

United States District Court
Northern District of California

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

UNITED STATES OF AMERICA,

Plaintiff,

No. CR 14-0175 WHA

v.

PACIFIC GAS AND ELECTRIC
COMPANY,

Defendant.

**ORDER RESOLVING PROPOSED
CONDITIONS OF PROBATION
RE PSPS CRITERIA**

In this criminal probation of California’s largest utility, this filing recommends that in deciding which power circuits to leave on and which to turn off during windstorms in the wildfire season, the convicted utility should take into account, among other factors it already considers, the extent to which trees and limbs bordering specific circuits remain in violation of California law and/or its own wildfire mitigation plan. For the reasons stated below, however, the Court will not impose the proposed conditions of probation numbers 11 and 12 and will leave to the utility the decision on the extent to which it will adopt the recommendation.

* * *

In our most recent wildfire season, a windstorm blew a tall gray pine onto a PG&E distribution line in Shasta County, pushing the power conductors together, thereby unleashing a bolt of electricity, and thus igniting what became known as the Zogg Fire. A mother and her daughter burned to death in their car, trying to escape the wildfire. Another woman died alone,

1 also trying to escape, and a man succumbed to burns he suffered while defending his home
2 from the blaze.

3 Two years earlier, PG&E, through its contractor, had marked the gray pine as a hazard
4 and slated it for removal. Standing more than 100 feet tall, the gray pine leaned at more than
5 twenty degrees from vertical, looming downhill over PG&E's Girvan Circuit, the distribution
6 line in question. It remained obvious that if it fell in the direction of the lean, it would fall on
7 the power line. Gray pines, it was further known, have shallow root systems and topple more
8 easily than trees with tap roots. And, this particular tree, although it had a healthy canopy,
9 had a severe, tall scar at its base. The contractor was correct to mark the tree for removal.
10 PG&E, however, did not remove it. Two years went by. In a windstorm in September 2020,
11 as stated, the gray pine blew onto the circuit, ignited the Zogg Fire, and four people died.
12 Two hundred four structures were lost.

13 To prevent such wildfires, Section 4293 of the California Public Resources Code has
14 long required utilities to remove such trees and to keep clearance around its lines. When
15 power lines are pushed together by the trees or limbs, the resulting bolt of electricity sends
16 molten metal to the dry grass below. Especially during a windstorm but at any time in our dry
17 season, this will very likely result in a wildfire. We have seen this exact scenario dozens of
18 times in PG&E's territory.

19 The Zogg Fire was the most recent in a long line of disastrous wildfires started by
20 PG&E's violations of Section 4293, all as laid out in the Order to Show Cause Re Conditions
21 of Probation dated December 29, 2020, the order initiating this chapter in our probation
22 proceedings, all arising out of PG&E's felony convictions due to the San Bruno gas explosion.
23 Some of the Wine Country Fires in 2017 and the Camp Fire in 2018 became tragic examples.
24 In those, 107 victims were burned to death and 22,060 structures were destroyed.

25 Also, as laid out in the December 29 order, the root cause is that over many years PG&E
26 robbed its tree clearance budget — why is not now pertinent but it's obvious it was to enhance
27 the bottom line. As a result, we now find ourselves with a power grid overgrown with hazard
28 trees ready to strike onto PG&E's lines during windstorms, spelling wildfire disaster in our dry

1 season. During this federal criminal probation, PG&E has begun to set this right by investing
2 larger sums in “vegetation management.” But it will take close to a decade for PG&E to clear
3 the backlog and to reach compliance. Meanwhile, as a last resort and interim stop-gap, the
4 Court recommended in the wake of the Camp Fire, and PG&E has since adopted, a protocol to
5 de-energize selected circuits during severe windstorms. In this way, when trees and limbs
6 crash onto the de-energized lines, there will be no power to spark a wildfire. This protocol
7 became PG&E’s Public Safety Power Shutoff program or PSPS.

8 PG&E rolled out its PSPS program during the 2019 wildfire season during which PG&E
9 conducted eight PSPS events. *Significantly, that year saw no wildfires caused by PG&E*
10 *distribution lines, a vast improvement over both 2017 and 2018.* We know for sure that the
11 PSPS events saved us from many wildfires because of the hundreds of trees that were blown
12 down onto the (thankfully) de-energized lines. But, due to criticism in 2019 over the
13 inconvenience and hardship of PSPS events, PG&E revised its criteria in the 2020 wildfire
14 season in order “to be more targeted.” This led to fewer PSPS events, six to be exact, but it
15 also led to the Zogg Fire.

16 In the days leading up to the windstorm, PG&E went through its PSPS decision-making
17 process to determine which distribution lines, *i.e.*, circuits, in Shasta County (and elsewhere) to
18 de-energize. Significantly, in making those circuit-by-circuit decisions, we now know PG&E
19 did *not* consider in any way the extent to which any particular circuit remained threatened (or
20 not) by hazard trees and limbs, the number one cause of fires ignited by PG&E distribution
21 lines. For example, it did not consider its own wildfire risk assessment priority ranking for any
22 circuit. And, it did not consider in any way the gray pine looming at a steep angle over the
23 Girvan Circuit. So, PG&E left it on — with fatal consequences.

24 These details emerged from inquiries made by the Court in the wake of the Zogg Fire,
25 whereupon an order on December 29 ordered PG&E to show cause why its PSPS criteria
26 should not be adjusted to take into account the extent to which hazard trees remained along
27 various rights of way in the high-risk fire zones. Specifically, that order proposed the
28 following new condition of probation and asked all parties to respond (Dkt. No. 1277 at 16):

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Proposed Condition 11: In determining which distribution lines in Tier 2 or Tier 3 to de-energize during a PSPS, PG&E must take into account all information in its possession and in the possession of its contractors and subcontractors concerning the extent to which trees and/or limbs bordering those lines remain in violation of Public Resources Code Section 4293, GO 95, FERC FAC-003-4, and/or its own wildfire mitigation plan.

Proposed Condition 12: To the extent that such information shows that such trees and limbs present a safety hazard in the event of a windstorm, PG&E must make a specific determination with respect to that distribution line and it must de-energize it unless PG&E finds in writing that there are specific reasons to believe that no safety issue exists.

Tiers 2 and 3 are the highest wildfire risk areas, typically in foothill counties covered with chaparral. PG&E purportedly accepted these new conditions but on the condition that it would, in effect, get full credit for considering *all* information yet it would only have to consider a *sliver* of the information available to it, as indicated by the bolded additions (Dkt. No. 1279 at 4, 6):

Proposed Condition 11: In determining which distribution lines in Tier 2 or Tier 3 to de-energize during a PSPS, PG&E must take into account all information in its possession and in the possession of its contractors and subcontractors concerning the extent to which trees and/or limbs bordering those lines remain in violation of Public Resources Code Section 4293, GO 95, FERC FAC-003-4, and/or its own wildfire mitigation plan. **In determining which distribution lines to de-energize during a PSPS event, PG&E will implement this condition by July 1, 2021, by considering the existence of all outstanding vegetation management work tagged “Priority 1” or “Priority 2” within PG&E’s service territory that is subject to potential de-energizations.**

Proposed Condition 12: To the extent that such information shows that such trees and limbs present a safety hazard in the event of a windstorm, PG&E must make a specific determination with respect to that distribution line and it must de-energize it unless PG&E finds in writing that there are specific reasons to believe that no safety issue exists. **PG&E will implement this condition by July 1, 2021, by developing a methodology to de-energize line segments in areas subject to potential de-energizations that have outstanding Priority 1 or Priority 2 vegetation management work when forecast conditions are above specified fire-risk thresholds, absent a documented determination that de-energization is not warranted.**

1 While these counter-proposals seemed to step in the right direction, they would *not*,
 2 as we eventually learned, have prevented the Zogg Fire. They would not have required
 3 de-energization of the Girvan Circuit because the gray pine in question was not a Priority 1 or
 4 Priority 2 work order under PG&E's system. Nor was any other tree along the Girvan Circuit.
 5 So, PG&E's counter-proposal would have made no difference. Those four victims would have
 6 been burned to death anyway.

7 Trying to find a compromise, the Court offered on February 4 to accept PG&E's
 8 counter-proposal, provided that PG&E would further consider the density of trees tall enough
 9 to fall on each circuit (Dkt. No. 1294) (additions in bold):

10 Proposed Condition 11: In determining which distribution
 11 lines in Tier 2 or Tier 3 to de-energize during a PSPS,
 12 PG&E must take into account all information in its
 13 possession and in the possession of its contractors and
 14 subcontractors concerning the extent to which trees and/or
 15 limbs are at risk of falling on those lines in a windstorm. In
 16 determining which distribution lines to de-energize during a
 17 PSPS event, PG&E will implement this condition by July 1,
 18 2021, by considering the existence of all outstanding
 19 vegetation management work tagged "Priority 1" or
 20 "Priority 2" within PG&E's service territory that is subject
 21 to potential de-energizations. **PG&E shall also consider
 the approximate number of trees tall enough to fall on
 the line irrespective of the health of the tree and
 irrespective of whether the tree stands outside or inside
 prescribed clearances. The latter may be done by simply
 rating the total approximate number of such tall trees
 along a line as "None," "Few," "Average" or "Many,"
 and by treating the "Many" category as posing a greater
 risk than the "Average" category and the "Average"
 category as posing a greater risk than the "Few"
 category and so on.**

22 Proposed Condition 12: To the extent that such information
 23 shows that such trees and limbs present a safety hazard in
 24 the event of a windstorm, PG&E must make a specific
 25 determination with respect to that distribution line and it
 26 must de-energize it unless PG&E finds in writing that there
 27 are specific reasons to believe that no safety issue exists.
 28 PG&E will implement this condition by July 1, 2021.

26 In response, PG&E stated that it had developed a model using LiDAR data measuring
 27 actual tree height along all PG&E lines based on helicopter flyovers during the last two years.
 28 These data and model allowed PG&E to see and measure the actual height of any and all trees

1 to calculate whether they could strike a power line if they fell. The number of such “strike
2 trees” along a circuit could be counted and, in turn, all circuits could be rated by risk based on
3 the number of such strike trees. Strike trees in this model counted both healthy and unhealthy
4 trees, both hazard and non-hazard, on the theory that even healthy non-hazard trees, in PG&E’s
5 experience, could blow over in a windstorm and strike lines. By this method, the Girvan
6 Circuit would have been ranked in the top 24 percent of risk, so PG&E proposed to use the top
7 thirty percent as a cutoff. This approach would have prevented the Zogg Fire because it would
8 have de-energized the Girvan Circuit.

9 At our recent hearing, PG&E stated that it wanted to adopt this modification to its
10 PSPS decision-making approach. PG&E Attorney Kevin Orsini stated, “The company
11 believes that this is the right approach We share the Court’s goal and [*sic*] expanding
12 the program . . . and not waiting until 2022 to do that” (Tr. 31:10–14).

13 By contrast, however, letters from commissioners of the California Public Utilities
14 Commission (CPUC) and from the California Governor’s Office of Emergency Management
15 vigorously opposed PG&E’s safety consideration of strike trees, saying it was an unvetted
16 approach and likely to lead to many more PSPS events and thus more public inconvenience
17 and hardship. They insisted that PSPS events should be a “last resort.” They asked the Court
18 not to impose it.

19 How did these agencies acquire this fear of marked increase in PSPS events? Earlier in
20 March, we now know, PG&E handed these agencies an internal “study” that seemed to
21 indicate a large number of additional PSPS events would flow from the strike-tree proposal.
22 That provoked the CPUC commissioners to express alarm about “doubling” the number of
23 PSPS events (Dkt. No. 1349). The Court then asked for the study.

24 In its filing dated March 23, PG&E produced its LiDAR “Sensitivity Study,” the estimate
25 given to the CPUC. In it, PG&E described the impact of the new PSPS criteria over a ten-year
26 hypothetical retrospective (Dkt. No. 1358-1). PG&E used its LiDAR strike-tree data in
27 combination with now-current PSPS criteria (examining extreme wind, heat, and fuel moisture
28 factors) to estimate how many PSPS events *would have occurred* between 2010 and 2020

1 using PG&E now-current criteria plus the strike-tree criteria. The study also estimated how
2 many PSPS events would have occurred in that ten-year period under PG&E's now-current
3 PSPS criteria (without the strike-tree criteria). The comparison showed that hypothetical PSPS
4 events would have increased by 55 percent with the strike-tree criteria (Dkt. No. 1358-1).

5 We held a hearing on March 23 and explored these concerns and heard the CPUC's
6 specifics. In response, the Court requested that PG&E perform a real-life comparison: how
7 would the *actual* PSPS events in 2019 and 2020 have changed had the proposed conditions of
8 probation been in effect? PG&E produced a 2019 comparison on March 29 (Dkt. No. 1369-1).
9 *The estimate showed that PSPS events in 2019 would have decreased, not increased, from*
10 *eight to five.* The average customer impact (in both hours and numbers) would also have
11 *decreased.*

12 With respect to 2020, PG&E stalled and said it would produce the 2020 numbers only if
13 requested again. The Court then repeated its request for the 2020 figures. PG&E filed that
14 estimate on April 16 (Dkt. No. 1377). *The analysis showed that the number of actual PSPS*
15 *events in 2020 would not have changed at all had the proposed conditions been in effect.*
16 Only twelve percent more customers would have been affected, meaning the PSPS events
17 would have caused twelve percent more customers, including those served by the Girvan
18 Circuit, to lose power.

19 It now seems obvious that PG&E used some sleight-of-hand to promote the incorrect
20 impression that the additional criteria — Priority 1 and 2 tags plus strike tree rankings —
21 would make a substantial difference in public safety whereas, in truth, they would have
22 *reduced* the number of PSPS events in 2019 and would have left the 2020 number unchanged
23 (though they would have de-energized the Girvan Circuit). Remembering that 2019 was the
24 only year in which the PSPS program succeeded in stopping wildfires caused by PG&E
25 distribution lines, it would be *a step backward* to bless PG&E's criteria.

26 Another reason the Court is reluctant to adopt these conditions is that the Priority 1 and
27 Priority 2 criteria have turned out to be the sleeves out of PG&E's vest. PG&E has now
28 admitted that the number of Priority 1 and Priority 2 tags would be very few because PG&E

1 expects to clear them all in the run-ups to future PSPS events. Such tags, therefore, would
2 rarely lead to any further circuits being de-energized. (Priority 1 and Priority 2 tags constitute
3 only a small fraction of all hazards. The gray pine looming over the Girvan Line, for example,
4 was *not* a Priority 1 or Priority 2 tag.)

5 To finalize the criteria proposed by PG&E in the form of a federal court order would give
6 PG&E a “Get-Out-of-Jail-Free” card, a card it could and would play in every civil lawsuit and
7 criminal prosecution arising out of future wildfires based on PG&E’s failure to de-energize
8 at-risk circuits. It would smile and say, “We did what the judge and the CPUC said to do
9 and they said that considering the sliver of information would count as considering all
10 information.”

11 A final reason is that the CPUC and the Governor’s Office have opposed the proposed
12 changes, curiously out of fear that they will lead to more PSPS events. Out of deference to
13 these authorities, the Court will simply state its recommendation but not impose any version of
14 the conditions. A related complication is that PG&E’s most recent counter-proposal involving
15 strike-tree count was expressly contingent on obtaining eventual CPUC approval, but in
16 response, the CPUC stated that it does not and will not bless such specific criteria and, instead,
17 as a matter of practice, leaves the selection of criteria to the utility. So, PG&E’s latest version
18 would be impossible to implement.

19 Accordingly, the Court will *not* impose Proposed Conditions 11 and 12. Instead, the
20 Court will and hereby does recommend that PG&E do the following:

21 In determining which distribution lines in Tier 2 or Tier 3 to
22 de-energize during a PSPS, PG&E should take into account all
23 information in its possession and in the possession of its
24 contractors or subcontractors concerning the extent to which trees
and/or limbs bordering those lines remain in violation of Public
Resources Code Section 4293, GO95, FERC PAC-003-4 and/or its
own wildfire mitigation plan.

25 To the extent that such information shows that such trees and/or
26 limbs present a safety hazard in the event of a windstorm, PG&E
27 should make a specific determination with respect to that
28 distribution line and it should de-energize it unless PG&E finds in
writing that there are specific overriding public safety needs to
leave the lines energized.

1 For example, that a circuit is in compliance with all vegetation clearance laws militates in favor
2 of leaving the power on in that circuit. Conversely, that a circuit has not been cleared in years
3 and is out of compliance militates in favor of turning the power off in that circuit. Of course,
4 all the other factors should be considered as well but in some cases this difference would be
5 and should be decisive. These are recommendations, not orders, but are recommendations
6 informed by years of studying the problem while trying to rehabilitate the offender and to
7 protect California from further crimes and wildfires by the offender.

8 To the extent that PG&E chooses to honor the Court's recommendation, it should not
9 pretend that using its "Priority 1" and "Priority 2" plus its "Strike Tree" criterion, although
10 steps in the right direction, would satisfy the recommendation or constitute taking into account
11 "all" information available to it. PG&E has much more information available to it pertaining
12 to wildfire risks specific to each circuit. PG&E, for example, has ranked each circuit in terms
13 of priority for "vegetation management." And, it knows or should know the extent to which
14 its circuits have been cleared. PG&E should know the true safety status of every one of its
15 circuits.

16 The Court agrees that PSPS events should be a last resort. Due to PG&E's neglect over
17 many years, however, our power grid remains overgrown with hazard trees poised to strike
18 during windstorms and unleash catastrophic wildfires. So our backs remain against the wall
19 and last resorts are necessary. In deciding which circuits to leave on and which to turn off
20 during windstorms in the wildfire season, it would be reckless not to take into account, in
21 addition to factors otherwise considered, the extent to which a circuit has been cleared of
22 hazard trees versus not cleared, keeping in mind that hazard trees falling on the lines in
23 windstorms has been the number one cause of wildfires started by PG&E distribution lines.
24 And, when deciding whether to leave a borderline circuit on versus off, public safety should
25 always take priority over inconvenience and hardship, it being preferable to lose power than to
26 lose lives. Again, the above are recommendations, not orders.

27 By **JULY 1, 2021**, PG&E shall file herein a statement setting forth its 2021 PSPS criteria
28 and stating the extent to which it has and has not adopted the above recommendations.

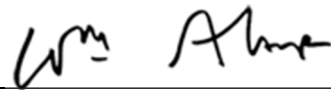
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1 Within **TWENTY-EIGHT DAYS** after each PSPS event in the 2021 Wildfire Season, PG&E shall
2 also file a public report herein stating:

- 3 (i) How many circuits were turned off in the PSPS;
- 4 (ii) How many of such circuits had limbs and/or trees blown or fallen onto
5 the lines (as determined in the post-storm inspection);
- 6 (iii) How many of such strikes would, in the judgment of PG&E, have
7 started a fire (regardless of size) had the circuit been energized at the
8 time of the strike;
- 9 (iv) How many circuits left energized had limbs and/or trees blown or fallen
10 onto the lines by the storm without causing a fire; and
- 11 (v) How many circuits left energized with strikes that in fact resulted in fires
12 (regardless of size).

13 The above five categories should each be further broken down by those circuits that were in
14 substantial compliance with Section 4293 as well as PG&E's Wildfire Mitigation Plan versus
15 those circuits that were not at the time of the PSPS event. The purpose of this information is to
16 assist in post-mortem analysis of how to improve the PSPS process by better selecting which
17 circuits to leave on and which to leave off. The order to show cause dated December 29, 2020,
18 is otherwise **DISCHARGED**. This paragraph is the only court order in this document, everything
19 else being a recommendation or explanation.

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22 Dated: April 29, 2021.



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24 WILLIAM ALSUP
UNITED STATES DISTRICT JUDGE