission will identify the best process to consider proposals and identify concerns that require additional filings from parties.

5. Schedule

The next step for this Commission is to obtain input on the various possible approaches to address the underlying issue of PG&E's safety culture. The Commission needs to have more information and analysis from a range of perspectives before it can consider implementation of any particular approach, or even select any approach to consider in more detail. Accordingly, the schedule set forth below is limited to the filing and service of party comments on the issues identified above.

The following schedule is adopted:

PG&E and PG&E Corp. Background Filing	January 16, 2019
Concurrent Opening Comments filed and served	January 30, 2019
Concurrent Reply Comments filed and served	February 13, 2019

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This schedule may be modified by the assigned Commissioner or Administrative Law Judge (ALJ) as necessary. Once comments are received, the assigned Commissioner and ALJ will determine the next procedural steps to take.

6. Presiding Officer

In the interest of judicial efficiency, ALJ Peter V. Allen is designated as the Presiding Officer in this phase of the proceeding.

7. Public Category of Proceeding/Ex Parte Restrictions

As stated in the original scoping memo issued on May 8, 2017, this proceeding is categorized as ratesetting. With the change in presiding officer, the voluntary *ex parte* prohibition previously imposed by the assigned Commissioner is lifted, and will not apply to this phase of the proceeding. The Commission's rules regarding *ex parte* communications in ratesetting proceedings remain in place. Accordingly, *ex parte* communications are restricted and must be reported pursuant to Article 8 of the Commission's Rules of Practice and Procedure.

8. Advisor

Any person interested in participating in this proceeding who is unfamiliar with the Commission's procedures or has questions about the electronic filing procedures is encouraged to obtain more information at <http://consumers.cpuc.ca.gov/pao/> or contact the Commission's Public Advisor at 866-849-8390 or 415-703-2074 or 866-836-7825 (TYT), or send an e-mail to public.advisor@cpuc.ca.gov.

IT IS RULED that:

1. The scope of this proceeding is described above.

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2. The schedule of this proceeding is as set forth above.
3. Administrative Law Judge Peter V. Allen is designated as the presiding officer for this phase of the proceeding.
4. Page limitations for opening and reply comments are as set forth above.

Dated December 21, 2018, at San Francisco, California.

/s/ MICHAEL PICKER

Michael Picker
Assigned Commissioner

EXHIBIT 4

Date of Issuance: July 16, 2018

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

**SAFETY AND ENFORCEMENT DIVISION
Electric Safety and Reliability Branch**

**Resolution ESRB-8
July 12, 2018**

R E S O L U T I O N

**RESOLUTION EXTENDING DE-ENERGIZATION REASONABLENESS,
NOTIFICATION, MITIGATION AND REPORTING REQUIREMENTS
IN DECISION 12-04-024 TO ALL ELECTRIC INVESTOR OWNED
UTILITIES.**

PROPOSED OUTCOME:

This Resolution extends the de-energization reasonableness, public notification, mitigation and reporting requirements in Decision (D.) 12-04-024 to all electric Investor Owned Utilities (IOUs) and adds new requirements. It also places a requirement on utilities to make all feasible and appropriate attempts to notify customers of a de-energization event prior to performing de-energization.

SAFETY CONSIDERATIONS:

De-energizing electric facilities during dangerous conditions can save lives and property and can prevent wildfires. This resolution provides guidelines that IOUs must follow and strengthens public safety requirements when an IOU decides to de-energize its facilities during dangerous conditions.

ESTIMATED COST: Costs of compliance with the new requirements are unknown.

SUMMARY

Commission Decision (D.) 12-04-024 established requirements for reasonableness, notification, mitigation and reporting by San Diego Gas & Electric Company (SDG&E) for its de-energization events.

This resolution extends the requirements established in D.12-04-024 to all electric IOUs, requires that the utilities meet with the local communities that may be impacted by a future de-energization event before putting the practice in effect in a particular area, requires feasible and appropriate customer notifications prior to a de-energization event, and requires notification to the Safety and Enforcement Division (SED) as soon as practicable after a decision to de-energize facilities and within 12 hours after the last service is restored.

BACKGROUND

California Public Utilities Code (PU Code) Sections 451 and 399.2(a) give electric utilities authority to shut off electric power in order to protect public safety. This authority includes shutting off power for the prevention of fires caused by strong winds.

Application (A.) 08-12-021 filed by SDG&E on December 22, 2008, requested specific authority to shut off power as a fire-prevention measure against severe Santa Ana winds and a review of SDG&E's proactive de-energization measures. SDG&E also requested that such power shut-offs would qualify for an exemption from liability under SDG&E's Tariff Rule 14.

Decision (D.) 12-04-024 issued on April 19, 2012 provided guidance on SDG&E's authority to shut off power under the PU Code and also established factors the Commission may consider in determining whether or not a decision by SDG&E to shut off power was reasonable. The decision ruled that SDG&E has the authority under Public Utilities Code, Sections 451 and 399.2(a) to shut off power in emergency situations when necessary to protect public safety. It also ruled that a decision to shut off power by SDG&E under its statutory authority, including the adequacy of any notice given and any mitigation measures implemented, may be reviewed by the Commission to determine if SDG&E's actions were reasonable. The decision requires SDG&E to take appropriate and feasible steps to provide notice and mitigation to its customers whenever it shuts off power. The decision also requires SDG&E to notify the Commission's Consumer Protection and Safety Division, now the Safety and Enforcement Division (SED), of the shut-off within 12 hours and submit a report to SED with a detailed explanation of its decision to shut off the power.

Southern California Edison Company (SCE) and Pacific Gas and Electric Company (PG&E) both currently exercise their authority to shut off power during dangerous fire conditions. However, there are currently no established standards on reasonableness, notification, mitigation and reporting by IOUs other than SDG&E.

DISCUSSION

The 2017 California wildfire season was the most destructive wildfire season on record, and saw multiple wildfires burning across California, including five of the 20 most destructive wildland-urban interface fires in the state's history. Devastating fires raged in Santa Rosa, Los Angeles, and Ventura, and the Thomas Fire proved to be the largest wildfire in California history. These fires further demonstrated the fire risk in California. As a result of the fires and critical fire weather conditions, both the President of the United States and the Governor of California issued State of Emergency declarations.

SDG&E exercised its statutory authority under Public Utilities Code Sections 451 and 399.2(a), to de-energize specific circuits in December of 2017. The first group of de-energization events occurred during the period of December 4 through 12, 2017. There were 55 individual circuit de-energization events involving 28 circuits (some circuits had multiple de-energization events) in various eastern San Diego County communities. A total of approximately 14,000 customers were affected.

A second group of de-energization events occurred on December 14 and 15, 2017. There were six individual circuit de-energization events involving three circuits in various eastern San Diego County communities. A total of approximately 650 customers were affected.

In 2017, SCE also used de-energization as a measure to protect its system against fire safety hazards. The de-energization event occurred on December 7, 2017 and affected customers in the community of Idyllwild. Approximately 8,061 total customers were affected in SCE's and nearby Anza Co-Op's service territories. The de-energization event occurred in response to a Red Flag Warning in effect, SCE meteorological forecasting, field-validated extreme high winds and associated fire risks in the area.

According to SCE, during such an event, the company typically attempts to notify customers who could be affected prior to de-energization if timing allows. For the December 7, 2017 event, SCE notified city, county and government officials prior to de-energizing but was not able to notify affected customers prior to the outage occurring. SCE also utilizes other wildfire mitigation practices, such as blocking of distribution reclosers in High Fire Areas, prior to de-energization. According to SCE, de-energization of circuits would be the last line of defense to protect public safety due to extreme fire weather conditions. SCE requires that such an event must be authorized by its activated Incident Management Team.

PG&E reports that prior to 2018, it did not have a policy to de-energize lines as a fire prevention measure. PG&E reported that it did not proactively de-energize lines due to extreme fire weather conditions in 2017. However, in March 2018 PG&E announced that it is developing a program to de-energize lines during periods of extreme fire conditions and has been meeting with local communities to gather feedback.

I. Current De-Energization Policies Applicable to SDG&E

D.12-04-024 established de-energization policies applicable to SDG&E addressing reporting, reasonableness review and customer notification.

A. Reporting

Under D.12-04-024, SDG&E is required to provide the following notifications:

- A notification to the Director of SED provided no later than 12 hours after the power shut-off.
- A report to the Director of SED provided no later than 10 business days after the shut-off event ends that includes (i) an explanation of the decision to shut off power; (ii) all factors considered in the decision to shut off power, including wind speed, temperature, humidity, and moisture in the vicinity of the de-energized circuits; (iii) the time, place, and duration of the shut-off event; (iv) the number of affected customers, broken down by residential, medical baseline, commercial/industrial, and other; (v) any wind-related damage to SDG&E's overhead power-line facilities in the areas where power is shut off; (vi) a description of the notice to customers and any other mitigation provided by

SDG&E; and (vii) any other matters that SDG&E believes are relevant to the Commission's assessment of the reasonableness of SDG&E's decision to shut off power.

As other electric IOUs shut off power in a similar manner and in similar situations, such notifications are important to allow safety oversight by SED, and it would be appropriate to have these reporting requirements apply to all electric IOUs' de-energization events.

B. Reasonableness Review

D.12-04-024 identified several factors that the Commission may consider in assessing whether an SDG&E decision to de-energize "was reasonable and qualifies for an exemption from liability under SDG&E's Electric Tariff Rule 14."¹ These factors are summarized below:

- SDG&E has the burden of demonstrating that its decision to shut off power is necessary to protect public safety.
- SDG&E must rely on other measures, to the extent available, as alternatives to shutting off power.
- SDG&E must reasonably believe that there is an imminent and significant risk that strong winds will topple its power lines onto tinder dry vegetation during periods of extreme fire hazard.
- SDG&E must consider efforts to mitigate the adverse impacts on the customers and communities in areas where it shuts off power. This includes steps to warn and protect its customers whenever it shuts off power.
- Other additional factors, as appropriate, to assess whether the decision to shut off power is reasonable.

As other electric IOUs are developing and/or instituting de-energization plans, it is important that these factors be used to assess the reasonableness of all electric IOU de-energization events in order to ensure that the power shut off is executed only as a last resort and for a good reason. However, we modify the third factor listed above by adding the phrase underlined below:

- [The IOU] must reasonably believe that there is an imminent and significant risk that strong winds will topple its power lines onto tinder dry vegetation or will cause major vegetation-related impacts on its facilities during periods of extreme fire hazard.

C. Public Outreach, Notification, and Mitigation

D.12-04-024 requires that SDG&E provide notice and mitigation to its customers, to the extent feasible and appropriate, whenever SDG&E shuts off power pursuant to its statutory authority.

¹ D.12-04-024, page 30.

As other electric IOUs are developing and/or instituting de-energization plans, it is important that this requirement for public outreach, notification, and mitigation apply to all electric IOUs in order to ensure that customers are impacted to the least extent necessary. We recognize that it is not practicable to have an absolute requirement that electric IOUs provide advance notification to customers prior to a de-energization event.

II. Strengthened Requirements Applicable to all Electric IOUs

Recent California experience with wildfires demands that we enhance existing de-energization policy and procedures. In order to ensure that the public and local officials are prepared for power shut off and aware of an IOU de-energization policy, and in order to ensure proper safety oversight by SED, we adopt the following:

1. The guidelines in D.12-04-024, currently applicable to SDG&E only, shall apply to all electric IOUs.
2. The guidelines shall be strengthened as described in the following sections and the strengthened guidelines shall apply to all electric IOUs.

A. Reporting

IOUs shall submit a report to the Director of SED within 10 business days after each de-energization event, as well as after high-threat events where the IOU provided notifications to local government, agencies, and customers of possible de-energization though no de-energization occurred. Reports to the Director of SED must include at a minimum the following information:

- The local communities' representatives the IOU contacted prior to de-energization, the date on which they were contacted, and whether the areas affected by the de-energization are classified as Zone 1, Tier 2, or Tier 3 as per the definition in General Order 95, Rule 21.2-D.
- If an IOU is not able to provide customers with notice at least 2 hours prior to the de-energization event, the IOU shall provide an explanation in its report.
- The IOU shall summarize the number and nature of complaints received as the result of the de-energization event and include claims that are filed against the IOU because of de-energization.
- The IOU shall provide detailed description of the steps it took to restore power.
- The IOU shall identify the address of each community assistance location during a de-energization event, describe the location (in a building, a trailer, etc.), describe the assistance available at each location, and give the days and hours that it was open.

B. Reasonableness Review

The reasonableness review discussion in D.12-04-024 and detailed above shall apply to all electric IOUs. At this time, we are not adding additional requirements and, while we recognize that this issue along with financial liability are important ongoing discussions, this resolution is not the venue for that discussion.

C. Public Outreach, Notification, and Mitigation

Increased coordination, communication and public education can be effective measures to increase public safety and minimize adverse impact from de-energization.

- The IOU shall notify the Director of SED, as soon as practicable, once it decides to de-energize its facilities. If the notification was not prior to the de-energization event, the IOU shall explain why a pre-event notification was not possible. The notification shall include the area affected, an estimate of the number of customers affected, and an estimated restoration time. The IOU shall also notify the Director of SED of full restoration within 12 hours from the time the last service is restored.
- Within 90 days of the effective date of this resolution, each IOU shall convene De-Energization Informational Workshops with representatives of entities that may be affected by a de-energization event, including but not limited to: state agencies, tribal governments, local agencies and representatives from local communities. Workshops should be inclusive of, but not limited to, representatives of customers who are low-income, have limited English, have disabilities, or are elderly. The purpose of these workshops is to explain, and receive feedback on, the IOU's de-energization policies and procedures. The workshops should be supplemented by focused working sessions, upon request by specific groups such as communications providers or Community Choice Aggregators that might have notification needs different than those of the general public.
- Within 30 days of the effective date of this resolution, each IOU shall submit a report to the Director of SED outlining its public outreach, notification, and mitigation plan. The plan must include at a minimum, the following information:
 - Names of communities that will be invited to De-Energization Informational Workshops.
 - Names of state agencies and tribal governments that the IOU will coordinate with in developing its de-energization plan and will invite to De-Energization Informational Workshops.
 - Names of local agencies the IOU will coordinate with in developing its de-energization plan and will invite to De-Energization Informational Workshops.
 - Proposed communication methods for publicizing and convening the De-Energization Informational Workshops.
 - Details regarding its plans for notification in advance of, and during, a de-energization event, and its plans for mitigation when de-energization occurs.
- The IOU shall ensure that de-energization policies and procedures are well-communicated and made publicly available, including the following:
 - Make available and post a summary of de-energization policies and procedures on its website.
 - Meet with representatives from local communities that may be affected by

de-energization events, before putting the practice in effect in a particular area.

- Provide its de-energization and restoration policy in full, and in summary form, to the affected community officials before de-energizing its circuits.
- Discuss the details of any potential shut-off and mitigation measures that the communities should consider putting in place, including information about any assistance that the IOU may be able to provide during events.
- In anticipation of a specific de-energization event, the IOU shall:
 - Notify customers of planned de-energization as soon as practicable before the event.
 - As practicable and operationally feasible, notify and communicate with representatives from the fire departments, first responders, local communities, government, communications providers, and Community Choice Aggregators that may be affected by the de-energization event.
 - Discuss with local government and community representatives the details of any potential shut-off and mitigation measures the IOU can provide to lessen the negative impacts of the power outage (e.g., cooling centers).
 - Ensure that critical facilities such as hospitals, emergency centers, fire departments, and water plants are aware of the planned de-energization event.
- The IOU shall retain documentation of community meetings and information provided in electronic form, and make that information available to SED upon request. The information shall be retained for a minimum of one year after the de-energization event or five years after the community meetings, whichever comes first.
- After the de-energization event, IOUs shall assist critical facility customers to evaluate their needs for backup power and determine whether additional equipment is needed. To address public safety impacts of a de-energization event, the IOU may provide generators to critical facilities that are not well prepared for a power shut off.
- The IOU shall retain records of customer notifications and make that information available to SED upon request. The information shall be retained for a minimum of one year after the de-energization event.

COMMENTS ON DRAFT RESOLUTION

PU Code Section 311(g)(1) provides that a resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding or in other specified situations.

The draft resolution was mailed to parties for comment on May 30, 2018, and was noticed on the Commission's Daily Calendar on June 8, 2018. The 30-day comment period for the draft resolution was neither waived nor reduced. Parties submitted comments by June 28, 2018, and reply comments by July 6, 2018.

Based on parties' comments, several modifications were made to the draft resolution, including the following:

- One of the factors specified in D.12-04-024 for consideration during reasonableness reviews was expanded for use when applied to all IOUs.
- The requirements for reporting events that do not eventually trigger de-energization were clarified.
- The full restoration reporting period to the SED was increased from 30 minutes to 12 hours.
- The period for convening De-Energization Informational Workshops was increased from 60 days to 90 days.
- The guidance for meeting with local communities was made a general requirement, rather than tied to specific de-energization events.
- Low-income, limited English, and disability communities were added to the list of parties to include in the De-Energization Informational Workshops.
- Communications providers were added to the list of representatives to be notified in anticipation of a de-energization event.
- The requirement to provide generators and/or batteries to critical facilities was removed since most critical facilities are required to have their own back-up power resources.

Also in response to comments by the parties, we clarify that the requirements adopted in this resolution are not in conflict with IOU authority to de-energize power lines to ensure public safety provided under the PU Code. We expect an IOU to use its best judgment on a case-by-case basis to determine whether de-energization is needed for public safety. We hold this expectation even if an IOU has not complied fully with each of the requirements in this resolution, for example, if a need for de-energization arises before an IOU has met with the impacted local communities. If an IOU did not fulfill one or more of the requirements in this resolution prior to a de-energization, the IOU shall identify the missed requirement(s) and provide an explanation in its report submitted to the Director of SED after the de-energization event.

FINDINGS

1. Under PU Code Sections 451 and 399.2(a), electric IOUs have the authority to shut off power in order to protect public safety.
2. The decision to de-energize electric facilities for public safety is complex and dependent on many factors including and not limited to fuel moisture; aerial and ground firefighting capabilities; active fires that indicate fire conditions; situational awareness provided by fire agencies, the National Weather Service and the United States Forest Service; and local meteorological conditions of humidity and winds.
3. The decision to shut off power may be reviewed by the Commission pursuant to its broad jurisdiction over public safety and utility operations.

Resolution ESRB-8

July 12, 2018

4. The requirements for reporting, public outreach, notification, mitigation and reasonableness review in D.12-04-024 are effective, but are only applicable to SDG&E.
5. All electric IOUs may face similar safety situations requiring power shut-off in emergencies and de-energization events in their service territory.
6. De-energization of electric facilities could save lives, protect property, and prevent fires.
7. The measures in D.12-04-024 should be strengthened to further ensure that the public and local officials are prepared for de-energization events and to ensure the proper safety oversight by the Commission's Safety and Enforcement Division.

THEREFORE, IT IS ORDERED THAT:

1. All electric IOUs shall take appropriate and feasible steps to provide notice and mitigation to their customers in accordance with the guidelines in D.12-04-024 whenever they shut off power pursuant to their statutory authority.
2. All electric IOUs shall follow the notification requirements to SED established in D.12-04-024.
3. All electric IOUs shall comply with the additional guidelines stated in the section of this resolution titled "**Strengthened Requirements Applicable to all Electric IOUs.**"

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on July 12, 2018; the following Commissioners voting favorably thereon:

/s/ ALICE STEBBINS

ALICE STEBBINS

Executive Director

MICHAEL PICKER

President

CARLA J. PETERMAN

LIANE M. RANDOLPH

MARTHA GUZMAN ACEVES

CLIFFORD RECHTSCHAFFEN

Commissioners

EXHIBIT 5

**MEMORANDUM OF UNDERSTANDING
BETWEEN THE
CALIFORNIA PUBLIC UTILITIES COMMISSION
AND THE
CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE
PROTECTION**

The California Public Utilities Commission (CPUC) and California Department of Forestry and Fire Protection (CAL FIRE) (collectively the Parties) enter into this Memorandum of Understanding (MOU) to cooperatively develop consistent approaches to forest management, safety and energy programs.

ROLES AND RESPONSIBILITIES

CAL FIRE is charged with the fire prevention, protection, and stewardship of over 31million acres of California's privately-owned wildlands. CAL FIRE answers the call to more than 350,000 emergencies each year such as fires, medical aids, hazardous material spills, search and rescue missions, train derailments, and earthquakes. CAL FIRE is responsible for fire and life safety code review of all State-owned and leased buildings, the training certification of firefighters, and the inspection of 6,500 miles of intrastate hazardous liquid pipelines. In addition, CAL FIRE provides varied emergency services to approximately 150 local cities, counties, and fire districts via cooperative contracts.

The CPUC ensures that regulated services are delivered in a safe, reliable manner. CPUC regulations are designed to protect the public from potential hazards, including fires, which may be caused from electric utility transmission or distribution lines, or communications infrastructure providers' facilities in proximity to the electric overhead transmission or distribution lines. The Commission's current General Orders 95, 128, and 165 are designed to promote the safe installation and operation of electric utility and communications infrastructure facilities, and provide the minimum safety requirements which the utilities are supposed to supplement with additional safety precautions when operations and local conditions warrant.

SHARED PRIORITIES

The following priorities are shared by the CPUC and CAL FIRE for effective communication and coordination:

1. Work together to develop consistent approaches to forest management, wildfire prevention, public safety, and energy programs.
2. Develop management alignment on key policy issues.

3. Develop a statewide biomass/bioenergy/biofuel strategy to ensure cost effective methods exists to deliver fuel to biomass/biofuel facilities.
4. Assist one another in preparing for, responding to, and mitigating the effects of wildfires.
5. Deepen awareness of the requirements and goals of each other's programs.
6. Create an Interagency Fire Safety Working Group to vet ideas and develop programmatic solutions to shared goals in the interest of fire safety and resource protection.

Immediate-Term Goals:

In order to achieve optimal results for the shared priorities, the Parties' immediate term goals are as follows:

1. Develop a shared understanding of the use of fire mapping, including enhanced enforcement of the CPUC's General Order 95.
2. Develop a shared understanding of utility deployment timelines, procedures, and operations during a wildfire event, including enhanced enforcement of CPUC General Order 166. Ensure utilities establish significant base camps and are a major presence at incident sites of major fires.
3. Enhance the Parties' communication during and following a wildfire event. The CPUC can serve as a link between CAL FIRE and utilities during an event.
4. Coordinate on a range of resource management issues, fuels treatments, tree mortality, and bark beetle infestation. Jointly identify any mitigation measures that the utilities need to take in response to the tree mortality crisis.
5. Initiate the process for utilities to develop and submit fire hazard prevention plans required by SB 1028. Work together on identifying the requirements for fire hazard prevention plans and communicating these requirements to the utilities. Develop a process for review of fire hazard prevention plans.
6. Provide complementary resources in the areas of risk mitigation, risk management, and investigative relationships between CAL FIRE and the CPUC relating to suspected utility involved fire events.
7. Share best practices related to regulation, inspection, and overall safety of hazardous liquid and gas pipeline systems.

CAL FIRE RESPONSIBILITIES

In order to achieve optimal results for the shared priorities, CAL FIRE will perform the activities and functions summarized below.

1. Upon request, review utility wildfire mitigation plans in accordance with Public Utilities Code Sections 8385 to 8387. Assist CPUC in developing criteria and standards to be used in wildfire mitigation plans.
2. Identify and develop contracting requirements necessary for the completion of Fire Map 2 and the establishment of the CPUC Wildfire Mitigation Section in accordance with SB 1028.
 - a. Participate in the Technical Review Team (as defined in the CPUC's Fire Map 2 Work Plan Decision 17-01-009).
 - b. Assess, evaluate, and provide formal feedback via public comments or reports on future Party-submitted mapping proposals regarding physical mapping changes and challenges and/or adjustments to existing mapping methodologies.
 - c. Assess, evaluate, and provide formal feedback via public comments on utility SB 1028 wildfire mitigation plans and utility vegetation management plans.
3. Provide subject matter expertise in mechanical engineering, utility design and testing, and wildland fire risk analysis to the CPUC to advise on wildfire mitigation program management, audit schedule, mitigation plan details, and enforcement. In addition, this liaison(s) will interface with CPUC staff to assist with technical fire science/behavior assessment and allocation of resources.
4. Participate in identifying best practices of design and operation of utility systems for the purposes of fire mitigation.
5. Provide CPUC staff with CAL FIRE operations documentation, including current CAL FIRE structure, operations model, field operations, investigation procedures, and utility/local community outreach efforts/relationships and also be available for follow-up regarding briefing documentation.
6. Provide safety training to select CPUC personnel in order to enhance the CPUC's ability to coordinate with CAL FIRE and/or utilities in the vicinity of a wildfire event.

CPUC RESPONSIBILITIES

In order to achieve optimal results for the shared priorities, the CPUC will perform the activities and functions summarized below.

1. Oversee utility implementation of wildfire mitigation plans and ensure adherence to best practices identified by CAL FIRE.
2. Adopt risk-based regulations that are in alignment with Fire Map 2 through the CPUC formal process.
3. Perform compliance and enforcement activities pertaining to adopted rules related to fire mitigation and emergency response.

4. Use CPUC regulatory authority to assist CAL FIRE to resolve issues with utilities.
5. Dedicate staff to work with CAL FIRE and ensure staff participation in training.
6. Provide funding as necessary to support CAL FIRE's efforts to meet CPUC assistance requests.
7. Assist CAL FIRE in areas of CPUC expertise.
8. Track and report vegetation management clearance activities on an annual basis to CAL FIRE and the California Board of Forestry and Fire Protection.
9. Fund applied research to examine the effectiveness of vegetation clearance and other activities in wildlife mitigation plans designed to reduce wildfire risk. Fund research to refine fire models and data layers that are used to develop Fire Map 2.

PROTECTION OF CONFIDENTIAL INFORMATION

"Confidential Information" includes information obtained pursuant to California Public Utilities Code section 583, records exempt from public disclosure under the California Public Records Act (Government Code sections 6250, et seq.), or written or verbal information that is designated by the Parties to be exempt, prohibited, or privileged from disclosure by State or federal law.

The Parties shall take all necessary measures to protect Confidential Information and, consistent with the Public Records Act and any other laws requiring disclosure, treat the shared Confidential Information as confidential. The Parties shall impose all the requirements of this MOU on all of their respective officers, members, employees and agents with access to Confidential Information. Any Confidential Information obtained by the Parties shall only be used for purposes which are consistent with existing law.

All Confidential Information provided to the Parties pursuant to this MOU shall be subject to Government Code Section 6254.5, subdivision (e), which exempts from public disclosure under the California Public Records Act, confidential records that one State or local agency has provided to another State or local agency pursuant to an agreement that the latter will treat the disclosed records as confidential.

SCOPE

This MOU is made for the sole benefit of CAL FIRE and CPUC, and no other person or entity shall have any rights or remedies under or by reason of this MOU. Nothing in this MOU may be the basis of any third-party challenges or appeals. Nothing in this MOU creates any rights, remedies, or causes of action in any person or entity not party to this MOU.

CAL FIRE and CPUC each retain all rights, responsibilities, and authorities provided for by law. Nothing in this MOU delegates any rights, responsibilities, or authorities

provided by law to either Party. Nothing in this MOU delegates or otherwise prevents, compromises, or precludes each Party from exercising all rights, responsibilities, or authorities provided by law.

Both parties will meet and coordinate progress regarding the MOU on an annual basis, or as mutually agreed upon by the parties.


APPROVAL

This MOU is effective upon completion of the signatures listed below. This MOU shall not be modified except by a written agreement signed by authorized representatives of the Parties.


This MOU shall continue unless or until either Party to the MOU determines that the MOU should be terminated. Unless otherwise provided for by the written agreement of both of the Parties, unilateral termination of the MOU shall be effected no sooner than 60 days from the date either party provides written notice of its intent to terminate the MOU. Termination of this MOU shall not affect the obligation of the parties to maintain the confidentiality of information pursuant to this MOU.

CALIFORNIA PUBLIC UTILITIES COMMISSION:


TIMOTHY J. SULLIVAN
Executive Director


August 18, 2017

CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION:


KEN PIMLOTT
Director



August 23, 2017

EXHIBIT 6

STATE OF CALIFORNIA

RULES

FOR

Overhead Electric Line Construction



Prescribed by the
PUBLIC UTILITIES COMMISSION

OF THE

STATE OF CALIFORNIA

GENERAL ORDER No. 95

May 2018

F. Energized Conductor (Wire or Cable)

All energized conductor (wire or cable) shall be covered with an insulation suitable for the voltage involved (See Rule 20.9–G).

G. Guying

Where mechanical loads imposed on poles or structures exceed safety factors as specified in Rule 44, or at the request of the granting authority, additional strength shall be provided by the use of guys or other suitable construction. When guying is required, refer to Rules 56 and 86 for applicable requirements.

Note: Revised November 6, 1992 by Resolution No. SU-15.

35 Vegetation Management

Where overhead conductors traverse trees and vegetation, safety and reliability of service demand that certain vegetation management activities be performed in order to establish necessary and reasonable clearances, the minimum clearances set forth in Table 1, Cases 13 and 14, measured between line conductors and vegetation under normal conditions shall be maintained. (Also see Appendix E for tree trimming guidelines.) These requirements apply to all overhead electrical supply and communication facilities that are covered by this General Order, including facilities on lands owned and maintained by California state and local agencies.

When a supply or communication company has actual knowledge, obtained either through normal operating practices or notification to the company, that dead, rotten or diseased trees or dead, rotten or diseased portions of otherwise healthy trees overhang or lean toward and may fall into a span of supply or communication lines, said trees or portions thereof should be removed.

Rule 35

Communication and electric supply circuits, energized at 750 volts or less, including their service drops, should be kept clear of vegetation in new construction and when circuits are reconstructed or repaired, whenever practicable. When a supply or communication company has actual knowledge, obtained either through normal operating practices or notification to the company, that its circuit energized at 750 volts or less shows strain or evidences abrasion from vegetation contact, the condition shall be corrected by reducing conductor tension, rearranging or replacing the conductor, pruning the vegetation, or placing mechanical protection on the conductor(s). For the purpose of this rule, abrasion is defined as damage to the insulation resulting from the friction between the vegetation and conductor. Scuffing or polishing of the insulation or covering is not considered abrasion. Strain on a conductor is present when vegetation contact significantly compromises the structural integrity of supply or communication facilities. Contact between vegetation and conductors, in and of itself, does not constitute a nonconformance with the rule.

EXCEPTIONS:

1. Rule 35 requirements do not apply to conductors, or aerial cable that complies with Rule 57.4-C, energized at less than 60,000 volts, where trimming or removal is not practicable and the conductor is separated from the tree with suitable materials or devices to avoid conductor damage by abrasion and grounding of the circuit through the tree.
2. Rule 35 requirements do not apply where the utility has made a "good faith" effort to obtain permission to trim or remove vegetation but permission was refused or unobtainable. A "good faith" effort shall consist of current documentation of a minimum of an attempted personal contact and a written communication, including documentation of mailing or delivery. However, this does not preclude other action or actions from demonstrating "good faith". If permission to trim or remove vegetation is unobtainable and requirements of exception 2 are met, the utility is not compelled to comply with the requirements of exception 1.

3. The Commission recognizes that unusual circumstances beyond the control of the utility may result in nonconformance with the rules. In such cases, the utility may be directed by the Commission to take prompt remedial action to come into conformance, whether or not the nonconformance gives rise to penalties or is alleged to fall within permitted exceptions or phase-in requirements.

Note: Revised November 6, 1992 by Resolution No. SU-15, September 20, 1996 by Decision No. 96-09-097, January 23, 1997 by Decision No. 97-01-044 and January 13, 2005 by Decision No. 0501030..

4. Mature trees whose trunks and major limbs are located more than six inches, but less than the clearance required by Table 1, Cases 13E and 14E, from primary distribution conductors are exempt from the minimum clearance requirement under this rule. The trunks and limbs to which this exemption applies shall only be those of sufficient strength and rigidity to prevent the trunk or limb from encroaching upon the six-inch minimum clearance under reasonably foreseeable local wind and weather conditions. The utility shall bear the risk of determining whether this exemption applies, and the Commission shall have final authority to determine whether the exemption applies in any specific instance, and to order that corrective action be taken in accordance with this rule, if it determines that the exemption does not apply.

Note: Added October 22, 1997 by Decision No. 97-10-056. Revised August 20, 2009 by Decision No. 09-08-029 and January 12, 2012 by Decision No. 1201032

36 Pole Clearances from Railroad Tracks

Poles or other supporting structures which are set in proximity to railroad tracks shall be so located that the clearance requirements of General Order 26-D are met. The clearance requirements of General Order 26-D, applicable to pole line construction, are contained in Appendix E.

Note: Revised February 1, 1948 by Supplement No. 1 (Decision No. 41134, Case No. 4324).

EXHIBIT 7

Appendix E

Guidelines to Rule 35

The following are guidelines to Rule 35.

The radial clearances shown below are recommended minimum clearances that should be established, at time of trimming, between the vegetation and the energized conductors and associated live parts where practicable. Reasonable vegetation management practices may make it advantageous for the purposes of public safety or service reliability to obtain greater clearances than those listed below to ensure compliance until the next scheduled maintenance. Each utility may determine and apply additional appropriate clearances beyond clearances listed below, which take into consideration various factors, including: line operating voltage, length of span, line sag, planned maintenance cycles, location of vegetation within the span, species type, experience with particular species, vegetation growth rate and characteristics, vegetation management standards and best practices, local climate, elevation, fire risk, and vegetation trimming requirements that are applicable to State Responsibility Area lands pursuant to Public Resource Code Sections 4102 and 4293.

Voltage of Lines	Case 13 of Table 1	Case 14 of Table 1
Radial clearances for any conductor of a line operating at 2,400 or more volts, but less than 72,000 volts	4 feet	12 feet
Radial clearances for any conductor of a line operating at 72,000 or more volts, but less than 110,000 volts	6 feet	20 feet
Radial clearances for any conductor of a line operating at 110,000 or more volts, but less than 300,000 volts	10 feet	30 feet
Radial clearances for any conductor of a line operating at 300,000 or more volts	15 feet	30 feet

Note: Added November 6, 1992 by Resolution SU-15. Revised September 20, 1996 by Decision No. 96-09-097, August 20, 2009 by Decision No. 09-08-029, January 12, 2012 by Decision No. 12-01-032, and December 14, 2017, by Decision D. 17-12-024.

EXHIBIT 8

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7 Attorneys for the California Public Utilities Commission and
8 Michael Picker, Liane Randolph,
9 Martha Guzman Aceves, and Clifford Rechtschaffen,
10 in their official capacities as Commissioners
11 of the California Public Utilities Commission

11 **UNITED STATES DISTRICT COURT**
12 **FOR THE NORTHERN DISTRICT OF CALIFORNIA**
13 **SAN FRANCISCO DIVISION**

14 UNITED STATES OF AMERICA,
15

16 Plaintiff,

17 vs.

18 PACIFIC GAS AND ELECTRIC COMPANY,
19

20 Defendant.

Case No. 14-CR-00175-WHA

**DECLARATION OF KAREN
ECKERSLEY IN SUPPORT OF
COMMENTS OF THE
CALIFORNIA PUBLIC UTILITIES
COMMISSION IN RESPONSE TO
ORDER TO SHOW CAUSE**

Hearing Date: January 30, 2019
Time: 9:00 a.m.
Courtroom: 12, 19th Floor
Judge: Hon. William H. Alsup

1 I, KAREN ECKERSLEY, declare as follows:

2 1. I am currently employed as a Program and Project Supervisor in the
3 Communications Division of the California Public Utilities Commission ("Commission" or
4 "CPUC") at 505 Van Ness Avenue, San Francisco, CA 94102. I make this declaration in
5 support of comments filed by the Commission in response to an Order to Show Cause issued
6 by this Court on January 10, 2019. I have personal knowledge of the facts set forth in this
7 declaration and, if called and sworn as a witness, could and would competently testify to
8 them.
9

10 2. I hold a Master's degree in Telecommunications from the School of
11 Engineering at the University of Colorado and a bachelor's degree in Journalism from the
12 same university. I have been employed by the Commission in various capacities for 6 years.
13 I have worked as the lead technical and business manager for the engineering, building and
14 integration of large communications systems for carriers and enterprises, in addition to
15 having an in-depth background in the technologies upon which these systems are delivered
16 to customers. Through my professional career and academic studies, I have over 30 years of
17 experience with the engineering, construction and operation of privately owned and
18 regulated communications companies
19
20

21 3. As a program and project supervisor in the Commission's Communications
22 Division, my day-to-day responsibilities include managing the team responsible for
23 monitoring wireline telephone service quality for California, including regular reporting by
24 carriers and major service interruptions. The Communications Division ongoing role is to
25 help the Commission in ensuring fair, affordable, universal access to necessary services,
26 with special emphasis on preserving universal access and developing clear regulatory tools.
27
28

1 As of January 2019, there are approximately 968 communications carriers which are
2 licensed by the CPUC.¹

3 4. Through the course of my professional career, I have gained substantial
4 experience with and expertise about the physical operation and infrastructure of
5 communication companies, including those utilities that would be affected if the Court's
6 Order to Show Cause were to be implemented under the terms described therein. There are
7 approximately 127 facilities-based broadband communication providers in Pacific Gas and
8 Electric's ("PG&E") service territory of varying size and customer base, and, although
9 difficult to predict with certainty, each company and its customer base would be
10 detrimentally affected by a prolonged de-energization.
11

12 5. Communications networks of the 21st century depend substantially on a
13 functioning electrical distribution system. The world's reliance on the internet, smart
14 phones, constant connection, immediate access to emergency response, requires 24x7
15 operation of the power grid. The communications network will fail in critical places without
16 power, and the result is that first responders, the public and the machines which operate
17 California's electrical grid will eventually cease operating. For example, home devices,
18 hospital equipment and communications network infrastructure, including cell towers and
19 landlines, rely on electricity provided by power companies.
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25 ¹ This is the number of communication companies who hold licenses or registration from the
26 CPUC, which includes CPCNs (Certificate of Convenience and Public Necessity), VOIP
27 Registration, Wireless Registration or Digital Video Service
28

PSPS Event in October 2018

6. Beginning on October 13, 2018, PG&E conducted a public safety power shutoff (PSPS or de-energization) event during a period of predicted high winds and fire danger, which resulted in 67 cell sites in California losing power for between 4 and 40 hours.² These 67 cell sites were operated by the five facilities-based wireless companies operating in California,³ and hundreds of their resale partners (companies which resell minutes without owning cellular infrastructure) were also unable to provide service to their customers during that period.

7. Cellular resellers are the primary providers of wireless LifeLine service, an essential communications service provided for low-income households in California.⁴ The CPUC has the responsibility both to designate carriers for providing federal Lifeline funds and for the collection and payment of funds for the California LifeLine program. The California LifeLine program provides discounted home phones and cell phone service to qualified households. This service lowers phone bills for low income households and insures access to voice and broadband services.

² Consolidated response to October 17th, 2018, CPUC data request answered by five facilities-based wireless carriers.

³ AT&T Mobility, Verizon Wireless, T-Mobile, Sprint, and US Cellular.

⁴ January 2018 wireless providers and number of users can be found here: <http://www.cpuc.ca.gov/General.aspx?id=1100>. Site last visited January 18, 2019. These providers include AirVoice Wireless dba Feel Safe Wireless, AirVoice Wireless dba Feel Safe Wireless, Assurance Wireless by Virgin Mobile, Boomerang Wireless dba enTouch Wireless, Global Connection dba Standup Wireless, iWireless dba Access Wireless, Tag Mobile, Telrite dba Life wireless, TruConnect, TracFone dba SafeLink, Blue Jay Wireless, and American Broadband and Telecommunications.

8. Additionally, during this particular PSPS event, nine cities and towns in California experienced cell site outages from multiple carriers at the same time. It is likely a high percentage of customers in these areas were not able to make wireless calls when the cell sites were out of service. The communities which had outages at the same time from multiple carriers are Calistoga, Camino, Colfax, Placerville, Pollock Pines, Fontana, Irvine, Orange, and Silverado.⁵ The result of the PSPS was that no one could make a wireless call in these communities during the de-energization.

Wireline Infrastructure Network Power

9. Wireline communications are provided by both local exchange carriers and cable companies. The network facilities of both of these types of providers require power to operate.⁶ Central offices are wireline carrier facilities which serve a number of customers with traditional phone service and/or DSL.

10. The CPUC has information on the network power resources which serve 54% of California residential and small business subscribers.⁷ Of the approximately 900 central offices that serve these subscribers, approximately 36% would lose the ability to operate after 1-3 days (24-72 hours) without power from the electrical grid. Fifty-one percent of the

⁵ October 17, 2018 data request response.

⁶ Final Analysis Report, May 2008, Reliability Standards for Telecommunications Emergency Backup Power Systems and Emergency Notification Systems, found here: <http://www.cpuc.ca.gov/General.aspx?id=5655> Site last visited January 18, 2019.

⁷ CALIFORNIA PUBLIC UTILITIES COMMISSION COMMUNICATIONS DIVISION, Total Number of Working Telephone lines from 26 Carriers Reporting Under General Order 133-D in California for June 2018.” The number of lines under this reporting in California for June 2018 was approximately 5.9 million. There are approximately 13 million households in California, so this means that less than half of the households and small businesses in California have a POTS (plain old telephone service) telephone.

central offices would lose the capacity to operate on battery power after 10 days, while the remaining 13% have the possibility to operate for an infinite amount of time depending on availability of fuel that feeds the onsite generator.⁸ However, these calculations are approximate and dependent on many variables such as traffic on the network e.g., the more traffic, the more drain on batteries, availability of diesel fuel and accessibility of central office locations (for diesel fuel delivery).

11. The CPUC does not have rules for the provision of backup power for communication network elements in wireless or wireline networks. The Federal Communications Commission (FCC) requires those central offices which serve Public Safety Answering Points (PSAPs) to have 24 hours of battery backup and selective routers (the switches which route calls to PSAPs) to have 72 hours.⁹ A PSAP is the name for the location of the service with people who answer, coordinate, and respond to the public's 9-1-1 calls.

Power Utility

12. Power companies themselves rely on communications infrastructure to provide inter-machine and voice communications to remote stations. PG&E reported to the CPUC in December of 2017 that 8,951 communication circuits based on copper technology

⁸ Data Requests 05-A and 05-F from AT&T California and Frontier California dated 6/12/2018 and 6/26/2018 respectively.

⁹ 47 CFR 12.4 (c) 2 (A) "...With respect to any central office it operates that directly serves a PSAP, a covered 911 service provider shall certify whether it: Provides backup power through fixed generators, portable generators, batteries, fuel cells, or a combination of these or other such sources to maintain full-service functionality, including network monitoring capabilities, for at least 24 hours at full office load or, if the central office hosts a selective router, at least 72 hours at full office load..."

1 leased from a variety of communication providers provide critical communications to their
2 power assets.¹⁰ These critical communications consist of communication facilities which
3 provide voice and potentially remote control of devices within the electrical facilities. In
4 other words, the power utility itself requires that the communication facilities which it owns
5 and leases to be operational in a power outage.
6

7 First Responders

8 13. The public relies on communications infrastructure to make 9-1-1 calls, and
9 first responders rely upon this same infrastructure to receive those calls and manage
10 emergencies. Situation management of emergencies by first responders depends on cell
11 towers, internet service, and land lines to communicate with each other to manage wildfire
12 and other disaster response, coordinate and triage evacuation centers, and to direct the public
13 and emergency personnel to specific locations.
14

15 14. Public Safety Answering Points (PSAPs) also require power to maintain their
16 operations at a local level. The State of California Office of Emergency Services provides
17 guidance to local agencies for maintaining operations for a very short period of time, and
18 each local government determines the amount of time that their PSAP will be operational
19 without power. There are approximately 450 PSAPs in California, each is funded by its local
20 government for operations, and hence there is variability in the times each facility can
21 operate without power.
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25
26 ¹⁰ PG&E Representative speaking at the CPUC workshop "Copper Communication
27 Facilities Usage in the IP Transition," December 6, 2017.
28

Public Reliance and Vulnerable Populations

15. The public relies on cell towers, internet, and land lines to communicate with first responders, for their own emergency needs as well as to communicate the location of new, spreading, or quickly-moving fires. The public also relies on electric service to charge their own cell phones and maintain power for their home electrical devices (routers, modems, cordless phones).

16. The CPUC held a workshop on December 14, 2018,¹¹ to address the impacts of Public Safety Power Shutoffs (PSPS), or electricity grid de-energization, on vulnerable populations. De-energization has wide-reaching impacts, especially when they occur for indefinite periods of time. As part of the October 2018 PSPS event described in Paragraph 6, de-energization occurred in Santa Rosa. According to Chris Coursey, Mayor of the City of Santa Rosa, the consequences of the de-energization were significant and widespread. Mayor Coursey noted examples of difficulties that emerge from extensive or indefinite periods of de-energization, including the spoiling of food and whether to evacuate due to homes becoming uninhabitable from the inability to regulate temperatures.¹² These impacts would also apply to senior centers, group homes, and other medical facilities.

17. According to Susan Goran, former Mayor of Santa Rosa, there are economic impacts on Californians from de-energization, in addition to those from spoiled food from loss of power to refrigerators and freezers for individuals and grocery stores and restaurants,

¹¹ This was the first of two workshops on de-energization as part of R.18-12-005. See <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M251/K987/251987258.PDF>.

¹² Mayor Chris Coursey of Santa Rosa spoke at the December 14, 2018 CPUC Workshop on De-Energization.

1 or the need of residents or employees to seek shelter elsewhere. Businesses also suffer from
2 the inability to make sales once payment systems lose power. Furthermore, loss of power
3 impacts emergency care facilities, hospitals, and hospices.¹³

4 18. According to Barry Atwood, a principal in a design firm which specializes in
5 accessible architecture, who spoke on the impacts of de-energization on vulnerable
6 populations, there are Californians that rely on power for the use of medical technology that
7 performs a life-saving function, such as a respirator while sleeping.¹⁴ This point would apply
8 to other home medical equipment. Furthermore, these vulnerable populations may not have
9 the financial means necessary to purchase back-up generators due to being on a fixed
10 income. They may also lack the means to evacuate to an area not experiencing a PSPS.
11

12 Local Government Impacts

13 19. According to the El Dorado County Sheriff's Department, the County of El
14 Dorado experienced de-energization in the latter half of 2018 to reduce the risk of wildfire.
15 According to Lieutenant Beyers of the El Dorado County Sheriff's Department, the pre-
16 emptive PSPS cut off power to the street lights that comprised the only evacuation route out
17 of the area. According to Lieutenant Beyers, if a wildfire or other disaster that necessitated
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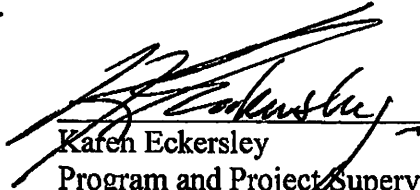
24 ¹³ Examples cited by Susan Goran, the former Mayor of Santa Rosa at the December 14,
25 2018 CPUC De-Energization Workshop.

26 ¹⁴ Statement of Barry Atwood at the December 14, 2018 CPUC Workshop on De-
27 Energization.

1 evacuation were to have occurred at this time, the ensuing traffic gridlock would have been
2 catastrophic.¹⁵

3 I declare under penalty of perjury that the foregoing is true and correct to the best of
4 my knowledge.
5

6 Executed this 25th day of January, 2019.
7

8 
9 Karen Eckersley
10 Program and Project Supervisor
11 California Public Utilities Commission
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25 ¹⁵ This example is from the comments of Lieutenant James Beyers of the El Dorado County
26 Sheriff's Department at the CPUC's January 9, 2019, workshop in Calabasas on the
27 Impacts of De-energization: Focus on First Responders and Local Government.
28

EXHIBIT 9

January 24, 2019

Alice Stebbins
Executive Director
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

via email at alice.stebbins@cpuc.ca.gov

Re: Order to Show Cause in *United States of America v. Pacific Gas and Electric Company*
USDC Northern District of California, Case No. CR 14-0175 WHA

Ms. Stebbins:

On behalf of the signatory communications companies below (the “Communication Providers”), we encourage the Commission to propose to the District Court that Commission Resolution ESRB-8 represents a more comprehensive and fulsome approach to ensuring fire safety than the de-energization protocol proposed in the above-referenced Order to Show Cause (“OSC”). In brief, the OSC seems to rely on a single factor to trigger a de-energization decision by PG&E, i.e., wind, while at the same time Commission Resolution ESRB-8, as well as SB901¹, already recognize that a number of additional factors need to be considered before any such decision is made. Thus, the OSC appears to conflict with this Commission’s Resolution and with SB901, which could inadvertently create unintended safety issues.

The OSC proposes to mandate de-energization by PG&E “of any part of its grid not yet rated as safe by PG&E for the wind conditions then prevailing until those conditions have subsided.” This approach, based on the single data point of wind conditions, seems to completely discount consideration of any other fire-ignition factors, including vegetation conditions and air moisture/humidity, or any other considerations enumerated in ESRB-8.

Furthermore, the OSC expressly mandates that, “in determining safety, PG&E may *not* take into account the need for *reliability of service*, the inconvenience to customers resulting from interruption in service, or its impact upon PG&E’s revenues and profits.” [emphasis added]. Although the Communication Providers support the need to make safety the top priority, this limitation with respect to reliability appears to conflict with SB901, which was signed into law last year. SB901 amended Section 8386 of the Public Utilities Code to require Investor Owned Utilities (“IOUs”) to create a wildfire mitigation plan, which is to include:

Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.

¹ Chapter 626, Statutes of 2018

The Commission recently commenced a new Rulemaking to Examine Electric Utility De-Energization of Power Lines in Dangerous Conditions (R.18-12-005) to, among other things, “address the implementation and logistics” for the de-energization element of the wildfire mitigation plans required by SB901.

As you know, the Commission has been addressing the complexities of de-energization since 2008, resulting in major decisions and policy implementation in 2009 (D.09-09-030), 2012 (D.12-04-024) and 2018 (Resolution ESRB-8). Throughout these activities, the Commission has actively engaged the electric utilities, communications companies, water companies, counties and municipalities, the California Department of Forestry, disability and consumer rights advocates and other stakeholders. The protocols developed under Resolution ESRB-8 still require further attention, and de-energization issues are still otherwise being considered at the Commission in its current Rulemaking (R.18-12-005).

The Communication Providers further note that the Commission has determined that de-energizing electric facilities during certain dangerous conditions can prevent wildfires. ESRB-8, p. 1. The OSC seems to recognize that as well. However, the Commission also recognizes (in D.09-09-030, at pp 51-53) that there are numerous safety risks that can increase with de-energization, including:

- Shutting off power could disrupt landline and wireless telephone service, including internet access and text alerts. Without these services, residents may not be able to report fires, which could delay the situational awareness and response by firefighters and thereby increase the chance of wildfires growing to catastrophic size. Residents also may not be able to call to report crimes, medical emergencies, and vehicle accidents. The delayed response to emergencies of all types poses a serious risk to lives and public safety in general.
- Residents without power may not be able to use their telephones, cell phones, televisions, radios, and computers, losing internet access and text alerts. Thus, those who work or live in an area where power is shut off will lose their primary means of obtaining information, about fire proximity, evacuation notices, and other critical information.
- Loss of power to traffic signals and street lights may cause traffic accidents and impede evacuations, particularly at night.
- Water District pump stations are critical to maintaining the supply of water. In the event that pump stations lose power, and/or run out of backup power, the supply of stored water in the area served by the pump station could be exhausted within hours, leaving no water to fight fires.
- People with disabilities rely disproportionately on communications devices that need to be plugged into a power outlet to operate, such as TTYs² and computers, making them vulnerable to being cut off from communications with the outside world during a power

² A TTY is a special device that lets people who are deaf, hard of hearing, or speech-impaired use the telephone to communicate, by allowing them to type messages back and forth to one another instead of talking and listening.

shut-off event. Shutting off power would place such people at greater risk of not receiving a notice to evacuate due to an oncoming wildfire. In addition, people with disabilities are more likely to need assistance in evacuating. The inability to receive evacuation notices or to call for assistance could have deadly consequences.

- Unless equipped with backup power (and most are not), electric garage door openers will not work when power is shut off. If wildfire forces an evacuation, customers who are elderly or have disabilities may not be able to open their garage doors manually, potentially trapping them in their homes.

Due to these competing risks, the Commission has determined that the decision to de-energize should be made only after consideration of multiple factors, only one of which is wind conditions.³

The OSC seems to ignore those safety risks and could create confusion and inadvertently increase public safety risks associated with de-energization. Accordingly, the Communication Providers urge the Commission to propose to the District Court that either (a) the District Court defer to the Commission on the complex issue of de-energization, or (b) any final order be consistent with ESRB-8 and any other Commission decisions, most significantly decisions resulting from R.18-12-005.

Signatory Companies:

AT&T CA and AT&T Mobility

Sprint Communications Company

T-Mobile West

Verizon

Frontier Communications

**Consolidated Communications of
California and the Small LECs**

cc: Cynthia Walker, Communications Division Director (*via email at cynthia.walker@cpuc.ca.gov*)

Christine Hammond, Legal Division (*via email at christine.hammond@cpuc.ca.gov*)

³ Recognizing the competing risks that accompany a decision to de-energize, the Commission in ESRB-8 found that this decision “is complex and dependent on many factors including and not limited to fuel moisture; aerial and ground firefighting capabilities; active fires that indicate fire conditions; situational awareness provided by fire agencies, the National Weather Service and the United States Forest Service; and local meteorological conditions of humidity and winds.” ESRB-8, Finding #2. The Commission further stated that the electric IOU must reasonably believe that there is an imminent and significant risk that strong winds will topple its power lines onto tinder dry vegetation or will cause major vegetation-related impacts on its facilities during periods of extreme fire hazard. ESRB-8, p. 4.

EXHIBIT 10

GOODIN,
MACBRIDE,
SQUERI & DAY, LLP

Megan Somogyi, Attorney at Law

January 23, 2019

President Michael Picker
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

**Re: Commission Response to the U.S. District Court Order to Show Cause
Why PG&E's Conditions of Probation Should Not Be Modified**

Dear President Picker:

On behalf of the County of Mendocino, the County of Napa, and the County of Sonoma (the "Counties"), we are writing to provide the Counties' input and response to the U.S. District Court for the Northern District of California's January 9, 2018 Order to Show Cause why the terms of PG&E's probation for criminal convictions arising from the San Bruno natural gas pipeline explosion should not be modified to include de-energization and vegetation removal measures. The Counties and their residents suffered significant harm in the October 2017 Northern California wildfires. CAL FIRE determined that the Adobe Fire, the Atlas Fire, the Norrbom Fire, the Nuns Fire, the Oakmont Fire, the Partrick Fire, the Pocket Fire, the Pressley Fire, the Pythian Fire, the Redwood Valley Complex Fire, and the 37 Fire were all caused by PG&E electrical equipment; the cause of the Tubbs Fire remains under investigation. The Counties generally support the swift and comprehensive action relating to fire safety that the District Court is proposing to order. But this support is dependent on there being clear recognition by the court and PG&E that the Commission will retain jurisdiction and authority, in the event the court adopts the proposed additional conditions of probation, to direct PG&E as to how those measures ordered by the court are to be implemented. PG&E must adhere to all rules adopted by the Commission in the pending de-energization and wildfire mitigation plan proceedings, and other relevant proceedings that will affect PG&E's wildfire prevention activities.

The Counties believe that it is not only important that the steps covered by the Court's proposed order be done, but also believe that it matters *how* the work is done. Given the sweeping scope of the court's Order, and the potential that PG&E's activities in complying with the order will significantly affect the public health, safety, and quality of life, the Counties urge the Commission to provide the court with a more nuanced view of what is required to effectively implement the fire safety measures in the Order to Show Cause.

The court cites CAL FIRE's referral for possible criminal prosecution of twelve of the October 2017 Northern California wildfires caused by PG&E's electrical equipment as the

President Michael Picke

January 23, 2019

Page 2

basis for modifying the terms of PG&E's probation. If adopted, the Order would obligate PG&E to re-inspect all of its electrical grid and trim trees and branches that might come into contact with electrical lines or equipment under high-wind conditions; identify and fix all above-ground electrical equipment that might cause a fire or is in a damaged or weakened state; and to fix any condition anywhere on its grid similar to any condition that contributed to any previous wildfire, among other proposed conditions. This must be done before June 21, 2019—the official start of wildfire season. The Order would direct PG&E to document its inspections and work, and to rate each segment's safety under various wind conditions. During the 2019 wildfire season, and thereafter, PG&E would be allowed to supply electricity only through the parts of its grid that have been determined safe under the prevailing wind conditions; any part of the grid not yet rated safe for the existing wind conditions would be de-energized. The court invited the Commission to submit a better plan for ensuring the safety of California before the 2019 wildfire season; the Commission's plan, if any, must be submitted by January 25, 2019.

The court's Order is focused on outcomes—clearing trees away from power lines, fixing overhead electrical equipment, and shutting off the power in high-wind conditions. These outcomes are largely duplicative of the enhanced wildfire safety measures ordered by Senate Bill 901 and proposed in PG&E's Community Wildfire Safety Program, which is the cornerstone of its 2020 general rate case application. The Counties support these combined efforts to reduce wildfire risk. The Counties are concerned, however, that requiring PG&E to achieve outcomes without also addressing the manner in which those outcomes must be achieved could have serious negative consequences for the very citizens the court hopes to protect. The Commission has the opportunity to raise with the court the process by which the fire safety objectives in the Order should be achieved. Although the Commission has not yet adopted the rules that will govern the measures covered by the court's proposed Order, the Commission could ask the court to include a general provision in any Order issued that requires PG&E to comply with the Commission's rules, as applicable.

Removing and trimming trees that are likely to fall onto or come into contact with overhead power lines in high winds will reduce wildfire risk, and the Counties support this endeavor. It is important, however, that PG&E not indiscriminately clear-cut the areas around its power lines, as it appears to have been doing in certain areas of the Counties since the 2017 wildfires. Removing significant numbers of trees and other vegetation creates the risk of erosion and flooding, and harms the environment. It is also PG&E's policy to leave large trees and tree limbs on the property from which they were cut, and to chip smaller branches and vegetation and leave that debris on the property for the owner to dispose of. While the Counties understand that the trees and vegetation are the property of the landowner, replacing living trees and vegetation with a large mass of rapidly desiccating wood debris not only places a financial burden on the property owner, but is a fire hazard in and of itself. If PG&E is to undertake significant tree removal and trimming under the court's Order, the court should also address these unintended and significant consequences of over-zealous vegetation management.

De-energizing power lines in high-wind conditions will also reduce wildfire risk, which the Counties support. The court's Order is focused on wildfire safety from the end result,

de-energized power lines, and does not appear to contemplate the safety implications of shutting power off or the manner in which the lines are de-energized. Power shutoffs impact the Counties' infrastructure that is critical in emergency events, including radio tower communications, water and fuel pumps, hospitals, camera networks, etc., as well as resources and communication channels for first responders, tactical situation awareness, and the ability to effectively communicate with residents through alert and warning systems. The length of a de-energization event can exceed the battery backup capabilities of cell towers and generators, which would increase public safety risks for residents and first responders in affected areas. The Counties are also home to thousands of medically vulnerable people; not all of whom are enrolled in PG&E's medical baseline program, who depend on electricity to operate medical equipment or otherwise ensure their continued wellbeing. PG&E's current practices for notifying vulnerable populations before a Public Safety Power Shutoff event are not adequate, nor is its communication with local emergency and safety officials about power shutoff events particularly effective. The Counties understand that PG&E has no experience de-energizing power lines before 2018, and therefore does not have the kinks worked out of its practices, but this lack of experience will create significant problems when PG&E is required to de-energize any portion of its system not rated safe for the prevailing wind conditions in June 2019. The Commission's Rulemaking on de-energization, R.18-12-005, is scheduled to produce a final decision that delineates best practices, utility coordination with local first responders, protocols for minimizing impacts to vulnerable populations, and reporting requirements by Summer 2019—in time for the 2019 wildfire season. It is critical that the Commission complete R.18-12-005 on time. The court's final Order should take into account the harm that can result from poorly executed de-energization and should direct PG&E to follow the protocols adopted in R.18-12-005.

The Counties are not parties to the District Court case in which PG&E's probation is addressed and therefore do not have the ability to voice these concerns directly to the court. But the Commission has been invited to offer its views on the court's Order and how best to ensure that PG&E's electrical system does not pose a continued threat for wildfires. The Counties ask that the Commission take this opportunity to urge the District Court to ensure that PG&E undertakes its wildfire prevention measures in a manner that will not adversely affect the customers the measures are intended to protect through adherence to the Commission's rules to be issued on these matters.

The Counties appreciate the Commission's consideration of this request.

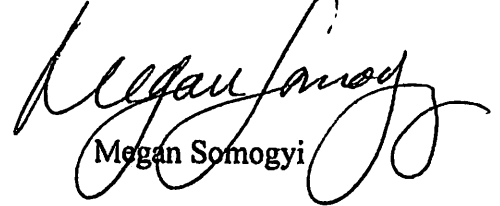
President Michael Picke

January 23, 2019

Page 4

Very truly yours,

GOODIN, MACBRIDE,
SQUERI & DAY, LLP

A handwritten signature in black ink, appearing to read "Megan Somogyi", is written over the printed name.

Counsel for the County of
Mendocino, the County of Napa, and
the County of Sonoma

CC: Commissioner Liane Randolph
Commissioner Martha Guzman Aceves
Commissioner Clifford Rechtschaffen
Service Lists for A.18-12-009, R.18-10-007, R.19-01-006

EXHIBIT 11

Working Together.
Achieving Results.



January 24, 2019

Honorable Michael Picker, President
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: Order to Show Cause filed January 9, 2019 in *U.S. v. Pacific Gas and Electric Company*, No. CR 14-0175 (U.S.D.C. N. Dist. Cal., Alsup, J.)

Dear President Picker:

By this letter, the California Water Association (CWA) respectfully presents its concerns and suggestions regarding the above-referenced Order to Show Cause Why PG&E's Conditions of Probation Should Not Be Modified (OSC). The OSC was entered in the Federal District Court for the Northern District of California January 9, 2019, in a criminal case, referenced above, arising out of the San Bruno explosion and fire. The OSC proposes to impose on Pacific Gas and Electric Company (PG&E), as new conditions of probation, a very stringent mandate to de-energize parts of its electric grid that have not been determined to be safe under prevailing wind conditions.

As you know, CWA is a statewide association that represents the interests of Commission-regulated water service providers that furnish safe, reliable, and high-quality drinking water service to approximately 6 million Californians. Of particular import here is that the regulated water systems also provide water to first responders for fire protection and suppression, as well as water essential for communities in the aftermath of fires. This vital role played by regulated water systems unequivocally depends on a reliable source of electricity, a source that may be compromised should the proposed new conditions of PG&E's probation be adopted without addressing the water utilities' legitimate concerns.

In its *Order Instituting Rulemaking to Examine Electric Utility De-Energization of Power Lines in Dangerous Conditions*, adopted December 13, 2018, the Commission has recognized that de-energizing power lines can play an important role in ensuring public safety. (OIR 18-12-005, p. 3.) That OIR noted the Commission's recent adoption of de-energization rules by Resolution ESRB-8 and confirmed that Resolution ESRB-8 will remain in effect during the pendency of the new rulemaking unless the Commission explicitly modifies or rescinds it.

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Working Together.
Achieving Results.



Honorable Michael Picker
January 24, 2019
Page 2 of 3

The Commission opened another rulemaking, R.18-10-007, in October 2018, to implement portions of SB 901 (Dodd, 2018), which require electric utilities to develop Wildfire Mitigation Plans, including the new requirement of Public Utilities Code Section 8386(c)(6) that such plans include protocols for de-energizing portions of the electrical distribution system and that consider associated impacts on public safety, including impacts on critical first responders and on health and communication infrastructure.

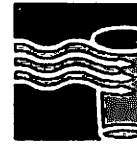
All these ongoing, concerted actions by the Commission and the Legislature demonstrate an appropriate true sense of urgency to address the increased risk of disastrous wildfires and the potential contribution of electric infrastructure to such disasters. Both the Commission and the Legislature have recognized that de-energization of electric lines can provide an important measure of protection in extreme circumstances, but also that use of de-energization requires consideration of multiple factors. Resolution ESRB-8 specifically found that “the decision to de-energize electric facilities for public safety is complex and dependent on many factors” – including but not limited to fuel moisture, firefighting capabilities, active fires, and local humidity and winds. (*Id.*, Finding 2, p. 8.)

CWA is concerned that the OSC takes too rigid an approach to a very complex set of challenges. CWA does not question that “safety must come first.” But safety cannot be optimized by considering only the single factor of “wind conditions ... in a given county.” (OSC, p. 3.) Reliable electric utility service is an essential element in the normal operation of the public water systems managed by CWA’s member companies. The determination by an electric utility to curtail service under threatening weather conditions itself imposes serious risks not only to public safety in general, but specifically to water utilities and their customers, at just that time when the water utilities’ ability to deliver water service is most critical.

This is why the Commission, in Resolution ESRB-8, imposed strict procedural requirements in connection with such actions and, in R.18-12-005, has undertaken a detailed consideration of ways to make the best possible use of de-energization as a tool for enhancing public safety. This is also why one of CWA’s principal goals in the rulemaking is to ensure that the Commission’s final decision applies the electric utility notification and grid location requirements equally to Commission-regulated water utilities and to the public agencies already identified.

The OSC suggests that PG&E advise all those concerned to consider arranging for back-up emergency generators as a hedge against interruption of power. This is good advice, but water utilities will need to invest many millions of dollars in such facilities in coming years in efforts to protect their customers from the disruption of water service (including the need to have adequate water available for fire suppression).

Working Together.
Achieving Results.



California
Water
Association

Honorable Michael Picker

January 24, 2019

Page 3 of 3

Unfortunately, the deployment of fossil-fuel burning generators requires permits from regional Air Quality Maintenance Districts, which are not easily obtained and the conflict with California's greenhouse gas emission reduction goals may not easily be reconciled. This is just one of many examples of competing public health and safety goals that cannot be resolved by a simple statement that "only safe operation will be allowed."

Also, implementing such measures is not as easy as the OSC suggests. Especially for vulnerable populations, such as the many disabled, elderly, and/or low-income residents of rural communities and smaller towns and cities that may be threatened by wildfires, gaining access to backup power generators will be a challenge. For water utilities, de-energization of electric lines, even with adequate advance notice, will present serious challenges for the safe operation of water treatment facilities and the pumping of water to meet fire flow requirements and customer needs. The massive interruptions of electric service that might result from enforcement of the OSC could overwhelm many water utilities' ability to maintain essential service.

CWA is confident the Commission will continue its coordinated and timely, but not hasty, work to resolve these complex and interrelated safety issues, and we respectfully urge the Commission to bring the complexity of these challenges to the Court's attention. CWA and its member companies pledge to work with the Commission to achieve the best and most reliable solutions, for the benefit of all California residents and communities.

Very sincerely,

A handwritten signature in black ink, reading "Jack Hawks".

Jack Hawks
Executive Director

cc: All Commissioners
Alice Stebbins, Executive Director
Arocles Aguilar, General Counsel
Raminder Kahlon, Director, Water Division

EXHIBIT 12

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2 CHRISTINE JUN HAMMOND, SBN 206768
3 CHRISTOFER NOLAN, SBN 229542
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5 505 Van Ness Avenue
6 San Francisco, CA 94102
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8 Facsimile: (415) 703-4592
9 cjh@cpuc.ca.gov

10
11 Attorneys for the California Public Utilities Commission and
12 Michael Picker, Liane Randolph,
13 Martha Guzman Aceves, and Clifford Rechtschaffen,
14 in their official capacities as Commissioners
15 of the California Public Utilities Commission

11 **UNITED STATES DISTRICT COURT**
12 **FOR THE NORTHERN DISTRICT OF CALIFORNIA**
13 **SAN FRANCISCO DIVISION**

14 UNITED STATES OF AMERICA,

15
16 Plaintiff,

17 vs.

18 PACIFIC GAS AND ELECTRIC COMPANY,

19
20 Defendant.

Case No. 14-CR-00175-WHA

**DECLARATION OF JAMES BOOTHE
IN SUPPORT OF COMMENTS OF THE
CALIFORNIA PUBLIC UTILITIES
COMMISSION IN RESPONSE TO
ORDER TO SHOW CAUSE**

Hearing Date: January 30, 2019

Time: 9:00 a.m.

Courtroom: 12, 19th Floor

Judge: Hon. William H. Alsup

1 I, JAMES BOOTHE, declare as follows:

2 1. I am currently employed as a Program and Project Supervisor in the Water
3 Division at the California Public Utilities Commission ("Commission" or "CPUC") at 505
4 Van Ness Avenue, San Francisco, CA 94102. I make this declaration in support of
5 comments filed by the Commission in response to an Order to Show Cause issued by this
6 Court on January 10, 2019. This declaration is based on my years of experience in the water
7 utility industry and, if called and sworn as a witness, could and would competently testify.

9 2. I hold a Ph.D. in Economics from the University of California, Santa
10 Barbara, an M.B.A. in Business/Finance from the University of Miami, and a B.S. in
11 Finance from the University of Virginia. I have been employed by the Commission in
12 various capacities for approximately 20 years. I have also worked in the private sector on
13 utility issues. Through my professional career and academic studies, I have over 20 years of
14 experience with the operation of privately and municipally owned water utilities.

16 3. As Program and Project Supervisor at the Commission's Water Division, my
17 day-to-day responsibilities include overseeing the regulation of water utilities. The Water
18 Division advises the Commission on all matters related to these utilities, including
19 rulemaking, investigations, and formal applications filed by the utilities.

21 4. Through the course of my professional career, I have gained substantial
22 experience with and expertise about the physical operation of water utilities in general,
23 including those utilities that would be affected if the Court's Order to Show Cause were to
24 be implemented under the terms described therein. There are approximately 3,000
25 community water systems in the State of California, and Pacific Gas and Electric's
26 ("PG&E") service territory covers about one-half of the state. The water utilities within
27

1 PG&E's service area are of varying size with varying customer bases, and, although difficult
2 to predict with specificity, each utility and its customer base could be detrimentally affected
3 by a prolonged de-energization.

4 5. While some of the larger water utilities have some backup power, with short
5 notice it may not be possible to relocate the necessary backup generators to impacted areas.
6 There is no public, centralized source of information that tracks the amount of backup power
7 each utility has at each facility, if it has any at all.
8

9 6. Except for a small percentage of gravity-fed water systems and pumps fueled
10 by natural gas, the pumps at all water utilities require electricity in order to operate, and
11 without operable water pumps, a utility cannot deliver potable water to its customers. In fact,
12 well and distribution pumps, wastewater treatment plants, potable water treatment plants,
13 storage reservoirs, and other infrastructure dependent on electricity could be adversely
14 impacted by a prolonged de-energization. This is true of all water facilities, not just CPUC-
15 regulated water companies, but all retail water service entities such as municipal water
16 utilities insofar as they rely on PG&E.
17

18 7. Commission General Order 103-A establishes rules governing water service,
19 including minimum standards for operation, maintenance, design, and construction over
20 Commission-regulated water utilities. Section VII.6.A requires that "each potable water
21 distribution system shall be operated in a manner to assure that the minimum operating
22 pressure at each service connection throughout the distribution system is not less than 40 psi
23 [pounds per square inch] . . ." Without operating pumps due to electricity outage, this
24 minimum operating pressure cannot be satisfied.
25
26
27
28

1 8. Without access to electricity, a water utility lacks the ability to deliver
2 potable water to its customers, because the distribution system must be pressurized to move
3 the water throughout the system. The distribution system must remain pressurized in order
4 to prevent the bacteria and other harmful contaminants from entering the system. If water
5 sits unpressurized in the distribution system, there is a risk of contamination to the water,
6 which often requires utilities to advise customers to boil their water or drink bottled water
7 once the distribution has been re-pressurized, until the water can be tested to ensure safety.

9 9. The prolonged loss of electricity at wastewater facilities could also pose a
10 potential health threat, since without electricity or some other fuel source for the pumps, the
11 ability to move the wastewater would be compromised. If the electricity is out at sewage
12 treatment facilities, there is a risk of untreated sewage contaminating waterways, like rivers,
13 creeks, and bays, depending on where the water is to be deposited. Moreover, without
14 power, there will be no water supply to businesses and residences and thus a curtailment of
15 waste water leaving homes and businesses. The inability to move human waste from a
16 residence or business is considered a health hazard.

17
18 10. Electricity is generally necessary to pump water at sufficient pressure for fire-
19 fighting purposes. Lack of water pressure directly compromises firefighting capabilities.

20
21 11. Many of the larger water utilities employ supervisory control and data
22 acquisition ("SCADA") systems for the maintenance and operation of their infrastructure. A
23 SCADA system monitors and adjusts the operating parameters for the facilities of a water
24 utility from well production and water treatment to water distribution to ensure the various
25 components are operating within acceptable parameters to provide safe and reliable water
26 quality to residential, business, and institutional customers 24 hours a day and 365 days a
27

1 year. SCADA systems can be relatively simple, such as one that monitors environmental
2 conditions of a small office building, or incredibly complex, such as a system that monitors
3 all the activity in a nuclear power plant or the activity of a large municipal or investor-
4 owned water system. SCADA systems depend on electricity to run the computers and the
5 telecommunications network (landline, cellular, microwave) to communicate with a
6 multitude of infrastructure facilities. Without power, water utilities that employ a SCADA
7 system would have no efficient or continuous means to monitor facility safety.

9 12. After any power outage of any substantial length, a water utility would need
10 to sample and test for the quality of its water throughout its entire system – and take
11 corrective measures where necessary – before assuring its customers that its water was safe
12 for use. It could take days for some water utilities to come back on to full service after an
13 outage.
14

15 I declare under penalty of perjury that the foregoing is true and correct to the best of
16 my knowledge.

17 Executed this 25th day of January, 2019.

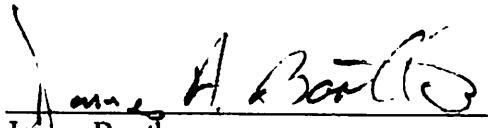
18 
19 James Boothe
20 Program and Project Supervisor
21 California Public Utilities Commission
22
23
24
25
26
27
28

EXHIBIT 13

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

RESOLUTION EXTENDING DE-
ENERGIZATION REASONABLENESS,
NOTIFICATION, MITIGATION AND
REPORTING REQUIREMENTS IN
DECISION 12-04-024 TO ALL ELECTRIC
INVESTOR OWNED UTILITIES.

A. _____

CITY OF MALIBU'S PETITION FOR MODIFICATION OF RESOLUTION ESRB-8

**Christi Hogin
Joshua Nelson
BEST BEST & KRIEGER LLP
for City of Malibu
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Telephone: (310) 643-8448
Facsimile: (310) 643-8441
Email: christi.hogin@bbklaw.com
joshua.nelson@bbklaw.com**

October 5, 2018

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

RESOLUTION EXTENDING DE-
ENERGIZATION REASONABLENESS,
NOTIFICATION, MITIGATION AND
REPORTING REQUIREMENTS IN
DECISION 12-04-024 TO ALL ELECTRIC
INVESTOR OWNED UTILITIES.

A. _____

CITY OF MALIBU'S PETITION FOR MODIFICATION OF RESOLUTION ESRB-8

I. Introduction

Pursuant to the Rules of Practice and Procedure (RPP) 16.4 and General 8.2 of General Order 96-B, the City of Malibu (City) respectfully petitions the Commission to modify Resolution ESRB-8 (Resolution).

Alarm bells have sounded throughout neighborhoods in the high risk fire zones of the City as residents got wind of SCE's plan to cut off power needed for emergency water pumps and communications when their homes are threatened by wildfires. The de-energization policy responds to important considerations involving risk but it was formed without sufficient information and community input to appropriately balance the benefits, risks, and effects of the policy itself. There are options that have not been examined. These are the reasons that the City brings this petition and the explanation for its timing. We appeal to the Commission's commitment to just resolutions in requesting this petition for modification.

For the reasons set forth herein, the City requests that the Commission modify the Resolution and not apply the standards developed in D.12-04-024 outside of SDG&E's service territory. Rather, the Commission should invite each IOU to submit an application to consider its de-energization policy or open a new rulemaking to consider a standard statewide policy. Any new or revised de-energization policy should be developed after meaningful public input and notice.

II. Procedural Background

On July 12, 2018, the Commission adopted the Resolution after the least public notice and review permitted by any formal and informal process set forth in the RPP and General

Order 96-B. As a resolution proposed by the Commission, notice was included in the daily calendar and provided to the service list for the prior San Diego Gas & Electric (SDG&E) de-energization proceeding. No notice was provided to the City or other affected agencies in Southern California Edison (SCE) or Pacific Gas and Electric (PG&E) service territories. As a result, the Commission was not afforded the benefit of public vetting and received very few comments on the draft Resolution. Specifically, opening comments were filed by PG&E, SCE, SDG&E, the California Association of Small and Multi-Jurisdictional Utilities (“CASMU”), Center for Accessible Technology and the Utility Reform Network (“CforAT/TURN”), and a coalition of communications providers. Reply comments were filed by the communications providers, CforAT/TURN, PG&E, SCE, and SDG&E.

III. Standard of Review and City’s Ability to Petition for Modification

RPP 16.4 authorizes a petition for modification of a Commission decision. A petition must include the “requested relief and must propose specific wording to carry out all requested modifications to the decision.”¹ The petition must generally be filed within one year of the decision at issue.² Lastly, “[i]f the petitioner was not a party to the proceeding in which the decision proposed to be modified was issued, the petition must state specifically how the petitioner is affected by the decision and why the petitioner did not participate in the proceeding earlier.”³

The Commission has clarified that a petition for modification is not a rigid procedural tool but a means for achieving substantial justice:

Precedent establishes that the Commission has not applied the justification and timing requirements of Rule 16.4 and its predecessor, Rule 47, in a mechanical way if that would thwart justice; thus, even where the Commission has determined that a petition was not the appropriate procedural remedy, on occasion and for public policy reasons, it has considered the substantive merits and after that review, has either granted or denied the petition.⁴

¹ RPP 16.4(b).

² RPP 16.4(d).

³ RPP 16.4(e).

⁴ *In the Matter of the Application of Southern California Edison Company (U 338-E) for a Certificate of Public Convenience and Necessity Concerning the Tehachapi Renewable Transmission Project (Segments 4 through 11)*, (2013) Cal. P.U.C. Decision D.13-07-018, Conclusion of Law #1, p. 65-66.

The City meets these procedural requirements. First, the Resolution was adopted on July 12, 2018, and this Petition is being filed well within a year of this date. Second, while the City was not a party in this matter, it did submit informal comments to the Commission prior to its meeting to adopt the Resolution. Moreover, the City did not participate earlier as it was not aware of the draft Resolution. As noted above, the draft Resolution was released by the Safety and Enforcement Division and served on all parties to the SDG&E power shut-off proceeding. As the City is not located within SDG&E territory and that proceeding was closed in 2012, it has not been monitoring that proceeding and was unaware of the proposal. Once the City became aware, it submitted its informal comments.⁵ The City will be dramatically affected by the Resolution, both directly and on behalf of its residents. It is located in a high fire area with limited ingress and egress, and any future de-energization events will affect City facilities and the City's ability to provide law enforcement and similar services during an emergency. For example, the Resolution requires SCE and other IOUs to evaluate the need for back-up generators and similar equipment at critical facilities after a de-energization event.⁶ This could result in a loss of water or communication service during a de-energization event interfering with or stopping the City's and other first responders' ability to fight the fire or respond to related medical and public safety emergencies.

IV. Modification Is Required

Modification should be granted for three reasons: (1) the Resolution improperly modifies D.12-04-024; (2) extending the de-energization requirements adopted in D.12-04-024 statewide is not supported by the record; and (3) the substantial policy and public safety issues implicated by the Resolution require careful vetting after allowing all affected entities, and not simply parties to D.12-04-024, an opportunity to provide input.

A. Resolution Improperly Modifies D.12-04-024

The Petition must be granted as the Resolution improperly modifies D.12-04-024. Under General Order 96-B and Public Utilities Code section 1708, a resolution, which is adopted through an informal proceeding, cannot amend or modify a decision adopted as a result of a

⁵ A copy of the City's informal comment letter is attached as Attachment A.

⁶ While the Resolution would have required mitigation to critical facilities, this requirement was removed from the final Resolution. (See Resolution, p. 8.)

formal proceeding. In D.16-08-027, the Commission considered an application for rehearing of Resolution E-4770. In part, the application challenged the decision in Res. E-4770 to utilize a solicitation process approved in a prior formal Commission decision, D.10-12-048. The Commission had declined to modify the solicitation process as it had been approved in a formal proceeding and could not be modified in an informal proceeding. The Commission stated:

Res. E-4770 is an order of this Commission, adopted as a result of informal proceedings. As our General Order (“GO”) 96-B 9 explains, resolutions are adopted when we resolve a matter outside an application, complaint, petition, investigation or rulemaking proceeding. (GO 96-B, § 3.7; cf. GO 96-B, § 5.1.) This Commission circulates draft proposed resolutions for public comment, but no formal hearing is provided before a resolution is adopted. (See Pub. Util. Code, § 311(g)(1).) Pursuant to GO 96-B, a formal proceeding (initiated by an application, application for rehearing, or petition to modify) must be commenced when it is proposed that we modify one of our past decisions or take other action that affects the result of a decision rendered in a formal proceeding. (GO 96-B, §§ 5.2, 5.3; see Pub. Util. Code, § 1708.)

Here, the Resolution was adopted through an informal proceeding and purports to modify D.12-04-024. For example, the Resolution modifies D.12-04-024 by extending its SDG&E-only de-energization plan to PG&E and SCE territories. Similarly, the Resolution revises the reasonableness factors outlined in D.12-04-024 for determining when SDG&E may de-energize power lines. Specifically, the Resolution notes:

However, we modify the third factor listed above by adding the phrase underlined below:

- [The IOU] must reasonably believe that there is an imminent and significant risk that strong winds will topple its power lines onto tinder dry vegetation or will cause major vegetation-related impacts on its facilities during periods of extreme fire hazard.

These modifications to D.12-04-024 are procedurally improper and the Commission must conduct a formal proceeding prior to amending D.12-04-024.

B. Resolution's Determination Is Not Supported by the Record

Even if the Resolution is procedurally proper (and it is not), the Resolution's expansion of the de-energization plan to PG&E, SCE and other IOU territories is not supported by the record. The SDG&E de-energization program was adopted after a multi-year process that began with SDG&E filing Application (A.) 08-12-021 in 2008 to allow it to shut-off power whenever winds were above a certain threshold. This application was ultimately rejected by the Commission in 2009 (D.09-09-030). While the Commission rejected SDG&E's power plan, it recognized that SDG&E retained the statutory authority to de-energize in response to an emergency and encouraged SDG&E to develop a revised shut-off plan after consultation with interested parties. This resulted in an interested party, the Disability Rights Advocates, filing a petition to modify D.09-09-030 to require SDG&E "... to provide notice and mitigation, to the extent feasible and appropriate, whenever SDG&E shuts off power for public-safety reasons." (D.12-04-024, p. 2.) The Commission issued D.12-04-024 in response to this petition. Accordingly, D.09-09-030 and D.12-04-024 were the result of a six-year process that involved multiple opportunities for parties to formally and informally provide input on the need for, scope and substance of the de-energization plan.

No similar efforts occurred with the Resolution. While the Resolution notes that wildfires occur throughout the state and highlights recent fires in SCE and PG&E territory, it does not discuss the causes, likelihood, impact or potential mitigation efforts that may apply. (Resolution, p. 2-3.) This sharply contrasts with the robust record developed in A.08-12-021. For example, the Commission and SDG&E conducted numerous public participation hearings and technical workshops. (D.09-09-030, p. 5-6.) As noted in D.09-09-030, "[t]here was considerable public participation in this proceeding. More than 100 members of the public, elected representatives, government officials, and representatives of community organizations spoke at the PPHs and public workshop, and there were many letters and email sent to the Commission. The public's input was carefully considered in crafting today's decision." (at p. 5-6.) In addition, the Commission also accepted written testimony, informational filings and robust written comments. (D.09-09-030, p. 5-6.) These efforts and additional efforts taken after D.09-09-030 was adopted provided substantial evidence and support for the Commission's conclusions in D.09-09-030 and D.12-04-024.

Similarly, the Commission conducted no review of the Resolution under the California Environmental Quality Act (“CEQA”). CEQA review would have evaluated the potential environmental effects of the Resolution, which are numerous given its dramatic effect on transportation, water, communications, and electrical systems during emergency events. CEQA review would have also provided an opportunity for further public comment and input on the Resolution and its potential effects.

Moreover, the (scant) record developed in this proceeding is devoid of any input from affected local agencies. The Commission received comments from six parties or joint parties, and no comments were submitted by any local government. This is likely due to the fact that the Resolution was served on the service list for A.08-12-021. Given its SDG&E focus, this service list does not include a single local government located in SCE or PG&E territory. As such, the Commission failed to provide direct notice to a single local government effected by the policy outside of SDG&E territory.

There is simply no support in the record for applying the de-energization standards in D.12-04-024 outside of SDG&E’s service territory.

C. Substantial Justice and Good Public Policy Require Modifying the Resolution

Lastly and most importantly, even assuming that the Resolution is procedurally and substantively proper (and it is not), the Commission should amend the Resolution in the interest of justice and good public policy. The City does not dispute the threat posed to it and other communities in California. The City further does not dispute that the Commission may and should ensure that all investor-owned utilities have appropriate plans in place to determine if and when to de-energize lines to avoid or mitigate wildfire risk. However, these far reaching, fundamental policy decisions require careful consideration and robust public and stakeholder input. Malibu and its residents should be heard and their perspectives considered. The Resolution has generated substantial public interest and concern within the City, and the City has received numerous oral and written comments from residents almost all opposed to the Resolution and its de-energization policy.⁷ These residents should have the opportunity to provide input on the development of any de-energization policy and not simply the results. It is

⁷ Examples of email comments received from City residents are attached as Attachment B.

simply improper to impose a statewide policy in this important issue through an informal resolution where notice was not provided to any of the affected communities.

Again, the inadequacy of the process can be seen with a simple comparison between the public outreach provided by SDG&E in A.08-12-021 and the effort taken by the Commission in this case. As noted in D.09-09-030:

SDG&E filed A.08-12-021 on December 22, 2008. Notice of A.08-12-021 appeared in the Daily Calendar on December 30, 2008. SDG&E served copies of A.08-12-021 on the San Diego Office of Emergency Services; the San Diego County Red Cross; and all State Legislators and members of Congress who represent any part of SDG&E's service territory. SDG&E also mailed a notice of A.08-12-021 to (1) all cities and counties in SDG&E's service territory, and (2) all customers in areas subject to the Power Shut-Off Plan. In addition, SDG&E published notice of A.08 12 -021 in newspapers of general circulation. (p. 3.)⁸

In this case, no notice was provided to the City or other affected local agencies (with the exception of those that participated in A.08-12-021). No notice was provided to local offices of emergency services, the Red Cross or similar disaster relief agencies. No notice was provided to affected legislators. The Commission should recognize the far reaching impacts of its decision and invite input from all affected stakeholders. As such, even if the Resolution is legal (and it is not), the City should be afforded the opportunity to show how the Resolution is bad policy and should be revised to permit a public process.

V. Requested Relief

The City requests that the Commission modify the Resolution to require each IOU to submit an application to consider its de-energization policy. This policy should be developed after significant public input and notice. As an alternative, the Commission could instate a rulemaking to develop a statewide policy. A complete list of the requested changes to the Resolution is attached as Attachment C.

///

///

⁸ *In re Application of San Diego Gas & Electric Company for Review of its Proactive De-Energization Measures and Approval of Proposed Tariff Revisions (U902E)* (2009) Cal. P.U.C. Decision D-09.09-030, p. 3.

VI. Conclusion

Based on the foregoing, the City requests that the Commission grant its petition for modification and modify the Resolution to require a public process before approving a revised de-energization policy.

DATED: October 5, 2018

Respectfully submitted,

/s/ Joshua Nelson

Christi Hogin
Joshua Nelson
Attorneys for City of Malibu

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1230 Rosecrans Ave Ste 110
Manhattan Beach, CA 90266
Telephone: (310) 643-8448
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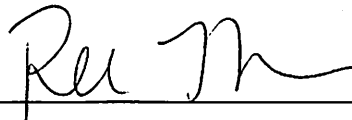
DECLARATION OF REVA FELDMAN

I, Reva Feldman, declare as follows:

I, Reva Feldman, am City Manager for the City of Malibu, responsible for, among other things, overseeing the City's challenge to Resolution ESRB-8. I have reviewed the document entitled *City of Malibu's Petition for Modification of Resolution ESRB-8*. If called as a witness, I, on information and belief, could attest to the factual statements contained therein.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct

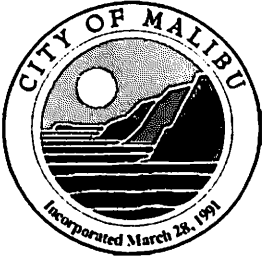
Executed this 4th day of October 2018, at Malibu, California.

A handwritten signature in cursive script, appearing to read 'Reva M', is written over a horizontal line.

REVA FELDMAN

ATTACHMENT A

ATTACHMENT A



City of Malibu

23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-3356 · www.malibucity.org

July 11, 2018

Sent via Email to public.advisor@cpuc.ca.gov

President Michael Picker
and Members of the California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

RE: Resolution No. ESRB-8 Public Safety Power Shutoff
CPUC July 12, 2018 Agenda ID #16556

Dear Commissioners:

Southern California Edison recently presented its Public Safety Power Shutoff program to the City of Malibu and the City has many serious concerns that need to be mitigated before this program is implemented.

The entire City of Malibu, which stretches 21 miles along the coast, sits in a Tier 3 Extreme Risk high fire threat area of the Santa Monica Mountains. Most of our residents live in neighborhoods nestled at the foot of the mountains or in the canyons with just one way in and one way out. Even under the best conditions, evacuating residents during a fire is extremely difficult. The City has multiple alerting systems to support the field evacuation efforts, but without power, that effort will be severely crippled.

We understand that the intent of the program is to decrease the chances of a fire during high wind events, but power lines are only one cause of fires. Fires are also frequently started by weed abatement tools, illegal campfires and lightning strikes. If Edison shuts off the power preemptively and a fire starts by another means, it could create an extremely dangerous and life-threatening situation in our community. Even if we request to have lines reenergized to implement our alert and warning systems, it could take hours before the first notification could be sent. During high wind events, there are not hours to wait for this, especially during the night when people are sleeping, and emergency resources are at their lowest.

The City's alert and warning systems are not the only concern. Our water system relies on pump stations that require power. If power is out, the water will not be able to flow, and the fire department will be severely hampered in its fire-fighting efforts. Also, Malibu is dependent on Pacific Coast Highway for a significant amount of ingress and egress from the area. Gridlock caused by inoperable traffic signals will negatively impact people's ability to evacuate the area, as well as impact the ability of emergency resources to enter the City. Another concern is that most of the City is on septic and extended power outages could negatively impact those pump stations and systems. Lastly, many residents do not have landlines and power outages cut off WiFi and all communication.

California Public Utilities Commission
City of Malibu Comments on Resolution ESRB-8
July 11, 2018
Page 2 of 2

Due to the above stated concerns, the City of Malibu requests that the language in Resolution ESRB-8 regarding extending the requirements of D.12-040024 to all electrical IOUs, be amended in the following manner:

- 1) Under II, C. Public Outreach, Notification, and Mitigation, bullet six located on page 6 of the Resolution where it states:

“To address public safety impacts of a de-energization event, the IOU may provide generators to critical facilities that are not well prepared for a power shut off.”

We request that the word “may” be changed to “will” and “critical facilities” be specified by adding “including, but not limited to cell phone towers, water pumps, key traffic signals and emergency communication.”

- 2) Under II, C. Public Outreach, Notification, and Mitigation, bullet four located on page 6 of the Resolution where it states:

“Discuss the details of any potential shut off and mitigation measure the IOU can provide to lessen the negative impacts of the power outage”

We request the language be strengthened to say, “Develop a detailed mitigation plan that is vetted with the local jurisdictions and emergency response agencies.”

Your consideration of these recommended changes to the proposed Resolution is greatly appreciated and crucial to the protection of the Malibu community and so many others throughout the state. If you have any questions regarding these suggestions, please contact me at 310-456-2489 x226 or rfeldman@cityofmalibu.org.

Sincerely,



Reva Feldman
City Manager

cc: Mayor Rick Mullen and Honorable Members of the Malibu City Council
Susan Dueñas, Public Safety Manager
Rob DuBoux, Acting Public Works Director
Diane Forte, Region Manager, Public Affairs, Southern California Edison

ATTACHMENT B

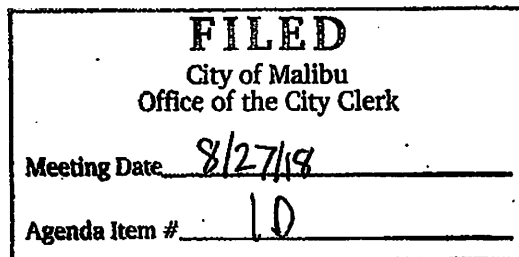
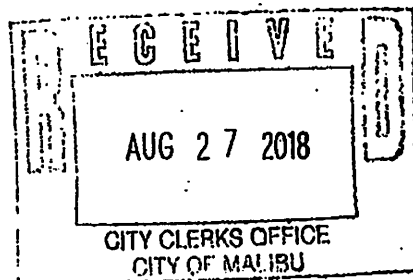
ATTACHMENT B

Heather Glaser

From: Georgia Goldfarb, MD
Sent: Monday, August 27, 2018 12:05 PM
To: Rick Mullen; Jefferson Wagner; Skylar Peak; Lou La Monte; Laura Rosenthal
Cc: Heather Glaser
Subject: Edison shutoff comment for city council meeting
Attachments: Comment City Council 18.08.27.docx

Dear Councilmembers,
Please see attached.
Thank you,

Georgia Goldfarb



I strongly oppose Edison's plan for outages. Their plan presents a high level of risk for many in our community. As we know, high fire hazard conditions can last for several days and will only become longer and more frequent with climate change. To shut off all ability to communicate at various times over some 400 square miles (the Santa Monicas) and possibly some 100,000 people without very careful planning, coordination and testing for secure mechanisms for communication, electrical supply to water pumps and traffic lights, is grossly irresponsible.

From Edison's perspective, concern about their liability is paramount: this is seen in their reported lobbying expenditures this year, in SB 901 language (which has thankfully been tabled) and in new PUC directives regarding these shutoffs. The solution to the wildfire crisis is not to desperately seek various ways of funding Edison's costs related to the disaster – e.g. absolution of liability, costs covered by rate payers, government programs, shareholders (their last choice) – but to ameliorate the causes of these fires. Edison does not discuss burying their wires, but that is the obvious answer to their liability. And, incidentally, it will also reduce hazard from arcing and downed powerlines and transformers which cause or contribute to wildfire, the main concern of residents.

The City has rightfully opposed their plan. I agree.

Here are some of my concerns:

1. Frequency and risk assessment for projected black outs by Edison, as I understand it, may be inaccurate.
 - a. Edison has stated that the expected frequency of blackouts is 2-10/year in their entire service area. However, much of the 50,000 sq mile SCE area has either limited risk of fire from sparking and downed wires or very low population. Clearly the highest risk will be concentrated in wildland, mountainous areas adjacent to cities, like the SMM. It is not acceptable that the risk of blackout for the Santa Monica Mountains has not been specifically calculated, especially when this risk is used to develop a wildfire plan. Edison continues to misrepresent the risk of blackout to our areas.
 - b. The stated frequency of blackouts is based on historical data, while the need for the blackout intervention, as evidenced by the NEW frequency and spread of wildfires for the present and future has NOT been incorporated into the projected frequency and duration of the blackouts. That is, they have no idea how often and how long these blackouts will occur now or in the future for our area. One respondent at the Public Safety meeting, August 1, found that Malibu had 32 red flag days over the previous year. Does this mean that we can expect that the power will be shut off for a possible 30 days per year and likely more? Further, Edison's criteria for shut-offs, apart from the trigger of red flag days are not clear.
 - c. Generalizability. SCE has tested the blackout intervention twice: Once in Idyllwild in December 2017, population ~3800, and another that wasn't discussed. Generalizing the validity of this one-time experience is NOT applicable to the Santa Monica Mountains considering the area covered, total population, and population density.
2. Communications. Without electricity, communications would not be available to residents or first responders regarding fire hazard, wind, road conditions, and evacuation information in the most critical areas. How will we learn of the advice from Cal Fire, Fire Department, City, Sheriff,

NOAA, and citizen information? This can change frequently and inform our decisions to stay, go and where to go. As has been made abundantly clear in the fires in northern California, it is ridiculous to think, that in a firestorm the entire populace will individually receive timely emergency information as Edison has suggested.

3. Here is an example Edison used which illustrates the lack of detail in planning: As I understood their statement at the public safety meeting, there will be no communication possible whatsoever during these blackouts, including cell and even landline service without additional batteries. For example, what additional batteries were they referring to? How will people know what type of batteries are required? How will this information be communicated to everyone? How do they deal with people who cannot afford the batteries or have the knowledge of how to install them? This is just one tiny part of the lack of information in Edison's shutoff plan.
4. Water supply would be limited. Water is pumped to a tank on a hill which feeds by gravity to our homes. Without electricity, the water supply would be whatever is left in the tank prior to the shutoff. So the fire department's water supply would have to rely on air and truck support, limiting their effectiveness and their safety. People who are unable to evacuate or who shelter in place would not have the water they need to protect themselves or safely defend their homes. In the 1993 Old Topanga fire in the Santa Monica Mountains, I understand that water ran out in Big Rock, which compromised the ability to fight the fire. And, in terms of personal needs, unless residents have stored 1-3 gallons of water per person per day at their house, they will not be able to cover their basic needs under a prolonged blackout, particularly worrisome under severe heat conditions.
5. Further, without power, absence of air-conditioning and electricity will place people at risk for heat related illness, particularly vulnerable people, older people, young children, people dependent on medical equipment, and people with disabilities. If moving to a hotel is not an option for someone, they may die from heat-related illness and lack of support for medical equipment.
6. Additional costs. For example, costs of alternative accommodations, loss of perishables and loss of income from home and other businesses due to inability to communicate have not been addressed in this plan. If, by state law, the PUC or legislators absolve SCE and other power companies of liability, will they develop any interventions to address these concerns or, if the worst happens, with loss of life and property, provide compensation to residents? Have they calculated the risk of loss of life due to inability of agencies to communicate conditions and evacuation orders with residents, or do they expect that whenever they shut off power, everyone will have already evacuated? If they preemptively shut off power, any consequences are certainly their responsibility.

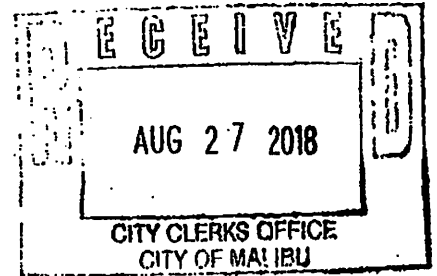
What we need is not a reactive discussion based on business and shareholder needs, but a thoughtful discussion and plan on how collectively to best survive these challenging conditions. This should be the beginning of these discussions not the end.

Heather Glaser

Subject:

Edison's plan to shut down power

FILED City of Malibu Office of the City Clerk Meeting Date <u>8/27/18</u> Agenda Item # <u>10</u>
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From: Scott Dittrich

Sent: Saturday, August 25, 2018 4:16 PM

To: Reva Feldman <rfeldman@malibucity.org>; Jefferson Wagner <zumajays@mac.com>; Heather Glaser <hglaser@malibucity.org>

Cc: Rick Mullen <rmullen@malibucity.org>; Lou La Monte <llamonte@malibucity.org>; Laura Rosenthal <lrosenthal@malibucity.org>; Skylar Peak <speak@malibucity.org>

Subject: Edison's plan to shut down power

To: Rick Mullen, Zuma Jay Wagner, Laura Rosenthal, Lou LaMonte, and Skylar Peak
cc. Reva Felman, Heather Glaser

What shutting off the power will do to our community.

1. No City emergency notification of a fire.
2. No notification from radio and television of a fire.

Think of the consequences of delayed notification in terms of evacuating. Instead of an orderly approach people will flee at the last moment, forced to leave valuables and pets behind. In a panic accidents will occur; blocking access. But some people, especially those most vulnerable, will be caught by surprise, unable to escape.

3. Inability to make a 911 call for fire, accident, or medical emergency (this means our brave fire fighters won't get notified of a fire when it is still small)
4. No power means no water – the pumps bringing water uphill to the storage tanks will not operate without power. The firemen might as well take the day off.
5. Many people in Malibu and Topanga work at home. There were 27 red flag days last year. Think about being unable to work for 27 days. For most of us that means no pay and angry clients.
6. With the traffic lights out on PCH, traffic will be snarled as people try to escape. This means firefighting equipment will not reach the fire in a timely manner.
7. Without traffic lights, those fleeing the fire down the canyons will be unable to turn onto PCH. As the fire approaches they will abandon their vehicles, trapping those behind, some with horse trailers.
8. This is obviously an attempt to limit legal exposure, but I suggest instead it will increase Edison's liability.

I do not want to leave this without offering a solution: It is clear that the power poles, wires, and transformers are unsafe even in normal weather and cannot withstand the annual Santa Ana winds. In one year in my neighborhood of 100 homes, we had 4 fires related to utility equipment, none during high winds.

It is time to rid ourselves of this 19th Century technology once and for all. The only solution is to underground the utility poles, since clearly the current system is causing a high percentage of the fires in hillside areas. Some fireman say as high as 50%. This means putting this relic of the days of the Pony Express in a museum.

CC:CM;CA;Council; Ref. Binder; PSM; original to 8/27/18 Agenda File

Yes undergrounding is expensive, but the cost of fighting these disastrous fires, higher insurance premiums paid by home owners, and the damage to the environment resulting from fires caused by the over the ground delivery system is even more expensive. And it must be Edison who takes the lead in undergrounding. This means the CPUC must allow the company to recover it's cost through higher electric bills. Limiting Edison's exposure could be part of any new undergrounding effort.

Scott Dittrich

25 August 2018

ATTACHMENT C

FINDINGS

1. Under PU Code Sections 451 and 399.2(a), electric IOUs have the authority to shut off power in order to protect public safety.
2. The decision to de-energize electric facilities for public safety is complex and dependent on many factors including and not limited to fuel moisture; aerial and ground firefighting capabilities; active fires that indicate fire conditions; situational awareness provided by fire agencies, the National Weather Service and the United States Forest Service; and local meteorological conditions of humidity and winds.
3. The decision to shut off power may be reviewed by the Commission pursuant to its broad jurisdiction over public safety and utility operations.
4. The requirements for reporting, public outreach, notification, mitigation and reasonableness review in D.12-04-024 are effective, but are only applicable to SDG&E.
5. All electric IOUs may face similar safety situations requiring power shut-off in emergencies and de-energization events in their service territory.
6. De-energization of electric facilities could save lives, protect property, and prevent fires.
7. Without considering the unique facts and circumstances of each IOU and its service area and providing for robust local input, it is premature to apply the measures in D.12-04-024 should be strengthened to further ensure that the public and local officials are prepared for de-energization events and to ensure the proper safety oversight by the Commission's Safety and Enforcement Division outside of SDG&E's service area.

THEREFORE, IT IS ORDERED THAT:

1. ~~All electric IOUs shall take appropriate and feasible steps to provide notice and mitigation to their customers in accordance with the guidelines in D.12-04-024 whenever they shut off power pursuant to their statutory authority.~~ may file an application to determine whether to extend the measures in D.12-04-024 to that IOU.
2. ~~All electric IOUs shall follow the notification requirements to SED established in D.12-04-024.~~
3. ~~All electric IOUs shall comply with the additional guidelines stated in the section of this resolution titled "Strengthened Requirements Applicable to all Electric IOUs."~~