

April 7, 2020

Wildfire Safety Division  
California Public Utilities Commission

RE: Comments and Criticisms Regarding PG&E's WILDFIRE MITIGATION PLAN REPORT,  
RULEMAKING 18-10-007 FEBRUARY 7, 2020

I wish to express concern over the environmentally destructive aspects of PG&E's vegetation management plan, past and future. I am Donald Alley, Certified Fisheries Scientist by the American Fisheries Society. I have worked with salmonids, primarily steelhead salmon along the Central Coast of California, for the past 30+ years. I worked with salmon and rainbow trout in the Sierra Nevada before that, having performed pioneer fishery research in foothill Sierran streams during graduate work at U.C. Davis. I have been a resident of Brookdale, California in the Santa Cruz Mountains for 35 years, living along the San Lorenzo River, which supports a steelhead population. I have been monitoring juvenile steelhead populations and their habitat in Santa Cruz Mountain watersheds in the north and Santa Lucia Mountain watersheds in the south since 1990. I have contributed to 8 watershed and 3 lagoon management and enhancement plans from San Mateo County in the north to San Luis Obispo County in the south. I am presently monitoring steelhead populations in the San Lorenzo, Soquel and Aptos watersheds in the Santa Cruz Mountains, where they have been substantially reduced over the last decade by a preponderance of dry winters and low streamflows that seriously reduced habitat. The proposed PG&E vegetation management plan without proper environmental oversight and regulation will further degrade salmonid habitat and contribute to further decline in steelhead and coho salmon populations along the Central Coast of California.

The CPUC has General Orders that define standards of performance for the Investor Owned Utilities they regulate. In the area of Wildfire Mitigation however, the CPUC has allowed the IOU's to define their own standards of performance. The result has been a non-uniform mix of responses that range from barely acceptable to unacceptable. In developing our comments, we are asking the CPUC to expand and update their existing General Orders to incorporate uniform practices, including circuit design, thus redefining "Best Practices" in response to Wildfire Mitigation, which can be adopted by all of the IOU's across the State of California. An example of existing obsolete circuit design is the 22,000 circuit miles of #6 bare copper wire. This issue was directly pointed out by the Office of Safety Advocate in 2017 to be phased out, but was disregarded.

PG&E has demonstrated that it is a bad partner and has failed to change, even when faced by bankruptcy or being taken over by the State. We will provide information and examples of how PG&E is still cutting corners on safety, is unresponsive to the community, fails to communicate, and as a result there is little confidence that PG&E can provide a safe electric grid.

PG&E's billions of dollars of liability burden, if invested in infrastructure, would have solved the wildfire ignition problem. Whenever we hear that it's too costly to make these investments, we have to consider the costs of the wildfires and the costs of PSPS continuing into the future.

My comments will address the 4 following issues.

### **1. *Misguided Focus to Solve the Fire Danger Problem- Wires not Trees.***

PG&E is planning to spend \$680 million on removing trees in 2020 and only spending about \$240 million on replacing 240 miles of distribution conductor (we believe that that number is highly inflated). *PG&E will spend over \$500 million on removing trees up to 200 feet from their right-of-way alone.* Regulations require a 4'-radial clearance (to last a year) from the wires. PG&E is claiming that removing thousands of trees “within striking distance” of the wires is justified. There are no metrics given to prove this will prevent wildfires or to validate this massive expenditure. Stronger, insulated wires will prevent arcing-caused wildfires, as well as the other 50% of fires caused by problems like animals, vehicle impacts, balloons and equipment failure. *It's the wires that cause the fires, not the trees, so keep the trees.*

PG&E is depending on Enhanced Vegetation Management (EVM) to solve the wildfire issue, but it is failing to make the electric system safer – and instead potentially exacerbating the spread of fire, by focusing on trees. If NOT replaced and upgraded, no amount of tree removal will protect those lines from a branch blown from afar, or from the other causes of utility-associated wildfire, including vehicles, animals, balloons and others that in total equal the danger from vegetation impacts – causing breakage, arcing and, thus, electrocution and wildfires. In fact, if the distribution lines are cleared as planned, it will create tunnels that will, during high wind wildfire situations, become conduits for wind-blown firebrands. These flaming missiles will be blown along, far past the body of the fire itself, until they hit and set fire to residences and businesses at the end of the tunnel. This is what happened in Paradise, CA. PG&E's EVM will contribute to the spread of destruction. (San Mateo Fire Protection for Homeowners' workshop.) PG&E does not address the issue of wind tunnels in its WMP.

By NOT following an EIR process, there was no need to prove the efficacy of the program to reduce fire, no need to mitigate the enormous negative environmental impacts resulting from the vegetation clearance (especially from the removal of healthy, mature trees and tree removal in riparian corridors), and no need to discuss the alternative ways to protect the distribution system, such as replacing the antiquated conductor wires. The creation of wind tunnels during a fire storm was not considered, which lead to massive loss of life and property.

### **2. *Infrastructure Shortcomings that Fail to Address the Present Danger of Wildfire.***

**a. Lack of Adequate Wire Insulation.** The CPUC has neglected to establish safety standards and regulations regarding criteria for conductors and computerized protective relays, the two most important aspects of a safe electrical grid. Southern California Edison (SCE) has defined their Standard conductor as triple-insulated wire, with a hard steel center, which should be the Best Practices standard, while PG&E fails to define what their Standard conductor will be. Computerized protective relays have already been developed and tested by major electrical engineering companies - and are installed in Europe and Australia. However the IOUs are discussing this technology as though they are developing it now. The Commission needs to step in and require the use of this technology.

PG&E admits in its WMP the following: “Replacement of bare conductors with three-layer design of covered conductors (as tree wire) will reduce the likelihood of faults due to trees,

branches, animals, or birds contacting lines, and will minimize situations where wires slap together in high winds, which can generate sparks or molten metal. The HFTD areas within PG&E's service territory have a high volume of vegetation with large overhangs and ground fuels; PG&E expects covered conductor to be an effective risk mitigation in these areas. The covered conductor will also often be higher gauge than the wire it replaces, which will reduce the potential for failures related to smaller conductors. PG&E is replacing bare overhead distribution primary (high voltage) and secondary (low voltage) conductor with covered conductor in HFTD areas."5.3.3.17.1

From the quote above, one would assume that PG&E is planning to significantly upgrade the cable to the same quality cable as what SCE originally tested and decided to make "Standard" (steel reinforced center with triple insulation). We expect that to be the case. PG&E must be held to the same standard, rather than the vague "covered conductor" of the final sentence.

In their 2020 WMP, Southern California Edison (a much smaller electricity provider than PG&E) commits to replacing 700 miles of old conductor in the 2020 calendar year, while PG&E commits to only 240 miles. (p. 18) At 7000 miles of Tier 2 and 3 that PG&E has committed to repairing, it will be decades before enough conductor is improved to improve safety. What about the rest of the 22,000 miles in tier 2 and 3 high fire risk? Much more of PG&E's annual budget must be spent on replacing bare, old conductor with fully insulated wire to effectively and realistically address the emergency danger of wildfire that the bare wire conductors present. The replacements for all inadequate cable in Tier 2 and Tier 3 HFTD areas must be completed within a few years not decades.

Also, statements regarding the replacement of bare conductors with "covered" and / or fully insulated main conductor distribution cable are inadequate. "Covered" conductor is not necessarily fully insulated by engineering standards. The Commission needs to clarify this distinction between Covered and Insulated conductors and require fully insulated cable mandatory as a part of its General Orders.

**2b. Dangerous Operation of Non-Exempt Fuses.** PG&E estimates that it has roughly over 15,000 non-exempt fuse devices located in the Tier 2 and Tier 3 HFTD areas. The operation of these fuses poses a potential fire risk, and PG&E has a plan to replace these units over the next several years. This is far too long a time line to allow this threat to cause wildfire to continue. More of the annual budget should be devoted to replacing non-exempt fuse devices.

Non-exempt fuses refer to fuse cutouts that the California Department of Forestry (CDF)/CalFire determined were dangerous for wildfire ignitions many years ago. Thus the term "non-exempt" refers to standards set by CDF. The Commission's regulations continue to permit the use of these dangerous and obsolete devices. Non-exempt fuses have the same problems as all expulsion fuses in that when they trip (blow) on an over-current event, these fuses expels hot molten metal and other hot debris onto the ground. This is not only a fire safety problem. Any pedestrian beneath one of these fuses when it blows will be injured, in some cases severely injured.

### ***3. PG&E's Violation of their Timber Harvest Plan Utility Right-of-Way Exemptions.***

PG&E is accumulating violations to their Utility Right-of-Way Exemptions from CalFire.

Calaveras County resident, Susan Robinson, who learned of possible actions by PG&E that resulted in serious violations relating to wildfire prevention, requested information from CalFire. In a March 30, 2020 email, Eric Huff (Staff Chief, HQ Forest Practice Program) responded to this request for information about PG&E's Timber Harvest Plan *Utility Right-of-way Exemptions*. These Exemptions gave PG&E a permit to cut trees up to 200 feet from the right-of-way without a THP for each property affected, but required they adhere to all THP regulations. Huff stated, "My understanding is that violations have been issued for failure to have the required fire box and fire tools on the project site, failure to have a copy of the Exemption on the project site, operations on saturated soils, and falling of trees in a Watercourse and Lake Protection Zone. Inspection reports have documented disagreement between the inspector and the utility representative in the determination of what constituted a "Danger Tree" likely to make contact with a powerline among other issues." The CalFire Inspector did not agree that the trees being removed were all "hazard" trees, which are the only trees that are permitted to be removed under the Exemption. This example indicates that PG&E and its tree-removal contractors take advantage of the exemption and are spending over a half a billion dollars in the process.

Most importantly, the fact that violations are issued for not having the required fire equipment (which means being unable to stop a fire if they cause one) is reason for deep concern since the whole objective is wildfire mitigation. We continue to make the case that PG&E does not inspire trust in their behavior. They talk "safety" in their WMP, but they do not practice it in reality.

#### ***4. Unsafe PG&E Practices.***

PG&E turns a blind eye to unsafe practices regarding treatment of contractors' employees. Specifically, this is in regard to absence of adequate toilet facilities that are required by CalOSHA regulations. Tree-cutting contractors are also failing to consistently remove slash and wood resulting from their vegetation management activities, thus negatively impacting property owners and increasing fire danger.

**PROBLEM 1. PGE CONTRACTORS ARE ENDANGERING PUBLIC HEALTH AND SAFETY** regarding the spread of human infection by the Covid-19 virus by not providing portable toilets (i.e. Porta Potties) for tree crews. CalOSHA has indicated that workers should drive to nearby toilets. However, because of the shelter in place and temporary closure of businesses and reduction in maintenance crews at public parks brought on by the Covid-19 virus pandemic, public toilet access is even more limited than previously and is completely inadequate. Usually in rural areas, toilet access is non-existent anyway - or limited by excessive travel time.

In towns and cities adjacent to vegetation management activities, it is now extremely difficult to find a toilet, and most remaining open stores require a purchase for toilet access. Most restaurants are closed, and those remaining open for pick-up limit toilet access to paying customers only. Sometimes, the only vehicle available for trips to town is an enormous bucket truck with chipper attached, which is exceedingly impractical for toilet trips. As a result, workers have no other alternative than to relieve themselves on the ground on public or private property.

**SOLUTION:** Provide portable toilets for crews. But PGE has only occasionally done so when property owners have insisted. Further detail and specific complaints are detailed in the Further Comments Section.

#### **Further Comments on the 4 Issues Raised Above:**

**1. *Install Better Wires rather than Cut More Trees- Failure to Properly Prioritize Infrastructure Improvements for Public Safety***

PG&E's failure to properly prioritize infrastructure improvements for public safety is overwhelmingly evident in 1) the degraded state of tens of thousands of miles of electrical transmission and distribution systems, 2) the extremely poor relationship that PG&E has had with residents of forested areas (in spite of highly admired, heroic efforts of dedicated PG&E repair crews to restore power during winter storms), and 3) the continued mistake of prioritizing "vegetation management" over infrastructure upgrades to modernize and provide safety improvements. Here are two small examples of the antiquated system in Santa Cruz County.

Power pole leading up a small street off of State Route 9 in Felton, CA, is tilting and barely standing up. It carries a bare, uninsulated powerline.



Pilger Rd. power line is antiquated and unsafe. Rather than replace it, PG&E cut down a dozen healthy, mature redwood trees to "protect" it.



**PG&E** has failed for decades to improve its infrastructure in far too many geographical areas, especially rural and forested locales. The company repairs electrical failures with the same previous design as cheaply as possible rather than improving the infrastructure to prevent failure in the future. This has been discussed at great length and the New York Times Business Section (N.Y.Times 3/18/2019 <https://nyti.ms/2Fj1ksG>) stated that “Run to Failure is PG&E’s “demonstrable business model.” Instead they have focused on vegetation management as the financially beneficial way to avoid best practice infrastructure improvements. The result is an on-going battle between property owners and PG&E’s vegetation control employees and contractors.

### ***1. Negative Environmental Impacts to Vegetation Management.***

Extensive clearing under the wires is part of PG&E’s EVM. PG&E’s contractors were given photos of what they wanted the EVM to look like in the Santa Cruz Coastal Mountains. The long, flat area of the photo below has little relevance to the steep, highly erosive slopes in forested areas. When the CPUC self-declared the EVM “Exempt” from CEQA environmental review much was lost. It ignored the impacts of clearing approximately 80 times the area more than the “regular” 4-foot-radial to-last-a-year trim. Even PG&E did not realize the time and costs involved in removing that many trees and that much brush, so the job was rarely completed. **This is also a prime example of the creation of a wind tunnel like those that exacerbated the Paradise fire.**

This “before and after” EVM photo example of EVM was distributed to PG&E contractors by Rob Morse, Senior Manager, Central Coast Division in the summer of 2018.



PG&E claims that (p. 5-180) it “is careful to mitigate, monitor, and manage” environmental impacts. However, for those of us who live in forested areas, and see the total lack of any of those three “m’s” on the part of PG&E, that is an invalid statement. Their actions undermine both this and their claims for environmental collaboration with wildlife agencies (p. 5-177).

A prime example is the absence of any discussion of the EVM impacts on fish (especially salmonids like the endangered Coho Salmon and threatened Steelhead Trout in Santa Cruz Coastal Mountain watersheds and in Calaveras and other counties). PG&E’s vegetation management has been impacting, and will continue to cause a worsening impact on those species as it removes healthy, mature trees, including redwoods, from along salmonid streams and rivers.

Our contributions to various NOAA Salmonid Recovery Plans has given us insights that PG&E appears ignorant of – probably because the EVM was declared EXEMPT from CEQA EIR by the CPUC when it was first proposed by PG&E in 2017, so no environmental studies were done.

The riparian forests of Central California watersheds are used exclusively for nest building and breeding by more than 30 species of birds. These nesting birds rely heavily on insects that emerge from streams and seeds produced by riparian vegetation. Central Coast watersheds in California, including their small headwater tributaries, are inhabited by the federally Threatened steelhead (*Oncorhynchus mykiss irideus*). Some watersheds in this region are also inhabited by the federally and state Endangered coho salmon (*Oncorhynchus kisutch*). The immature juveniles of these species spend 1 to 3 years in freshwater streams before entering the ocean to mature and then return to their natal streams to spawn. These very active salmonid species visually feed in fastwater habitat on insect drift supplied by aquatic insects that live in fastwater habitat and terrestrial insects that fall into the water from overhanging vegetation. Steelhead and coho salmon bury their eggs in redds (nests) dug in gravelly spawning glides, often at the tail of

pools just upstream of steep, fastwater riffles. The gravel must be relatively free of smaller sediment particles that would clog the spaces around the gravel and prevent adequate oxygenation of the buried eggs provided by moving water through the gravels during incubation. Juvenile salmonids rely heavily on instream logs to hide under from predators and behind during stormflows and to scour deeper pool habitat with sorting of clean spawning gravels at pool tails.

#### Impacts from Indiscriminant Tree Cutting in the Riparian Corridor

Indiscriminant riparian tree cutting causes significant ecological damage. It interferes with nesting birds during the breeding season. Breeding birds are known to leave an area when noise and disturbance occurs. Of course, nests are destroyed in trees that are cut. Other road repair and construction projects in the riparian corridor require nesting bird surveys by qualified biologists, and all projects must establish buffers between any disturbing activities and detected bird nests. Cutting of trees containing bird nests is prohibited by law.

Riparian tree cutting increases the potential for soil erosion and streambank failure. When soil erosion into watercourses occurs, sedimentation of the streambed occurs. Increased sediment degrades salmonid spawning habitat, increasing egg mortality. Increased sedimentation degrades salmonid rearing habitat by shallowing of pools and filling in cracks and crevices under boulders where juvenile steelhead may hide, thus increasing predation rates on fish from fish-eating birds. Sedimentation reduces food supply for insect drift-feeding salmonids and other fish species. Increased sediment reduces aquatic insect habitat by reducing cracks and crevices and pockets for algae and dead leaves to collect, thus reducing the aquatic insect population and food supply for stream fishes and increasing their mortality, especially salmonids.

Cutting of broad leaf, deciduous trees in riparian corridors reduces the input of falling leaves into the stream channel, which are a source of food by a multitude of aquatic insect species. This reduces the aquatic insect population and reduces food supply for stream fishes, such as salmonids. If riparian trees with branches that overhang stream channels are cut, fewer terrestrial insects drop off into stream channels, thus reducing food supply for salmonids, as well.

If the riparian trees are cut that were maintaining undercut streambanks with their root systems, valuable escape cover from predators is lost for steelhead and coho salmon, thus increasing fish mortality and reducing survival to adulthood. Larger riparian trees provide more undercut bank habitat. Thus, indiscriminant cutting of large, streamside trees should be prevented. Their cutting should be truly warranted. These trees' root masses also armor streambanks against erosion and additional stream sedimentation.

When riparian trees are cut down, cut into smaller pieces and/or removed, their future recruitment as large instream wood that stays in place is prevented. This seriously reduces salmonid rearing habitat and spawning habitat in the future.

Cutting of riparian trees will potentially heat up streams and reduce habitat for salmonids. Juvenile steelhead and coho salmon require cooler water temperatures where food is in short supply, as is common in Central Coast watersheds where summer stream baseflow is typically low. Often power lines and roads closely follow relatively small stream channels inhabited by steelhead for miles in canyon settings. Extensive riparian tree removal for extended distances in proximity and underneath these power lines in these settings will reduce stream shading and increase water temperature. The taller the tree, the more shade it provides. Thus, removal of trees

with large stature must be clearly warranted, and indiscriminant cutting simply because of tree height should be prevented to protect fish habitat. Metabolic rate and food requirements of stream fishes increase with increased water temperature. Thus, growth rate of salmonids may decline in some instances where summer streamflow is low in small streams and drifting food is already in short supply. Warmer water temperature may restrict activity of fishes in other larger, already warm, downstream stream reaches, and restrict the habitat fish may use, thus reducing their ability to feed. Slower growth from higher metabolic rate and reduced fish swimming activity brought on by higher water temperature will result in higher mortality of stream fishes, especially salmonids. Increased sedimentation brought on by streambank erosion caused by riparian tree cutting will compound the negative impacts of increased water temperature as stream shading is reduced.

In summary, tree removal in riparian corridors of Central Coast streams related to protecting electrical power lines will likely significantly impact California bird populations and salmonid fish populations without proper environmental regulation. It will likely hinder the recovery of native steelhead and coho salmon, Threatened and Endangered species. related to bird nesting, soil erosion, stream sedimentation, loss of undercut streambanks and increased water temperature.

PG&E's teams have marked thousands of trees in the San Lorenzo Valley alone for destruction. In other counties they are removing every Douglas Fir. Elsewhere they remove heritage oaks and Ponderosa Pines. The EVM is destroying many thousands of mature, healthy trees, without proof of efficacy. Filed reports by PG&E to the Commission on subject of fire, neglect to address basic analysis necessary for legitimate assessments of fire safety. This fact was pointed out by the Commission's own Office of the Public Safety Advocate when evaluating "wires down" events reported by PG&E. [Investigation 17-11-003] (Filed November 9, 2017), stating there were no metrics to determine effectiveness.

Hundreds of redwoods in the riparian corridor of Steelhead-valued **Two Bar Creek** marked with yellow X for removal. Riparian tree cutting increases the potential for soil erosion and streambank failure. Extensive riparian tree removal for extended distances in proximity and underneath these power lines in these settings will reduce stream shading and increase water temperature.



**2a. Infrastructure.** Why is PG&E wasting time on a substandard data acquisition system when there are more efficient ways to get the information?

“PG&E is piloting Sensor IQ on approximately 500K SmartMeters™ in HFTD areas and customizing reads and alarms to identify service transformer failures, with other use-cases to be considered based on wildfire risk reduction and/or business value.” **5.3.2.2.6 Sensor IQ**

Comment: While useful to use SmartMeters for system awareness, use of this equipment does not lead directly to enabling PG&E to detect the exact location of a fault. A more effective solution is to have SCADA enabled protection relays directly connected into distribution circuits. Such equipment exists today to install on distribution circuits that would immediately shut down a faulted circuit if connected to a modern recloser or other switch. Response time to a high impedance fault from a downed wire would be at most a few seconds to shut down and does not require any human decision making or assessment of SmartMeter pings.

## **2.b.Infrastructure** Distribution System Hardening

PG&E has over 25,000 distribution circuit miles rated by the Commission as Tier 2 or 3 High Wildfire Threat District HWTD. PG&E’s selection of less than one third of these circuit miles for insulated conductor replacement has not been adequately justified by information submitted to the Commission. In its WMP, PG&E states that, “In 2018, PG&E initiated construction pilots to evaluate various overhead conductor and equipment configurations, including potential undergrounding, as well as to develop best practices. In 2019, PG&E began the System Hardening Program proper, with a target of completing 150 circuit miles by the end of the year. In 2020-2022, PG&E forecasts completing approximately 1,000 distribution circuit miles (about 200 miles in 2020, approximately 350 in 2021 and 440 in 2022). PG&E ultimately intends to complete work on 7,100 distribution circuit miles.”5.3.3.17.2 It is the Commission’s responsibility to decide if the 7,100 miles of replacement is adequate.

In contrast, SCE (Southern CA Edison) far exceeds this amount. “In 2019, SCE installed 372 circuit miles of covered conductor, exceeding its 2019 WMP goal of installing at least 96 circuit miles in HFRA. Some of the key lessons learned from this were related to weather, permitting, and material availability, among other constraints on the speed of installation. In 2020, SCE plans to install 700 circuit miles of covered conductor in HFRA. SCE plans to further coordinate construction windows in areas prone to winter weather events, communicate with internal and external stakeholders during the early design phase to attain permits in a timely manner, and closely monitor material availability to identify any shortages or surplus at sites where work is planned. SCE will strive to install up to 1,000 circuit miles of covered conductor in 2020 in HFRA.”5.3.3.3.1

SCE is demonstrating good planning and foresight. PG&E is not.

## **2c. Infrastructure.** Computer Operated Protection Relays Provide Vital Safety Improvement

The CA Public Utilities Commission GO 95 is silent regarding computer operated protective relays and other highly effective safety equipment. The Commission has no standards whatsoever for *any* type of circuit protection, including fuses and reclosers.

All three major IOUs in CA are discussing various advanced safety technologies. We hear about SDG&E using synchrophasers to automatically shut down faulted circuits at very fast reaction time. (PG&E discusses Proactive Wires Down Mitigation Demonstration Project using Rapid Earth Fault Current Limiter. 5.1.D.3.6. SCE discusses Alternative Technology Pilots – Meter Alarming for Down Energized Conductor (MADEC) Section 5.3.3.2.2. They also mention Distribution Fault Anticipation (DFA) Section 5.3.2.2.1 and Rapid Earth Fault Current Limiter - Ground Fault Neutralizer (GFN) Section 5.3.3.2.3.1)

It is absurd that each IOU is deceptively touting its plans to develop and test various forms of circuit protection when there are excellent existing sources for this equipment. It has already gone through research and development, testing, and is installed throughout Europe and Australia. These products cut power from a broken line before it can start a fire and can inform utility operations where the problem is so crews can be directly dispatched to repair the problem (rather than waiting for someone to report a fire). They are off-the-shelf ready for installation from General Electric, Schweitzer Engineering, and ABB - and others. They should be required and begin installing in 2020 with the goal to protect Tier 2 and Tier 3 three areas within 3 years.

## **OTHER SPECIFIC EXAMPLES OF PRIVATE PROPERTY ISSUES**

### *a. Jodi Frediani, Bonny Doon, Santa Cruz County (February, 2020)*

i. Tree crews entered property without required permission from owner (per 2010 agreement with PGE)

ii. Damaged driveway with enormous bucket truck hauling chipper. No vehicular access to tree being trimmed, therefore no need for such vehicle.

iii. Removed 12”diameter limbs growing well below power line, providing no additional protection. Crew doing the work was from Pennsylvania w/no knowledge about the growth of local tree species.

iv. Lopped slash and left beneath power lines and w/in 50 yards of Frediani’s house, creating fire hazard.

*b. Anonymous, Bonny Doon, Santa Cruz County (March, 2020)*

- i. Davey Tree felled several large trees, cut up the logs, left some adjacent to the roadway, ‘creating a safety hazard by making the road narrower than it already was.’
- ii. The crews also threw many of the heavy logs down an embankment across the road onto someone else’s property, without permission.

*c. Judith Heinemann, 7 Springhill Dr., Cazadero, CA 95421 (April/May 2018)*

Over the decades nearly one third of my trees have been cut down by PGE. Unfortunately, my property has lines on both sides. I have been able, with help, to eventually clean up these trees but am older now and unable to do the work.

i. “Two years ago a number of trees were dropped by PGE and our largest, most beautiful Fir was taken down by mistake!!! It was Mowbray’s Tree Service, a crew from Orange County with no arborist knowledge. (Three trees were to be topped and two removed. But when the crew “ topped “ my big Fir they took the top third of it down!!! The tree would have died a slow death so I made them come back and take the rest of it down.) All the wood was left lying across a steep hillside rendering my land useless and dangerous. It took a great deal of effort, but the manager of the crew came out himself and dragged the wood out onto the street. Locals came for the wood to sell as firewood. “

ii. Large pine tree felled and left in property owner’s yard two years ago, taking up lots of the yard, and creating a serious fire hazard!!! Wood and slash pile are within 80’ of the elderly property owners’ house. Owner was told it would be removed last year under a contract with the tree service. Logs were not removed, and owner is now told old contract is null and void and a new contract will need to be drafted.

“ In the yard proper lies a good size pine that was taken down that no one wants. I cannot afford to have it hauled off. It was in last years contract that I signed that this pile of wood was to be removed along with more of my trees.

“ I have been trying to reach the gentleman who wrote up the contract for a year now and have been unable to get through. So I've called several other PGE employees involved in Vegetation Management and am being told that last years contracts are no longer valid. Now at this time no one is returning my calls. So I and everyone else in the area have no idea as to what will happen next. “

iii. Every fir tree w/in 200 feet of power lines in the area has been marked for removal. (This will create a wind tunnel, which will hasten the spread of any fire, which is ignited by faulty electrical equipment along that line.) Removal of those trees may lead to ‘wind fall’ causing additional trees to fall towards the lines.

*d. Nancy & Ken Macy, Boulder Creek, Santa Cruz County (December, 2018)*

i. Large crew (8-10) (unknown PG&E contractor, non-English speaking) took three weeks to fell 25 mature, healthy Douglas Fir trees - with neighbor’s permission - along single electric line (with TV cable and phone lines sharing poles), bordering driveway along Macy property. Located two miles from town of Boulder Creek where septic issues limit toilet use to customers.

ii. Ms Macy asked about no Porta-Potty. Worker just shrugged. She complained to PG&E. Within 2 days, crew had Porta-Potty. No hand washing facility seen.

iii. Four weeks later – thinner, young fir, formerly supported by surrounding grove, was felled by wind-throw, breaking the power line, destroying one power pole, damaging two others. Repaired by PG&E over a week by crew with no Porta-Potty.

*e. Nancy Macy, Boulder Creek, Santa Cruz County (March, 2020)*

i. Davey Tree crew of 5 worked on Bear Creek Rd. for several weeks, trimming and removing trees along two miles of distribution line -- with no Porta-Potty. Crew arrived at Macy's property after coronavirus "shelter in place" regulation mandated. Employee called to get OK for trimming on their property. Ms Macy met with him, keeping her distance. She then asked about lack of Porta-Potty. Worker said it would be nice to have one, but didn't indicate what they did without it.

Ms Macy called CalOSHA this time, as well as PG&E, worried about fecal contamination and coronavirus. CalOSHA returned call, said it would investigate, and that Davey Tree may have had an exception in their contract, but no explanation of what that might be. PG&E representative called and assured her that they would follow up with Davey Tree. No follow-up calls. Workers never returned after that day.

*f. Kevin Collins, Felton, Santa Cruz County (2018)*

i. Davey Tree and their spin off "Trees Incorporated" have, over many years, repeatedly misled my road association members about their plans to cut trees on our private road and on individual homeowner's property. We control the road as an organization and not as individual homeowners in regard to PG&E's use of its power-line right of way. The road association is a deed recorded and manages through voting decisions.

In 2018 we conducted a joint walking inspection with Dave Tree staff. We were told that Davey Tree needed access to cut 3 trees and we made an appointment for their access. About 2 weeks later 6 heavy trucks and additional pickup truck support arrived at the appointed time. My neighbor stopped them before I arrived at their first unloading location and he demanded to see their crew work order. After some talk amongst the crew, my associate determined that Davey intended to cut down 165 trees. He was not contradicted regarding his conclusion. He ordered the crew out and they left as I was approaching. I was then personally addressed by the crew chief and told that this was all a mix-up. I ignored this ridiculous assertion and we walked the crew out.

This is a perennial stream-side forest road in steep mountain terrain. The mass tree felling that Davey Tree intended would have been hugely destructive to the stream, to landslide stability and to the beauty of our shared property and our home sites.

*g. Jodi Frediani, Bonny Doon, Santa Cruz County (June, 2019)*

PGE and sub-contractors removed one transformer, replaced a pole and second transformer, and restrung line after a tree took out two transformers and damaged two poles.

i. Perhaps a month prior to pole replacement, Cupertino Electric, sub-contractor for PGE sent out a crew that began work at 8:30pm on a Sunday night to remove a transformer, which was damaged when a tree fell pulling the wires to the ground. The crew worked for 4 hours deep in the forest, in an area inaccessible to vehicles.

The following morning I walked to the site to see what had been done. I found a cigarette butt at the base of the pole. I contacted the Supervisor at Cupertino Electric as well as the PGE rep in charge, expressing my chagrin that a fire could have been started in the middle of the night in a remote area. I was told that none of the crew smoked, so it couldn't have been them. No other crews or individuals had accessed the site. (See item ii for continuing saga)

ii. Three crews (Davey Tree, Cupertino Electric, PGE) plus a helicopter pilot spent 8 hours doing the repair work on my property, maybe 30+ people in all. At one point I walked down to the worksite (1500' from my house), to find a Cupertino Electric crewmember sitting in his truck with the door open, parked over dry grass, smoking a cigarette. When I said that was not acceptable, he told me he'd been advised he could smoke as long as he was in his truck. I told him I'd been advised that none of the crew smoked.

iii. No Porta-Potties were brought in. No vehicles were seen to leave the project site. The nearest publicly accessible toilet is 8-10 miles away at a gas station in town. The only vehicles at the worksite were pickup trucks. Clearly crews must have relieved themselves in the woods.

Conclusion: PG&E's failure to put safety above profit, its failure to undertake comprehensive environmental impact studies, its failure to put in the best infrastructure for the community it endangered, its willingness to spend many millions of dollars on tree removals that are not proven, its inability to recognize how its actions exacerbate wildfire problems rather than solve them, shows us that PG&E is not worthy yet to be absolved of its bankruptcy and able to cash in on the \$21 billion wildfire fund.

Note: These remarks are the result of the research, analyses and experiences of dozens of people from throughout PG&E's territory and beyond. They represent every forested area, many backgrounds, many occupations and skills, and decades of experience dealing with PG&E in a wide range of circumstances. The unanimous consensus is that PG&E has failed to act responsibly for decades, putting profit and expediency before safety and environmental responsibility, resulting in felony convictions, horrific deaths, desperate use of PSPS to prevent wildfire, and the unnecessary removal of thousands of healthy, mature trees – undermining the health of forests, watersheds and wildlife, and causing emotional and financial distress to many thousands of residents. Sadly, the CPUC has been, until now, too often complicit in this by failing to hold PG&E to best practices, failing to require environmental impact reports under CEQA, and by allowing the IOU's to set their own standards rather than providing policy guidelines for them to adhere to.

Respectfully submitted,

A handwritten signature in cursive script that reads "Donald W. Alley, Jr. M.S.".

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