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**A (DANGEROUS) NEW NORMAL—PUBLIC SAFETY
POWER SHUTOFFS (PSPS): A LOOK INTO
CALIFORNIA UTILITY DE-ENERGIZATION
AUTHORITY AND THE POTENTIAL FOR ITS ABUSE**

*Robert Murillo II**

Over the past few years, the State of California has endured some of the worst fire seasons on record. In 2020, over one million acres burned across the San Francisco Bay Area, Northern California, and the Central San Joaquin Valley—conditions which created a public safety and health emergency in the midst of an ongoing pandemic. In 2019, the Kincade Fire set ablaze nearly 78,000 acres in Northern California, but coincided with widespread power shutoffs impacting millions of customers throughout the state. In 2018, we learned of the devastation in Butte County, where the Camp Fire destroyed the community of Paradise, California, and claimed the lives of eighty-six people. To confront wildfire threats of such magnitude, the three largest energy providers in California—Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric—have executed Public Safety Power Shutoffs (de-energization) as one response to mitigate public safety concerns. The California Public Utilities Commission (CPUC) oversees all utilities operating within the state. The CPUC authorizes PG&E, SCE, SDG&E, and all other intrastate utilities to de-energize their power lines, but only as a measure of last resort when dangerous fire conditions present an imminent threat to public safety.

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While de-energization serves as a useful tool, it equally carries the potential for abuse. PG&E stands as a notable example. The CPUC evaluates de-energization execution for reasonableness but does not inquire into other critical areas of relevant information: the condition of electrical infrastructure, utility infrastructure repairs or investments performed, or the financial status of the de-energizing utility. To ensure utilities remain committed to their regulatory duties of promoting public safety by delivering safe and reliable power to the public, this Note recommends the CPUC incorporate an infrastructure investment inquiry into its de-energization reasonableness review. As our electrical grid deteriorates, environmental conditions worsen, and PG&E (the largest of the three utility providers in California) emerges from bankruptcy, the danger of de-energization becoming a general utility wildfire response continues to increase. Without closer utility infrastructure scrutiny public safety stands at risk—and at the whim of utility discretion.

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I. INTRODUCTION

In October 2019, Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) executed a series of widespread Public Safety Power Shutoffs (PSPS)—also known as de-energization—across the State of California.¹ In doing so, PG&E cut power to nearly two million customers within its service territory extending throughout the San Francisco Bay Area, Northern California, and the Central San Joaquin Valley; SCE to over 180,000 customers in Southern California; and SDG&E to nearly 30,000 of its customers.² The shutoffs garnered criticism from the public and state officials, but within two weeks, PG&E warned of another large de-energization event.³ On October 26,

1. SAFETY AND ENFORCEMENT DIVISION, PUBLIC REPORT ON THE LATE 2019 PUBLIC SAFETY POWER SHUTOFF EVENTS 2-3 (2020) [hereinafter SED 2019 PSPS REPORT].

2. See *id.* at 2-3; Marisa Sotolongo et al., *California Power Shutoffs: Deficiencies in Data and Reporting*, INITIATIVE FOR ENERGY JUST., Oct. 2020, at 5, <https://iejusa.org/wp-content/uploads/2020/10/V3.3-Policy-Brief-CA-Shutoffs-Data-Brief.pdf>.

3. See generally SED 2019 PSPS REPORT, *supra* note 1; Letter from Marybel Batjer, President, Cal. Pub. Utils. Comm’n, to William Johnson, President, Pac. Gas & Elec. Co. (2019) [hereinafter CPUC Letter to PG&E]; see also Emma Newburger, *More than 2 million people expected to lose power in PG&E blackout as California wildfires rage*, CNBC (Oct. 26, 2019, 2:26 PM), <https://www.cnbc.com/2019/10/26/pge-will-shut-off-power-to-940000-customers-in-northern-california-to-reduce-wildfire-risk.html>.

the utility followed suit and implemented another round of electrical blackouts impacting approximately three million Californians.⁴

Utility-initiated power shutoffs of this magnitude were unprecedented for California.⁵ Yet, for PG&E and its broad customer base, such planned power outages have transformed into the new normal with the potential for lasting the next five years and beyond as the utility initiates repairs to its extensive and decaying electrical infrastructure—all while PG&E emerges from bankruptcy proceedings.⁶ De-energization is one response PG&E has employed following its multi-billion dollar judgment for the 2018 Camp Fire—to date, the deadliest wildfire in California history.⁷ The cause of this devastating blaze: PG&E's failing infrastructure and operational mismanagement.⁸ Over 18,000 structures were destroyed, 153,000 acres burned, and eighty-six people were killed.⁹ Following a lengthy investigation, a Butte County Grand Jury criminally indicted PG&E for the Camp Fire.¹⁰ On March 17, 2020, PG&E pled guilty to eighty-four individual counts of

4. Dan Brekke, *Lights Back On for More Than 335,000 PG&E Customers Who Lost Power in Safety Shutoff*, KQED (Oct. 27, 2020), <https://www.kqed.org/news/11843472/pge-public-safety-power-shutoff-red-flag-warning>.

5. See CPUC Letter to PG&E, *supra* note 3.

6. *Full Committee Hearing to Examine the Impacts of Wildfire on Electric Grid Reliability*, SENATE COMM. ON ENERGY & NAT. RESOURCES (Dec. 19, 2019), <https://www.energy.senate.gov/hearings/2019/12/full-committee-hearing-to-examine-the-impacts-of-wildfire-on-electric-grid-reliability> [hereinafter *Senate Committee Wildfire Hearing*] (“I think for us, in Northern California, it will take us probably five years to get to the point where we can largely eliminate this tool.”); see also Ethan Howland & Paul Ciampoli, *PG&E CEO sees power shutoffs continuing for five years*, AM. PUB. POWER ASS'N (Jan. 2, 2020), <https://www.publicpower.org/periodical/article/pge-ceo-sees-power-shutoffs-continuing-five-years>.

7. Press Release, Cal. Dep't of Forestry & Fire Prot., CAL FIRE Investigators Determine Cause of the Camp Fire (May 15, 2019) (on file with author).

8. See Susie Cagle, *This Is Why California Will Keep Burning*, VICE (Apr. 17, 2019, 9:21 AM), https://www.vice.com/en_us/article/qvygeq/this-is-why-california-will-keep-burning.

9. Meghan Bobrowsky, *Camp Fire death toll rises to 86 after man who suffered third-degree burns dies*, SACRAMENTO BEE (Aug. 8, 2019, 5:25 PM), <https://www.sacbee.com/news/california/fires/article233683422.html>; see also Cleve R. Wootson, Jr., *The deadliest, most destructive wildfire in California's history has finally been contained*, WASH. POST (Nov. 26, 2018, 4:22 AM), <https://www.washingtonpost.com/nation/2018/11/25/camp-fire-deadliest-wildfire-californias-history-has-been-contained/>.

10. Plea Agreement and Settlement 1-7, *California v. PG&E, Case No. 20CF01422*, SUPERIOR CT. OF THE ST. OF CAL., COUNTY OF BUTTE (Mar. 17, 2020) [hereinafter PG&E Plea Agreement]; Press Release, Butte Cty. Dist. Attorney, DA Ramsey Confirms PG&E Filing About Pleading Guilty to 85 Count Criminal Indictment on Camp Fire Deaths 1 (Mar. 23, 2020) [hereinafter Butte County Press Release].

Involuntary Manslaughter, one count of Unlawfully Causing a Fire, and other charges related to causing great bodily harm.¹¹

In 2019, PG&E infrastructure was again implicated in another blaze—the Kincade Fire in Sonoma County.¹² There, the blaze burned nearly 78,000 acres, destroyed 374 structures, and forced the evacuation of more than 180,000 people.¹³ On July 16, 2020, Cal Fire confirmed the fire “was caused by electrical transmission lines owned and operated by Pacific Gas and Electric Company (PG&E) located northeast of Geyserville.”¹⁴ Cal Fire submitted its report to the Sonoma County District Attorney, and on April 6, 2021, its office formally charged PG&E with five felonies and twenty-eight misdemeanors connected with the Kincade Fire.¹⁵

California law authorizes investor-owned utilities (IOUs) to de-energize electrical lines when increased fire risks pose imminent threats to public safety.¹⁶ SDG&E and SCE have implemented de-energization in the past, and SDG&E itself stands as a wildfire mitigation model.¹⁷

11. Butte County Press Release, *supra* note 10, at 1; Elisha Fieldstadt, *PG&E to plead guilty to involuntary manslaughter in California Camp Fire*, NBC NEWS (Mar. 23, 2020, 10:47 AM), <https://www.nbcnews.com/news/us-news/pg-e-plead-guilty-manslaughter-california-camp-fire-n1166471>.

12. CPUC, PG&E’S INCIDENT REPORT TO THE CALIFORNIA P.U.C. (2019), http://s1.q4cdn.com/880135780/files/doc_downloads/2019/10/IR.pdf.

13. Dale Kasler, *California blames PG&E for Kincade Fire in wine country. Criminal charges coming?*, SACRAMENTO BEE (July 16, 2020, 2:44 PM), <https://www.sacbee.com/news/california/fires/article244283752.html>.

14. Cal. Dep’t of Forestry & Fire Prot., *Cal Fire Investigators Determine Cause of Kincade Fire*, YUBANET.COM (July 16, 2020), <https://yubanet.com/california/cal-fire-investigators-determine-cause-of-the-kincade-fire/> [hereinafter *Cause of Kincade Fire*] (“The Kincade Fire in Sonoma County . . . burned a total of 77,758 acres, destroyed 374 structures and caused four non-life threatening injuries. After a very meticulous and thorough investigation, CAL FIRE has determined that the Kincade Fire was caused by electrical transmission lines owned and operated by [PG&E][.]”). *See also* Kasler, *supra* note 13.

15. *Cause of Kincade Fire*, *supra* note 14; *see also* Press Release, Sonoma Cty. Dist. Attorney, *Criminal Charges Filed Against PG&E Related to the Kincade Fire* (Apr. 6, 2021) [hereinafter *Sonoma County Press Release*].

16. CAL. PUB. UTILS. CODE § 451 (1977); CAL. PUB. UTILS. CODE § 399.2 (2001); CAL. PUB. UTILS. COMM’N, DECISION ADOPTING PHASE 2 UPDATED AND ADDITIONAL GUIDELINES FOR DE-ENERGIZATION OF ELECTRIC FACILITIES TO MITIGATE WILDFIRE RISK, DECISION 20-05-051, at 2 (2020) [hereinafter *CPUC DECISION 20-05-051*]; CAL. PUB. UTILS. COMM’N, RESOLUTION EXTENDING DE-ENERGIZATION REASONABLENESS, NOTIFICATION, MITIGATION AND REPORTING REQUIREMENTS IN DECISION 12-04-024 TO ALL ELECTRIC INVESTOR OWNED UTILITIES, RESOLUTION ESRB-8, at 2 (2018) [hereinafter *ESRB-8*]; CAL. PUB. UTILS. COMM’N, DECISION GRANTING PETITION TO MODIFY DECISION 09-09-030 AND ADOPTING FIRE SAFETY REQUIREMENTS FOR SAN DIEGO GAS & ELECTRIC COMPANY, DECISION 12-04-024, at 36 (2012) [hereinafter *CPUC DECISION 12-04-024*].

17. *See generally* CPUC DECISION 20-05-051, *supra* note 16, at 6; *see* Letter from Cal. Pub. Utils. Comm’n, to San Diego Gas & Elec. (Oct. 14, 2019) [hereinafter *CPUC Letter to SDG&E*].

PG&E can similarly shut off its lines.¹⁸ While all three can exercise de-energization authority, the scale and scope of PG&E's recent power shutoffs dwarf SDG&E practices.¹⁹

The California Public Utilities Commission (CPUC) retains jurisdictional review when evaluating whether de-energization action plans adhere to notification and mitigation requirements.²⁰ Equally important, the CPUC determines whether planned power shutoff events remain consistent with other public utility duties under Commission rules, orders, and decisions.²¹ Neither California law nor the CPUC demand de-energization when dangerous weather conditions threaten electrical infrastructure and public safety.²² Rather, the CPUC entrusts utilities to exercise reasonable judgment when executing shutoffs as a measure of last resort. Public Utilities Code sections 451, 399, and 399.2 still hold utilities accountable for promoting public safety by safe and reliable operation of electrical facilities and delivering electrical service at just and reasonable rates.²³ Thus, de-energization falls under the discretion of the utility—not the CPUC.²⁴

Yet for PG&E, broad PSPS authority threatens to undermine public safety by transforming a tool of last resort into a general wildfire response based on several factors: (1) its recent emergence from bankruptcy, (2) PG&E pleading guilty to eighty-four criminal charges for involuntary manslaughter, and (3) its vastly decaying electrical infrastructure—infrastructure responsible for the destructive Camp Fire and for igniting the Kincade Fire.²⁵ The current COVID-19 pandemic

18. ESRB-8, *supra* note 16, at 5; CPUC DECISION 12-04-024, *supra* note 16, at 36; *See also* CAL. PUB. UTILS. COMM'N, ASSIGNED COMMISSIONER'S RULING REGARDING PACIFIC GAS AND ELECTRIC COMPANY'S POST-PUBLIC SAFETY POWER SHUTOFF CORRECTIVE ACTION REPORTING 4 (2020) [hereinafter ASSIGNED COMMISSIONER'S RULING] (requiring from PG&E detailed reports regarding corrective actions taken following its massive de-energization event).

19. CPUC Letter to SDG&E, *supra* note 17, at 1-2; *but see* CPUC Letter to PG&E, *supra* note 3, at 2; *see also* Senate Committee Wildfire Hearing, *supra* note 6, at 1:00:37 (“The use of PSPS goes back to the early 2000s in California after fires in 2007 at San Diego Gas & Electric. Twelve years later they're [SDG&E] still doing PSPS events, but in a very narrow surgical way.”).

20. *See* ESRB-8, *supra* note 16, at 8; CPUC DECISION 12-04-024, *supra* note 16, at 35.

21. *See* ESRB-8, *supra* note 16, at 5; *see also* CPUC DECISION 12-04-024, *supra* note 16, at 35.

22. *See* ESRB-8, *supra* note 16, at 8.

23. CAL. PUB. UTILS. CODE § 451 (1977); CAL. PUB. UTILS. CODE §§ 399, 399.2 (2001). ESRB-8, *supra* note 16, at 8 (“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.”); Press Release, Cal. Pub. Utils. Comm'n, CPUC Takes Action to Hold Communications Companies Accountable and Increase Public Safety 1 (2019) [hereinafter CPUC Takes Action].

24. ESRB-8, *supra* note 16, at 8.

25. *See generally* Press Release, PG&E, PG&E Obtains All Financing Necessary to Emerge from Chapter 11 and for Ongoing Operations (July 1, 2020),

further exacerbates public safety dangers emanating from widespread power shutoffs by risking households reliant on electricity for telework, distance learning, telemedicine, and medical equipment necessary for survival.²⁶ Some communities already confronted the double hardship of energy blackouts coupled with shelter-in-place orders, and several counties have sounded the alarm for CPUC regulatory guidance.²⁷ Recent federal public charge rule changes dissuaded immigrant community members from seeking government help during fire and de-energization emergencies out of fear doing so would endanger their citizenship application prospects.²⁸ Even so, the CPUC has yet to fully outline a comprehensive order specifically addressing de-energization authority within the public health crisis context.²⁹

Consequently, broad IOU de-energization authority raises two critical questions: are utilities adhering to their legal duties to deliver safe and reliable power, and should the CPUC assert a more direct role over de-energization events because of their widespread impact on the public?³⁰ This Note directly addresses those concerns. Part II lays the legal groundwork for de-energization authority. Part III elaborates on the aforementioned questions by specifically asking whether IOU de-

https://www.pge.com/en/about/newsroom/newsdetails/index.page?title=20200701_pge_emerges_from_chapter_11 (“[PG&E] announced today that [it] has emerged from Chapter 11[.]”). See PG&E Plea Agreement, *supra* note 10, at 1. See also MICHAEL L. RAMSEY, THE CAMP FIRE PUBLIC REPORT: A SUMMARY OF THE CAMP FIRE INVESTIGATION 82 (2020) [hereinafter CAMP FIRE REPORT] (“The fact that PG&E was using a 97-100 year old conductor for which they knew almost nothing is evidence of absolute indifference on the part of PG&E.”). *Cause of Kincaide Fire*, *supra* note 14.

26. See CPUC DECISION 20-05-051, *supra* note 16, at 12-13; see also Sotolongo et al., *supra* note 2, at 6.

27. CAL. PUB. UTILS. COMM’N, JOINT MOTION FOR EMERGENCY ORDER REGARDING DE-ENERGIZATION PROTOCOLS DURING THE COVID-19 PANDEMIC, RULEMAKING 18-12-005, at 1, 17-23 (2018) [hereinafter JOINT MOTION FOR EMERGENCY ORDER]; see also Jackie Ward, *Power Shut Off For Danville Residents Sheltering-In-Place For PG&E Fire Prevention Work*, CBS SF BAYAREA (Apr. 16, 2020, 3:38 PM), <https://sanfrancisco.cbslocal.com/2020/04/16/coronavirus-power-shut-off-for-danville-residents-sheltering-in-place-for-pge-fire-prevention-work/>.

28. *Public Charge*, U.S. CITIZENSHIP & IMMIGR. SERVS., <https://www.uscis.gov/green-card/green-card-processes-and-procedures/public-charge> (last updated Sept. 22, 2020) (expanding public charge rule to include aliens who have received public benefits for more than twelve months within any thirty-six-month period). *Dep’t of Homeland Sec. v. New York*, 140 S. Ct. 599 (2020) (granting DHS a stay on a preliminary injunction issued against the new rule change pending disposition of government’s appeal in the Second Circuit).

29. See CPUC DECISION 20-05-051, *supra* note 16, at 75 (acknowledging requests for PSPS guidance during the pandemic, but noting this decision does not address such requests); see also *Electric Utility 2020 Planning for Public Safety Power Shutoffs (PSPS)*, CAL. PUB. UTILS. COMM’N, <https://www.cpuc.ca.gov/general.aspx?id=6442465765> (last visited Jan. 6, 2021) (directing the public to review each individual utility for their 2020 PSPS protocols during the pandemic).

30. CPUC DECISION 20-05-051, *supra* note 16, at 2-12.

energization discretion: (1) threatens compliance with investment duties under PU Codes 451, 399 and 399.2; (2) incentivizes utilities to sidestep critical repairs to their electric facilities—investments synonymous with delivering safe and reliable power—while potentially gaining access to a new wildfire liability fund; and (3) disproportionately impacts socially and economically vulnerable communities. Part IV analyzes these legal issues in further depth. Part V provides a specific proposal for CPUC response—a recommendation squarely within its current de-energization rules, orders, and decisions. Part VI concludes by recommending immediate action to ensure utilities place safety first, and consider equity when executing de-energization authority.

II. BACKGROUND

The California Constitution empowers the CPUC to regulate all public utilities subject to its jurisdiction.³¹ All private corporations controlling or managing the production, generation, transmission, or furnishing of heat, light, or power, whether directly or indirectly to or for the public, are public utilities subject to regulation by the California Legislature.³² Investor-owned utilities (IOUs) PG&E, SDG&E, SCE, and others operating within California are public utilities for purposes of state law.³³ Through the CPUC, the Legislature regulates these IOUs.³⁴ Such regulatory power includes the CPUC authority to review utility executed de-energization—and ensuring PSPS remains a tool of last resort.³⁵

A. A Brief Overview of Our Electrical Infrastructure System

Understanding the electrical infrastructure system is a prerequisite to analyzing de-energization authority and examining its impact on public safety. Our electrical infrastructure breaks into three main categories: generation, transmission, and distribution.³⁶ Generation involves the fuels and processes employed to produce electricity; transmission describes bulk electrical energy movement through transmission lines from a wholesale point of generation to substations; distribution entails the movement of electricity from a substation

31. CAL. CONST. art. XII.

32. CAL. CONST. art. XII, § 3.

33. *See id.*

34. *See* CAL. CONST. art. XII.

35. *See id.* ESRB-8, *supra* note 16, at 4. CAL. PUB. UTILS. COMM'N, DECISION 19-05-042 ADOPTING DE-ENERGIZATION (PUBLIC SAFETY POWER SHUT-OFF) GUIDELINES 3 (PHASE 1 GUIDELINES) 68 (2019) [hereinafter CPUC DECISION 19-05-042] (de-energization is a “measure of last resort”).

36. K.K. DUVIVIER, ENERGY LAW BASICS 171 (2017).

through localized lines connecting directly to customers.³⁷ Electrical infrastructure (the grid) embodies these complex and interconnecting facilities generating, transmitting, and distributing electricity.³⁸

Though similar in many characteristics, transmission and distribution lines differ on two points. First, transmission lines channel higher-voltage electricity to multiple customers of wholesale markets, whereas distribution lines deliver power from substations directly to retail customers.³⁹ Second, transmission lines generally carry electrical power much farther and often across state boundaries, but distribution lines largely stay within local areas.⁴⁰ These critical differences delineate where federal and state jurisdictions apply.⁴¹

The Federal Energy Regulatory Commission (FERC) presides over electricity sold at wholesale in interstate commerce, but states retain authority over retail sales to local customers.⁴² FERC oversees reliability standards of electricity sold in interstate commerce, yet the

37. See *Electricity Explained*, U.S. ENERGY & INFO. ADMIN. (Mar. 20, 2020), <https://www.eia.gov/energyexplained/electricity/electricity-in-the-us.php> (noting how the United States relies on varying sources of energy for generation of electricity including fossil fuels, nuclear energy and renewable energy sources, where “most electricity is generated with steam turbines” using those energy resources). DUVIVIER, *supra* note 36, at 171 (“In its broadest sense, FERC defines a transmission line as one moving bulk energy products from a wholesale point of production or generation to a point where it can be converted to be delivered for retail sale to customers.”). *Id.* (“Distribution lines bring the power from the substation to end users of electricity.”).

38. DUVIVIER, *supra* note 36, at 100 (“In summary, most modern electricity production in the United States passes through three phases: (1) Generation, (2) Transmission, and (3) Distribution.”). *Id.* at 172 (“The term ‘grid’ to describe the collection of lines throughout the United States suggests more order than there is in reality.”).

39. *Id.* at 171.

40. *Id.* at 172 (“[A] fundamental trait of a transmission line is that it is intended to carry power over distances. These distances will vary. Some transmission lines remain completely within a single state and others cross state lines.”). *Id.* at 171. See also *Transmission Lines vs. Distribution Power Lines*, PG&E, https://www.pge.com/en_US/safety/yard-safety/powerlines-and-trees/transmission-vs-distribution-power-lines.page (last visited Mar. 7, 2021) (noting how transmission lines “transport bulk electricity at high voltages ranging from 60 kV-500kV” whereas distribution lines “[d]eliver electricity to neighborhoods and communities over a shorter distance than transmission lines . . . [and serve as] the final stage of electricity to homes and businesses.”).

41. *What FERC Does*, FED. ENERGY REG. COMM’N, <https://www.ferc.gov/about/what-ferc/what-ferc-does> (last visited Jan. 6, 2021) (“The Federal Energy Regulatory Commission, or FERC, is an independent agency that regulates the interstate transmission of electricity, natural gas, and oil . . . [FERC] [r]egulates the transmission and wholesale sales of electricity in interstate commerce” but “[m]any areas outside of FERC’s jurisdictional responsibility are dealt with by State Public Utility Commissions” including “[r]egulation of retail electricity and natural gas sales to consumers”).

42. 16 U.S.C. § 824(a)-(b) (2015) (extending federal regulatory power over electricity to the transmission of electric energy in interstate commerce, and the sale of electric energy at wholesale in interstate commerce). *What FERC Does*, *supra* note 41 (noting how FERC does not regulate retail electricity sales to customers, reliability problems related to local distribution facilities, and tree trimmings near local distribution lines in residential areas).

Federal Power Act—which created FERC—makes no mention of safety standards for delivering the same electrical power.⁴³ FERC jurisdiction over the electric power industry remains limited and largely concerns the transmission of electrical energy flowing through interstate commerce, and setting rates conforming to just and reasonable standards.⁴⁴ In contrast, California prioritizes safety and reliability when regulating utilities generating, transmitting, and distributing electrical power within state boundaries.⁴⁵

B. De-Energization Legal Authority

The absence of a federal safety power mandate lends to our focused discussion on de-energization at the state and local level. Specifically, our analysis centers on how the CPUC steps in to address a critical regulatory safety gap, and thus retains broad regulatory authority over utilities—including reviewing de-energization for reasonableness and ensuring it remains as a tool of last resort.⁴⁶ California Public Utilities Codes 451, 399, and 399.2 take center stage in our discussion because these provisions ground PSPS authority, outline IOU requirements, and highlight CPUC responsibilities when ensuring utilities furnish electric service to promote the health and safety of the public.

1. California Public Utilities Code § 451

The CPUC retains authority to “fix rates, establish rules, examine records, issue [subpoenas] . . . and prescribe a uniform system of accounts for utilities subject to its jurisdiction.”⁴⁷ Within this same oversight power, the CPUC permits IOUs to execute a Power Shut-Off Plan when extreme weather conditions pose an increased fire risk to public safety.⁴⁸ But the ultimate decision to de-energize falls at the

43. *Id.*

44. CONG. RESEARCH SERV., THE LEGAL FRAMEWORK OF THE FEDERAL POWER ACT 1-2 (2020).

45. See CAL. PUB. UTILS. CODES § 451 (1977); CAL. PUB. UTILS. CODE § 399.2 (2001).

46. See generally CAL. CONST. art. XII, §§ 2-6.

47. CAL. CONST. art. XII, § 6.

48. ESRB-8, *supra* note 16, at 8 (“Under PU Code Sections 451 and 399.2(a), electric IOUs have the authority to shut off power in order to protect public safety.”). See generally CAL. PUB. UTILS. COMM’N, DECISION DENYING WITHOUT PREJUDICE SAN DIEGO GAS & ELECTRIC COMPANY’S APPLICATION TO SHUT OFF POWER DURING PERIODS OF HIGH DANGER, DECISION 09-09-030 69 (2009) [hereinafter CPUC DECISION 09-09-030] (“SDG&E has authority under §§ 451 and 399.2(a) to shut off power in emergency situations when necessary to protect public safety. Any decision by SDG&E to shut off power may be reviewed by the Commission pursuant to its broad jurisdiction regarding the safety of public utility operations and facilities.”).

discretion of the utility—not the CPUC.⁴⁹ De-energization serves as a critical tool of last resort when hazardous weather conditions merit cutting off electrical power, but remains an impermissible general wildfire response.⁵⁰

California PU Code 451 is of critical importance here because it directs: (1) every public utility to provide and maintain “adequate, efficient, just, and reasonable service” as (2) “necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.”⁵¹ In essence, PU Code 451 requires IOUs to deliver electric service for promoting the safety of the public.⁵² However, this provision alone does not supply the legal basis for IOU de-energization authority. PU Code 451 works in conjunction with PU Code 399.2, a provision laying out the utility mandate to operate infrastructure and deliver electricity in a safe and reliable manner.⁵³

2. California Public Utilities Code § 399.2

PU Code 399.2 teases out utility obligations under PU Code 451 (promoting public safety) by ordering electric providers to: (1) operate electric distribution lines in a “safe, reliable, efficient, and cost-effective manner;” (2) control and maintain utility-owned electric distribution grids, and; (3) manage electric distribution grids in service territories consistent with Section 330.⁵⁴ PU 399.2 serves a distinct, complementary function to PU 451: it reinforces reliable electric service as a critical state interest, but equally mandates reasonable infrastructure investments—a point elaborated later in this discussion.⁵⁵

49. See ESRB-8, *supra* note 16, at 8 (“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.”).

50. See generally CPUC Takes Action, *supra* note 23.

51. CAL. PUB. UTILS. CODE § 451 (1977) (“Every public utility shall furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities . . . as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.”).

52. *Id.*; see also Catherine J.K. Sandoval, *Safe, Reliable Service at Just and Reasonable Rates: Priorities, Challenges, and Opportunities*, STAN. L. SCH. 4 (Apr. 25, 2013), https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Commissioners/Catherine_Sandoval/Stanford_2013_Presentation.pdf.

53. See ESRB-8, *supra* note 16, at 2.

54. CAL. PUB. UTILS. CODE § 399.2(a)-(b) (2001) (“It is the policy of this state, and the intent of the Legislature, to reaffirm that each electrical corporation shall continue to operate its electric distribution grid in its service territory and shall do so in a safe, reliable, efficient, and cost-effective manner.”).

55. CAL. PUB. UTILS. CODE § 399.2(c) (2001) (“In carrying out the purposes of this section, each electrical corporation shall continue to make reasonable investments in its electric distribution grid.”). See also Reliable Electric Service Investments Act, CAL. PUB. UTILS. CODE § 399 (2001) (“The Legislature further finds and declares that in order to ensure that the citizens of this state continue to receive safe, reliable, affordable, and environmentally

Fundamentally, PU Code 399.2 directs utilities to operate electrical distribution grids within their service territories in a safe and reliable manner.⁵⁶

Herein lies de-energization. Cutting electric power appears antithetical to providing reliable service; however, utilities must deliver power safely. PU Code 451 (promoting public safety) demands every public utility must: “furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities . . . as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.”⁵⁷ In turn, PU Code 399.2 holds utilities accountable for the safe and reliable operation of their electrical infrastructure.⁵⁸ The end result: when weather phenomenon acutely threatens safe delivery of reliable power, thus risking the public, then an IOU stands empowered to shut off electricity to affected areas because it must operate in a safe manner.⁵⁹ Together, these codes form the basis of de-energization authority.

3. California Public Utilities Code § 330

Though not included in the de-energization legal framework, California PU Code 330 remains relevant in our discussion for two brief reasons. The provision emphasizes safe and reliable power under PU Codes 451 (promoting public safety) and 399.2 (safe and reliable operation) by assigning the CPUC and electric utilities additional duties concerning safety, reliability, inspection, and maintenance of electric transmission and distribution systems.⁶⁰

First, PU Code 330 follows the same theme of safe energy reliability: “[r]eliable electric service is of utmost importance to the safety, health, and welfare of the state’s citizenry.”⁶¹ PU Code 330 underscores the mandates highlighted in PU Codes 451 (promoting public safety) and 399.2 (safe and reliable operation) and further grounds CPUC authority to protect public safety.⁶² Unlike FERC, the CPUC

sustainable electric service, it is essential that prudent investments continue to be made [to] protect the integrity of the electric distribution grid [and to] ensure an adequately sized and trained utility workforce[.]”).

56. CAL. PUB. UTILS. CODE § 399.2 (2001).

57. CAL. PUB. UTILS. CODE § 451 (1977).

58. CAL. PUB. UTILS. CODE § 399.2 (a)(1)(2001); *see also* ESRB-8, *supra* 16, at 8 (“Under PU Code Sections 451 and 399.2(a), electric IOUs have authority to shut off power in order to protect public safety.”).

59. *Id.*; *see also* CPUC DECISION 09-09-030, *supra* note 48, at 61-62; CPUC DECISION 12-04-024, *supra* note 16, at 3-4; ESRB-8, *supra* note 16, at 2.

60. CAL. PUB. UTILS. CODE § 330(f)-(i) (2001).

61. *Id.*

62. CAL. PUB. UTILS. CODE § 330(g) (2001).

goes beyond federal reliability requirements by specifically addressing safety standards for electric power service.⁶³ This distinction remains important because the federal authority does not inhibit the CPUC from taking necessary action when protecting public safety, regulating electrical infrastructure operation, and utility delivery of electric service at the local level.⁶⁴ Moreover, the CPUC wields broad jurisdiction over formulating and revisiting de-energization rules, orders, and requirements—a power this discussion highlights and recommends exercising to ensure utilities do not resort to de-energization in lieu of postponing critical infrastructure repairs.⁶⁵

Second—along with PU Code 399.2 (safe and reliable operation)—PU Code 330 reinforces how reliable delivery of electricity depends on diligent inspection and maintenance of electric transmission and distribution lines.⁶⁶ In doing so, PU Code 330 encourages the CPUC to work with the California Independent System Operator (CAISO)—the state grid operator—in setting standards for those inspections, maintenance, and repairs.⁶⁷ Yet, utilities like PG&E remain obligated to provide safe and reliable electric power at “just and reasonable rates,”⁶⁸ in addition to performing conscientious inspections and maintaining their electrical facilities.⁶⁹ In doing so, utilities retain a protected opportunity to receive a fair return on investment in their electrical infrastructure.⁷⁰ This compromise exemplifies a regulatory compact where a utility receives a government-backed monopoly and a protected fair return opportunity in exchange for state regulation of rates, profits, and delivery of safe and reliable power to the public.⁷¹

63. *What FERC Does*, *supra* note 41.

64. *See id.*

65. *See* CAL. PUB. UTILS. CODE § 330 (2001); *see also* ESRB-8, *supra* note 16, at 8 (“The decision to shut off power may be reviewed by the Commission pursuant to its broad jurisdiction over public safety and utility operations.”).

66. CAL. PUB. UTILS. CODE § 330(i) (2001).

67. *Id.*

68. CAL. PUB. UTILS. CODE § 451 (1977); *see* Sandoval, *supra* note 52.

69. CAL. PUB. UTILS. CODE § 330(i) (2001).

70. CAL. PUB. UTILS. CODE § 399.2(c) (2001) (outlining how each electrical corporation enjoys a reasonable opportunity to fully recover from all of its customers all “reasonable investments in its electric distribution grid,” “reasonable return[s]” on those investments, and “reasonable costs to operate its electric distribution grid.”). *See generally* Maryam Ghadessi & Marzia Zafar, *An Introduction to Utility Cost of Capital*, CAL. PUB. UTILS. COMM’N (Apr. 18, 2017), [https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/PPD_Work/PPD_Work_Products_\(2014_forward\)/PPD-An-Introduction-to-Utility-Cost-of-Capital.pdf](https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/PPD_Work/PPD_Work_Products_(2014_forward)/PPD-An-Introduction-to-Utility-Cost-of-Capital.pdf).

71. CAL. PUB. UTILS. CODE § 399.2(a)-(b). *See* Cagle, *supra* note 8 (“The construction of [the] private utility system was ‘a grand bargain,’” says University of California, Santa Barbara, political science professor Leah Stokes. “They said, ‘we want to be private

C. IOU Duties Under California Public Utilities Codes § 451, § 399, and § 399.2

Operating collectively, PU Codes 451, 399 and 399.2 mandate utilities: (1) promote public safety by (2) controlling, maintaining and diligently investing in electric infrastructure (3) through safe and reliable operation when delivering electric service to the public.⁷² PU Codes 451 and 399.2 mandate safe and reliable power flowing from utilities to customers.⁷³ PU Code 330 encourages the CPUC to set diligent inspection and maintenance standards of electric transmission and distribution lines.⁷⁴ But another critical legal responsibility exists: the utility obligation to reasonably invest in its own electrical infrastructure as outlined in PU Code 399.2(c).⁷⁵ The pivotal question presented in this discussion centers on whether de-energization *when left to IOU discretion* undermines mandates to reasonably invest in utility-owned infrastructure, and, if so, how the CPUC should step in with an infrastructure investment inquiry to ensure de-energization does not become a practical general wildfire response. Thus, PU Code 399.2(c) raises two relevant points.

On the first point, IOUs must provide safe and reliable power but shall do so in conjunction with diligent investments in their electrical infrastructure.⁷⁶ When extreme weather conditions arise or persist, IOUs can de-energize their local lines to protect public safety.⁷⁷ The CPUC makes no distinction between utility authority to shut off distribution lines versus transmission lines, and CAISO—the state power grid operator—maintains how “[u]tilities may de-energize both distribution and high-voltage transmission lines as needed.”⁷⁸ Nevertheless, de-energization does not negate the responsibility to maintain electrical

monopolies, we have to have a guaranteed market to make our product cheaper because we have all these fixed costs. So government said okay, if you’re a monopoly, we have to regulate you.[.]”). DUVIVIER, *supra* note 36, at 57 (“In this newly established arrangement, often called the ‘regulatory compact,’ utility companies would receive a government-backed monopoly, with guaranteed territories for selling their products. In exchange, the government would be able to regulate the rates and profits of the regulated utilities.”).

72. CAL. PUB. UTILS. CODE §§ 451 (1977); CAL. PUB. UTILS. CODE §§ 399, 399.2 (2001).

73. CAL. PUB. UTILS. CODE § 451; CAL. PUB. UTILS. CODE § 399.2 (2001).

74. CAL. PUB. UTILS. CODE § 330 (2001).

75. CAL. PUB. UTILS. CODE § 399.2(c) (2001).

76. *See* CAL. PUB. UTILS. CODE § 451 (1977); CAL. PUB. UTILS. CODE §§ 399, 399.2(c) (2001).

77. ESRB-8, *supra* note 16, at 8.

78. *See* FACT SHEET: PUBLIC SAFETY POWER SHUTOFF (PSPS) PROGRAM, CAL. INDEP. SYS. OPERATOR (2020). ESRB-8, *supra* note 16, at 8-9 (emphasizing only how “[u]nder PU Code Sections 451 and 399.2(a), electric IOUs have the authority to shut off power in order to protect public safety[,]” and how “[d]e-energization of electric facilities could save lives, protect property, and prevent fires.”).

facilities, ensure an adequately sized and trained workforce, and employ reasonable investments in utility-owned electrical infrastructure.⁷⁹ Such infrastructure investments logically include repairing and replacing faulty or excessively old facilities.⁸⁰ Certainly, operating electrical infrastructure well beyond life expectancy cannot constitute delivering safe and reliable power.⁸¹

Second, for PG&E, where operational mismanagement and infrastructure failures resulted in significant liability and loss of life, de-energization presents a dangerous opportunity for abuse.⁸² Unfettered de-energization discretion potentially delays repairing and replacing electrical facilities, thus risking public safety—conduct contravening utility obligations to deliver safe and reliable power through a prudently maintained energy infrastructure.⁸³ PG&E points to climate change and unpredictable weather phenomena as equal culprits contributing to wildfire dangers.⁸⁴ The utility argues PSPS is the only certain way to prevent ignition during high wind weather events.⁸⁵

D. Climate Change Challenges, De-Energization and Utility Obligations

Certainly, extreme weather conditions exacerbate wildfire dangers. Prolonged summer heatwaves increase dry vegetation growing alongside electrical infrastructure, consequently leaving electrical facilities at the mercy of high winds flowing onshore.⁸⁶ Such

79. See CAL. PUB. UTILS. CODE § 451 (1977); CAL. PUB. UTILS. CODE §§ 399, 399.2(c) (2001).

80. See CAL. PUB. UTILS. CODE § 399.2 (2001).

81. See CAL. PUB. UTILS. CODE § 451 (1977); CAL. PUB. UTILS. CODE §§ 399, 399.2(c) (2001). See also CAMP FIRE REPORT, *supra* note 25, at 84 (“During the post Camp Fire inspections, worn C hooks and worn hanger holes were found throughout the PG&E Overhead Transmission System. Despite the knowledge C hooks and hanger holes wear over time and despite the knowledge of the danger inherent in the failure of a C hook or hanger hole, the evidence clearly established nobody in PG&E was inspecting C hooks and hanger holes.”).

82. CAMP FIRE REPORT, *supra* note 25, at 82-87.

83. See CAL. PUB. UTILS. CODE § 451 (1977); CAL. PUB. UTILS. CODE §§ 399, 399.2(c) (2001).

84. Kavya Balaraman, *PG&E CEO promises ‘shorter, fewer’ shut-offs continuing for the next 5 years*, UTIL. DIVE (Dec. 20, 2019), <https://www.utilitydive.com/news/pge-ceo-shut-offs-shorter-fewer-five-years/569466/>.

85. PG&E, 2020 WILDFIRE MITIGATION PLAN REPORT 4-1 (2020) [hereinafter PG&E 2020 WMP REPORT].

86. See CPUC DECISION 19-05-042, *supra* note 35, at 3 (“After several years of drought, changing weather patterns, extreme high heat, ferocious winds, and low humidity, among other factors, the 2018 fire season in California was the most destructive on record. July 2018 was the hottest month on record in California.”); Tim Arango et al., *5 Lessons We Learned from the California Wildfires in 2019*, NY TIMES (Sept. 9, 2020), <https://www.nytimes.com/2019/11/04/us/fires-california.html>.

circumstances translate into a direct cause and effect relationship where “[d]rier plants catch fire more easily,” thus sparking massive fire events; here, de-energization aids as a useful and flexible tool adaptable to such wildfire emergencies.⁸⁷

CPUC Rules (including General Order 95) specifically address the danger live wires present when coming into contact with vegetation.⁸⁸ GO 95 requires utilities to perform year-round clearance of vegetation coming within eighteen inches of power lines and vegetation coming within four feet of high voltage lines in areas the CPUC designates as a High Fire-Threat District (HFTD).⁸⁹ Still, for California, drought conditions are increasing drier vegetation and more areas are being classified as a HFTD.⁹⁰ For PG&E, over half of its service territory lies within HFTD areas.⁹¹

In late 2020, the state endured one of the most destructive fire seasons with an estimated 4.2 million acres burned; the August Complex currently stands as the largest in modern California history at one million acres, and five out of the six largest California fires recorded occurred this past year.⁹² In Fresno County, the Creek Fire—cited as the largest single wildfire in state history—destroyed approximately \$250 million worth of homes.⁹³ While the August Complex resulted from lightning and the Creek Fire remains under investigation,⁹⁴ the impetus remains the same: deteriorating weather conditions are leaving dry brush at the

87. Arango et al., *supra* note 86; see also ESRB-8, *supra* note 16, at 8.

88. See CPUC DECISION 19-05-042, *supra* note 35, at 4. CAL. PUB. UTILS. COMM’N, RULES FOR OVERHEAD ELECTRIC LINE CONSTRUCTION GENERAL ORDER NO. 95 III-19 (2018) [hereinafter GO 95] (explaining Rule 35 vegetation management guidelines and establishing necessary and reasonable clearances minimums for all overhead electrical supply facilities).

89. GO 95, *supra* note 88, at III-19, III-24-25. *Laws and Regulations GO 95*, PG&E, https://www.pge.com/en_US/safety/yard-safety/powerlines-and-trees/laws-andregulations.page#:~:text=General%20Order%2095%2C%20issued%20by,designated%20High%20Fire%2DThreat%20Districts (last visited Jan. 4, 2021).

90. See PG&E 2020 WMP REPORT, *supra* note 85, at 1-2.

91. *Id.* (“Approximately 5,500 line-miles of electric transmission and 25,500 line-miles of distribution assets lie within these HFTDs.”).

92. Jeff Masters, *Reviewing the horrid global 2020 wildfire season*, YALE CLIMATE CONNECTIONS (Jan. 4, 2021), <https://yaleclimateconnections.org/2021/01/reviewing-the-horrid-global-2020-wildfire-season/> (highlighting the August Complex Fires as the largest in California state history at a size of 1.03 million acres).

93. Manuela Tobias, *Creek Fire is a \$500 million-plus mystery. How investigators plan to solve the case*, FRESNO BEE (Dec. 31, 2020, 9:24 AM), <https://www.fresnobee.com/news/california/fires/article248158005.html> (noting the Creek Fire as the single largest in California history).

94. *August Complex: Incident Information*, INCIWEB, <https://inciweb.nwcg.gov/incident/6983/> (last visited Jan. 4, 2021). Tobias, *supra* note 93 (“Federal and state officials declined to give details on the cause of the Creek Fire, citing an ongoing federal investigation.”).

mercy of ignition sources.⁹⁵ As PG&E points out, even a “perfectly sound [electrical] system with everything working well” is not immune to climate change; even when vegetation management adheres to CPUC rules excessive wind can carry debris onto live electrical lines.⁹⁶ PG&E faces a particularly dangerous situation because the utility furnishes power to millions of Californians dispersed over a vast service territory “uniquely exposed to climate impacts because of its geography and vegetation.”⁹⁷

Nevertheless, climate change complications fail as a viable defense for PG&E on two points. First, SDG&E exemplifies a multi-faceted approach when addressing wildfire dangers by executing broad infrastructure upgrades in conjunction with localized, small-scale de-energization events.⁹⁸ Even former PG&E CEO Bill Johnson noted how SDG&E employs de-energization events in “a very narrow surgical way.”⁹⁹ SDG&E improved mitigation efforts following its own fatal liabilities during the 2007 wildfire season—but PG&E did not.¹⁰⁰ Instead, investigations into the Camp Fire revealed 100-year old PG&E electrical equipment ignited the deadly blaze.¹⁰¹ In its Camp Fire Report, the Butte County District Attorney explicitly noted how PG&E discovered and possessed detailed information confirming the deteriorated state of its electrical infrastructure, yet failed to sufficiently inspect its electrical equipment used for restraining dangerous overhead transmission lines in place.¹⁰²

Second, extreme weather phenomenon does not abrogate utility duties. Rather, such phenomenon reinforces the legal duties of due

95. Masters, *supra* note 92 (explaining how a “once-in-50-year” weather event along with heat and drought contributed to a disastrous 2020 California Wildfire Season).

96. Balaraman, *supra* note 84.

97. *Id.*

98. See Claire Trageser, *PG&E Blasted For Not Being More Like SDG&E In Managing Power Shutoffs, But Is The Comparison Fair?*, KPBS (Oct. 24, 2019), <https://www.kpbs.org/news/2019/oct/24/pge-blasted-not-being-more-sdge-managing-power-shu/> (noting how SDG&E made changes only after power lines ignited fires in 2007 which burned down hundreds of homes and killed two people).

99. *Senate Committee Wildfire Hearing*, *supra* note 6, at 1:00:54.

100. See CAMP FIRE REPORT, *supra* note 25, at 84.

101. *Id.* at 83-84.

102. *Id.* (“In 2018 the discovery of keyhole wear on hanger plates on the par transmission line caused enough concern that the Transmission Line Supervisor sent the plates to the PG&E lab for analysis and evaluation. Unlike in 1987, in 2018 the lab actually did a metallurgical evaluation. A PG&E lab scientist, with a PhD in Material Science and Engineering, used the available data to opine the keyhole wear was occurring at a rate of .007 inches per year. Based on average wear rate, the PG&E lab scientist determined the useful life of those hanger plates to be between 97 and 100 years old. PG&E now had scientific confirmation of the body-on-body wear caused by the constant movement of the C hooks within the hanger holes and had an estimate of average wear per year. Nothing was done.”).

diligence in safely operating and maintaining electrical infrastructure—including inspecting, repairing and replacing facilities at risk—either because of the weather events themselves or the deteriorated status of the infrastructure.¹⁰³ Climate change exacerbates drier conditions and vegetation conducive for devastating wildfires; wind presents the danger of carrying such debris onto live lines, but the choice to operate electrical infrastructure without the proper upgrades, repairs or replacement falls with the utility alone.¹⁰⁴

Utility decisions of this nature endanger property, the public and contravene obligations under PU Codes 451 (promoting public safety), 399 (prudent infrastructure investments), and 399.2 (safe and reliable operation).¹⁰⁵ The Camp Fire devastation stands as a notable example of the deadly choice resulting from operating dangerously decaying infrastructure. As the CPUC notes: “[e]lectrical utility infrastructure has historically been responsible for less than ten percent of reported wildfires; however, fires attributed to power lines comprise roughly half of the most destructive fires in California history.”¹⁰⁶

Herein lies the danger of broad de-energization discretion: utilities stand emboldened in manipulating PSPS to address imminent wildfire dangers—arguing public safety necessitated those power shutoffs—all while postponing or forfeiting their legal duty to prudently invest in their electrical infrastructure. The 2019 PSPS shutoffs affecting millions of customers exemplify the extent utilities will go to avoid further catastrophic liabilities in the name of public safety.¹⁰⁷ The central thesis of our discussion focuses on whether utilities like PG&E are at increased risk for abusing de-energization authority as a general wildfire response to stave off further wildfire incidents connected to its equipment in lieu

103. See generally CAL. PUB. UTILS. CODE § 399.2(a)-(c) (2001).

104. CAMP FIRE REPORT, *supra* note 25, at 84 (“Despite the efforts of PG&E personnel to distance the company from the ‘Run to Failure’ model, the evidence clearly establishes quite the opposite. PG&E had knowledge of the potential consequences of failure of the nearly 100-year-old C hooks, yet PG&E continued its policy of ‘Run to Failure[.]’”). Cagle, *supra* note 8.

105. CAL. PUB. UTILS. CODE § 451 (1977); CAL. PUB. UTILS. CODE §§ 399, 399.2(c) (2001).

106. *Public Safety Power Shutoff (PSPS) / De-Energization*, CAL. PUB. UTILS. COMM’N, <https://www.cpuc.ca.gov/deenergization/> (last visited Jan. 4, 2021).

107. Press Release, Cal. Pub. Utils. Comm’n, CPUC to Examine Recent Utility PSPS Events and Consider Enforcement Actions (Nov. 13, 2019), <https://yubanet.com/california/cpuc-to-examine-recent-utility-psps-events-and-consider-enforcement-actions/> [hereinafter CPUC to Examine Recent Utility PSPS Events] (comments by PUC Commissioner Genevieve Shiroma) (“It is important for the CPUC to determine if the utilities complied with using [PSPS] as a last resort, and to collect the knowledge gained towards any revisions needed for next year[.]”). See also SED 2019 PSPS REPORT, *supra* note 1, at 2-3.

of costly infrastructure repairs.¹⁰⁸ The next question then evaluates whether directing an IOU to repair or replace utility-owned facilities violates its constitutional right to just compensation.

E. The Federal Mandate: A Fair Return on Investment

Fair returns on utility investment is a complex area directly implicating IOU de-energization authority in three ways: (1) IOUs are entitled to a fair return on infrastructure investment,¹⁰⁹ (2) the CPUC must balance just compensation and the statutory requirement for just and reasonable rates under PU Code 451 with the public interest of receiving safe and reliable power,¹¹⁰ and (3) broad de-energization discretion incentivizes financially distressed entities like PG&E to postpone or sidestep critical investments. Together, these factors pose significant challenges when weighing public safety risks and the utility duty to furnish safe and reliable power.

First, IOUs require a sufficient return to attract investor capital while keeping costs low for ratepayers.¹¹¹ The U.S. Constitution entitles public utilities to an opportunity for earning a fair return on investment when providing services to the public.¹¹² The right does not guarantee a fair return, but protects the ability to gain one.¹¹³ The return should be sufficient to instill confidence regarding the financial stability of the utility, but ought to reflect the return on investment comparable to other entities sharing similar risks.¹¹⁴ Denying a public utility the chance to earn a fair return raises serious constitutional issues of just

108. See CAMP FIRE REPORT, *supra* note 25, at 84; *Cause of Kincade Fire*, *supra* note 14.

109. See *Munn v. Illinois*, 94 U.S. 113, 126 (1876) (“When, therefore, one devotes his property to a use in which the public has an interest, he, in effect, grants to the public an interest in that use, and must submit to be controlled by the public for the common good, to the extent of the interest he has thus created.”). See generally *L.A. Gas & Elec. Corp. v. R.R. Comm’n of Cal.*, 289 U.S. 287 (1933) (explaining that rate regulation cannot be confiscatory).

110. CAL. PUB. UTILS. CODES § 451 (1977) (obligating utilities to provide just and reasonable service as necessary to promote public safety).

111. Ghadessi & Zafar, *supra* note 70, at 3.

112. See generally *L.A. Gas & Elec. Corp.*, 289 U.S. at 305-06 (“[T]he judicial function does not go beyond the decision of the constitutional question. That question is whether the rates as fixed are confiscatory . . . [and] that what the complainant is entitled to demand, in order it may have ‘just compensation,’ is ‘a fair return upon the reasonable value of the property at the time it is being used for the public.’ ”).

113. *Id.* at 3-4.

114. *Id.* at 3 (citing *Bluefield Water Works & Improv. Co. v. Pub. Serv. Comm’n of W. Va.*, 262 U.S. 679 (1923)) (“The return should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise money necessary for the proper discharge of its public duties.”). See *Fed. Power Comm’n v. Hope Nat. Gas Co.*, 320 U.S. 591 (1944) (“[T]he return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks.”).

compensation—a due process violation.¹¹⁵ Inquiries into a fair return require a regulator to evaluate all relevant facts—an analysis not amenable to simplified formulas or calculations.¹¹⁶ For purposes of this discussion, we need only remember an IOU’s constitutional right to earn a fair return on investment.¹¹⁷

Second, an IOU’s protected right to seek a fair return complicates the CPUC’s duty to the public. PU Code 451 requires utilities to maintain their equipment and facilities as necessary to promote the safety, health, and convenience of the public.¹¹⁸ Section 399.2(c) requires utilities to reasonably invest in their electrical distribution grids, facilities, and operations.¹¹⁹ PU Code 399 guarantees utilities recover from their customers all reasonable investments in their facilities and operations reasonably necessary to carry out service to customers.¹²⁰ Common sense informs us IOUs will not repair or replace owned facilities when investment returns cannot be expected: “[i]nvestors expect to earn a return on their capital.”¹²¹ Thus, the CPUC walks a delicate line of balancing competing interests: prioritizing ratepayer access to safe and reliable power at just and reasonable rates on the one hand, while fulfilling a constitutional mandate of permitting utilities an opportunity to recover a fair investment return on the other.¹²²

Third, broad de-energization discretion frustrates juggling IOU just compensation and the public interest of receiving safe and reliable service. At one end, de-energization serves its narrow legitimate function as a vital tool of last resort.¹²³ IOUs may exercise de-energization when anticipating dangerous weather conditions posing

115. *See* L.A. Gas & Elec. Corp., 289 U.S. 287 (1933).

116. *Id.* at 306.

117. Ghadessi & Zafar, *supra* note 70, at 3-4 (citing *Bluefield*, 262 U.S. 679) (“The legal standard for setting a fair rate of return has been established by the United States Supreme Court in the *Bluefield* and *Hope* decisions. That decision states that a public utility should be provided an opportunity to earn a return necessary for it to provide utility service.”). *See also* L.A. Gas & Electric Corp., 289 U.S. at 304-306 (“We have emphasized the distinctive function of the Court . . . to enforce constitutional rights . . . [t]his Court has repeatedly held that the basis of calculation is the fair value of the property, that is, that what the complainant is entitled to demand, in order that it may have ‘just compensation,’ is ‘a fair return upon the reasonable value of the property at the time it is being used for the public.’”).

118. CAL. PUB. UTILS. CODE § 451 (1977).

119. CAL. PUB. UTILS. CODE § 399.2(c)(1) (2001).

120. CAL. PUB. UTILS. CODE § 399.2(d) (2001) (“For purposes of this section, the term ‘electric distribution grid’ means those facilities owned or operated by an electrical corporation that are not under the control of the Independent System Operator and that are used to transmit, deliver, or furnish electricity for light, heat, or power.”).

121. Ghadessi & Zafar, *supra* note 70, at 3.

122. *Id.* (“The [CPUC] has the responsibility to authorize a return high enough to attract [investor] capital and low enough to minimize [ratepayer] costs.”).

123. *See* ESRB-8, *supra* note 16, at 2-3.

increased fire dangers, but the CPUC retains review power when evaluating shutoff decisions, notice, and mitigation requirements.¹²⁴ At the other end, broad IOU de-energization discretion endangers the public by swallowing up reasonable investment mandates in utility facilities. Infrastructure investments remain necessary for providing safe and reliable power to consumers.¹²⁵

F. A Comparative Look at SDG&E and PG&E

SDG&E exemplifies wildfire mitigation efforts integrating de-energization with infrastructure repairs and upgrades.¹²⁶ SDG&E committed \$1.5 billion to wildfire preparation, including relocating power lines underground and constructing smaller electrical grids for executing de-energization events at a localized level.¹²⁷ In contrast, PG&E's 2019 Wildfire Safety Plan (WSP) expands PSPS from 7,000 circuit miles of targeted distribution lines to over 25,000 miles and potential transmission line de-energization from 370 circuit miles to over 5,500.¹²⁸ Yet, PG&E intended to only repair or replace 150 circuit miles of its electrical infrastructure by the end of 2019, another 600 circuit miles each year from 2020 through 2022, and complete 7,100 within ten years.¹²⁹

PG&E alleges that a low supply of required materials and trained personnel impede the completion of its infrastructure inspection and corrective work on a faster timeline.¹³⁰ Those circumstances potentially violate PU Code 399 because PG&E must maintain sufficient resources and an adequately sized and trained workforce for safe and reliable infrastructure operation; such failures endanger de-energization becoming a general wildfire response in lieu of supply and workforce failures.¹³¹

124. *Id.* at 2.

125. CAL. PUB. UTILS. CODE § 399.2(a) (2001).

126. *See generally* CAL. PUB. UTILS. COMM'N SAFETY & ENFORCEMENT DIVISION, REVIEW OF SAN DIEGO GAS & ELECTRIC COMPANY DECEMBER 2017 DE-ENERGIZATION EVENTS (2018); *see also* Trageser, *supra* note 98.

127. Trageser, *supra* note 98.

128. PG&E, PACIFIC GAS AND ELECTRIC COMPANY AMENDED 2019 WILDFIRE SAFETY PLAN 96 (2019), https://www.pge.com/pge_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/Wildfire-Safety-Plan.pdf [hereinafter PG&E 2019 WILDFIRE SAFETY PLAN].

129. *Id.* at 63.

130. *Id.* at 55.

131. *Id.* *See also* CAL. PUB. UTILS. CODE § 399 (2001) (“[I]n order to ensure that the citizens of this state continue to receive safe [and] reliable . . . electric service, it is essential that prudent investments continue to be made in all of the following areas [including] . . . an adequately sized and trained utility workforce.”).

In its 2020 Wildfire Mitigation Plan, PG&E states it completed system hardening of overhead distribution lines in High Fire-Threat Districts for 171 miles, plans to target 241 miles in 2020, and complete a total of 7,100 miles of hardening over the next twelve to fourteen years; for 2021, PG&E aims to harden 180 miles of higher risk overhead facilities—though that number is a drop from its 2020 mileage target.¹³² The utility also explains how it anticipates reducing PSPS impact over the next ten years through different fire risk assessment tools but leaves open the possibility of increased de-energization based on climate models indicating a higher probability of more frequent fire weather conditions.¹³³ Still, the miles targeted for system hardening pale in comparison to those mentioned for de-energization in the 2019 PG&E WSP.¹³⁴

Of course, simply comparing PG&E to SDG&E then concluding why the former should emulate the latter ignores key differences between the two utilities. The PG&E service area of 70,000 square miles dwarfs SDG&E's 4,100 square miles; SDG&E falls at a quarter of PG&E's 16 million total customer base, and PG&E service territory includes denser tree and human population, thus increasing fire hazards and wildfire mitigation costs.¹³⁵ Nonetheless, PG&E's financial dilemma, its extensive liability to wildfire victims, and its continuously decaying infrastructure furnishing electricity to millions of Californians leaves de-energization as *the* tool for wildfire mitigation.¹³⁶ The CPUC forbids de-energization as a liability reducing method:

[T]he utilities should continue to strengthen their infrastructure to minimize the need for and size of de-energization events. Under no circumstances may the utilities employ de-energization solely as a means of reducing their own liability risk from utility-infrastructure wildfire ignitions, and the utilities must be able to justify why de-

132. PG&E, PACIFIC GAS AND ELECTRIC COMPANY UPDATED 2020 WILDFIRE MITIGATION PLAN REPORT 3, 7 (2020) [hereinafter UPDATED 2020 WMP REPORT] (explaining system hardening as replacing bare overhead conductors by eliminating the line entirely, undergrounding or replacing with covered conductor and stronger poles); *see also* PG&E, PACIFIC GAS AND ELECTRIC COMPANY 2021 WILDFIRE MITIGATION PLAN REPORT 558 (2021) [hereinafter PG&E 2021 WMP REPORT].

133. *Id.* at 8-18, 4-27 (citing the need to de-energize some transmission and distribution lines to reduce the risk of catastrophic wildfires, but also efforts to reduce PSPS impact).

134. *Compare* PG&E 2019 WILDFIRE SAFETY PLAN, *supra* note 128, at 5 (detailing how in 2019, PG&E intends to complete 150 miles of system hardening in high-fire threat districts), *with* UPDATED 2020 WMP REPORT, *supra* note 132, at 4-25, 4-27 (noting how PG&E is evaluating 552 miles transmission line miles in HFTD to determine whether to remove from future PSPS events).

135. Trageser, *supra* note 98.

136. *See* Cagle, *supra* note 8.

energization was deployed over other possible measures or actions.¹³⁷

For PG&E, the incentive of resorting to de-energization remains great. Its recent emergence from bankruptcy—coupled with wildfire settlement claims valued at \$25.5 billion—presents much doubt as to whether PG&E will implement power shutoffs only as a tool of last resort; as it emerges from bankruptcy, PG&E instead appears to focus on expansion of its executive level officers.¹³⁸ At the same time, PG&E's post-bankruptcy commitments vaguely reference its objective to repairing, replacing, or upgrading its infrastructure responsible for those wildfire settlements.¹³⁹ The only concrete details are found in PG&E's WMP Reports: 171 miles completed in 2019, 241 miles targeted for 2020, 180 miles targeted for 2021, with an overall 7,100 miles of overhead facility hardening to occur over a twelve-fourteen year timespan.¹⁴⁰ Consequently, broad PG&E de-energization authority poses a specific and growing danger to the public because of its current financial status, past criminal liability, and expansive utility territory servicing millions of Californians—factors collectively potentially postponing critical infrastructure repairs.¹⁴¹

The California Constitution vests the California Legislature and the CPUC with the authority to set just compensation for utilities.¹⁴² This includes allowing a utility to recover a reasonable return for investing in its electrical infrastructure.¹⁴³ The CPUC must allow an IOU a fair return

137. CPUC DECISION 19-05-042, *supra* note 35, at 68.

138. See *PG&E Achieves Bankruptcy Court Confirmation of its Plan of Reorganization*, PG&E (June 20, 2020), <https://www.pgecurrents.com/2020/06/20/pge-achieves-bankruptcy-court-confirmation-of-its-plan-of-reorganization/> (emphasizing governance, oversight and operational strengthening by establishing a new safety committee, new board of directors, and expanding responsibilities for certain executive-level officers).

139. Compare *id.*, with *PG&E Corporation and Pacific Gas and Electric Company Case No. 19-30088*, PG&E, <https://restructuring.primeclerk.com/pge/> (last visited Jan. 8, 2021) (case background) (“Throughout the Chapter 11 Process, PG&E remains committed to . . . [c]ontinuing to make critical investments in system safety and maintenance[.]”).

140. UPDATED 2020 WMP REPORT, *supra* note 132, at 3, 7; see also Kavya Balaraman, *PG&E exits bankruptcy, but long-term wildfire risk would put it 'back in the soup'*, UTIL. DIVE (July 6, 2020), <https://www.utilitydive.com/news/pge-exits-bankruptcy-but-long-term-wildfire-risk-could-put-it-back-in-th/581017/>; see also PG&E 2021 WMP REPORT, *supra* note 132, at 558.

141. Katie Worth & Karen Pinchin, *After Deadly Fire, Regulators and Consumers Question PG&E Blackouts*, PBS (Nov. 15, 2019), <https://www.pbs.org/wgbh/frontline/article/deadly-paradise-fire-regulators-consumers-pge-blackouts-pge-outage/>. See generally CAMP FIRE REPORT, *supra* note 25.

142. CAL. CONST. art. XII, § 5.

143. CAL. PUB. UTILS. CODE § 399.2(c) (2001).

on infrastructure investment; failing to do so would amount to confiscatory ratesetting prohibited by the U.S. Constitution.¹⁴⁴

In 2019, PG&E estimated how complying with inspection and vegetation trimming requests would yield costs between \$75 and \$150 billion—an amount the utility argues would pass down to ratepayers: “PG&E would inevitably need to turn to California ratepayers for funding, resulting in a substantial increase—an estimated one-year increase of more than five times current rates in typical utility bills.”¹⁴⁵ Currently, PG&E assets hover at \$94 billion, with annual revenue slightly above \$17 billion.¹⁴⁶ But in December 2020, PG&E received CPUC approval for rate increases to fund infrastructure repairs aimed at reducing de-energization execution—a reminder of the CPUC obligation to allow utilities a fair return opportunity for their infrastructure investment costs.¹⁴⁷ Thus, one question arises: how can the CPUC ensure PG&E commits to repairing its infrastructure (on account of the ratepayer increase) while reducing power shutoffs? In exploring this question, the discussion evaluates current CPUC orders addressing utility de-energization requirements.

G. De-Energization Requirements

The CPUC outlines several requirements public utilities must satisfy when exercising de-energization.¹⁴⁸ CPUC Resolution ESRB-8 extends de-energization authority to all IOUs but mandates utilities: (1) employ all “feasible and appropriate attempts” to notify customers of a planned power shutoff before executing such a plan; (2) provide a detailed report of the de-energization event to the Director of Safety Enforcement Division (SED)—a division of the CPUC—and; (3)

144. See *L.A. Gas & Elec. Corp. v. R.R. Comm'n of Cal.*, 289 U.S. 287, 314-17 (1933) (holding that the United States Constitution prohibits confiscatory rate setting).

145. Jim Christie, *PG&E puts cost of judge's wildfire plan at up to \$150 billion*, REUTERS (Jan. 23, 2019, 4:12 PM), <https://www.reuters.com/article/us-pg-e-us-wildfire/pge-puts-cost-of-judges-wildfire-plan-at-up-to-150-billion-idUSKCN1PI00P>.

146. *PG&E (PCG)*, FORBES, <https://www.forbes.com/companies/pge/?sh=7ceac70545e4> (last updated Jan. 27, 2021). See Madeleine Gregory, *Millions of Californians Lost Power Because PG&E Refused to Spend Money to Fix Its Problems*, VICE (Oct. 11, 2019, 7:19 AM), https://www.vice.com/en_us/article/a35y38/millions-of-californians-lost-power-because-pgande-refused-to-spend-money-to-fix-its-problems.

147. *PG&E Receives State Approval for Investments Aimed at Improving Safety, Reducing Wildfire Risk and Building a Stronger Energy System for the Future*, PG&E, https://www.pge.com/en/about/newsroom/newsdetails/index.page?title=20201203_pge_receives_state_approval_for_investments_aimed_at_improving_safety_reducing_wildfire_risk_and_building_a_stronger_energy_system_for_the_future (last visited Jan. 27, 2021) [hereinafter *PG&E GRC Rate Approval*].

148. ESRB-8, *supra* note 16, at 5-9.

highlight mitigation efforts addressing de-energization consequences.¹⁴⁹ The CPUC retains reasonableness review power over de-energization efforts, but has yet to outline concrete reasonableness guidelines.¹⁵⁰

Instead, the CPUC defers to IOU expertise, knowledge, and jurisdiction for exercising de-energization.¹⁵¹ The Commission emphasizes de-energization notification as its prime focus.¹⁵² Yet, absent from CPUC de-energization requirements are the utility legal duties to invest in critical infrastructure and workforce—directives under PU Codes 399 and 399.2(c).¹⁵³ In leaving such mandates out, the CPUC fails to incorporate necessary evaluations into whether utilities are dedicating reasonable investments to their electrical infrastructure—investments critical for reducing the need for expansive de-energization events.

1. Public Notification

Resolution ESRB-8 demands all electric IOUs take “feasible and appropriate attempts” to warn the public of an impending planned power-shutoff.¹⁵⁴ ESRB-8 does not elaborate on “feasible” and “appropriate” efforts; however, ESRB-8 highlights two explicit notification requirements. First, IOUs must notify likely affected local communities before effectuating their de-energization plans regardless if a power shut off occurs.¹⁵⁵ No specific time length is given, but an IOU must explain its failure to provide customers with at least two hours prior notice.¹⁵⁶ Decision 12-04-024—as applied to SDG&E—sheds further light on public alert considerations. There, SDG&E articulated its protocols for public-safety outages: pre-recorded telephone notice to the general population, specialized supplemental alerts for medical baseline and life support customers, and text alerts to those with hearing disabilities.¹⁵⁷ The CPUC does not mandate that all other IOUs follow SDG&E protocols because power shutoffs are often reactive and occur when a utility anticipates immediate threats to its electrical infrastructure.¹⁵⁸ Instead, the CPUC encourages alert prioritization to

149. *Id.* at 1, 5-9.

150. *See id.* at 5.

151. CPUC DECISION 19-05-042, *supra* note 35, at 119.

152. *See id.*

153. *See id.* at 32; ESRB-8, *supra* note 16, at 9; *but see* CAL. PUB. UTILS. CODE §§ 399, 399.2(c) (2001).

154. ESRB-8, *supra* note 16, at 1.

155. *Id.*

156. *Id.* at 5.

157. CPUC DECISION 12-04-024, *supra* note 16, at 8-9.

158. *Id.* at 8.

critical service providers (schools, hospitals, prisons, public safety agencies, telecommunications utilities, and water districts) and populations most vulnerable to power shutoffs—customers relying on power to stay alive.¹⁵⁹

Second, when possible, an IOU must notify the Safety and Enforcement Division before a de-energization occurs.¹⁶⁰ This change varies from SDG&E guidelines mandating the notification of the Director of CPSD (now SED) within twelve hours before it shuts off power.¹⁶¹ SED reporting is not at issue here; rather, the concern lies with de-energization impacts on vulnerable communities overall. For working families with few affordable alternative sources of energy required for day-to-day needs, de-energization results in lost wages and spoiled food.¹⁶² For the medically vulnerable, de-energization escalates to a life and death situation where breathing machines can no longer function, and life saving medication cannot be properly preserved.¹⁶³ For non-English speakers, alerts limited to only a few languages leave particular communities without critical information.¹⁶⁴ Notification prioritization addresses few of the significant impacts that widespread de-energization inflicts on poorer populations.¹⁶⁵

2. Reporting

ESRB-8 requires IOUs to report their de-energization action plans to state regulators.¹⁶⁶ Originally, PSPS reporting standards applied only to SDG&E.¹⁶⁷ The CPUC now requires all IOUs to follow SDG&E reporting mandates.¹⁶⁸

All electric IOUs must submit a report to the Director of SED within ten days after each de-energization event, including notifications to local governments and customers—even when no power shutoff occurs.¹⁶⁹ This report must detail at a minimum: (i) the date of contact to affected community representatives; (ii) classification of zones according to General Order 95; (iii) an explanation if unable to provide

159. *Id.* at 10.

160. ESRB-8, *supra* note 16, at 6.

161. CPUC DECISION 12-04-024, *supra* note 16, at 36.

162. Jackie Botts, “*We need the food that we lost.*” *Low-income families still reeling from blackouts*, CALMATTERS (Nov. 22, 2019), <https://calmatters.org/projects/california-psps-power-shutoffs-poverty-spoiled-food-hunger/>.

163. Gregory, *supra* note 146.

164. *Id.*

165. *See id.*

166. ESRB-8, *supra* note 16, at 5-9.

167. *Id.* at 5.

168. *Id.*

169. *Id.*

notification to affected customers at least two hours before any de-energization event; (iv) a summary of filed complaints against the IOU because of shutoffs; (v) a detailed description of steps taken to restore power, and; (vi) identify by address each community assistance location during the shutoff event as well as days and hours of operation.¹⁷⁰

In turn, Order 12-04-24 directs SDG&E to notify the CPSD within twelve hours after shutting off power.¹⁷¹ Upon conclusion of the event, the utility must submit a comprehensive report detailing information leading up to, during, and following the event.¹⁷² The report must provide: (i) “an explanation of SDG&E’s decision to shut off power;” (ii) all factors considered, including wind speeds, temperatures, humidity levels, and vegetation moisture near de-energized circuits; (iii) the time, locations, and duration of the power shutoff; (iv) number of affected customers according to residential, medical baseline, commercial/industrial, and other; (v) any wind-related damage to SDG&E power lines in de-energized areas; (vi) a description of notice to customers and mitigation efforts, and; (vii) any other matters SDG&E believes relevant in assessing whether its decision to shut off the power was reasonable.¹⁷³ ESRB-8 extends similar reporting requirements to all IOUs.¹⁷⁴

Excluded from IOU reporting: de-energization impacts on economically vulnerable households. Neither Decision 12-04-042 for SDG&E, ESRB-8 as applied to all IOUs, nor Decision 19-05-042 mandate detailed analysis into the extent to which poor communities stand impacted from de-energization.¹⁷⁵ Reporting requirements emphasize notification, language-tailored alerts, geographical and cultural demographics of affected areas, strategies for in-person warnings, and coordination efforts with local and state agencies.¹⁷⁶ Yet, without including de-energization impacts on economically vulnerable households, current CPUC de-energization reviews risk overlooking critical inquires into whether de-energization raises other substantial public safety issues.¹⁷⁷ Likewise, for utilities, not incorporating economic impacts on low-income households into their mandated

170. *Id.*

171. CPUC DECISION 12-04-024, *supra* note 16, at 36.

172. *Id.*

173. *Id.* at 36-37.

174. ESRB-8, *supra* note 16, at 5.

175. CPUC DECISION 20-05-051, *supra* note 16, at 22-32 (requiring all IOUs to utilize all reasonable communications channels to reach all populations potentially impacted by power shutoff events). *See also* CPUC DECISION 19-05-042, *supra* note 35, at 116-131; CPUC DECISION 12-04-024, *supra* note 16, at 9-11, 34-37; ESRB-8, *supra* note 16, at 6-7.

176. CPUC DECISION 19-05-042, *supra* note 35, at 126-127.

177. *See* Gregory, *supra* note 146.

reports prevents full appreciation of the broader consequences following from power shutoff execution.

3. *Mitigation Efforts*

Along with notification and reporting, an IOU must highlight mitigation efforts taken during and after a de-energization event.¹⁷⁸ Mitigation can include local outreach through workshops addressing notification needs in affected communities—especially those with prevalent language barriers, disabilities, and elderly populations.¹⁷⁹ The effectiveness of outreach depends on whether community concerns influence de-energization plans.

De-energization requirements focus on notification to communities affected by de-energization; mitigation largely remains under IOU discretion.¹⁸⁰ To the CPUC, the importance lies with identifying, educating, and notifying vulnerable populations to ensure maximized resiliency during and following planned power shutoffs.¹⁸¹

4. *CPUC Reasonableness Review*

The CPUC possesses broad rulemaking authority over all public utilities falling within its jurisdiction.¹⁸² When it comes to de-energization, the CPUC specifically retains the power of review: the Commission can inquire into whether a utility reasonably de-energized its infrastructure based on the dangerous weather and fire conditions at the time of shutoff.¹⁸³ Yet, the Commission stops short of embracing a strict reasonableness test.¹⁸⁴ Instead, IOUs are expected to employ their best judgment on a case-by-case basis when executing power shutoffs.¹⁸⁵

Utilities can de-energize when confronting heightened wildfire threats.¹⁸⁶ Certainly, emergencies warrant granting IOUs flexible

178. ESRB-8, *supra* note 16, at 6-7.

179. *Id.* at 6. *See generally* CPUC DECISION 20-05-051, *supra* note 16.

180. *See* CPUC DECISION 19-05-042, *supra* note 35, at 116-19.

181. *See id.* at 117.

182. CAL. CONST. art. XII, § 6.

183. CPUC DECISION 12-04-024, *supra* note 16, at 35.

184. CPUC DECISION 19-05-042, *supra* note 35, at 123.

185. ESRB-8, *supra* note 16, at 4, 8 (“[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.”).

186. *Public Safety Power Shutoff (PSPS) / De-Energization*, CAL. PUB. UTILS. COMM’N, <https://www.cpuc.ca.gov/deenergization/> (last visited Mar. 6, 2021) (“In 2012, the CPUC ruled that California Public Utilities Code Sections 451 and 399.2(a) give electric utilities authority to shut off electric power in order to protect public safety. This allows energy companies (SDG&E, PG&E, SCE, Liberty, Bear Valley and PacifiCorp) to shut off power for the prevention of fires where strong winds, heat events, and related conditions are present.”).

authority over de-energization action plans. But the absence of a streamlined reasonableness standard focused on evaluating the integrity of utility infrastructure encourages PSPS becoming a general wildfire response rather than a tool of last resort. Without inquiring into whether a de-energizing utility remains committed to infrastructure repairs and maintenance, the CPUC leaves out critical information in its reasonableness review.

The CPUC already evaluates utility investment proposals and requests for increasing customer electric rates through its General Rate Case (GRC) proceedings.¹⁸⁷ In December 2020, the CPUC approved PG&E rate increases for customers through the GRC process.¹⁸⁸ PG&E cites the GRC rate increase as a:

[N]ecessary investment in PG&E’s electric and gas distribution systems . . . including investments to reduce the risk of catastrophic wildfires through electric system hardening, enhanced vegetation management, system automation, and asset inspection and repair. The GRC also enables PG&E to continue its efforts to make Public Safety Power Shutoff (PSPS) events smaller in size, shorter in duration and smarter in execution.¹⁸⁹

But for PG&E, its objectives of electric system hardening and reducing PSPS execution requires a more assertive CPUC role to ensure the utility adheres to those commitments. Without an ongoing de-energization reasonableness review centered on utility infrastructure integrity, the utilities have an open door to forgo their infrastructure maintenance obligations, deviate from compliance with safe and reliable power mandates, and transform PSPS into a general wildfire response to stave off liability.¹⁹⁰ The reality for financially distressed utilities like PG&E

187. *Electric Rates*, CAL. PUB. UTILS. COMM’N, https://www.cpuc.ca.gov/electricrates/#:~:text=The%20CPUC%20must%20approve*%20a%20CPUC%20proceedings%20called%20ratemaking%20proceedings (last visited Mar. 10, 2021). *PG&E Receives State Approval for Investments Aimed at Improving Safety, Reducing Wildfire Risk and Building a Stronger Energy System for the Future*, PG&E, https://www.pge.com/en/about/newsroom/newsdetails/index.page?title=20201203_pge_receives_state_approval_for_investments_aimed_at_improving_safety_reducing_wildfire_risk_and_building_a_stronger_energy_system_for_the_future (last visited Mar. 10, 2021).

188. *PG&E GRC Rate Approval*, *supra* note 147 (“With the CPUC approval of the settlement agreement, the average monthly bill for a typical residential electric and gas customer will increase by \$13.44 a month. This includes \$10.40 for electric and \$3.05 for gas service. The 2020 GRC rate change . . . will be effective March 1, 2021 and will impact rates until Dec. 31, 2022.”).

189. *Id.*

190. *See* CPUC DECISION 19-05-042, *supra* note 35, at 68 (stating that under no circumstances may a utility execute de-energization as a sole response to ward off liability). *See also* CAL. PUB. UTILS. CODE § 451 (1977) (promoting public safety); CAL. PUB. UTILS. CODE §§ 399, 399.2(c) (2001) (reasonable infrastructure investments) (safe and reliable operation).

leaves PSPS as *the* general wildfire response because its vastly deteriorating infrastructure threatens public safety, but its projected system hardening extends for the next twelve to fourteen years.¹⁹¹

III. IDENTIFICATION OF LEGAL PROBLEMS: DE-ENERGIZATION UNDERCUTS STATUTORY DIRECTIVES TO PROVIDE SAFE AND RELIABLE SERVICE

California faces an increasingly dangerous situation directly connected to an aging electrical infrastructure.¹⁹² To meet these dangers, de-energization can serve as a useful tool of last resort when IOUs respond to weather conditions imminently threatening safe delivery of power.¹⁹³

Nevertheless, unfettered de-energization discretion opens a dangerous door for utility abuse. Such authority acutely endangers the public in the midst of the current pandemic crisis—a crisis where millions of households rely on safe and reliable power for information access, maintenance of life-saving equipment and medication, telemedicine, emergency communications, storage of expensive food, virtual learning, and work-from-home.¹⁹⁴ In the case of PG&E, its financial situation, past criminal implications, decaying infrastructure, and widespread power shutoffs exemplify the dangers of permitting a utility with a poor safety track record to unilaterally de-energize without evaluating the integrity of its electrical system through a CPUC reasonableness review.¹⁹⁵

As a consequence, without sufficient CPUC oversight, broad IOU de-energization raises three specific concerns: (1) PSPS authority undermines adherence with investment duties under PU Codes 451, 399, and 399.2; (2) PSPS execution and potential access to a new wildfire fund incentivize utilities to side-step critical repairs to their electric facilities—investments integral to safe and reliable power; and (3) PSPS authority disproportionately impacts socially and economically vulnerable communities—communities devastated by the current coronavirus pandemic.

191. UPDATED 2020 WMP REPORT, *supra* note 132, at 3, 7 (reporting that PG&E completed system hardening of overhead distribution lines in High Fire Threat Districts for 171 miles, plans to target 241 miles in 2020, and completing a total of 7,100 miles of hardening over the next twelve to fourteen years).

192. Cagle, *supra* note 8.

193. CPUC DECISION 19-05-042, *supra* note 35, at 123.

194. See JOINT MOTION FOR EMERGENCY ORDER, *supra* note 27, at 2-3.

195. Gregory, *supra* note 146.

IV. ANALYSIS

A. Broad De-Energization Authority Undermines PU Codes § 451, § 399, and § 399.2

PU Code 451 mandates utilities to deliver just and reasonable electrical power as necessary to promote public safety.¹⁹⁶ PU Code 399 reinforces public safety by directing prudent investments in utility electrical systems, and a competent and adequately sized workforce.¹⁹⁷ PU Code 399.2 then lays further responsibility on IOUs to operate facilities in a safe and reliable manner.¹⁹⁸ Collectively, these provisions demand electrical corporations furnish safe and reliable power by maintaining a trained and sized workforce, operating in a safe and reliable manner and prudently investing in utility-owned electrical infrastructure.¹⁹⁹

In October of 2019, PG&E cut power to nearly three million people.²⁰⁰ Yet, PG&E projects its de-energization program will continue for the next five years.²⁰¹ Nevertheless, extreme conditions cannot overshadow years of inadequate PG&E recordkeeping regarding the age, composition, and degree of wear concerning its electrical infrastructure system.²⁰² The Butte County Report details how investigations into the PG&E San Bruno Gas Explosion and the Camp Fire revealed an alarming shared characteristic: “PG&E never made an effort to examine, evaluate and catalogue the components of those lines.”²⁰³ As the Butte Report highlights regarding the Camp Fire:

In a written response to a CPUC data request PG&E states “PG&E has not historically maintained an inventory of suspension hooks or their manufacturers, age or material composition. As a result, PG&E does not have an inventory of all transmission and distribution facilities in the entire PG&E service territory organized by location and the presence of suspension hooks similar to the Incident Location 1 suspension hook.”²⁰⁴

196. CAL. PUB. UTILS. CODE § 451 (1977).

197. CAL. PUB. UTILS. CODE § 399 (2001).

198. CAL. PUB. UTILS. CODE § 399.2 (2001).

199. CAL. PUB. UTILS. CODE § 451 (1977); CAL. PUB. UTILS. CODE §§ 399, 399.2(c) (2001).

200. Newburger, *supra* note 3.

201. *Senate Committee Wildfire Hearing, supra* note 6, at 1:01:00 (statement by PG&E CEO William “Bill” Johnson) (“I think for us, in Northern California, it will take us probably five years to get to the point where we can largely eliminate this tool.”). UPDATED 2020 WMP REPORT, *supra* note 132, at 4-2.

202. *See* CAMP FIRE REPORT, *supra* note 25, at 66 n.124.

203. *Id.* at 66.

204. *Id.* at 66 n.124.

Consider the magnitude of PG&E not maintaining an account of the age and composition of its electrical system: PG&E service territory encompasses more than 50,000 steel transmission structures, 100,000 non-steel transmission structures, and more than two million distribution poles.²⁰⁵ Yet, PG&E acknowledges it has not “historically” tracked the age, composition, and degree of wear of such an expansive electrical system.²⁰⁶ Evidentiary findings into the Camp Fire revealed the fire resulted from excessive wear of an approximately 100-year-old “C-hook” responsible for holding up an insulator assembly attached to a tower, and used for supporting electrified power lines.²⁰⁷ When questioned about similar wear identified in another tower along with evidence of repairs made to that tower, PG&E asserted it had “no records of when or why this work was done.”²⁰⁸

PG&E electrical infrastructure services over 16 million customers across 70,000 square miles spanning the Bay Area, Northern and Central California—customers relying on the utility to reinforce its facilities.²⁰⁹ Failure to maintain records of the age, composition, and other critical information regarding infrastructure equipment translates into blindly operating decaying electrical infrastructure endangering the public. California faces a dire situation where public safety depends on private decisions to adequately repair utility-owned electrical systems and to maintain records of its facilities.²¹⁰ PG&E admits it cannot guarantee the safety of its electric lines by pointing to an inadequate supply of trained personal for its failure to implement widespread inspections and repairs of its electrical lines.²¹¹ Simply stated, PG&E cannot guarantee it will follow the law.

Here, broad de-energization discretion threatens noncompliance with utility duties to promote public safety, to safely and reliably operate electrical systems, and to reasonably invest in utility-owned infrastructure by instead incentivizing power shutoffs as *the* method of addressing wildfire dangers.²¹² De-energization presents an attractive option for the utility: it can proactively execute power shutoffs during emergencies—emergencies created by its own failures to adequately replace decaying facilities and maintain a sizeable workforce—as its method of delaying repairs. In such a situation, de-energization proves

205. *Id.*

206. *Id.* at 19-20, 66 n.124.

207. *Id.* at 2-3, 19-22. *See also* Cagle, *supra* note 8.

208. CAMP FIRE REPORT, *supra* note 25, at 21.

209. Trageser, *supra* note 98.

210. Cagle, *supra* note 8.

211. *See* PG&E 2019 WILDFIRE SAFETY PLAN, *supra* note 128, at 55.

212. Cagle, *supra* note 8.

disastrous to public safety by manipulating a narrowly tailored tool intended for dangerous weather conditions into a broad instrument circumventing utility duties.²¹³

B. De-Energization and New Wildfire Fund Incentivize Sidestepping Expensive, but Critical Infrastructure Repairs

PU Code 399.2 outlines two general IOU investment duties: 399.2(a) directs electrical corporations to operate their electrical infrastructure in a safe and reliable manner while 399.2(c) directs prudent investments in utility-owned electrical infrastructure.²¹⁴ IOUs operate via a cost-benefit analysis in which grid safety coincides with affordable prices—a calculus complicated by climate change.²¹⁵ But a recently enacted wildfire fund emboldens electric utilities to sidestep their investment duties and endanger the lives of customers, employees and the public.

In 2019, Governor Gavin Newsom signed into law Assembly Bill 1054 (the Wildfire Fund), allowing electrical corporations to recover just and reasonable costs resulting from a catastrophic wildfire if the utility acted reasonably under the circumstances.²¹⁶ Specifically, the CPUC must determine whether:

[A]n electrical corporation’s conduct was reasonable if that conduct, related to the ignition, was consistent with action that a reasonable utility would have undertaken in good faith under similar circumstances, at the relevant point in time, and based on the information available to the electrical corporation at the time, as provided.²¹⁷

AB 1054 imposes the initial burden of reasonableness on the utility.²¹⁸ The electrical corporation must demonstrate its reasonable conduct by a preponderance of evidence—unless the utility possesses a valid safety certification during the fund application time period, in which holding a certificate presumes reasonable conduct unless serious doubt is raised.²¹⁹

213. See CAL. PUB. UTILS. CODE § 451 (1977); CAL. PUB. UTILS. CODE §§ 399, 399.2(c) (2001); see also CPUC DECISION 19-05-042, *supra* note 35, at 123.

214. CAL. PUB. UTILS. CODE § 399.2 (2001).

215. Cagle, *supra* note 8 (“Utilities are motivated to keep their grid as safe as they can for the price they can afford, according to a risk model that’s been upended by climate change. New fire risks may present a new crisis to power utilities, but so long as they manage their liabilities within the ‘prudent’ buffer, there’s little incentive to change course.”). See generally Ghadessi & Zafar, *supra* note 70, at 3 (“Investors expect to earn a return on their capital.”).

216. *Wildfire Fund and Safety Certificates*, CAL. PUB. UTILS. COMM’N, <https://www.cpuc.ca.gov/safetycertificates/> (last visited Jan. 29, 2021).

217. Assem. B. 1054, 2019-2020 (Cal. 2020) (Legislative Counsel’s Digest).

218. *Id.*

219. *Id.*

Reasonable conduct “encompasses a spectrum of possible practices, methods, or acts consistent with utility system needs,” ratepayer interests, and regulator requirements.²²⁰

To qualify for safety certification—and establish a presumption of reasonable conduct—a utility must meet the mandates under PU Code 8389(e).²²¹ Safety certification requirements include a utility providing documentation of: (1) an approved Wildfire Mitigation Plan (WMP); (2) good standing; (3) an established safety committee board; (4) an executive compensation plan “structured to promote safety as a priority;” (5) executive-level reporting to the CPUC; (6) executive officer compensation tied to an electrical corporation’s long-term performance and value; and (7) implementation of its approved WMP.²²² Certification shall issue to the utility upon satisfaction of the requirements.²²³ On January 14, 2021, PG&E officially received its Wildfire Safety Certification—joining SDG&E and SCE—despite an ongoing Cal Fire investigation into whether PG&E equipment may be responsible for the Zogg Fire, which killed four people.²²⁴

At one end, the fund pools critical funds for utilities to access and pay out wildfire victims. Under California law, IOUs and their customers remain liable for covering property damages connected to fires sparked by utility equipment.²²⁵ Pooling liability dollars into a centralized wildfire fund helps alleviate this imposed legal responsibility.²²⁶ Yet, the Wildfire Fund provides a dual layer of protection for utilities—such as PG&E—where de-energization may substitute for electrical facility investments, workforce, and operations; at the same time, a utility can access an expansive wildfire liability fund tantamount to a bailout.²²⁷ With a customer base of sixteen million, the

220. CAL. PUB. UTILS. CODE § 451.1 (1977).

221. CAL. PUB. UTILS. CODE §§ 8389(e)(1)-(7) (2020).

222. *Id.*

223. CAL. PUB. UTILS. CODE § 8389(e) (2020).

224. Letter from Caroline T. Jacobs, Dir., Cal. Pub. Utils. Comm’n Wildfire Safety Div., to Robert Kenney, PG&E Vice President of Reg. Affairs (Jan. 14, 2021) (on file with the California Public Utilities Commission). *See also* Jaxon Van Derbeken, *Judge Presses PG&E for Zogg Fire Answers*, NBC BAY AREA (Feb. 18, 2021, 8:20 PM), <https://www.nbcbayarea.com/investigations/judge-presses-pge-for-zogg-fire-answers/2471868/>.

225. CAL. CONST. art. I, § 19 (requiring just compensation for private property taken for public use). *See also* Barham v. S. Cal. Edison Co., 74 Cal. App. 4th 744, 753 (1999) (holding private utilities could be held liable as a public entity subject to California Constitution Article I, Section 19).

226. *See* CAL. CONST. Art. I, § 19.

227. *See* George Skelton, *With new California wildfire law, Newsom didn’t let perfect be the enemy of good*, L.A. TIMES (July 18, 2019, 12:05 AM), <https://www.latimes.com/california/story/2019-07-17/skelton-gavin-newsom-california-wildfire-legislation>.

Wildfire Fund reflects state legislature judgments holding PG&E remains “too big to fail” because it powers nearly forty percent of California, and the goal of keeping large utilities in service by softening wildfire liability costs.²²⁸

Nevertheless, the law raises two critical inquiries: (1) whether the CPUC retains reasonableness review over utility access to this new wildfire fund and; (2) whether failure to reasonably invest in owned infrastructure outlined by PU Code 399.2 falls into the reasonable de-energization calculus.²²⁹

The CPUC has yet to address these inquiries, and current decisions do not incorporate 399.2(c) infrastructure investments into the de-energization reasonableness review.²³⁰ For PG&E, de-energization and potential wildfire fund access diminish incentives to promptly repair its electrical facilities—infrastructure responsible for significant loss of life and property.²³¹ Following PG&E’s unprecedented power shutoff to millions of customers, the CPUC publicly notified its intent to investigate the utility for PSPS compliance.²³² The investigation aims to evaluate all IOU PPS action plans and ensure de-energization remains a tool of last resort.²³³ For PG&E, the CPUC is investigating whether the utility should be sanctioned for violating PU Code 451, Decision 19-05-042, and Resolution ESRB-8, in connection with its widespread de-energization communication mishandling, failure to alert customers, and coordination breakdowns with local governments during the October 2019 de-energization blackout.²³⁴ Yet, the 2020 SED Report on the 2019 Public Safety Power Shutoff Events did not inquire into the integrity of PG&E infrastructure, PU Code 399.2 utility infrastructure investment mandates, nor PG&E’s potential access to the Wildfire Fund, but does reinforce the need for additional de-energization notification requirements.²³⁵

228. *See id.*

229. *See* CAL. PUB. UTILS. CODE § 451.1(b) (1977).

230. *See generally* CPUC DECISION 20-05-051, *supra* note 16; CPUC DECISION 19-05-042, *supra* note 35; ESRB-8, *supra* note 16.

231. *See* Trageser, *supra* note 98.

232. Press Release, Cal. Pub. Util. Comm’n, CPUC Takes Additional Decisive Actions to Hold Utilities Accountable and Increase Public Safety (Oct. 28, 2019), <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M318/K885/318885370.PDF>.

233. *See* CPUC to Examine Recent Utility PPS Events, *supra* note 107, at 2.

234. *See generally* CAL. PUB. UTILS. COMM’N, ASSIGNED COMMISSIONER AND ASSIGNED ADMINISTRATIVE LAW JUDGE’S RULING DIRECTING PACIFIC GAS AND ELECTRIC COMPANY TO SHOW CAUSE WHY IT SHOULD NOT BE SANCTIONED BY THE COMMISSION FOR VIOLATION OF PUBLIC UTILITIES CODE SECTIONS 451 COMMISSION DECISION 19-05-042 AND RESOLUTION ESRB-8, at 1 (Nov. 11, 2019).

235. *See* SED 2019 PPS REPORT, *supra* note 1, at 83-87.

Climate change heightens wildfire dangers and complicates mitigation efforts for utilities and the public as the climate becomes drier and hotter, temperatures experience extreme swings between hot and cold, and drought and flood change the topography. Drought-like conditions increase dry vegetation growing alongside electrical lines, and excessive winds present the danger of ignition even when vegetation management requirements are observed.²³⁶ For PG&E, its service territory encompasses widespread electrical poles, lines, and facilities near extensive tree populations and brush.²³⁷ Addressing these risks requires deploying numerous workers and equipment, all impacting a financial bottom line.²³⁸

While climate change poses new risks, utilities have an ongoing duty to provide safe and reliable service adapted to current conditions. Negligent maintenance of electrical infrastructure elevates safety risks because faulty or old facilities are ill adept at withstanding extreme weather conditions.²³⁹ Excessively aged power poles cannot withstand high winds—a lesson learned from the fatal Camp Fire.²⁴⁰ Facilities must also withstand sustained winds:

High winds or sustained winds may induce metal on metal rub and create dangerous conditions including conductor splice failures or wear on fasteners, hardware, and other equipment that can ignite fires.²⁴¹ The CPUC's Safety and Enforcement Division (SED) found that "higher sustained winds are more likely to cause motion in non-tensioned lines and hardware, such as jumpers."²⁴²

Operating infrastructure beyond the anticipated useful life stands inconsistent with the delivery of safe and reliable power. Yet, IOUs can practically sidestep necessary repairs to electrical infrastructure by instead shutting off power when fire hazards acutely threaten the very facilities utilities are charged with maintaining.²⁴³ Despite viable duty breaches under CPUC regulations, extensive wildfire liability,

236. See Cagle, *supra* note 8.

237. See Worth & Pinchin, *supra* note 141.

238. See *id.*

239. See Newburger, *supra* note 3.

240. See Cagle, *supra* note 8.

241. Amici Comments in Opposition to the Probation Conditions Suggested by PG&E, The Federal Monitor, and the U.S. Dep't of Just. at 17, *United States v. PG&E*, No. 14-cr-00175, 2016 WL 1298388 (N.D. Cal. July 16, 2016) (No. CR 14-0175 WHA).

242. *Id.* (quoting CPUC, APPENDIX A SED INCIDENT INVESTIGATION REPORT FOR 2018 CAMP FIRE WITH ATTACHMENTS 48 (Nov. 8, 2019), ftp://ftp.cpuc.ca.gov/News_and_Outreach/I1906015%20Appendix%20A%20SED%20Camp%20Fire%20Investigation%20Report%20REDACTED.pdf).

243. See *id.* at 18.

deteriorating infrastructure, and operations risking public safety, PG&E submitted its Safety Certification Request but has yet to receive one.²⁴⁴

C. De-Energization Disproportionately Impacts Socially and Economically Vulnerable Communities

Currently, ratepayers have few options for purchasing their electricity.²⁴⁵ Even if an electrical customer chooses a different retailer to serve its electrical needs, a competitive retailer—whether owned by a municipality or privately controlled—depends on PG&E electric distribution and transmission lines to transfer power to the electric retailer end-use customer.²⁴⁶ When electrical utilities de-energize their lines, socially and economically sensitive communities stand acutely vulnerable to power disruptions.²⁴⁷ The CPUC remains aware of this threat.²⁴⁸ The Commission places emphasis on notification and mitigation efforts but falls short of analyzing specific impacts affecting these communities during prolonged de-energization events.²⁴⁹ Order 19-05-042 identifies vulnerable communities as populations with access and functional needs (AFN),²⁵⁰ but those bearing the full force of de-energization blackouts include medical baseline customers, poor communities, and households with undocumented member.²⁵¹ The

244. *Wildfire Fund and Safety Certificates*, *supra* note 216 (“A safety certification allows an electrical corporation to recover catastrophic wildfire costs from its ratepayers, or from the Wildfire Insurance Fund, if applicable, using a burden of proof test that is easier to satisfy than would be the case if [the corporation] did not have a safety certification. To obtain a safety certification, the electrical corporation must satisfy the conditions of Public Utilities Code Section 8389(e)(1-7).”). *See generally* Jaxon Van Derbeken, *PG&E Critics Welcome Regulators’ New Stance*, NBC BAY AREA (Nov. 25, 2020, 7:12 PM), <https://www.nbcbayarea.com/investigations/pge-critics-welcome-regulators-new-stance/2408525/> (sharing comments by Catherine J.K. Sandoval, Santa Clara Law Professor and former CPUC Commissioner, on the CPUC warning PG&E how its prior safety record could jeopardize its 2020 Safety Certification) (“This is a good step . . . I have become very concerned over the years that PG&E is not learning the lessons from its failures, and is not implementing them.”).

245. Cagle, *supra* note 8.

246. *See* Gregory, *supra* note 146.

247. *Id.*

248. CPUC DECISION 19-05-042, *supra* note 35, at 7 (“[D]e-energization can leave communities and essential facilities without power, which brings its own risks and hardships, particularly for vulnerable communities and individuals.”).

249. *Id.* at 83.

250. *Id.* at 78 (citing CAL. GOV. CODE § 8593.3 (2021)) (“[T]he access and functional needs population consists of individuals who have . . . intellectual disabilities, physical disabilities, chronic conditions, injuries, limited English proficiency or who are non-English speaking, older adults, children, people living in institutionalized settings, or those who are low income, homeless, or transportation disadvantaged, including, but not limited to, those who are dependent on public transit or those who are pregnant.”).

251. Botts, *supra* note 162.

current global pandemic further intensifies de-energization dangers already affecting these same populations.²⁵²

1. Medically Vulnerable Populations

For the medically vulnerable, repeated prolonged power shutoffs endanger individuals dependent on electricity to stay alive.²⁵³ When utilities de-energize power, individuals with dependent on life-saving equipment face a life and death situation.²⁵⁴ Replacing insulin is costly and time-consuming and may require interaction with the public that increases the risk of exposure to COVID-19.²⁵⁵ Many breathing machines can lack backup batteries or have batteries capable of only a few hours of operation.²⁵⁶ The 2019 PG&E blackouts spanned several days in many areas.²⁵⁷ At the same time, PG&E's advanced notification and community outreach failed to mitigate widespread de-energization hardships experienced across several counties affecting millions of people.²⁵⁸ With PG&E projecting expansive de-energization for the next five years, medically vulnerable populations remain at risk until the utility fundamentally strengthens its decaying infrastructure.²⁵⁹

2. Economically Distressed Communities

For poor communities, de-energization leaves few alternatives for meeting household energy needs. Generators are expensive and require constant steady sources of fuel for continued operation.²⁶⁰ Diesel generators—for those able to afford them—exacerbate air pollution and “produce ‘black carbon’ emissions and fine particulates including particulate matter 2.5 (PM 2.5) which induce climate change and ill-

252. JOINT MOTION FOR EMERGENCY ORDER, *supra* note 27, at 17-21.

253. Sotolongo et al., *supra* note 2, at 5.

254. *See id.*

255. *Are You Prepared in the Event of a Power Outage?*, STANISLAUS COUNTY, <http://www.schsa.org/publichealth/pages/power-outage/> (last visited Jan. 30, 2021) [hereinafter *Power Outage*]. *See also* S. Vincent Rajkumar, *The High Cost of Insulin in the United States: An Urgent Call to Action*, MAYO CLINIC PROC. (Jan. 1, 2020), [https://www.mayoclinicproceedings.org/article/S0025-6196\(19\)31008-0/fulltext](https://www.mayoclinicproceedings.org/article/S0025-6196(19)31008-0/fulltext) (providing an example of a price increase of 1000%, from \$21 to \$332, for one vial of insulin).

256. *See Power Outage*, *supra* note 255.

257. *Id.*

258. *See* CPUC Letter to PG&E, *supra* note 3, at 1.

259. Ethan Howland & Paul Ciampoli, *PG&E CEO sees power shutoffs continuing for five years*, AM. PUB. POWER ASS'N (Jan. 2, 2020), <https://www.publicpower.org/periodical/article/pge-ceo-sees-power-shutoffs-continuing-five-years>.

260. Roy Berendsohn, *How to Safely Use a Home Generator*, POPULAR MECHANICS (Apr. 27, 2020), <https://www.popularmechanics.com/adventure/reviews/a11855/home-generator-101-how-to-power-on-when-the-power-goes-out/>.

health.”²⁶¹ Exposure to black-carbon and particulates may increase asthma and compromise lung health—conditions making people more vulnerable to poor COVID-19 outcomes.²⁶²

Moreover, power shutoffs disproportionately impact working and impoverished families as electricity loss results in spoiled food that can be difficult and costly for these families to replace.²⁶³ School shutdowns eliminate daily access to price reduced or free lunches—a staple food source for many low-income households as high numbers of families and individuals seek aid from local community food banks.²⁶⁴ Additionally, de-energization may result in lost days of work, in turn reducing earnings and further constraining budgets for low-income residents.²⁶⁵ For these populations, advanced de-energization notifications do not change the economic circumstances. Instead, power shutoff events further dislocate economically sensitive communities by interrupting the power necessary for day-to-day functions.

3. Non-Citizen and Undocumented Community Members

For undocumented community members, de-energization imperils lives by dissuading requests for government help and limiting access to public assistance because of citizenship status.²⁶⁶ Many undocumented individuals refrain from seeking public aid out of fear local, state, or federal government workers may communicate their immigration status to the federal government.²⁶⁷ Those specifically affected include immigrant families, immigrants with disabilities, and immigrants fleeing from violence, including those because of their LGBTQ identification—populations heavily reliant on some form of assistance during

261. Catherine J.K. Sandoval, *Energy Access is Energy Justice: The Yurok Tribe's Trailblazing Work to Close the Native American Reservation Electricity Gap*, in ENERGY JUSTICE, INTERNATIONAL AND U.S. PERSPECTIVES 7 (Raya Salter, Carmen G. Gonzalez, Michael H. Dworkin, Roxanna A. Mastor, Elizabeth Kronk Warner, eds. 2018).

262. See *People with Certain Medical Conditions*, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fneed-extra-precautions%2Fgroups-at-higher-risk.html (updated Dec. 29, 2020) (listing conditions which may increase risk of severe illness from COVID-19 including asthma (moderate-to-severe) and pulmonary fibrosis (having damaged or scarred lung tissues)).

263. Botts, *supra* note 162.

264. *Id.*

265. *Id.*

266. Natalie Hanson, *Public Charge Rule Would End Benefits for Immigrants Without Green Card*, CHICO-ENTERPRISE-RECORD (Oct. 22, 2019, 3:30 AM), <https://www.chicoer.com/2019/10/22/public-charge-rule-would-end-benefits-for-immigrants-without-green-card/>.

267. *Id.*

widespread de-energization events.²⁶⁸ Aid eligibility restrictions leaves these vulnerable communities without sufficient resources to endure a prolonged blackout.²⁶⁹

Those seeking citizenship face similar dangers. Under the new public charge rule implemented by the Trump Administration, the United States Citizenship and Immigration Services must consider:

[T]he receipt of certain cash and non-cash public benefits, including those that may be used to obtain testing or treatment for COVID-19 in a public charge inadmissibility determination, and for purposes of a public benefit condition applicable to certain nonimmigrants seeking an extension of stay or change of status.²⁷⁰

The Rule specifically conditions the approval of nonimmigrant visa holders seeking to extend their stay or change their nonimmigrant classification status on not receiving public benefits for more than twelve months—in total—within any thirty-six month period.²⁷¹ Included in those public benefits determinations are most federally funded Medicaid programs, and cash and noncash benefits used to obtain COVID-19 testing or treatment.²⁷²

In January 2020, the Supreme Court in *Department of Homeland Security v. New York*,²⁷³ granted DHS a stay for a preliminary injunction issued against the new rule change pending resolution on the merits in the Second Circuit.²⁷⁴ In September 2020, the Second Circuit in *New York v. U.S. Department of Homeland Security*,²⁷⁵ stayed the injunction based on DHS demonstrating a likelihood of success on the merits of irreparable harm by not being able to enforce the change; but the Ninth Circuit in *City & County of San Francisco v. USCIS*,²⁷⁶ largely affirmed

268. *Id.*

269. Natalie Hanson, *Immigrants In Butte County Affected By New Public Charge Rule*, CHICO-ENTERPRISE-RECORD (Dec. 15, 2019, 2:32 AM), <https://www.chicoer.com/2019/12/15/immigrants-in-butte-county-affected-by-new-public-charge-rule/>.

270. *Public Charge*, *supra* note 28 (expanding public charge rule to include aliens who have received public benefits for more than twelve months within any thirty-six-month period).

271. *Id.*

272. *Id.*

273. *Dep't of Homeland Sec. v. New York*, 140 S. Ct. 599 (2020) (granting DHS a stay on a preliminary injunction issued against the new rule change pending disposition of government's appeal in the Second Circuit).

274. *Id.*

275. *New York v. U.S. Dep't of Homeland Sec.*, 974 F.3d 210 (2d Cir. 2020) (staying injunction based on DHS showing likelihood of success on the merits of irreparable harm).

276. *City & Cty. of S.F. v. U.S. Citizenship & Immigration Servs.*, 981 F.3d 742 (9th Cir. 2020) (affirming injunctions issued for plaintiffs grounded on showing the likelihood of success on the merits of irreparable harm based on new change, but vacating the nationwide applicability).

preliminary injunctions issued against the rule, although it vacated nationwide applicability.²⁷⁷ Following the 2020 Presidential Election, the USCIS under the Biden Administration announced it would no longer adhere to the 2019 Public Charge Rule changes, nor would the Department of Justice seek appellate review of judicial decisions invalidating or enjoining its enforcement.²⁷⁸ But the consequences for non-citizen immigrant community members remain clear: public charge considerations dissuade seeking local, state, and federal help following a wildfire or de-energization event out of fear doing so will lead to deportation or other citizenship application consequences.

For households with undocumented immigrants, the electricity loss and the COVID-19 crisis force a choice between two dangerous options: either ride the power shutoff out for however long it may last and risk individual health and safety should illness or complications develop, or risk legal sanctions, deportation and safety by leaving home and exposing oneself to other infected individuals. Dangers are further escalated by fire threats that force undocumented family members to evacuate their homes—even when they have no place to go—and risk deportation when staying at public shelters.

De-energization notification, education, and community outreach alone cannot overcome acute economic conditions vulnerable communities face when widespread power shutoffs repeatedly compromise reliance on safe and reliable power.²⁷⁹ Utilities must comply with CPUC mandates to maintain their electrical infrastructure; to do otherwise circumvents their legal obligations of delivering safe and reliable power to those communities in most need.²⁸⁰ Cognizant of these widespread dangers, this analysis offers a specific recommendation falling within CPUC authority for decisive implementation in reducing de-energization as a general wildfire response.

V. PROPOSAL

The California Constitution vests the CPUC with vast regulatory authority over all utilities generating, transmitting, or furnishing power “directly or indirectly to or for the public.”²⁸¹ Under this delegation, the Commission can “establish rules, examine records, issue subpoenas [sic]

277. Compare *New York v. U.S. Dep’t of Homeland Sec.*, 974 F.3d, with *City & Cty. of S.F. v. U.S. Citizenship & Immigration Servs.*, 981 F.3d at 763.

278. USCIS, Letter to Interagency Partners (2021).

279. See generally ESRB-8, *supra* note 16.

280. See CAL. PUB. UTILS. CODE § 451 (1977); CAL. PUB. UTILS. CODE §§ 399, 399.2(c) (2001).

281. CAL. CONST. art. XII, § 3.

... and prescribe a uniform system of accounts for all public utilities subject to its jurisdiction.”²⁸² At the same time, the CPUC has exercised its power in interpreting PU Codes 451 and 399.2 as granting IOUs de-energization discretion while reserving for itself the power of review.²⁸³

To ensure utilities remain committed to their legal duties of promoting public safety, prudent infrastructure investments, and delivering safe and reliable power to the public, the CPUC must evaluate utility infrastructure investments when conducting de-energization reasonableness reviews. In line with its broad regulatory power, this analysis recommends the CPUC take a two-fold approach: (1) investigate utility compliance with the duty to invest in their electrical infrastructure (an infrastructure investment inquiry) and; (2) factor this investment inquiry into the utility de-energization reasonableness review. The CPUC touts IOU discretion as a vital tool for addressing emergencies, but for utilities like PG&E, unfettered de-energization discretion threatens to become a general wildfire response amidst the current public health crisis and a looming 2021 Wildfire Season.²⁸⁴

A. The CPUC Must Incorporate an Infrastructure Investment Inquiry into its Reasonableness Review

First, the CPUC must inquire into whether de-energization accompanies diligent electrical infrastructure investments. Duties under PU Code 399.2 are threefold: 399.2(a) reiterates delivery of safe and reliable power while holding electrical corporations responsible for controlling, managing, operating, and maintaining owned distribution lines; 399.2(b) mandates compliance with PU 330; 399.2(c) directs reasonable investments in owned electrical infrastructure.²⁸⁵

Reasonable investments in infrastructure are not mere recommendations—they are the law. As an example, SDG&E has focused on its infrastructure investments along with reducing the scope of its de-energization events.²⁸⁶ Yet, PG&E has expanded de-

282. *Id.* § 6.

283. CPUC DECISION 09-09-030, *supra* note 48, at 61-62.

284. *See generally* JOINT MOTION FOR EMERGENCY ORDER, *supra* note 27.

285. CAL. PUB. UTILS. CODE § 399.2 (2001).

286. Trageser, *supra* note 98 (“In the past decade an SDG&E spokesperson said [SDG&E] has spent more than \$1.5 billion on wildfire preparedness ... [overhauling] its grid to minimize large scale power shutoffs ... rolling out new technology ... including moving power lines underground and creating smaller grids so they can turn off power in neighborhoods or even individual households with the highest fire risk.”). *See also* CPUC Letter to SDG&E, *supra* note 17 (“While San Diego Gas and Electric (SDG&E) is often held up as a model for wildfire mitigation and has been able to develop a number of tools to minimize the impact of PSPS, SDG&E should seek to improve and learn from other utilities’ experiences. SDG&E should carefully assess and consider the CPUC’s directions to PG&E

energization while undergoing bankruptcy proceedings.²⁸⁷ In October 2018, the utility cut power to 60,000 customers across six counties; contrast this to October 2019 when the utility shut off power to nearly two million customers.²⁸⁸ By requiring investment disclosures in de-energization reports, the CPUC can evaluate whether utilities exercising power shutoffs remain committed to reasonable investment mandates under PU Code 399.2.²⁸⁹

B. Public Safety Demands a More Assertive CPUC Approach over De-Energization Events

Second, safe delivery of reliable power relies on critical investments in IOU-owned facilities.²⁹⁰ Consequently, any CPUC reasonableness review into de-energization necessitates evaluating whether power-shutoffs remain tools of last resort—not general wildfire responses.²⁹¹ Safe, reliable power cannot exist without diligent investments in electrical facilities, and moving electricity via faulty or excessively outdated transmission and distribution lines cannot constitute safe delivery of such power.

Expansive recurring power shutoffs divorced from fundamental upgrades to aging infrastructure fail as reasonable exercises of de-energization authority. The devastating 2018 Camp Fire vividly illustrates the dangers of operating electrical facilities well beyond age limits.²⁹² In 2007, SDG&E similarly confronted the loss of life when utility power lines destroyed hundreds of homes and killed two people.²⁹³ As a result, the utility streamlined its de-energization efforts, implemented new technology, and relocated power lines underground.²⁹⁴ But PG&E's 2020 Wildfire Mitigation Plan limits system hardening strengthening to 241 miles and 7,100 miles over the next twelve to fourteen years even when PG&E service territory encompasses 5,500

and examine last week's . . . [October 7, 2019, massive PG&E power shutoffs] to ensure critical lessons learned are transferred to SDG&E's operation and that there is not a repeat of any of last week's mistakes in any part of the state in the future.”)

287. PG&E 2019 WILDFIRE SAFETY PLAN, *supra* note 128, at 63; *see* Gregory, *supra* note 146; *see also* Worth & Pinchin, *supra* note 141.

288. SED 2019 PSPS REPORT, *supra* note 1, at 3; *see also* Gavin Bade, *In a first, PG&E cuts power to 60,000 to prevent wildfires during wind storm*, UTIL. DIVE (Oct. 15, 2018), <https://www.utilitydive.com/news/in-a-first-pge-cuts-power-to-60000-to-prevent-wildfires-during-wind-stor/539680/>.

289. CAL. PUB. UTILS. CODE § 399.2 (2001).

290. *Id.*

291. *See* CAL. PUB. UTILS. CODE §§ 399, 399.2 (2001). CPUC Takes Action, *supra* note 23, at 2.

292. Cagle, *supra* note 8.

293. Trageser, *supra* note 98.

294. *Id.*

miles of electric transmission lines, and 25,500 miles of distribution lines located in High Fire-Threat Districts; for 2021, the utility is limiting its hardening to 180 miles of overhead facilities in higher risk areas.²⁹⁵

This means PG&E intends to target a small portion of its vast infrastructure located in high-fire risk areas over the course of a decade, despite remaining largely unaware of the age, composition, or degree of wear of much of its electrical system.²⁹⁶ Utility company failures to adequately invest in their own electrical infrastructure threaten reliable delivery of power and endanger public safety by exposing consumers to dangerous infrastructure and potential wildfires.²⁹⁷ The CPUC's primary obligation rests with protecting the public safety, and to advance this duty requires CPUC evaluation into utility infrastructure investments—an integral factor currently missing from CPUC reasonableness review standards.

V. CONCLUSION

De-energization serves as a vital tool of last resort when emergencies necessitate immediate power shutoffs. Yet, IOU de-energization authority carries an accompanying danger of utility abuse. For PG&E, de-energization entices sidestepping its legal obligations to reasonably invest in its workforce and electrical infrastructure—investments necessary for providing safe and reliable power to customers and the public.

The State of California charges the California Public Utilities Commission with regulating all public utilities operating within its jurisdiction, to execute orders, and to examine IOU compliance with state law. To remain consistent with its statutory obligation the CPUC must inquire into whether IOUs like PG&E are fulfilling their infrastructure investments, providing safe reliable power, and narrowly applying de-energization as the tool of last resort. The CPUC stands empowered to incorporate infrastructure investments as a critical factor in its de-energization review, and in its decision to authorize a Safety

295. UPDATED 2020 WMP REPORT, *supra* note 132, at 7; *see also* PG&E 2021 WMP REPORT, *supra* note 132, at 558.

296. *Id.* *See also* CAMP FIRE REPORT, *supra* note 25, at 66 n.124 (acknowledging PG&E has not historically kept records of the age or material composition of its suspension hooks, despite suspension hooks being a common hardware in many of its transmission and distribution facilities—facilities inclusive of over 50,000 steel transmission structures, 100,000 non-steel transmission structures, and over two million distribution poles).

297. *See* Van Derbeken, *supra* note 244 (comments by Mark Toney—the head of ratepayer advocacy group TURN—on the CPUC consideration of withholding PG&E Safety Certification) (“For really the first time we are seeing the CPUC not simply rubber stamp the safety certification, and that is progress.”).

Certificate allowing utility access to the wildfire fund. With shelter-in-place orders, global pandemic, and a looming 2021 wildfire season, public safety demands bold CPUC action to hold utilities responsible for upgrading their electrical infrastructure.