EXAMINING PACIFIC GAS AND ELECTRIC'S CULTURE OF NEGLIGENCE AS A CAUSE OF DEVASTATING WILDFIRE

A Research Paper submitted to the Department of Engineering and Society

Presented to the Faculty of the School of Engineering and Applied Science

University of Virginia • Charlottesville, Virginia

In Partial Fulfillment of the Requirements for the Degree

Bachelor of Science, School of Engineering

Nathan Yu

Spring 2025

On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

Advisor

William J Davis, Department of Engineering and Society

Introduction

Wildfire is fire that primarily takes hold in combustible vegetation and can be caused by both natural and human behaviors. While these fires primarily threaten wild areas, they can easily spread into densely populated areas as well. The state of California experiences more than 7,500 wildfire events each year (Cal Fire). Many of which arise from unpredictable natural occurrences or human activities. A consistent source, however, can be identified: electrical equipment. According to the California State Auditor, "since 2015 power lines have caused six of the State's 20 most destructive wildfires" (Tilden, 2022). Some of these fires occurred because of trees or extreme wind damaging equipment - situations that are nigh impossible to prevent. In a way, these wildfires have almost begun to feel like just another cost of keeping our world powered.

In 2018, the most destructive wildfire in California history, the Camp Fire, ripped through Butte County, killing 85 and burning 153,336 acres (Butte County District Attorney, 2020). The town of Paradise, California was completely wiped off of the map. A live wire, owned by Pacific Gas and Electric (PG&E) broke from an unmaintained power line and sparked the Butte County Camp Fire. An investigation undertaken by Butte County concluded that "reckless actions of PG&E created the risk of a catastrophic fire in the Feather River Canyon, that PG&E knew of that risk and PG&E ignored the risk by not taking any action to mitigate the risk" (Butte County District Attorney, 2020). Given the severe consequences of PG&E's negligence, it is reasonable to expect serious repercussions, whether financially or legally. However, in 2020, PG&E emerged from bankruptcy and in December 2024, the corporation reached its highest ever market cap of \$56,570,000,000 (Companies Market Cap). This is a corporation that is supposed to serve public interests being worth more than the states of South

Dakota, Montana, Alaska, Wyoming, or Vermont (Statista). Allowing for continued operation of utility corporations with long, known histories of negligence will only lead to more numerous and more extreme disasters stemming from aging equipment and a rapidly heating climate.

I argue that PG&E's culture of negligence stems from our society's dependence on the widespread and reliable power it distributes and that PG&E has continued to prioritize profit over safety. Prior PG&E incidents, including the 2018 Camp Fire and 2010 San Bruno pipeline explosion, show that PG&E is repeatedly negligent and the current management system has done nothing to change that -- making it simply a matter of time before the next tragedy. I am supporting my argument using the framework of technological momentum, which asserts that as society becomes more reliant on a technology, that technology's influence on that society increases, whether that be through infrastructure, economic interests, bureaucracy, etc (Hughes, 1994). For my analysis, I will explore PG&E's executive bonus system and government legislation and policy meant to lessen the economic impact of wildfires caused by electrical equipment on utility companies. The purpose of this paper is to make the public aware of PG&E's continued prioritization of profit over safety and explore how and why the California government supports PG&E, despite the corporation's history of negligence.

Pacific Gas and Electric's History of Negligence

On September 9, 2010, a natural gas pipeline, owned by PG&E, burst. The natural gas released in the pipeline explosion caught fire and burned for nearly 48 hours. The explosion and proceeding fire killed 8 people and destroyed 38 houses (National Transportation Safety Board, 2011). Despite a prompt and organized emergency response, PG&E failed to shut down the flow of gas to the explosion site for 95 minutes (National Transportation Safety Board, 2011). In 2016, PG&E was found guilty of "multiple willful violations of the Natural Gas and Pipeline"

Safety Act (PSA) and obstructing an agency proceeding" (Northern District of California, 2016). PG&E was determined to have knowingly failed to update incorrect and incomplete pipeline records, properly investigate threats to their natural gas pipelines, and prioritize high-risk pipelines that were threatened by over-pressurization (Northern District of California, 2016). Because of previous explosions and failures, the National Transportation Safety Board "concluded that PG&E's multiple, recurring deficiencies are evidence of a systemic problem" (National Transportation Safety Board, 2011).

The Butte County Camp Fire, which killed 85 people and burned 153,336 acres, was caused by PG&E's negligent failure to maintain its electrical equipment. A live wire broke from Tower 27/222, which is a part of the Caribou-Palermo line that runs through the Feather River Canyon (Butte County District Attorney, 2020). An investigation conducted by Butte County determined that the fire was caused by a wire insulator still in use from the line's construction in 1921, far beyond the component's intended lifespan (Butte County District Attorney, 2020). Furthermore, it was determined that even though PG&E had owned Tower 27/222 since 1930, the corporation had "little or no information" on the 97 year old parts that were still in service (Butte County District Attorney, 2020). The Butte County investigation concluded that the "reckless actions of PG&E created the risk of a catastrophic fire in the Feather River Canyon, that PG&E knew of that risk and PG&E ignored the risk by not taking any action to mitigate the risk" (Butte County District Attorney, 2020). In the aftermath of the Camp Fire, PG&E was charged and convicted of 84 counts of involuntary manslaughter and the corporation was fined \$4 million.

A single tragedy is unacceptable for a corporation that is responsible for providing utility services to millions of Americans. Multiple tragedies caused by the same corporation's

negligence is an indication that the system of management and oversight is fundamentally broken.

Current Understanding

Current discourse around utility mismanagement and negligence mostly focuses on utility companies holding a natural monopoly over the regional utilities industry making it impossible for consumers to switch providers. A natural monopoly is a monopoly that arises because of the massive overhead costs of entering into a limited industry and once that overhead is covered, expansion is cheap. Generally speaking, the first corporation in the region or industry is the most successful because it is too expensive for other companies to build the necessary infrastructure and then compete for the same client pool. In the case of utility companies, building infrastructure to service a region is very expensive, so if a company's infrastructure already exists in an area, other companies are unable to compete.

Ivan Penn, who covers the energy industry, and Peter Eavis, who covers economics, reported on the Camp Fire in *The New York Times*. He writes, while a "felony conviction can deal a mortal blow" to a company, PG&E's "customers cannot switch to another provider of electricity and gas" (Penn et al, 2020). Utility companies are protected from customer loss because their customers cannot easily switch to alternative providers or energy sources. The lack of competition allows PG&E to behave negligently, as consumers have no option but to use their services. As a result of this dynamic, previous writers have concluded that PG&E's continued culture of negligence stems from its position as a natural monopoly.

Consider the Lahaina wildfire that occurred in Hawaii in August of 2023. 100 people died in the blaze sparked by Hawaiian Electric Industry's (HEI) equipment (Moss, 2024). Similarly to PG&E, HEI is considered to be a natural monopoly because of the natural

monopolies of the utility industry. R.A. Moss, former president of RAM Management Group, argued that the Lahaina fire, caused by HEI equipment, stems from its position as a natural utility monopoly. In the *Wall Street Journal* he wrote, "Hawaiian Electric's alleged mismanagement runs deeper than 'accidental' negligence" (Moss, 2024, single quotations in original). He continues, "The utility is both a monopolist and monopsonist... this resulted in its management's failure to invest in proper risk mitigation measures and essential upgrades" (Moss, 2024). In another case, an expert has solely attributed utility sourced wildfires to a utility company being a natural monopoly.

In both the Camp and Lahaina fires, current writers are attributing both companies' negligent failure to their status as natural monopolies. While PG&E and HEI's monopoly status is an important factor in both cases, their unethical practices going unpunished is not solely because of their statuses as natural monopolies. Monopolization is not the root cause of the issue of utility negligence, but rather a symptom of deeper systemic forces. Past monopolies have been busted by government action, yet utility monopolies remain, showing that approaching the issue solely focusing on monopolization is inadequate. I argue that our society's deep reliance on widely-available electricity is the cause of PG&E's long culture of negligence. Because our world grinds to a halt without electricity, the government is unwilling to disrupt the status quo and implement real changes to utility companies. To the government, PG&E's uninterrupted service outweighs the cost of the tragedies the utility causes.

California Public Utilities Commission

Founded in 1911, the California Public Utilities Commission (CPUC) is a state agency that serves public interest by regulating private utility companies that service California. This is done through setting utility rates, inspecting and auditing infrastructure, and implementing safety

procedures (CPUC, 2013). The Commission's stated goal is to "empower California through access to safe, clean, and affordable utility services and infrastructure" (CPUC). Additionally, the Commission's website lists five core values: accountability, excellence, integrity, open communication, and stewardship (CPUC). For the purpose of this paper, I will be primarily focusing on CPUC's rate regulation. Electricity bills are calculated from a combination of production cost, utility company profits, transmission costs, and contribution to the California Wildfire Fund (CWF). Utility companies are able to request raises in rates, which CPUC must approve based on the justification for the rate hike. These rate hikes may be approved for infrastructure development and projected expenses for a given time period.

California Wildfire Fund

Following the 2018 Camp Fire and PG&E's subsequent liability bankruptcy, California Governor Gavin Newsom signed the 2019 Wildfire Legislation, also known as AB 1054, establishing the California Wildfire Fund (CWF). The Fund's purpose is to provide financial support for utility companies in the case of wildfires caused by electrical equipment. Because wildfire damage can be incredibly costly, utility companies would go bankrupt from the liability of a severe fire, see PG&E and the Camp Fire. As stated in the bill, "this bill would establish the Wildfire Fund to pay eligible claims arising from a covered wildfire" (CPUC). The Fund allows for continued electrical service and operation, even when liability is more than the company can afford. AB 1054 allows for the collection of "a nonbypassable charge from ratepayers of the electrical corporation to support the wildfire fund" (California Legislature, 2019). Customers are now subject to rate hikes to help with funding for utility company wildfire liability. Nearly a quarter of the CWF's purse. While ratepayers are not fully paying for the fund, their inclusion

socializes the costs of wildfire by placing significant financial burden on customers, not only the utility corporations.

Methodology

This paper will be split into two distinct research and analysis groups. The first group uses virtue ethics as a framework for determining how ethical PG&E's current actions are, given the corporation's history of deadly negligence. PG&E's current system of massive executive bonuses and shareholder dividends is compared with safety spending and consumer costs. The second group uses technological momentum to explore how PG&E is able to continue operating despite killing nearly 100 people and continuing to prioritize shareholder and executive profit over safety. Specifically, how government mandated charges to consumers are being used to protect utility companies from wildfire liability - charges that were mandated as a direct response to the Camp Fire.

Virtue Ethics

Virtue ethics provides a framework for assessing and critiquing PG&E's corporate behaviors and continued failures. PG&E's behaviour can be examined from a moral perspective, which allows for an action or behavior to be determined to be ethical or unethical. Virtue ethics centers around the idea that morally correct actions come from virtuous traits and the action's purpose. Using virtue ethics, several 'virtuous' characteristics can be identified for a modern utility company. I (hopefully we) would expect the company to prioritize safety, act responsibly, and work for the benefit of the customers, with the goal of providing reliable and cheap electricity. The San Bruno Pipeline Explosion and the Camp Fire are past examples of PG&E failing to prioritize safety and act responsibly. PG&E has undergone many changes since the Camp Fire, many for the better, however, PG&E has continued to make unethical decisions since

emerging from bankruptcy. Past unethical behavior has been well documented and analyzed, yet current unethical behavior is hardly addressed. PG&E has continued to prioritize profit over both safety and consumer affordability, by lobbying CPUC for rate increases in the name of wildfire safety, while paying hundreds of millions of dollars out in stock dividends and executive bonuses. Is it ethical for hundreds of millions to be paid out in executive bonuses and stock dividends to be paid out while rate hikes for consumers are justified by claiming the money is needed for safety? For a corporation that provides an essential service to millions of people, we must have a higher ethical standard.

CPUC Rate Hikes and PG&E Justification

Following their bankruptcy in 2019, PG&E has been required to increase wildfire risk mitigation and preparation. Many of these changes are expansive and expensive, leading PG&E to request increases in electrical rates from CPUC. PG&E requests rate hikes in three year intervals, so 2020-2022 is covered in one request and 2023-2026 in the next, these revenue increases can be found in Table 1 below. PG&E must justify increases in rates, which are then decided on and adjusted by CPUC.

For 2020-2022, PG&E stated that an increase in approved revenue would provide "funding required for continued safety and compliance to mitigate wildfire risks", continuing to state that "CWSP [Community Wildfire Safety Program] O&M [Operations and Management] and capital costs represent a significant portion of PG&E's GRC [General Rate Case]" (CPUC, 2020). From 2020-2022, PG&E argued and was approved for significant revenue increases for greater wildfire safety and management.

For 2023-2026, PG&E made a similar case for increasing rates to CPUC for the implementation of safer electrical systems. CPUC approved ratepayer funding for PG&E "to

reinvest in its infrastructure and improve operations", along with fulfilling "critical imperatives... including: mitigating the risk of catastrophic wildfire" (CPUC, 2023). PG&E once again justified significant rate increases for equipment upgrades and safety. PG&E additionally pledged to fortify 320 miles of above ground conductors at the cost of \$517 million, which is \$1.6m/mi, and bury 2000 miles of wire for \$5.9 billion, which is \$2.95 m/mi (CPUC, 2023).

Table 1.CPUC Approved Revenue Increases

Year	2020	2021	2022	2023	2024	2025	2026
Approved	575	318	376	1,307	716	359	204
Revenue							
Increase							
(\$ million)							

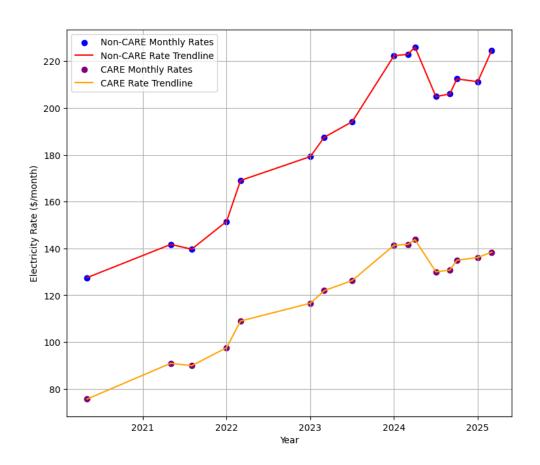
Note. The data for 2020, 2021, 2022 is from Application of Pacific Gas and Electric Company for Authority, Among Other Things, to Increase Rates and Charges for Electric and Gas Service Effective on January 1, 2020. (U39M)., by California Public Utilities Commission, 2020 The data for 2023, 2024, 2025 is from Application of Pacific Gas and Electric Company for Authority, Among Other Things, to Increase Rates and Charges for Electric and Gas Service Effective on January 1, 2023. (U39M)., by California Public Utilities Commission, 2023.

The approved revenue increases in Table 1. above are increases in millions of dollars from the previous year, not the total amount that PG&E is allowed to collect from rates. CPUC approves yearly revenue changes for PG&E, which are then reflected in increased rates for consumers. When these revenue increases were proposed, many members of the public echoed concerns, "such as the unaffordability of PG&E's proposed rate increase, PG&E's poor safety

and maintenance operations" (CPUC, 2020). Many were skeptical about PG&E and CPUC increasing revenue, as that revenue comes directly from consumers in the form of rate hikes and because PG&E has done a poor job with the revenue it has already received. These rate hikes came right after the PG&E caused the Camp Fire and the resulting bankruptcy.

Figure 1.

PG&E Average Monthly Residential Electricity Bill (2020-2025)



Note. Tabular data and sources can be found in Appendix A. Graph generated by me.

Figure 1 shows the average electricity bill of CARE and Non-CARE homes. Since March of 2020, the average monthly bill for CARE customers has risen from \$75 to \$138.38, along with

monthly bills going from \$127 to \$224 for non-CARE customers. Although wildfire safety efforts have increased, consumers are being crushed by the cost of a vital service.

PG&E Dividends and Executive Compensation

While electric bills skyrocket, PG&E has been paying out hundreds of millions in stock dividends and executive bonuses. Since 2022, PG&E has been paying preferred stock dividends, and began paying common stock dividends in 2024.

Table 2.

Stock Dividends From 2022-2024

Туре	2022	2023	2024	Total
Preferred Stock	\$10,437,237.96	\$13,916,317.28	13,916,317.32	\$38,269,872.56
Common Stock	\$0	\$0	\$85,457,591.95	\$85,457,591.95

Note. See Appendix B for full data breakdown and sources

Since beginning preferred dividends in 2022, PG&E has paid out \$38,269,872.52. In 2024 alone, PG&E paid out \$85,457,591.95 in common stock dividends. Since 2022, PG&E has paid out \$123,727,464.95 in dividends in total.

Table 3.PG&E Executive Total Compensation from 2021-2023

Recipient(s)	2021	2022	2023	Total
Executive Suite, including Poppe	\$78,591,936	\$40,442,570	\$46,918,214	\$165,952,720

Patricia Poppe	\$51,198,471	\$14,120,593	\$16,994,840	\$82,313,904

Note. See Appendix C for full data breakdown and sources

PG&E executives are paid through a salary and a bonus system that sets different metrics to measure "performance". Table 3 shows the compensation totals for PG&E's executive board, which has either had 9 or 10 members, depending on the year. For every year between 2021-2023, PG&E has paid out more than \$40 million dollars in executive salaries, while consumers are crushed by record-high electricity prices.

Table 4.PG&E Executive Bonuses

Recipient(s)	2021	2022	2023	Total
Executive Suite, including Poppe	\$70,242,399	\$30,632,089	\$28,382,202	\$129,256,690
Patricia Poppe	\$51,198,471	\$11,707,520	\$14,203,030	\$77,109,021

Note. See Appendix C for full data breakdown and sources

Table 3. and Table 4. show the eye-watering amount of money paid in bonuses to PG&E's CEO Patricia Poppe and PG&E's executive suite of 9 or 10 executives, depending on the year. Between 2021 and 2023, PG&E has paid Patricia Poppe \$77,109,021 and the executive suite a total of \$165,952,720, in bonuses alone. 2024 payment data is not yet available.

Discussion of Rising Rates, Dividends, and Executive Pay

Since 2020, PG&E has justified increased revenue caps, resulting in rate increases, to CPUC in the name of wildfire risk mitigation and increased safety measures. Figure 1 showcases the incredible spike in residential electric bills since PG&E has emerged from bankruptcy. PG&E

has claimed time and time again, to both the public and CPUC, that their number one priority is safety. Post-Camp Fire, many wildfire vulnerabilities were found in PG&E's electric distribution system, so an increase in costs to shore up wildfire protection is expected and necessary. However, at the same time PG&E is hiking up consumer costs to fund system hardening, they have been shoveling hundreds of millions of dollars to shareholders and executives. PG&E has been approved to spend \$517 million dollars on hardening above ground electrical systems from 2023-2026. From 2021-2023, PG&E paid out \$129,256,900 in executive suite bonuses to an executive suite of 9 people. Bonuses so large that they can cover 25% of hardening costs, while consumers are faced with record high electricity costs. In 2024 alone, PG&E paid out \$99,373,908 to shareholders, which could have covered 19.22% of their approved hardening costs, again while consumers are burdened with skyrocketing utility bills.

On the PG&E website, several core values are listed: "We put safety first", "We are accountable", "We act with integrity, transparency and humility", "We are here to serve our customers" (PG&E). PG&E has presented a list of virtues that the corporation claims to be defined by and uphold. Using virtue ethics, a comparison between the virtues PG&E claims to uphold and the corporation's actions can be performed. PG&E claims to put safety above all, yet continues to allocate hundreds of millions of dollars to executive bonuses and shareholder dividends. PG&E's emergency operations budget is \$40 million, which could easily have more than double the funding just from Patricia Poppe's bonus in 2021 (CPUC, 2020). PG&E has continued their trend of prioritizing profit over safety by allocating a mind boggling amount of money for dividends and bonuses instead of investing that money into increasing safety measures. Not only does PG&E prioritize shareholders and executives over safety, but also over the Californian citizens they serve. PG&E claims that they "are here to serve our customers",

which is untrue because PG&E is risking their safety and sticking consumers with skyrocketing prices (PG&E). PG&E needed money to implement increased safety measures mandated post-Camp Fire. To get this money, PG&E argued to the CPUC that consumer rates needed to be significantly increased to pay for increased wildfire protections, which is why there has been such a large spike in electricity prices. Yes, PG&E spent a significant amount of the new revenue increases on safety, but had even a fraction of the dividend and bonus money been reallocated, PG&E could have reduced the financial strain placed upon customers that they claim to care about, but did not. PG&E has continued to prioritize shareholder profits and executive bonuses above both safety and consumers, showing that any consequences from bankruptcy have been far too lenient to inspire real change. PG&E is continuing to show the same patterns of profit over everything that killed 8 in San Bruno and 85 in the Camp Fire. California is speeding towards the next major utility disaster because PG&E has faced essentially zero consequences, both regulatory and socially, for their morally bankrupt culture and prioritization of profit over all else.

Technological Momentum

Enron collapsed "in large part because of the unethical practice of its executives", so why is PG&E still allowed to operate after killing more than 93 people (Johnson, 45)? Our society is so dependent on easily accessible electricity that such failures have become a cost of doing business. Technological momentum provides a framework for analyzing PG&E's continued operation and government support, even with a past history of tragedy and negligence.

Technological momentum allows for the problem to be explored beyond the idea of a natural monopoly being untouchable solely because of economic forces. [insert sentence about tech momentum and the concept of momentum]. Society today is so rooted in the current system of

electrical distribution that tragedies are not enough to shift the momentum of the energy grid. PG&E's electrical grid has built up so much societal, regulatory, and infrastructural momentum that a shift in that momentum would require massive and drastic effort. I will explore the foundation of the CWF, founded in direct response to the Camp Fire, to show the California government's resistance to a change in the industry. By providing a backing for insurance companies built off of ratepayer charges, the government is socializing accountability for wildfire disasters caused by electrical equipment. A shift from the PG&E utility system would be an enormous endeavor, which is why the California government continues to support an ethically bankrupt system.

CWF Legislation and Funding

Gavin Newsom's AB1054 requires the collection of "a nonbypassable charge [NBC] from ratepayers of the electrical corporation to support the wildfire fund" (California Legislature, 2019). Customers of PG&E, San Diego Gas and Electric (SDG&E), and Southern California Edison (SCE), are now charged an additional fee to fund the California Wildfire Fund. As discussed above, the CWF provides funding for electric company wildfire liability, so in a sense, consumer money is being used by utility companies as insurance.

Table 5.

CWF Funding Breakdown

Source	Ratepayer (NBC)	PG&E	SDG&E	SCE	SMIF Loan	Total
Value (\$ billions)	3.730	5.583	0.388	2.740	2	14.743

Note. See Appendix D for full data breakdown and sources

Since its founding, the CWF has collected more than \$3,730,000,000 from ratepayers and \$5,583,000,000 from PG&E. Even though CWF provides no insurance to ratepayers, they have paid more than half of what PG&E, the primary beneficiary, has.

CWF Funding Discussion

As California became more and more reliant on electricity, PG&E's inertia and the difficulties of replacement have grown significantly. PG&E's current system is so integrated into society, government, and infrastructure that reversing its momentum through the development of a different system would require an incredible shift. PG&E has so much momentum that being directly responsible for the deaths of nearly 100 people is not enough to reverse the corporation's momentum. When Californian access to electricity was threatened by PG&E's bankruptcy, the government intervened to maintain the status quo [reword]. The CWF was created by Governor Gavin Newsom as a type of insurance for utility companies to reduce possible financial liability from wildfires caused by electrical equipment. The CWF is not funded by the government though – it is funded directly through non-bypassable charges on consumer electric bills and utility company contributions. More than \$3,730,000,000 has been collected from ratepayers since 2020 through these non-bypassable charges. By taking money from consumers and using it as insurance for utility companies, the California government has socialized the liability and cost for utility caused wildfires. Because the CWF was founded as a direct result of the Camp Fire to support utility companies, the government is accepting that PG&E has gained so much momentum that being directly responsible for the deaths of 85 people is simply a cost of keeping our modern world powered. The CWF is the government's attempt to guard utility companies from market forces that have the ability to hold corporations accountable through bankruptcy and dissolution. Unlike what previous work has claimed, utility companies are not invincible because of natural monopoly market forces, rather they are nearly invincible because of the inertia our current system of power generation and distribution has over the government and our society.

Conclusion

PG&E's negligence was directly responsible for the 8 killed in the San Bruno pipeline explosion and the 85 killed by the Camp Fire. As a result of the Camp Fire, PG&E was forced to declare bankruptcy, yet continues to operate to this day. Previous authors have argued that utility companies are shielded from economic and societal consequences because of their status as a natural monopoly. By attributing utility and PG&E's invincibility to economic principles and rules, we are left believing that we can do nothing to change the existing broken system. A broken system where PG&E continues to prioritize profits over safety and consumers. A broken system where PG&E justifies skyrocketing electricity prices in the name of safety, yet shoves hundreds of millions of dollars into the pockets of executives and shareholders.

Governor Gavin Newsom established the CWF immediately after PG&E's bankruptcy with the intention of using money taken from consumers as an insurance policy for utility caused wildfires. More than \$3 billion has been taken from customers to protect these utility corporations. The CWF shows that behind the scenes, the California government protects PG&E, along with other utility corporations, from the market consequences stemming from their negligence. We are not victims of economic forces outside of our control. Whether you agree or disagree with PG&E's continued operation, knowing that we hold the power to change the government allows us to make a choice, rather than just surrender to the reckless behavior of corporations.

Appendix A

Table 6.

PG&E Average Residential Monthly Rate (2020-2023)

Туре	May	Mar	Aug	Jan	Mar	Jan	Mar	Jul	
									1

	2020	2021	2021	2022	2022	2023	2023	2023
Non-CARE	\$127.5	\$141.7	\$139.7	\$151.5	\$169	\$179.2	\$187.5	\$194.1
CARE	\$75.6	\$90.9	\$89.9	\$97.6	\$109	\$116.6	\$121.9	\$126.3

Note. The data for May 2020 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2020, May. The data for March 2021 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2021, March. The data for August 2021 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2021, August. The data for January 2022 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2022, January. The data for March 2022 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2022, March. The data for January 2023 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2023, January. The data for March 2023 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2023, March. The data for July 2023 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2023, March. The data for July 2023 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2023, July.

Pacific Gas and Electric. (2020, May). *PGE Rate Change Alert*. California Public Utilities Commission.

Table 7.PG&E Average Residential Monthly Rate (2024-2025)

Туре	Jan 2024	Mar 2024	Apr 2024	Jul 2024	Sep 2024	Oct 2024	Jan 2025	Mar 2025
Non-CARE	\$222.4	\$222.9	\$226.1	\$204.9	\$206	\$212.5	\$211.3	\$224.6
CARE	\$141.4	\$141.7	\$143.8	\$130	\$130.7	\$134.9	\$136.1	\$138.4

Note. The data for January 2024 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2024, January. The data for March 2024 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2024, March. The data for April 2024 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2024, April. The data for July 2024 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2024, July. The data for September 2024 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2024, September. The data for October 2024 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2024, October. The data for January 2025 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2025, January. The data for March 2025 is from *PGE Rate Change Alert*, by Pacific Gas and Electric, 2025, March.

Appendix B

Table 8.

PG&E Stock Dividend Payments (2022-2024)

Stock Type	May 2022	Aug 2022	Nov 2022	Feb 2023	May 2023	Aug 2023	Nov 2023	Dec 2024
Preferred	\$3,479, 079.32	\$13,916 ,317.32						
Common								\$85,457 ,591.95

Note. The data for Preferred May 2022 is from *Form 8937*, by Pacific Gas and Electric, 2022, September. The data for Preferred August 2022 is from *Form 8937*, by Pacific Gas and Electric, 2022, September. The Preferred data for November 2022 is from *Form 8937*, by Pacific Gas and

Electric, 2022, December. The data for Preferred February 2023 is from *Form 8937*, by Pacific Gas and Electric, 2023, February. The data for Preferred May 2023 is from *Form 8937*, by Pacific Gas and Electric, 2023, June. The data for Preferred August 2023 is from *Form 8937*, by Pacific Gas and Electric, 2023, September. The data for Preferred November 2023 is from *Form 8937*, by Pacific Gas and Electric, 2023, December. The data for Preferred December 2024 is from *Preferred-Stock-Form-8937*, by Pacific Gas and Electric, 2024, December. The data for Common December 2024 is from *Common-Stock-Form-8937*, by Pacific Gas and Electric, 2024, December.

Appendix C

Table 9.PG&E Executive Pay (2023)

Name	Base Salary (\$)	Short Term	Long Term	Total (\$)
		Incentives (\$)	Incentives (\$)	
Patricia Poppe	1,400,000	3,453,030	10,750,000	16,994,840
Jason Glickman	747,720	947,689	1,750,000	3,748,529
Marlene Santos	907,813	1,408,549	2,600,000	5,397,418
Sumeet Singh	907,813	1,314,236	2,600,000	5,340,021
Carolyn Burke	725,000	740,355	1,800,000	4,395,500
Christopher	446,816			2,255,919
Foster				

Stephanie	375,000	317,444	450,000	1,332,521
Williams				
David	143,632			156,756
Thomason				
John Simon	851,570	1,100,899	1,750,000	4,994,509
Julius Cox	553,262			2,302,201

Note. The data is from *Joint Notice of 2024 Annual Meetings Joint Proxy Statement*, by Pacific Gas and Electric, 2024, May 16.

Table 10.

PG&E Executive Pay (2022)

Name	Base Salary (\$)	Short Term	Long Term	Total (\$)
		Incentives (\$)	Incentives (\$)	
Patricia Poppe	1,400,000	2,207,520	9,500,000	14,120,593
Jason Glickman	720,000	630,392	1,750,000	3,319,458
Marlene Santos	875,000	993,034	2,600,000	4,788,022
Adam Wright	875,000	911,040	2,600,000	4,709,917
Christopher	655,000	454,352	1,750,000	3,058,554
Foster				

Davis Thomason	390,370	202,868	400,000	1,074,499
John Simon	820,000	725,760	1,750,000	3,440,906
Sumeet Singh	675,000	597,213	1,750,000	3,227,232
Julius Cox	645,000	559,910	1,250,000	2,703,389

Note. The data is from Joint Notice of 2023 Annual Meetings Joint Proxy Statement, by Pacific Gas and Electric, 2023, May 18.

Table 11.PG&E Executive Pay (2021)

Name	Base Salary	Short Term	Long Term	One Time	Total (\$)
	(\$)	Incentives	Incentives	Payments (\$)	
		(\$)	(\$)		
Patricia	1,350,000	1,486,578	9,250,000	38,524,949	51,198,471
Poppe					
Jason	675,000	287,213	1,750,000	500,000	3,074,861
Glickman					
Marlene	825,000	503,663	2,600,000	3,413,444	7,484,086
Santos					
Adam Wright	825,000	579,212	2,600,000	2,100,000	6,508,160
Christopher	615,000	375,723	1,330,000		2,474,133

Foster				
David	364,000	200,906	400,000	1,076,238
Thomason				
John Simon	773,488	488,657	1,750,000	3,440,906
Sumeet Singh	475,000	273,320	715,000	1,619,095
James Welsch	602,252	398,734	715,000	1.715.986

Note. The data is from Joint Notice of 2022 Annual Meetings Joint Proxy Statement, by Pacific Gas and Electric, 2022, May 19.

Appendix D

Table 12.California Wildfire Fund PG&E and Ratepayer Contributions (2019-2024)

Payment	Year	Value (\$)
PG&E Initial Contribution	2020	4,815,000,000
PG&E Contribution	2019	192,000,000
PG&E Contribution	2020	192,000,000
PG&E Contribution	2021	192,000,000
Ratepayer (NBC)	2021	875,076,565
PG&E Contribution	2022	192,000,000

Ratepayer (NBC)	2022	1,116,593,213
PG&E Contribution	2023	192,000,000
Ratepayer (NBC)	2023	888,460,572
Ratepayer (NBC)	2024	850,046,455

Note. The data is from Report to the Legislature and Department of Finance on the Formation,

Administration, and Disposition of the Wildfire Fund ("Statutory Report"), by California

Catastrophe Response Council, 2024, January 1.

References

Butte County District Attorney. (2020, June 16). The Camp Fire Public Report.

https://www.buttecounty.net/DocumentCenter/View/1881/Camp-Fire-Public-Report---Summary-of-the-Camp-Fire-Investigation-PDF

California Catastrophe Response Council. (2024, January 1). Report to the Legislature and

Department of Finance on the Formation, Administration, and Disposition of the Wildfire

Fund ("Statutory Report"). California Wildfire Fund.

https://www.cawildfirefund.com/sites/wildfire/files/documents/2024/section-3287-statuto-ry-report-2024.pdf

Cal Fire. (n.d.) Our Impact.

https://www.fire.ca.gov/our-impact#:~:text=EMERGENCY%20RESPONSE%20On%20the%20scene,than%20550%2C000%20emergencies%20each%20year

California Legislature. (2019, July 12). *Assembly Bill No. 1054*. California Legislative Information.

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB1054

- California Public Utilities Commission. (2013, June). *The California Public Utilities*Commission Regulating Essential Services. California Public Utilities Commission.

 https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/about_us/aboutcpuc0410-rev3.pdf
- California Public Utilities Commission. (n.d.). *About the California Public Utilities Commission*(CPUC). California Public Utilities Commission.

 https://www.cpuc.ca.gov/about-cpuc/cpuc-overview/about-us
- California Public Utilities Commission. (2013, June). *How Your Electricity Bill is Calculated*.

 California Public Utilities Commission.

https://www.cpuc.ca.gov/-/media/cpuc-website/about-cpuc/documents/transparency-and-reporting/fact sheets/californiapublicutilitiescommissionelectricity713.pdf

California Public Utilities Commission. (2020, December 11). Application of Pacific Gas and

Electric Company for Authority, Among Other Things, to Increase Rates and Charges for

Electric and Gas Service Effective on January 1, 2020. (U39M). California Public

Utilities Commission.

https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M354/K486/354486687.PDF

California Public Utilities Commission. (2023, November 17). Application of Pacific Gas and Electric Company for Authority, Among Other Things, to Increase Rates and Charges for Electric and Gas Service Effective on January 1, 2023. (U39M). California Public Utilities Commission.

https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M520/K896/520896345.pdf

California Wildfire Fund. (n.d.). *About the California Wildfire Fund*. California Wildfire Fund. https://www.cawildfirefund.com/

Companies Market Cap. (n.d.). *Market capitalization of Pacific Gas and Electric (PCG)*.

Companies Market Cap.

https://companiesmarketcap.com/pacific-gas-and-electric/marketcap/#google_vignette

Hughes, T. (1994). Technological Momentum.

Johnson, Craig. (2003). Enron's Ethical Collapse. Journal of Leadership Education. 2. 45-56. 10.12806/V2/I1/C2.

https://www.researchgate.net/publication/274301016 Enron's Ethical Collapse

Moss, R. A. (2024, January 26). *Hawaii's Electric Utility Could Soon Feel the Burn*. Wall Street Journal.

https://www.wsj.com/articles/hawaiis-electric-utility-could-soon-feel-the-burn-lahaina-wildfire-bc79b9b7

- National Transportation Safety Board. (2011, August 30). Pipeline Accident Report: Pacific Gas and Electric Company Natural Gas Transmission Pipeline Rupture and Fire San Bruno, California September 9, 2010. National Transportation Safety Board Reports.

 https://www.ntsb.gov/investigations/accidentreports/reports/par1101.pdf
- Northern District of California. (2016, August 9). PG&E Found Guilty Of Obstruction Of An Agency Proceeding And Multiple Violations Of The Natural Gas Pipeline Safety Act.

 United States Attorney's Office.

 https://www.justice.gov/usao-ndca/pr/pge-found-guilty-obstruction-agency-proceeding-a-nd-multiple-violations-natural-gas
- Pacific Gas and Electric. (2020, May). *PGE Rate Change Alert*. California Public Utilities Commission.
 - https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/rate-change-advisories/rates-alert_pge-al-5661-e-a-b-c_05012020.docx
- Pacific Gas and Electric. (2021, March). *PGE Rate Change Alert*. California Public Utilities Commission.

https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/rate-change-advisories/20210301rate-alertpge-rate-change.docx

Pacific Gas and Electric. (2021, August). *PGE Rate Change Alert*. California Public Utilities Commission.

https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/rate-change-advisories/20210801rate-alertpge-72321.docx

Pacific Gas and Electric. (2022, January). *PGE Rate Change Alert*. California Public Utilities Commission.

https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/rate-change-advisories/20220101rate-alertpge-updated.pdf

Pacific Gas and Electric. (2022, March). *PGE Rate Change Alert*. California Public Utilities Commission.

https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/rate-change-advisories/20220310rate-alertpge.docx

Pacific Gas and Electric. (2023, January). *PGE Rate Change Alert*. California Public Utilities Commission.

https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/rate-change-advisories/20230101rate-alertpge.pdf

Pacific Gas and Electric. (2023, March). *PGE Rate Change Alert*. California Public Utilities Commission.

https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/rate-change-advisories/20230301pge-rate-alert.pdf

Pacific Gas and Electric. (2023, July). *PGE Rate Change Alert*. California Public Utilities Commission.

- https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/rate-change-advisories/20230701rate-alertpge.pdf
- Pacific Gas and Electric. (2024, January). *Electric Rate Alert*. Pacific Gas and Electric.

 https://www.pge.com/assets/pge/docs/account/rate-plans/electric-rate-advisory-2024.01.p

 df
- Pacific Gas and Electric. (2024, March). *Electric Rate Alert*. Pacific Gas and Electric.

 https://www.pge.com/assets/pge/docs/account/rate-plans/electric-rate-advisory-2024.03.p

 df
- Pacific Gas and Electric. (2024, April). *Electric Rate Alert*. Pacific Gas and Electric. https://www.pge.com/assets/pge/docs/account/rate-plans/electric-rate-advisory-0424.pdf
- Pacific Gas and Electric. (2024, July). *Electric Rate Alert*. Pacific Gas and Electric. https://www.pge.com/assets/pge/docs/account/rate-plans/electric-rate-advisory-0724.pdf
- Pacific Gas and Electric. (2024, September). *Electric Rate Alert*. Pacific Gas and Electric. https://www.pge.com/assets/pge/docs/account/rate-plans/electric-rate-advisory-0924.pdf
- Pacific Gas and Electric. (2024, October). *Electric Rate Alert*. Pacific Gas and Electric. https://www.pge.com/assets/pge/docs/account/rate-plans/electric-rate-advisory-1024.pdf
- Pacific Gas and Electric. (2025, January). *Electric Rate Alert*. Pacific Gas and Electric. https://www.pge.com/assets/pge/docs/account/rate-plans/electric-rate-advisory-0125.pdf
- Pacific Gas and Electric. (2025, March). *Electric Rate Alert*. Pacific Gas and Electric. https://www.pge.com/assets/pge/docs/account/rate-plans/electric-rate-advisory-0325.pdf
- Pacific Gas and Electric. (2022, September). Form 8937 May-13-2022. Pacific Gas and Electric. https://s1.q4cdn.com/880135780/files/doc_downloads/2022/09/09/Form-8937-Preferred-Dividend-Distribution-May-13-2022.pdf

- Pacific Gas and Electric. (2022, September). *Form 8937 August-15-2022*. Pacific Gas and Electric.
 - https://s1.q4cdn.com/880135780/files/doc_downloads/2022/09/09/Form-8937-August-15-2022.pdf
- Pacific Gas and Electric. (2022, December). *Form 8937 November-2022*. Pacific Gas and Electric.
 - https://s1.q4cdn.com/880135780/files/doc_downloads/2022/12/PGE-Form-8937-(Nov-Pref-Div)_Dec-29-2022.pdf
- Pacific Gas and Electric. (2023, February). Form 8937 February-13-and-15-2023. Pacific Gas and Electric.
 - $\underline{https://s1.q4cdn.com/880135780/files/doc_downloads/2023/february-13-and-15-2023-for}\\ \underline{m-8937.pdf}$
- Pacific Gas and Electric. (2023, June). Form 8937. Pacific Gas and Electric. https://s1.q4cdn.com/880135780/files/doc_downloads/2023/pge-form-8937-w-attachmen
- Pacific Gas and Electric. (2023, September). Form 8937. Pacific Gas and Electric.

t-06-09-23-signed.pdf

- https://s1.q4cdn.com/880135780/files/doc_downloads/2023/09/form-8937_9-11-2023.pdf
- Pacific Gas and Electric. (2023, December). Form 8937. Pacific Gas and Electric.

 https://s1.q4cdn.com/880135780/files/doc_downloads/2023/12/pge-form-8937-w-attachment_dec-15-2023.pdf
- Pacific Gas and Electric. (2024, December). *Preferred-Stock-Form-8937*. Pacific Gas and Electric.

- https://s1.q4cdn.com/880135780/files/doc_downloads/2025/01/Preferred-Stock-Form-89 37.pdf
- Pacific Gas and Electric. (2024, December). *Common-Stock-Form-8937*. Pacific Gas and Electric.
 - $\frac{https://s1.q4cdn.com/880135780/files/doc_downloads/2025/01/Common-Stock-Form-89}{37.pdf}$
- Pacific Gas and Electric. (2024, May 16). *Joint Notice of 2024 Annual Meetings Joint Proxy*Statement. U.S. Securities and Exchange Commission.

 https://www.sec.gov/ix?doc=/Archives/edgar/data/0000075488/000007548824000011/pcg-20240404.htm
- Pacific Gas and Electric. (2023, May 18). *Joint Notice of 2023 Annual Meetings Joint Proxy*Statement. U.S. Securities and Exchange Commission.

 https://www.sec.gov/ix?doc=/Archives/edgar/data/75488/000007548823000009/pcg-202

 30331.htm
- Pacific Gas and Electric. (2022, May 19). *Joint Notice of 2022 Annual Meetings Joint Proxy*Statement. U.S. Securities and Exchange Commission.

 https://www.sec.gov/Archives/edgar/data/75488/000007548822000009/pcgcompany_lpc
 g2022xdef14a.htm
- Pacific Gas and Electric. (n.d.). *Diversity and Inclusion*. Pacific Gas and Electric. https://www.pge.com/en/about/diversity-and-inclusion.html
- Penn, I., & Eavis, P. (2020, June 16). *PG&E pleads guilty to 84 counts of manslaughter in Camp Fire Case*. The New York Times.

 $\frac{https://www.nytimes.com/2020/06/16/business/energy-environment/pge-camp-fire-califo}{rnia-wildfires.html}$

Statista. (2024, March). *Gross Domestic Product of the United States in 2023, by State*. Statista. https://www.statista.com/statistics/248023/us-gross-domestic-product-gdp-by-state/

Tilden, Michael. (2022, March 24). Electrical System Safety: California's Oversight of the

Efforts by Investor-Owned Utilities to Mitigate the Risk of Wildfires Needs Improvement.

Auditor of the State of California.

https://information.auditor.ca.gov/reports/2021-117/index.html