

Decision _____

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Investigation on the Commission's Own Motion into the Maintenance, Operations and Practices of Pacific Gas and Electric Company (U39E) with Respect to its Electric Facilities; and Order to Show Cause Why the Commission Should not Impose Penalties and/or Other Remedies for the Role PG&E's Electrical Facilities had in Igniting Fires in its Service Territory in 2017.

Investigation 19-06-015

**DECISION APPROVING PROPOSED SETTLEMENT AGREEMENT
WITH MODIFICATIONS**

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DECISION APPROVING PROPOSED SETTLEMENT AGREEMENT WITH MODIFICATIONS

Summary

This decision approves with modifications a settlement proposed by Pacific Gas & Electric Company (PG&E), the Commission's Safety and Enforcement Division, the Commission's Office of the Safety Advocate, and the Coalition of California Utility Employees, which resolves all issues in this investigation concerning the penalties and other remedies that should be imposed on PG&E for the role its electrical facilities played in igniting wildfires in its service territory in 2017 and 2018.

With the modifications to the settlement agreement, this decision imposes penalties totaling \$2.137 billion, which consist of:

- \$1.823 billion in disallowances for wildfire-related expenditures (an increase of \$198 million from the proposed settlement agreement);
- \$114 million in System Enhancement Initiatives and corrective actions (an increase of \$64 million from the proposed settlement agreement); and
- a \$200 million fine payable to the General Fund, which shall be permanently suspended.

In addition, this decision requires any tax savings associated with the shareholder obligations for operating expenses under the settlement agreement, as modified by this decision, to be returned to the benefit of ratepayers.

These modifications to the settlement agreement are appropriate given the widespread harm resulting from the 2017 and 2018 fires at issue in this investigation; the uncertainty that PG&E would otherwise recover from ratepayers a substantial portion of the costs identified in the settlement agreement; the anticipated tax savings for PG&E associated with its shareholder

obligations; and the importance of fines to punish and deter future misconduct and in light of Commission precedent.

Upon approval by the Bankruptcy Court¹ of the settlement agreement as modified, this proceeding is closed.

1. Factual Background

In October 2017 and November 2018, multiple wildfires started burning across Pacific Gas and Electric Company (PG&E)'s service territory in Northern California. These wildfires were unprecedented in size, scope, and destruction.

The "October 2017 Fire Siege" started on the evening of October 8, 2017 into the morning of October 9, 2017. At the peak of the 2017 wildfires, there were 21 major wildfires that, in total, burned 245,000 acres. Eleven thousand firefighters battled the fires that, at one time, forced 100,000 people to evacuate, destroyed an estimated 8,900 structures (as of October 30, 2017) and took the lives of 44 people:² the Atlas Fire (Napa, 6 fatalities), the Cascade Fire (Yuba, 4 fatalities), the Nuns Fire (Napa/Sonoma, 3 fatalities), the Redwood Valley Fire (Mendocino, 9 fatalities), and the Tubbs Fire (Sonoma, 22 fatalities).³

In the early morning hours of November 8, 2018, a fire ignited near Camp Creek Road near the community of Pulga in Butte County. The resulting Camp Fire burned approximately 153,336 acres, destroyed 18,804 structures, and resulted in 85 fatalities.

¹ United States Bankruptcy Court for the Northern District of California, Case No. 19-30088DM (Bankruptcy Court).

² Of the 44 fatalities, 22 are attributed to fires started by PG&E facilities.

³ Report on October 2017 Fire Siege by the Commission's Safety and Enforcement Division dated June 13, 2019 (SED Fire Report) at 1. The SED Fire Report and attached individual incident investigation reports were designated as Appendix A to the order instituting this investigation.

2. Procedural Background

On June 27, 2019, the Commission issued this Order Instituting Investigation (OII) into the maintenance, operations, and practices of PG&E with respect to its electric facilities and ordered PG&E to show cause why the Commission should not impose penalties or other remedies for the role PG&E's electrical facilities had in igniting wildfires in its service territory in 2017.

The Commission initiated the investigation in response to investigative reports on the 2017 wildfires prepared by the Commission's Safety and Enforcement Division (SED), which found that PG&E had violated Commission General Orders (GOs) and Resolution E-4148 and failed to follow industry best practices. The OII addressed 15 of the 17 fire incidents that occurred in 2017 investigated by SED.⁴ The California Department of Forestry and Fire Protection (CAL FIRE) had determined that PG&E's electrical facilities ignited all but one of these 15 fires.

The OII also ordered PG&E to provide a report on systemic issues as specified in Attachment B of the OII; to take immediate corrective actions to come into compliance with Commission requirements; and to file an application within 30 days of the issuance of the OII to develop an open source, publicly available mobile app that allows a Geographic Information System-equipped phone to send pictures of utility infrastructure (*e.g.*, pole) to an asset management system/database maintained by PG&E.

On July 29, 2019, PG&E filed its initial response to the OII/Order to Show Cause (OSC) (PG&E Initial Response) and also filed the mobile app application

⁴ The OII did not include two of the fire incidents, the Lobo and McCourtney Fires, because information regarding those fires remained confidential at the time the Commission issued the OII.

(Application 19-07-019). The Public Advocates Office at the Public Utilities Commission (Cal Advocates) and the Coalition of California Utility Employees (CUE) also filed responses to the OII on July 29, 2019.

On August 5, 2019, PG&E submitted its Report in Response to Attachment B of the OII/OSC (Attachment B Report), which included PG&E's responses to all Attachment B requirements with the exception of Requirements III.B.1, 2 and 7.⁵ On August 14, 2019, PG&E submitted an Amendment to Exhibit 4 of its Attachment B Report. On August 23, 2019, PG&E submitted its Supplemental Response to Attachment B of the OII, which included additional responses to Attachment B Requirements III.B.1, 2 and 7 and Section VI.B. of its Attachment B Report.

A prehearing conference (PHC) was held on August 13, 2019, to discuss the service list, scope of issues, and schedule for the proceeding. The Assigned Commissioner's Scoping Memo and Ruling (Scoping Memo) was issued on August 23, 2019 setting forth the category, issues to be addressed, and schedule of the proceeding. The Scoping Memo ruled that the scope of this proceeding would include issues concerning the 15 fires addressed in the OII.⁶ The Scoping Memo also noted that SED intended to file a motion requesting to expand the scope of the proceeding to include alleged violations concerning the 2017 Lobo and McCourtney Fires and some or all of the 2018 Camp Fire.⁷ The Scoping Memo directed PG&E and SED to meet at least once a week to address the

⁵ At a status conference held on July 29, 2019, the assigned Administrative Law Judge (ALJ) authorized an extension of time to respond to certain Attachment B requirements.

⁶ Scoping Memo at 4-5.

⁷ Scoping Memo at 5.

potential for settlement and also to meet with other parties regarding settlement and stipulated issues.

On September 6, 2019, the assigned Administrative Law Judge (ALJ) issued a ruling directing parties to brief various pre-evidentiary hearing legal issues. PG&E, SED, Cal Advocates, the Office of the Safety Advocate (OSA), The Utility Reform Network (TURN), and Thomas Del Monte (Del Monte) and Wild Tree Foundation (Wild Tree) (jointly) filed opening pre-evidentiary hearing briefs addressing disputed legal issues on October 14, 2019. PG&E, SED, Cal Advocates, TURN, and Del Monte/Wild Tree filed reply briefs on October 28, 2019.

SED subsequently released its reports for the Lobo and McCourtney Fires and on October 17, 2019 filed a motion to amend the scope of the proceeding to include these fires. On October 28, 2019, an Amended Scoping Memo and Ruling (Amended Scoping Memo) was issued amending the scope of the proceeding to include issues concerning the Lobo and McCourtney Fires.

OSA and Del Monte served testimony on November 8, 2019. PG&E served reply testimony for all its fact and expert witnesses with the exception of one witness on November 18, 2019.

On November 15, 2019, SED filed its Reply to PG&E's Report in Response to Attachment B.

On November 26, 2019, SED filed a motion to expand the scope of the proceeding to include the Camp Fire. The motion included, as an attachment, a copy of SED's investigative report on the Camp Fire. On December 5, 2019, a Second Amended Scoping Memo and Ruling (Second Amended Scoping Memo)

was issued amending the scope of the proceeding to include issues concerning the Camp Fire.⁸

Since the PHC, the parties have met bilaterally or multilaterally over thirty times and have filed weekly or bi-weekly joint status reports regarding settlement efforts. On November 18, 2019, PG&E issued a notice of settlement conference pursuant to Rule 12.1(b) of the Commission's Rules of Practice and Procedure. On December 17, 2019, PG&E, SED, OSA, and CUE (collectively, Settling Parties) filed a joint motion for approval of a settlement agreement, which would resolve all issues in this investigation (Joint Motion). The settlement was not joined by all parties to this investigation.

On December 30, 2019, the assigned ALJ issued a ruling directing PG&E to provide additional information regarding the proposed settlement agreement. PG&E timely filed a response to the ruling on January 10, 2020.

On January 16, 2020, Cal Advocates, TURN,⁹ Del Monte and Wild Tree (jointly), and the City and County of San Francisco (CCSF) filed comments on the

⁸ Contrary to assertions by Del Monte, Wild Tree, and Cal Advocates, the Second Amended Scoping Memo did not establish a schedule for issues related to the Camp Fire, and consequently, there was no discovery cut-off established for the Camp Fire. The discovery cut-off established in rulings issued prior to the Second Amended Scoping Memo applied to issues identified in the Scoping Memo and Amended Scoping Memo, which did not include issues related to the Camp Fire. (*See* Seconded Amended Scoping Memo at 4 (affirming schedule for issues identified in the Scoping Memo and Amended Scoping Memo).) Furthermore, pursuant to Rules 10.1 and 12.3 of the Commission's Rules of Practice and Procedure, parties were not precluded from conducting discovery regarding the settlement agreement.

⁹ On January 17, 2020, TURN submitted a revised version of its comments, which added a table of contents, corrected page number formatting errors, and modified the new language proposed by TURN to address tax benefits from the settlement. All references in this decision to TURN's comments on the settlement agreement are to TURN's comments as amended on January 17, 2020.

proposed settlement agreement. PG&E and CUE (jointly), SED, Cal Advocates, and TURN filed reply comments on January 31, 2020.¹⁰

On February 12, 2020, Cal Advocates filed a motion requesting a hearing on the contested settlement.

On February 25, 2020, Del Monte and Wild Tree filed a motion requesting evidentiary hearings on the settlement and to reopen the discovery period.

On February 27, 2020, the presiding officer issued the Presiding Officer's Decision Approving Proposed Settlement Agreement with Modifications (POD) to resolve the issues in this investigation. As described in Section 10, below, a motion requesting other relief, appeals, and a request for review were filed in response to the POD.

On April 20, 2020, the Decision Different of Commissioner Rechtschaffen Approving Proposed Settlement Agreement with Modifications (Decision Different) was issued. Parties filed comments on the Decision Different as described in Section 11, below.

3. Violations Found by SED

SED found violations for 15 of the 18 fires included in this investigation. Most but not all of the alleged violations are related to an ignition of a fire. Alleged violations not directly related to the ignition of a fire include violations related to recordkeeping practices, late work orders, and evidence disposal. With respect to the 2017 wildfires, SED found a total of 33 violations of GO 95 and Resolution E-4184. GO 95 establishes requirements for the design, construction, and maintenance of overhead electric lines to ensure adequate

¹⁰ Unless otherwise specified, all references to a party's comments or reply comments are to the party's comments and reply comments on the proposed settlement agreement.

service and safety. Resolution E-4184 sets forth procedures for reporting electric and gas emergencies to Commission Staff.

With respect to the 2018 Camp Fire, SED found 12 violations of GOs 95 and 165, Resolution E-4184, and Public Utilities Code § 451. GO 165 establishes requirements for inspections of electric distribution and transmission facilities (excluding those facilities contained in a substation) in order to ensure safe and high-quality electrical service. Pub. Util. Code § 451 requires every public utility “to furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities ... as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.”

The following table summarizes the violations SED found for each fire:¹¹

No.	Incident	Violations Found
1	Adobe Fire	GO 95, Rule 31.1 – Hazardous tree not identified and abated
		GO 95, Rule 31.1 – Records of 2015 CEMA inspection not retained
		GO 95, Rule 31.1 – Work order completed late
2	Atlas Fire	GO 95, Rule 31.1 – Failure to identify and abate hazardous Black Oak tree at Atlas 1 site
		GO 95, Rule 31.1 – Failure to identify and perform correctional prune of hazardous Valley Oak codominant branch at Atlas 2 site
		GO 95, Rule 35 – Vegetation clearance not maintained at Atlas 1 site
		GO 95, Rule 35 – Vegetation clearance not maintained at Atlas 2 site
		GO 95, Rule 31.1 – Work order completed late

¹¹ SED Fire Report at 12-14; SED Lobo Fire Report at 2; SED McCourtney Fire Report at 2; SED Camp Fire Report at 2-3.

No.	Incident	Violations Found
3	Cascade Fire	GO 95, Rule 38 – Conductor clearance not maintained
4	Cherokee Fire	No violations identified
5	La Porte Fire	No violations identified
6	Norrbon Fire	GO 95, Rule 31.1 – Hazardous tree not identified and abated
		GO 95, Rule 35 – Vegetation clearance not maintained
7	Nuns Fire	GO 95, Rule 35 - Improper prioritization and delay in abating vegetation strain on secondary conductor
8	Oakmont/Pythian Fire	GO 95, Rule 31.1 – Incomplete patrol prior to re-energizing circuit
		GO 95, Rule 31.1 – Failed to complete work order and reinforce a pole
		GO 95, Rule 31.1 – Completed a work order late
9	Partrick Fire	GO 95, Rule 31.1 – Hazardous tree not identified and abated
		GO 95, Rule 35 – Vegetation clearance not maintained
10	Pocket Fire	GO 95, Rule 31.1 – Hazardous tree not identified and abated
		GO 95, Rule 35 – Vegetation clearance not maintained
11	Point Fire	GO 95, Rule 19 – Evidence disposal
12	Potter/Redwood Fire	Resolution E-4184 – Second fire located at 9100 Main St., Potter Valley not reported
		GO 95, Rule 31.1 – Repair records not maintained
		GO 95, Rule 31.1 – Records of 2016 CEMA inspection not maintained
13	Sulphur Fire	GO 95, Rule 19 – Evidence disposal
		GO 95, Rule 31.1 – Records of 2016 CEMA inspection not maintained
14	Tubbs Fire	No violations identified
15	Youngs Fire	GO 95, Rule 31.1 – Hazardous tree not identified and abated

No.	Incident	Violations Found
		GO 95, Rule 35 – Vegetation clearance not maintained
16	Lobo Fire	GO 95, Rule 31.1 – Hazardous tree with open cavity not identified and abated
		GO 95, Rule 31.1 – Failure to identify unsafe condition that left the subject tree exposed to high winds
		GO 95, Rule 31.1 – Records of 2014 CEMA inspection not maintained
		GO 95, Rule 35 – Vegetation clearance not maintained
17	McCourtney Fire	GO 95, Rule 31.1 – Failure to identify and remove a hazardous tree
		GO 95, Rule 35 – Vegetation clearance not maintained
18	Camp Fire	GO 95, Rule 44.3 – Failure to replace or reinforce the C-hook on Tower :27/222 (Incident Tower) before its safety factor was reduced to less than two-thirds of the safety factor specified in Rule 44.1, Table 4, which is a violation of Rule 44.3.
		GO 95, Rule 31.1 – Failure to maintain the C-hook supporting the transposition jumper on the Incident Tower :27/222 for its intended use and regard being given to the conditions under which it was to be operated.
		GO 95, Rule 31.2 – Failure to inspect Incident Tower thoroughly and failure to detect an immediate Safety Hazard or Priority A condition on the incident C-hook.
		GO 165, Section IV – PG&E failed to follow its procedures by failing to document the factors and reasons that led to the delay in the repair work on the Incident Tower.
		GO 165, Section IV – Failure to conduct detailed climbing inspections when conditions to trigger climbing inspections were evident as specified by internal procedures. Wear on the original working

No.	Incident	Violations Found
		eyes that remained on the Incident Tower is an indication of a known condition with potential to recur on the added hanger plates with working eyes, which should have triggered detailed climbing inspection to examine the added hanger plates.
		GO 95, Rule 31.1 –The condition of the C-hook (material loss > 50%) supporting the transposition jumper on Tower :24/199 demonstrates that PG&E did not maintain the tower for its intended use.
		GO 95, Rule 31.2 – Failure to inspect Tower :24/199 thoroughly and failure to detect an immediate Safety Hazard or Priority A Condition on the C-hook.
		GO 165, Section IV – C-hook on Tower :24/199 had material loss of over 50%. PG&E failed to detect and correct the Priority A condition as specified in PG&E's procedures.
		GO 95, Rule 18 – PG&E assigned an incorrect priority for an immediate Safety Hazard (disconnected insulator hold-down anchor on Tower :27/221).
		GO 165, Section IV – PG&E failed to follow its procedures by using an outdated inspection form during the detailed climbing inspections that PG&E conducted from September 19 to November 5, 2018.
		Decision (D.) 06-04-055, as amended by Resolution E-4184 – PG&E failed to report the reportable incident on the Big Bend 1101 12kV Distribution Circuit in a timely manner.
		CA Pub. Util. Code § 451 – Failure to maintain an effective inspection and maintenance program to identify and correct hazardous conditions on its transmission lines in order to furnish and maintain service and facilities, as are necessary to promote the safety and health of its patrons and the public.

4. PG&E Position on Violations

In PG&E's Initial Response, PG&E acknowledged that, with regard to the operation and maintenance of its electric facilities, there were some areas in which it could have performed better to mitigate risks. However, PG&E disagreed with many of the findings in SED's Fire Reports and contested that there were violations of GO 95 and other Commission rules. PG&E argued that SED erred in its interpretation and application of Rules 31.1, 35, and 38 of GO 95, and that SED misapplied GO 95, Rule 19 and Resolution E-4184.¹²

In PG&E's Initial Response, PG&E did not contest nine of SED's alleged violations but asserted that its decision not to contest these violations was not an admission of any wrongdoing, unlawful conduct, or liability.¹³ PG&E argues that of these nine violations, only one (Violation of GO 95, Rule 31.1 for an incomplete patrol prior to re-energizing a line for the Oakmont/Pythian Fire) was found to be related to the ignition of a fire. The remainder of the uncontested violations related to late completion of work orders, failure to maintain records, and evidence disposal.

The Lobo, McCartney, and Camp Fires were added to the scope of this investigation after PG&E's Initial Response was filed, and therefore, were not addressed in the Initial Response. The settlement agreement sets forth PG&E's positions on the allegations for all of the fires within the scope of this investigation. PG&E disputes all but four of the allegations for the newly added fires.¹⁴ The uncontested allegations relate to failure to maintain records for the Lobo Fire, and failure to document reasons for repair work, use of outdated

¹² PG&E Initial Response at 23.

¹³ PG&E Initial Response at 42.

¹⁴ Settlement Agreement, Exhibit B.

inspection form, and failure to report a reportable incident in a timely manner for the Camp Fire.

5. Summary of Proposed Settlement

The proposed settlement would resolve all issues in this investigation and consists of three primary substantive components.

First, the Settling Parties have stipulated to a series of facts and violations.¹⁵ PG&E does not dispute that its electric facilities played a role in the ignition of all fifteen fires for which SED found violations.¹⁶ Other facts the Settling Parties have stipulated to include:

- the conditions of the subject trees identified in SED's investigative reports;
- instances of missing repair records;
- instances of repair work completed after the original due date;
- circumstances surrounding disposal of evidence;
- the conditions of equipment relevant to the 2018 Camp Fire investigation and alleged violations; and
- the inspection and maintenance history relevant to the 2018 Camp Fire investigation and alleged violations.

Although PG&E stipulates to various facts, as discussed above, except for a few allegations largely unrelated to the ignition of these fires, PG&E continues to dispute that it violated applicable laws, rules, and regulations.

Second, the settlement agreement requires PG&E to bear \$1.675 billion in financial obligations. PG&E agrees that it will not seek rate recovery of certain wildfire-related expenses and expenditures in future applications, which will

¹⁵ Settlement Agreement, Exhibits A and B.

¹⁶ See Settlement Agreement, Exhibit A, Stipulated Facts 10, 16, 22, 27, 33, 39, 42, 45, 50, 54, 58, 61, 67, 72, 132, and 133.

total \$1.625 billion. In addition, PG&E will spend \$50 million, funded by shareholders, on 20 specified System Enhancement Initiatives.

Third, the settlement agreement requires PG&E to undertake 20 System Enhancement Initiatives. These initiatives include vegetation management and electric operations-focused initiatives, system wide analyses, community engagement-focused initiatives, and transparency and accountability-focused initiatives.

The full settlement agreement is attached as Appendix A to this decision.

6. Party Positions on Proposed Settlement

Cal Advocates, TURN, and Del Monte/Wild Tree (collectively, “Opposing Parties”) filed comments opposing the proposed settlement agreement. These parties argue that the proposed settlement is not reasonable in light of the record, consistent with the law, or in the public interest.

Cal Advocates opposes the proposed settlement agreement on the following grounds: (1) the terms of the settlement agreement are not commensurate with the magnitude of PG&E’s violations or the harm PG&E caused; (2) it does not bar PG&E from seeking recovery of costs related to fires that were caused by PG&E’s failure to operate its electric facilities according to the law; (3) it fails to identify a process for considering and implementing corrections to lessen the likelihood of future catastrophic wildfires caused by PG&E’s electric facilities; and (4) the proposed settlement needlessly constrains the Commission’s ability to evaluate the October 2017 Tubbs Fire, even if new information changes CAL FIRE’s current conclusion that PG&E facilities did not ignite the Tubbs Fire.

Cal Advocates recommends that the Commission deny the settlement agreement unless it is revised to: (1) bar PG&E from seeking recovery of costs

associated with fires for which SED found violations, and (2) allow SED to consider violations or enforcement proceedings regarding the Tubbs Fire in the event that CAL FIRE or another state, federal, or local entity determines that PG&E's infrastructure was the cause of the Tubbs Fire. Cal Advocates also recommends that the Commission leave this proceeding open to consider and implement corrections to lessen the likelihood of future catastrophic wildfires caused by PG&E's electric facilities.

TURN also opposes the proposed settlement as neither consistent with the whole record nor in the public interest. TURN argues that the proposed settlement suffers from the following significant deficiencies: (1) the proposed penalty does not include purely incremental disallowances, and is therefore, insufficient in light of PG&E's conduct; (2) ratepayers are at risk of funding projects that would not have occurred but for PG&E's role in these wildfires; and (3) the settlement does not address how PG&E will use any tax benefit received as a function of the settlement.

Although TURN opposes the settlement, TURN recognizes the condensed timeframe for review and the necessity of addressing prepetition claims before PG&E exits bankruptcy. Rather than outright rejection of the settlement agreement, TURN recommends the following modifications to the settlement to strengthen the proposed penalty: (1) ensure that the penalty is sufficient to reflect the gravity of the violations by requiring PG&E to forego rate recovery of costs that are likely recoverable from ratepayers; (2) require PG&E shareholders to fully fund the System Enhancement Initiatives, even if the costs exceed the \$50 million provided in the settlement; and (3) clarify that any tax benefits that are realized as a result of the structure of the penalty in this case must serve to benefit ratepayers. TURN recommends that the Commission reject the

settlement if the Settling Parties do not accept these alternative terms as provided for in Rule 12.4(c) of the Commission's Rules of Practice and Procedure. TURN also recommends that this proceeding remain open for a second phase to consider the root cause analyses completed for the different wildfires in order to ensure that the underlying causes are adequately identified and mitigated.

Del Monte and Wild Tree also oppose the proposed settlement agreement. They argue that the settlement agreement is not in the public interest because: (1) it does not include a fine, which is an integral part of Commission enforcement actions in order to effectively deter future violations by the perpetrator and others; (2) the financial obligations agreed to in the settlement are de minimis given that PG&E likely would not have received ratepayer recovery for a substantial amount of the costs and given the tax benefits associated with the financial obligations; (3) the settlement agreement does not necessarily prohibit use of previously authorized debtor-in-possession (DIP) financing for the \$1.625 billion in financial obligations; and (4) in stark contrast to previous utility enforcement actions, it is "a no-fine settlement reached in just a matter of months with scant record evidence."

Del Monte and Wild Tree also argue that the settlement agreement is contrary to law because: (1) the settlement does not adequately weigh and consider PG&E's conduct as required by law; and (2) SED's conclusions regarding PG&E's financial situation are contrary to law.

Del Monte and Wild Tree further argue that the settlement agreement is not reasonable in light of the whole record because it does not take into account any violations for PG&E's role in the Tubbs Fire.

Del Monte and Wild Tree request that the Commission deny the Joint Motion and move forward with evidentiary hearings. Should the Commission

adopt the settlement agreement with modifications, Del Monte and Wild Tree request that any reference to the Tubbs Fire be removed from the settlement agreement because they contend that the facts and violations associated with the Tubbs Fire were excluded from discovery and not adequately considered in this investigation.

CCSF filed comments proposing limited modifications to the settlement agreement to ensure transparency on important issues of public safety but did not take a position on other aspects of the settlement agreement. Specifically, CCSF recommends that the settlement agreement be modified to make the quarterly electric maintenance reports and documentation of “near hit” potential fire incidents available to local governments and the general public. CCSF also states that the location information for both the quarterly electric maintenance reports and “near hits” should be presented in a manner that is understandable by local government officials and the general public.

7. Standard of Review

In order for the Commission to approve a proposed settlement, the Commission must find that it is reasonable in light of the whole record, consistent with law, and in the public interest.¹⁷ In general, the Commission does not consider if a settlement reaches the optimal outcome on every issue. Rather, the Commission determines if the settlement as a whole is reasonable.

The Commission's policy is that contested settlements should be subject to more scrutiny compared to an all-party settlement. As explained in D.02-01-041:

In judging the reasonableness of a proposed settlement, we have sometimes inclined to find reasonable a settlement that has the unanimous support of all active parties in the proceeding. In contrast, a contested settlement is not entitled

¹⁷ Commission’s Rules of Practice and Procedure, Rule 12.1(d).

to any greater weight or deference merely by virtue of its label as a settlement; it is merely the joint position of the sponsoring parties, and its reasonableness must be thoroughly demonstrated by the record.¹⁸

8. Discussion

8.1. Penalty Factors

The financial obligations imposed by the settlement agreement are to resolve an enforcement action alleging violations of law by a public utility, and therefore, the Commission considers the financial obligations to be a settlement of the penalties to be imposed in this case.¹⁹ In evaluating the reasonableness of a settlement involving a penalty, the Commission considers the following criteria adopted in D.98-12-075:²⁰

- (1) Severity of the offense;
- (2) The conduct of the utility;
- (3) The financial resources of the utility;
- (4) The totality of the circumstances in furtherance of the public interest; and
- (5) The amount of the fine in relationship to prior Commission decisions.

Given that a settlement agreement was reached before this proceeding was fully adjudicated and several legal and factual issues remain in dispute, the Commission evaluates the reasonableness of the Settling Parties' proposed

¹⁸ D.02-01-041 at 13.

¹⁹ Consistent with past Commission decisions, this decision uses the term "fines" to refer to monies imposed under Pub. Util. Code § 2107 and paid to the General Fund and the term "penalties" to refer to the combination of fines, disallowances, and remedies. (*See* D.15-04-024 at 27.)

Although the Settling Parties do not use the term "penalty" to describe the financial obligations to be imposed on PG&E, the Settling Parties analyze the settlement agreement in light of the penalty factors set forth in D.98-12-075. (Joint Motion at 34.)

²⁰ D.98-12-075 at 35-39.

outcome based on the record to date and in light of the potential range of outcomes that could result if this proceeding was fully adjudicated and the litigation risk facing the parties.

8.1.1 Severity of the Offense

The Commission considers several factors in evaluating the severity of the offense, including physical harm, economic harm, and harm to the regulatory process, as well as the number and scope of violations. The most severe violations are those that caused actual physical harm to people or property, with violations that threatened such harm closely following.”²¹ A high level of severity is also accorded to the disregard of a statutory or Commission directive, regardless of the effect on the public, since such compliance is absolutely necessary to the proper functioning of the regulatory process.²²

There is no question that the physical and economic harm resulting from the 2017 and 2018 wildfires is unprecedented. The 2017 and 2018 wildfires resulted in over 100 deaths, the destruction of over 25,000 structures, and the burning of hundreds of thousands of acres. There is also no dispute that PG&E equipment played a role in igniting the 15 fires for which SED found violations. While PG&E accepts that its equipment played a role in igniting certain fires, PG&E continues to dispute SED’s assertions that it violated applicable laws, rules, and regulations.²³

The Settling Parties state that harm to the regulatory process was not deemed a significant factor for purposes of the settlement agreement because there were no allegations of Rule 1.1 violations, ethical violations, or any

²¹ D.98-12-075 at 36.

²² D.98-12-075 at 36.

²³ PG&E Reply Comments at 7.

deliberate misconduct associated with the wildfires covered by this OII.²⁴ However, as noted by Cal Advocates, SED alleged several violations of rules regarding the preservation of evidence and the reporting of incidents, which directly relate to harm to the regulatory process.²⁵ Moreover, harm to the regulatory process can result from a failure to follow Commission requirements.

Given the unprecedented nature of the physical and economic harm, the detailed nature of SED's violations, as well as the fact that there are allegations regarding harm to the regulatory process, which are also accorded a high level of severity, the litigation risk to PG&E is very high. In the event that the Commission were to find that PG&E committed all or even some of the violations as alleged by SED, these violations would be considered the most severe and the severity of the offense factor would weigh in favor of a very significant penalty.

8.1.2 Conduct of the Utility

In considering the conduct of the utility, the Commission examines the utility's conduct in: (1) preventing the violation, (2) detecting the violation, and (3) disclosing and rectifying the violation.²⁶ Utilities are expected to take reasonable steps to ensure compliance with applicable laws and regulations. In evaluating a utility's actions to prevent a violation, "the Commission will consider the utility's past record of compliance with Commission directives."²⁷

SED contends that PG&E's conduct prior to the 2017 and 2018 wildfires led to its inability to prevent, detect, and rectify the violations of GO 95, GO 165, and

²⁴ Joint Motion at 36.

²⁵ Cal Advocates Reply Comments at 4-5.

²⁶ D.98-12-075 at 37-38.

²⁷ D.98-12-075 at 37.

Pub. Util. Code § 451 identified in SED's investigative reports. SED considered PG&E's failure to detect and prevent the violations prior to the events a significant factor for purposes of the settlement agreement, especially since many of the violations alleged by SED span decades.²⁸

On the other hand, PG&E continues to contend that it followed the requirements of GO 95 when inspecting its electric facilities and performing vegetation management prior to the 2017 and 2018 wildfires.²⁹ PG&E also states that it embarked on numerous improvements to its electric facility operations and maintenance in response to the 2017 and 2018 wildfires.³⁰ The Settling Parties state that they have taken into consideration PG&E's efforts to proactively address the issues raised in the OII and have worked to prescribe a set of corrective actions intended to further enhance PG&E's efforts to minimize the risk of catastrophic wildfire in the future.³¹

The Opposing Parties argue that PG&E's conduct and inadequate efforts to prevent, detect, disclose, and rectify violations weigh in favor of significant penalties and that the penalties set forth in the settlement agreement are inadequate.³² Although PG&E states that it has made numerous improvements in response to the 2017 and 2018 wildfires,³³ parties note that PG&E's vegetation

²⁸ Joint Motion at 37.

²⁹ Joint Motion at 37.

³⁰ Joint Motion at 37.

³¹ Joint Motion at 37-38.

³² See, e.g., Del Monte/Wild Tree Comments at 33; TURN Comments at 16; Cal Advocates Reply Comments at 5.

³³ Joint Motion at 37.

management program in 2019 has produced questionable results as measured by the Federal Monitor's Report.³⁴

TURN also observes that the 2017 and 2018 wildfires are the latest in a series of disastrous safety lapses for the utility, which include:³⁵

- a natural gas line rupture in San Bruno on September 9, 2010, which resulted in the Commission imposing \$1.6 billion in penalties and the utility being found guilty of criminal conduct by a federal jury and being put on criminal probation;
- the fatality of a PG&E subcontractor at PG&E's decommissioned Kern Power Plant on June 19, 2012, which resulted in the Commission imposing \$5.6 million in penalties;
- the Commission imposed \$25.6 million in penalties in response to six incidents from 2010 and 2014 that called into question the safety of PG&E's natural gas distribution system;
- the Butte Fire, which began on September 9, 2015 and destroyed approximately 70,000 acres of land, destroyed 921 structures, and left two civilians dead and resulted in SED issuing PG&E a citation for \$8 million; and
- the Commission imposed \$110 million in penalties in response to numerous violations for PG&E's implementation of its locate and mark program for identifying the location of underground gas and electric facilities prior to construction activities.

There are serious questions regarding PG&E's efforts to prevent, detect, and rectify the violations that are at issue in this proceeding. Some of SED's allegations span decades. Furthermore, PG&E has a demonstrated record of

³⁴ TURN Comments at 14; Cal Advocates Reply Comments at 5.

³⁵ TURN Comments at 2-3.

failing to comply with Commission directives, including those related to vegetation management. In SED's citation for the Butte Fire issued on April 25, 2017, SED stated that it found PG&E in violation of GO 95, Rule 31.1, 37 times since 1999.³⁶

It is clear from the record that PG&E failed to take any meaningful steps to prevent or detect this significant number of violations. In fact, PG&E continues to dispute that most of the violations alleged by SED occurred. These potential violations only came to light after the ignition of deadly and catastrophic fires, not as a result of any PG&E- initiated actions. Moreover, although the Settling Parties assert that PG&E has made proactive efforts to address the issues raised in the OII, there are ongoing questions regarding whether PG&E has rectified its practices to avoid such incidents in the future.

8.1.3 Financial Resources of the Utility

In setting the level of a fine or penalty, the Commission must balance "the need for deterrence with the constitutional limitations on excessive fines."³⁷ The Commission, therefore, must "adjust fine levels to achieve the objective of deterrence, without becoming excessive, based on each utility's financial resources."³⁸

The Settling Parties state that PG&E is currently in Chapter 11 bankruptcy proceedings and contend that this is a unique circumstance that affects PG&E's ability to pay any monetary penalty, particularly one that would require a cash payment to the General Fund. PG&E states that its ability to raise capital as part of its plan of reorganization is limited and depends in large part on the amount

³⁶ Citation No.: D.16-09-055 E.17-04-001 at 4.

³⁷ D.98-12-075 at 38.

³⁸ D.98-12-075 at 39.

of capital it will require to resolve other claims.³⁹ In reaching a settlement, the Settling Parties took into account the fact that PG&E has total financial obligations of \$25.5 billion to settle all claims related to the 2017 and 2018 wildfires as part of its proposed reorganization plan and will need an additional \$4.8 billion for an initial contribution to the Wildfire Fund established pursuant to Assembly Bill (AB) 1054 (Stats. 2019), which is intended to help the state's electric utilities pay for future wildfire damages.⁴⁰

Cal Advocates comments that PG&E is one of the largest combined natural gas and electric energy companies in the United States.⁴¹ Cal Advocates argues that while the Commission may decide that PG&E's current financial resources weigh in favor of a lower penalty than it would ordinarily impose on a utility of PG&E's size, the Commission should not approve a settlement with financial remedies too low to effectuate deterrence.

The fact that PG&E is currently in bankruptcy proceedings is a factor the Commission must consider in assessing the financial resources of the utility that may weigh in favor of a lower penalty than ordinarily would be warranted. However, the Settling Parties do not provide sufficient information regarding the bankruptcy or PG&E's plan of reorganization that would enable the Commission to assess whether the amount and structure of the financial obligations imposed by the settlement agreement are the limit of a reasonable penalty for punishing and deterring the conduct at issue without being excessive in light of PG&E's financial resources. Information regarding the bankruptcy plan of

³⁹ PG&E/CUE Reply Comments at 8.

⁴⁰ Joint Motion at 38-39.

⁴¹ Cal Advocates Reply Comments at 5-6.

reorganization is provided in only very general terms and the extent of PG&E's ability to pay a larger penalty is not clear from the record.

8.1.4 Totality of Circumstances in Furtherance of Public Interest

The totality of the circumstances in furtherance of the public interest factor requires the Commission to:

specifically tailor the package of sanctions, including any fine, to the unique facts of the case. The Commission will review facts which tend to mitigate the degree of wrongdoing as well as any facts which exacerbate the wrongdoing. In all cases, the harm will be evaluated from the perspective of the public interest.⁴²

The Settling Parties argue that approval of the settlement agreement is in the public interest for reasons including: (1) it is consistent with the Commission's policy in support of settlement, which promotes administrative efficiency so that the Commission and parties are not required to expend substantial time and resources on continued litigation; (2) the settled outcome reflects a reasonable compromise of the parties' positions and falls within a range of possible litigated outcomes; (3) timely resolution of this proceeding will help ensure that PG&E is able to conclude its Chapter 11 proceedings by June 30, 2020 to meet the AB 1054 deadline in order for PG&E to be able to participate in the Wildfire Fund, which will enable PG&E to be adequately capitalized to continue the necessary work set forth in its Wildfire Safety Plan; and (4) the settled costs relate to PG&E's efforts to mitigate future wildfire risks and show PG&E's intent to operate and maintain its electric facilities in accordance with law.⁴³

⁴² D.98-12-075 at 39.

⁴³ Joint Motion at 33-34, 40.

The Opposing Parties argue that the settlement agreement is not in the public interest because the proposed penalty is not commensurate with the magnitude of the violations and the harm caused. TURN, Del Monte, and Wild Tree argue that the financial obligations set forth in the settlement agreement are not sufficient as a penalty because they do not consist of purely incremental financial obligations being imposed on PG&E and because PG&E may continue to receive tax savings from these expenses. Del Monte and Wild Tree also argue that the settlement agreement is not in the public interest because it does not include a fine payable to the General Fund. Del Monte, Wild Tree, and Cal Advocates also argue that the accelerated schedule for the proceeding has resulted in an inadequate record.

The Commission recognizes that the package of sanctions must be tailored to the unique facts of this case. As discussed further below, the Commission takes into account and balances all of these considerations in evaluating the reasonableness of the penalties proposed in the settlement agreement.

8.1.5 Consistency with Precedent

In looking at the role of precedent, the Commission considers the proposed outcome with “previously issued decisions which involve the most reasonably comparable factual circumstances and explain[s] any substantial differences in outcome.”⁴⁴

The Settling Parties argue that there is a wide range of outcomes in enforcement decisions involving electric operations safety issues and that the settlement agreement is reasonable when compared to the outcomes in other Commission proceedings.⁴⁵ The Settling Parties argue that the settlement

⁴⁴ D.98-12-075 at 39.

⁴⁵ Joint Motion at 41.

amount far exceeds the combined total of prior fire-related precedents and represents a significant amount even for a company of PG&E's size.⁴⁶

Del Monte and Wild Tree argue that the settlement is inconsistent with long-standing well-reasoned precedent. Del Monte and Wild Tree argue that it is difficult to adequately compare this proceeding to other enforcement actions and settlement precedent given the scope of harm and destruction that is at issue.⁴⁷ Cal Advocates also comments that the damage and destruction at issue in this case are unprecedented.⁴⁸

In reviewing the Commission precedent presented by the Settling Parties,⁴⁹ the Commission does not find any previously issued decision that presents "reasonably comparable factual circumstances." The loss of life, physical and economic harm, and destruction that are at issue in this proceeding are unprecedented and not comparable to the factual circumstances of prior enforcement proceedings. For example, the Settling Parties cite to some prior incidents that involved no reported fatalities or injuries.⁵⁰ Other prior incidents involved one or two fatalities.⁵¹ In comparison, the incidents at issue in this case for which SED found violations involves 107 fatalities.⁵²

⁴⁶ Joint Motion at 45.

⁴⁷ Del Monte/Wild Tree Comments at 25-27.

⁴⁸ Cal Advocates Reply Comments at 6.

⁴⁹ Joint Motion 41-45.

⁵⁰ Long Beach Power Outages OII Decision (D.17-09-024) and Malibu Canyon Fire OII Decisions (D.12-09-019, D.13-09-026, and D.13-09-028).

⁵¹ Huntington Beach Underground Vault OII Decision (D.17-06-028), Kern Power Plant OII Decision (D.15-07-014), and Witch/ Rice and Guejito Fire Settlements (D.10-04-047).

⁵² This is the number of fatalities reported in SED's Fire Reports. Cal Advocates contends that the fatalities may exceed this number.

Furthermore, the violations alleged in this proceeding involve 15 separate fires. There may be individual fires in this proceeding that are reasonably comparable to prior incidents. However, there are others, such as the Camp Fire, for which the factual circumstances are not reasonably comparable to any prior incident. In any event, there is no prior Commission decision that addresses factual circumstances on the scale of all 15 of these fires.

Del Monte and Wild Tree argue that the most comparable proceeding is the San Bruno OII, which was fully investigated and litigated and resulted in the Commission imposing penalties in the form of fines totaling \$300 million, penalties of \$850 million for infrastructure improvements, a \$400 million bill credit, and \$50 million in other remedies for a mix of penalties totaling \$1.6 billion.⁵³

The Settling Parties argue that there are significant differences between the record in this proceeding and the San Bruno proceedings,⁵⁴ including: (1) the fact that San Bruno involved three separate fully litigated investigations, and (2) PG&E's financial resources are far more constrained today than they were at the time of the San Bruno explosion.⁵⁵

Although San Bruno involved fully litigated investigations, such precedent may still be useful for assessing the potential range of outcomes that could result if this proceeding was fully adjudicated. However, there are factual differences between this proceeding and the San Bruno proceedings. The scope and severity of the physical and economic harm at issue in this proceeding are on a scale much greater than the physical and economic harm at issue in the San Bruno

⁵³ Del Monte/Wild Tree Comments at 27.

⁵⁴ I.11-02-016, I.11-11-009, I.12-01-007.

⁵⁵ Joint Motion at 45-46, fn. 60; PG&E/CUE Reply Comments at 15-17.

proceedings, which would weigh in favor of higher penalties. On the other hand, PG&E's financial condition is much different than during the San Bruno proceedings, which must be considered.

There is one aspect of the settlement agreement that departs from Commission precedent. The Settling Parties note that almost all of the precedent they reference include a mix of fines, shareholder funding of programs, and/or remedial action plans.⁵⁶ Notably, all of these prior Commission decisions included a fine payable to the General Fund. The proposed settlement agreement, however, does not include any fines.

8.2. Amount and Structure of Penalty

Under the terms of the proposed settlement agreement, PG&E's shareholders will bear \$1.675 billion in financial obligations, which consists of \$1.625 billion in disallowances of wildfire-related expenses and capital expenditures that PG&E incurred or will incur, as well as \$50 million in System Enhancement Initiatives. The Settling Parties contend that their proposed outcome is reasonable in light of the whole record, consistent with the law, in the public interest, and meets the criteria set forth in D.98-12-075.

The Opposing Parties argue that PG&E should be penalized, and that the penalty must be commensurate with the magnitude of the alleged violations, the harm caused by the fires, and the utility's safety record. They argue that the terms of the settlement agreement do not provide for an adequate level of penalty in light of these considerations, and therefore, are not reasonable in light of the whole record or in the public interest.

⁵⁶ Joint Motion at 45.

While all of the Opposing Parties have recommendations for strengthening the penalty, Cal Advocates is the only party that offers an estimate of the amount of potential penalties in this investigation. Cal Advocates calculates potential penalties of approximately \$943.8 million for the October 2017 wildfires and approximately \$1.5 billion for the 2018 Camp Fire.⁵⁷ PG&E and CUE respond that Cal Advocates' estimates are based on unproven alleged violations, speculative estimates as to the longevity of the alleged violations, and the statutory maximum level for setting a fine without taking into account the financial resources of the utility.⁵⁸ TURN, on the other hand, argues that Cal Advocates' calculations may actually underestimate the potential penalties, particularly with respect to the allegations related to the Camp Fire.⁵⁹

The Settling Parties agree that "the settlement should be commensurate with the scale of the 2017 and 2018 wildfires."⁶⁰ The Settling Parties represent that the settlement agreement "requires PG&E to bear an additional \$1.675 billion in financial obligations to resolve this proceeding."⁶¹ By implication, the Settling Parties believe that the settled amount of \$1.675 billion in financial obligations is commensurate.⁶² However, the Commission does not find that the effective value of the settled penalty is \$1.675 billion as represented by the Settling Parties.

⁵⁷ Cal Advocates Comments at Attachment B and Attachment E.

⁵⁸ PG&E/CUE Reply Comments at 14-15.

⁵⁹ TURN Reply Comments at 8-9.

⁶⁰ Joint Motion at 35.

⁶¹ Joint Motion at 39.

⁶² It is unknown why the Settling Parties settled on an amount of \$1.675 billion. The settlement agreement is a negotiated compromise and a "black box" settlement. The Settling Parties did not assign a specific dollar amount to each alleged violation or explain the basis for the settled amount. (PG&E/CUE Reply Comments at 15.)

Based on review of the record in this proceeding, the Commission finds that the provision for penalties set forth in the proposed settlement agreement is inadequate for the following reasons: (1) the proposed penalty is not commensurate with the magnitude of the allegations and conduct that are at issue; (2) the effective value of the financial obligations imposed on PG&E is less than the asserted amount of \$1.675 billion given that PG&E may not otherwise have received ratepayer recovery for a substantial amount of the costs identified in the settlement agreement and that PG&E can be expected to receive significant tax savings associated with the financial obligations; and (3) the proposed settlement agreement is not in the public interest or consistent with Commission precedent because it does not impose any fines on PG&E.

Although this proceeding has not been fully adjudicated and there are questions of law and fact that remain in dispute, the Commission cannot find that a settlement is reasonable or in the public interest unless it reflects the magnitude of the allegations and conduct that are at issue. In reviewing the penalty factors, the litigation risk to PG&E is very high and the only factor that may weigh against a much higher penalty is the financial resources of the utility. However, as noted above, there is insufficient information in the record regarding the extent of PG&E's ability to pay a higher penalty.

As all parties acknowledge, the wildfires of 2017 and 2018 resulted in an unprecedented level of destruction, loss of life, and damage to property. The Settling Parties represent that a penalty amount of \$1.675 billion is commensurate with the scale of the harm caused by the 2017 and 2018 wildfires. The Opposing Parties argue that the potential penalties, were the case fully litigated, may be greater than the settled amount by as much as \$750 million or more. Because the Commission finds that the proposed penalty is too low

relative to the harm and that the effective value is likely substantially less than the proposed \$1.675 billion, the Commission finds that the settlement agreement is not reasonable in light of the whole record or in the public interest.

The Commission finds that the settlement agreement should be modified to: (1) increase the financial obligations to be imposed on PG&E by an additional \$462 million of which \$198 million shall go toward future wildfire mitigation expenses that would have otherwise been recovered from ratepayers but for this decision, \$64 million shall go toward expanding the System Enhancement Initiatives, and \$200 million shall be in the form of a fine payable to the General Fund, which shall be permanently suspended; and (2) require that any tax savings (*i.e.*, financial benefits) associated with shareholder obligations for operating expenses in the settlement agreement, as modified by this decision, be returned for the benefit of ratepayers once PG&E has realized the savings. The justification for these modifications is discussed further below.

In comments filed after the issuance of the Decision Different, the Settling Parties accept these modifications to the settlement agreement.⁶³ In its appeal of the POD, PG&E did argue that a fine and additional disallowances are inappropriate because the violations against it were never proven and that SED would have faced considerable litigation risk if the violations had proceeded to hearing.⁶⁴ PG&E's argument is belied by the scope and extent of the violations set forth in SED's Fire Reports, as noted above. Also notable, as an independent matter, is PG&E's recent agreement with the Butte County District Attorney to plead guilty to 84 counts of involuntary manslaughter in connection with the

⁶³ PG&E Comments on Decision Different at 2; CUE Comments on Decision Different at 1; SED Comments on Decision Different at 2.

⁶⁴ PG&E Appeal at 29-31, 35-36.

Camp Fire.⁶⁵ PG&E wrongly attempted to minimize the seriousness of the violations it faced. For the reasons discussed above, the penalties imposed here are justified, and but for PG&E's financial condition, even higher penalties might have been warranted.

PG&E's objections in its appeal that the modifications to the settlement agreement undermine the Commission policy favoring settlement and the larger regulatory compact are also misplaced.⁶⁶ As noted above, the Commission affords considerably less deference to settlements that do not include all the parties, and here the settlement was vigorously contested by the non-settling intervenors. The Commission retains the responsibility to independently review, and if appropriate modify, settlements to ensure that they are in the public interest.

8.3. Disallowances

The Commission has explained that: "The purpose of a fine is to go beyond restitution to the victim and to effectively deter further violations by this perpetrator or others. ... Deterrence is particularly important against violations which could result in public harm, and particularly against those where severe consequences could result."⁶⁷ The Commission has the authority to impose fines pursuant to Pub. Util. Code §§ 2107 and 2108. In addition to statutory fines, the Commission has the authority to fashion other equitable remedies pursuant to Pub. Util. Code § 701 and other statutes.

⁶⁵ TURN Response to PG&E Motion Requesting Other Relief at 2-3, 16-17; Cal Advocates Response to Appeals and Request for Review at 10.

⁶⁶ PG&E Appeal at 27-29.

⁶⁷ D.98-12-075 at 35.

In past enforcement actions, the Commission has used a mix of penalties, including fines to the General Fund, disallowances, and other remedies, to penalize a utility for violations and to deter similar behavior and violations in the future.⁶⁸ Although the Commission has in the past used disallowances as a penalty in enforcement proceedings, such disallowances can only be effective as a penalty where shareholders are required to absorb costs that would otherwise be paid by ratepayers. To disallow ratepayer funding of costs that would not have been recoverable from ratepayers even in the absence of the enforcement action has little or no value as a penalty.

The proposed settlement agreement provides for \$1.625 billion in disallowances for wildfire-related costs that PG&E has incurred or will incur. These wildfire-related costs are identified as follows:⁶⁹

Description	Expense	Capital	Estimated Amount
Distribution Safety Inspections Expense (excludes repairs) (FRMMA/WMPMA) ⁷⁰	\$157,000,000		\$157,000,000
Distribution Safety Repairs Expense (FRMMA/WMPMA)	\$79,000,000		\$79,000,000
Transmission Safety Inspections Expense (excludes repairs) (recovered at FERC) ⁷¹	\$225,000,000		\$225,000,000

⁶⁸ D.15-04-024 at 1-2; *see* Joint Motion at 41-45.

⁶⁹ Settlement Agreement at 2-3, as modified by PG&E January 10, 2020 Response at 3-4.

⁷⁰ FRMMA is the Fire Risk Mitigation Memorandum Account. WMPMA is the Wildfire Mitigation Plan Memorandum Account.

⁷¹ FERC is the Federal Energy Regulatory Commission.

Description	Expense	Capital	Estimated Amount
Transmission Safety Repairs Expense (recovered at FERC)	\$209,000,000		\$209,000,000
AWRR Base Camp and Admin Expense (FHPMA) ⁷²	\$36,000,000		\$36,000,000
2017 Northern California Wildfires CEMA ⁷³ Expense and Capital (for amounts associated with fires for which SED or CAL FIRE have alleged violations) (CEMA)	\$82,000,000	\$66,000,000	\$152,000,000
2018 Camp Fire CEMA Expense (CEMA)	\$435,000,000		\$435,000,000
2018 Camp Fire CEMA Capital for Restoration (CEMA)		\$253,000,000	\$253,000,000
2018 Camp CEMA Capital for Temporary Facilities		\$84,000,000	\$84,000,000
Total	\$1,222,000,000	\$403,000,000	\$1,625,000,000

The Opposing Parties argue that it is uncertain whether these costs would have been recoverable from ratepayers. Pursuant to Pub. Util. Code § 451, the Commission must ensure that all charges demanded or received by any public utility are just and reasonable. A utility cannot recover costs from ratepayers absent Commission review of the costs for reasonableness and approval to recover in rates. There has been no finding by the Commission that the costs

⁷² FHPMA is the Fire Hazard Prevention Memorandum Account.

⁷³ CEMA is the Catastrophic Event Memorandum Account.

identified in the settlement agreement are reasonable. Even in the absence of the settlement agreement, it is possible that the Commission may have disallowed some of the costs set forth in the settlement agreement in the ordinary course of its reasonableness review of these costs pursuant to Pub. Util. Code § 451.

In particular, TURN, Del Monte, and Wild Tree argue that it is highly uncertain that the Commission would have authorized rate recovery of the CEMA costs identified in the settlement agreement. CEMA is used to record unexpected costs incurred as a result of significant events declared to be disasters by the state of California or federal authorities.⁷⁴ These costs are recoverable in rates following a request by the affected utility, a Commission finding of their reasonableness, and approval by the Commission.⁷⁵

The CEMA costs included in the settlement agreement relate to the 2017 and 2018 wildfires for which SED has alleged violations and CAL FIRE has made determinations that PG&E's electrical facilities ignited. PG&E does not dispute that its equipment played a role in igniting in these fires. TURN, Del Monte, and Wild Tree argue that PG&E is not likely to be able to demonstrate the reasonableness of CEMA costs associated with catastrophes that it was responsible for causing.⁷⁶

Due to the risk of non-recovery of the CEMA costs identified in the settlement, TURN recommends that the identified CEMA costs totaling \$924 million not count towards the \$1.625 billion in disallowances. As a substitute for those CEMA costs, TURN proposes that PG&E forego recovery of

⁷⁴ A utility may record costs for the following in CEMA: (1) safely restoring utility services to customers during declared natural disasters, (2) repairing, replacing or restoring damaged utility facilities, or (3) complying with governmental agency orders. (Pub. Util. Code, § 454.9(a).)

⁷⁵ Pub. Util. Code, § 454.9(b); *see also* Pub. Util. Code, § 451.

⁷⁶ TURN Comments at 13-14; Del Monte/Wild Tree Comments at 21-22.

\$930.9 million in other CEMA costs included in two pending PG&E CEMA applications (Application (A.) 18-03-015 and A.19-09-012), which do not involve costs associated with wildfires caused by PG&E.⁷⁷ Although TURN's proposed substitute costs are approximately \$7 million higher than the settled costs, TURN contends that the small increase is reasonable given the uncertainty as to whether the Commission would have authorized these costs for recovery and to help ensure that more of the amount identified as a penalty is indeed a penalty.⁷⁸

Upon review of the costs identified in the settlement, the Commission agrees with the Opposing Parties that argue that PG&E's ability to recover all of the CEMA costs identified in the settlement is questionable. TURN observes that PG&E has not yet sought recovery of these costs. Moreover, in the past, the Commission has disallowed ratepayer recovery for costs related to fires caused by utility equipment where the Commission found that the utility did not reasonably manage and operate its facilities prior to the fires.⁷⁹ On the other hand, as noted above, PG&E contests many of the violations related to the 2017 and 2018 fires.

Given the substantial uncertainty regarding the recoverability of the settled CEMA costs, the effective value of these disallowances as a penalty is likely much lower than the stated \$924 million. It is unclear whether the Settling Parties took into account the likelihood of recoverability of these costs.⁸⁰

⁷⁷ TURN Comments at 21-23.

⁷⁸ TURN Comments at 23.

⁷⁹ See e.g., D.17-11-033.

⁸⁰ PG&E and CUE state that the Settling Parties never suggested or made any prediction as to whether the Commission would view these costs as reasonable in a reasonableness review. (PG&E/CUE Reply Comments at 12.)

However, the Commission finds that this uncertainty must be taken into account when assessing whether the penalty is adequate.

To account for this uncertainty and to ensure the penalty is commensurate with the scale of the 2017 and 2018 fires, the Commission finds that the settled penalty amount should be increased. The Commission finds that an appropriate modification is to adopt all of the disallowances in the settlement, and also increase the penalty amount by \$462 million, which is half the value of the disputed CEMA costs included in the settlement. This modification will help to ensure that the effective value of the penalty more closely approximates the amount proposed by the Settling Parties.

Of this \$462 million, the Commission finds it reasonable to require that \$198 million shall go toward future wildfire mitigation expenses that would otherwise have been recovered from ratepayers but for this decision; \$200 million shall be in the form of a fine payable to the General Fund, which shall be permanently suspended; and \$64 million shall go toward the System Enhancement Initiatives and corrective actions identified below. The \$198 million shall be applied to wildfire mitigation expenses recorded in the FRMMA or WMPMA within 4 years of the effective date of the settlement.

The Commission recognizes that the settlement agreement is a negotiated compromise, and contrary to arguments presented by some of the Opposing Parties, does not find that the CEMA disallowances identified in the settlement have no value as a penalty. Although there are questions regarding whether the Commission would have allowed ratepayer recovery for these costs, it is not certain that the Commission would have disallowed all of these costs. The Commission also notes that forgoing what is likely to be extensive litigation

regarding the reasonableness of these costs saves resources for the Commission, PG&E's ratepayers, and other parties.

8.4. Anticipated Tax Benefits

PG&E estimates that all \$1.625 billion of the wildfire-related expenditures identified in the settlement agreement will be deductible for federal tax purposes and that it is possible but not certain that the additional \$50 million invested in System Enhancement Initiatives will also be deductible for federal tax purposes.⁸¹ PG&E estimates that the full \$1.675 billion in financial obligations will be tax deductible for California state tax purposes.⁸² Assuming that the full \$1.675 billion is tax deductible, and depending on many other variables such as PG&E's taxable income, net operating loss position, future changes in the tax laws, and the timing of expenditures, PG&E estimates that its anticipated tax savings are as follows:⁸³

Tax Category	Statutory Tax Rate	Total Amount Deductible & Depreciable	Anticipated Tax Savings
Federal	21 percent	\$1,675,000,000	\$351,750,000
State	8.84 percent	\$1,675,000,000	\$148,070,000
State Impact on Federal Tax	21 percent	(\$148,070,000)	(\$31,094,700)
Total	n/a	n/a	\$468,725,300

TURN, Del Monte, and Wild Tree argue that any tax benefits that result from the structure of the penalty would reduce the net impact and deterrent

⁸¹ PG&E Jan. 10, 2020 Response at 10.

⁸² PG&E Jan. 10, 2020 Response at 10-11.

⁸³ PG&E Jan. 10, 2020 Response at 14.

value of the adopted penalty.⁸⁴ TURN recommends that the settlement agreement be modified to include language that would require any tax benefit to be used to support the business in a manner that directly benefits ratepayers, such as through investment in operations that would otherwise be funded through rate revenues, or where appropriate, support for the utility's credit ratings.⁸⁵

Generally, the federal tax treatment of fines, penalties, and other amounts associated with government enforcement action is governed by Section 162(f) of the Internal Revenue Code of 1986, as amended by the Tax Cuts and Jobs Act of 2017 (TCJA). Under 26 U.S.C. § 162(f), a federal income tax deduction is not allowed "for any amount paid or incurred (whether by suit, agreement, or otherwise) to, or at the direction of, a government or governmental entity in relation to the violation of any law or the investigation or inquiry by such government or entity into the potential violation of any law." 26 U.S.C. § 162(f)(2)(A)(i) provides for two exceptions where deductions for such amounts are not disallowed: (1) amounts paid as restitution, and (2) amounts paid to come into compliance with "any law which was violated or otherwise involved in the investigation or inquiry." For either of the exceptions to apply, the amounts must be "identified as restitution or as an amount paid to come into compliance with such law, as the case may be, in the court order or settlement agreement."⁸⁶

The Settling Parties characterize the \$1.625 billion in wildfire-related expenditures as costs that PG&E has incurred or will incur to comply with its

⁸⁴ TURN Comments at 25; Del Monte/Wild Tree Comments at 20-21.

⁸⁵ TURN Comments at 25.

⁸⁶ 26 U.S.C. § 162(f)(2)(A)(ii).

legal obligations to provide safe and reliable service.⁸⁷ The Settling Parties also state that the \$1.625 billion in financial obligations are costs that “were, or will be, incurred by PG&E, not at the direction of SED or the Commission in the OII.”⁸⁸ Based on these characterizations, Section 162 does not bar PG&E from deducting these costs from its federal taxes.⁸⁹ In fact, PG&E states that it has already reported some of the incurred costs as current deductions or capital asset depreciation deductions in its tax return and financial statements and expects to report future costs in the same manner when they are incurred.⁹⁰

There is less certainty regarding whether the shareholder funded System Enhancement Initiatives would fall under one of the exceptions under Section 162, and therefore, be deductible under federal law.⁹¹

California continues to follow the pre-TCJA Section 162(f), which prohibited deductions “for any fine or similar penalty paid to a government for the violation of any law.”⁹² Therefore, under California law, both the disallowances and costs of the System Enhancement Initiatives would likely be deductible.

In comparison, a fine payable to the General Fund is not deductible under Section 162 or California law since it is a payment to a government for a violation of law or investigation or inquiry into a potential violation of law.

⁸⁷ Joint Motion at 13.

⁸⁸ Joint Motion at 13.

⁸⁹ The additional disallowances adopted by this decision appear to be deductible for the same reasons.

⁹⁰ PG&E Jan. 10, 2020 Response at 13.

⁹¹ PG&E Jan. 10, 2020 Response at 11-12.

⁹² PG&E Jan. 10, 2020 Response at 12 citing 26 U.S.C. § 162(f) (Effective: December 19, 2014 to December 21, 2017).

The POD modified the settlement agreement to require that ratepayers, rather than shareholders, receive the benefit of any tax savings associated with the financial obligations to be imposed on PG&E in this proceeding (“tax benefit provision”). PG&E and CUE object to the tax benefit provision and argue that the Commission should eliminate the provision because it is contrary to Commission precedent, invites PG&E to violate Internal Revenue Service (IRS) normalization rules, and because it is unclear whether the POD considered the impact of a potential \$518 million increase in penalties that may result.⁹³

The argument that the tax benefit provision is contrary to Commission precedent is not persuasive. PG&E argues that the Commission’s general rule is “that when deductions were not part of utility cost of service, but were generated with shareholder funds, the deductions are the property of shareholders and not ratepayers. This include[s] deductions derived from disallowed costs incurred in excess of those included in rates.”⁹⁴ Although this general rule may apply in rate cases such as those cited by PG&E, it does not necessarily apply to penalties. Penalties are intended to punish and deter unlawful conduct. Therefore, the Commission may find that it is not appropriate for disallowances or expenditures intended as penalties to be treated as they would ordinarily be treated for ratemaking purposes.⁹⁵

There is some merit to the assertion that the tax benefit provision may implicate IRS normalization rules, at least with respect to the capital expenditures for which PG&E has taken accelerated depreciation. Pursuant to IRS normalization rules, a utility receives accelerated tax benefits in the early

⁹³ PG&E Appeal at 3 and 44-46; CUE Appeal at 5-6.

⁹⁴ PG&E Appeal at 44 quoting D.14-08-032 at 584.

⁹⁵ *See, e.g.*, D.16-12-010 at 30-31.

years of an asset's regulatory life, "but passes that benefit through to ratepayers ratably over the regulatory useful life of the asset in the form of reduced rates."⁹⁶ The POD directed PG&E to return the tax benefits to ratepayers "once PG&E has realized the savings."⁹⁷ The POD also directed that "[t]he tax savings shall be applied in accordance with any applicable Internal Revenue Service normalization rules."⁹⁸ However, PG&E argues that the normalization rules necessarily conflict with the tax benefit provision and that it is unclear how PG&E is to resolve this conflict.⁹⁹

As set forth in Commissioner Rechtschaffen's request for review, applying the tax benefit provision only to the tax savings associated with operating expenses and not to any tax savings associated with capital expenditures would eliminate any potential legal conflict with IRS normalization rules.¹⁰⁰ Although acknowledging that the modified tax benefit provision would eliminate any potential violation of IRS normalization rules, PG&E and CUE initially objected to the modified tax benefit provision arguing that it would still add an additional \$425.5 million to the dollar value of the settlement and jeopardize PG&E's timely emergence from Chapter 11 bankruptcy proceedings.¹⁰¹ However, the Commission rejects this argument because the dollar value of the tax benefits is speculative, and PG&E has not met its burden of demonstrating that returning

⁹⁶ PG&E Appeal at 45.

⁹⁷ POD at 72, Ordering Paragraph 1.b.

⁹⁸ POD at 44, n. 94.

⁹⁹ PG&E Appeal at 46.

¹⁰⁰ Commissioner Rechtschaffen's Request for Review at 4-5.

¹⁰¹ PG&E Response to Request for Review at 11; CUE Response to Request for Review at 2. PG&E and CUE subsequently accepted the modified tax benefit provision in their respective comments on the Decision Different. (PG&E Comments on Decision Different at 2; CUE Comments on Decision Different at 1.)

the tax benefits to ratepayers (when they are realized) would jeopardize PG&E's timely emergence from bankruptcy.

The financial obligations adopted in this decision are intended as penalties for the purpose of punishment and deterrence, and therefore, it is not appropriate for these expenditures to be treated as they would be treated during the course of ordinary business. In order for the financial obligations adopted in this decision to have the appropriate punitive and deterrent impact, the Commission finds that ratepayers, rather than shareholders, should receive the benefit of any tax savings associated with these financial obligations. The Commission notes that if a fine were adopted for the same amount as the disallowances, the value of the penalty would be certain¹⁰² and there would be no associated tax savings. To avoid any violation of IRS normalization rules, only the tax savings associated with operating expenses and not capital expenditures shall be returned to ratepayers.

PG&E argues that the Settling Parties took into account the deductibility of these expenditures in assessing PG&E's overall financial condition for purposes of reaching an agreement as to the financial obligations that should be imposed on PG&E.¹⁰³ However, the Settling Parties have not provided any information regarding how the deductibility of these expenditures impacts PG&E's overall financial condition or its ability to exit from bankruptcy now. The return of tax benefits to ratepayers will not occur until those tax benefits are realized by the company, which may occur many years in the future. There is no mention in the Joint Motion or the settlement agreement regarding these anticipated tax savings.

¹⁰² As discussed above, the effective value of the settled disallowances as a penalty is uncertain because it is uncertain whether PG&E would have otherwise been able to recover these costs from ratepayers.

¹⁰³ PG&E. Jan. 10, 2020 Response at 14-15.

Moreover, it is unclear that any tax savings were factored into assessing PG&E's overall financial condition given PG&E's arguments that the calculation of these tax benefits is uncertain.¹⁰⁴

Therefore, as PG&E realizes any tax savings associated with the shareholder obligations for operating expenses set forth in the settlement agreement, as modified by this decision, PG&E is directed to report these tax savings, with accompanying supporting testimony and underlying calculations, in its next General Rate Case (GRC) filing immediately following the realization of the savings. The amount of the tax savings shall be applied to wildfire mitigation expenses recorded in the WMPMA or FRMMA that would otherwise have been recovered from ratepayers but for this decision.¹⁰⁵ This will ensure that ratepayers, not PG&E shareholders, benefit from the tax savings associated with treating the penalty as an ordinary business expense.

8.5. Imposition of Fine

Although the proposed settlement agreement imposes \$1.675 billion in financial obligations on PG&E, it does not require PG&E to pay any fine to the General Fund. The Settling Parties contend that PG&E's bankruptcy affects its ability to pay a cash fine.¹⁰⁶

¹⁰⁴ See PG&E Jan. 10, 2020 Response at 12-13.

¹⁰⁵ In the event that all of the reported tax savings cannot be applied to FRMMA or WMPMA expenses in the GRC in which PG&E reports the tax savings, the reported savings or portion thereof shall be applied to the subsequent GRC or stand-alone application in which PG&E seeks recovery of FRMMA or WMPMA expenses. In the event that neither the FRMMA or WMPMA are open at the time the tax savings are to be applied, the Commission will designate substitute recorded wildfire mitigation or resiliency-related expenses that would otherwise have been recovered from ratepayers to which these savings should be applied.

¹⁰⁶ Joint Motion at 38.

Del Monte and Wild Tree argue that a fine of \$0 is not in the public interest or in compliance with the law.¹⁰⁷ Del Monte and Wild Tree argue that the Settling Parties have put forth no evidence on PG&E's ability to pay a fine and have not shown that PG&E is unable to pay a fine.¹⁰⁸

Upon review of the facts of this case, the Commission finds that it is neither consistent with Commission precedent nor in the public interest for this investigation to conclude without the assessment of a fine. There is no question that PG&E's electric facilities played a role in the 2017 and 2018 fires. PG&E faces a total of 45 alleged violations concerning these fires and does not contest 14 of these violations.¹⁰⁹ Given the severity of the allegations, the assessment of no fine is not within a reasonable range of potentially litigated outcomes.

Of the settled penalty amount of \$1.675 billion, \$1.625 billion are in the form of disallowances. However, as discussed above, disallowances are not the same as a fine. Fines convey the strongest societal opprobrium for wrongdoing and are thus the most potent tool for purposes of penalizing and deterring unlawful conduct.

Notably, all of the prior Commission decisions cited as precedent by the Settling Parties included a fine payable to the General Fund.¹¹⁰ In D.15-04-024, the Commission imposed a mix of fines, penalties, and other remedies in connection with the San Bruno proceedings. On its decision to impose a fine, the Commission explained: "we recognize both the statutory tool for penalties (*i.e.*, fines to the state General Fund) and the Commission's long-standing policy

¹⁰⁷ Del Monte/Wild Tree Comments at 23.

¹⁰⁸ Del Monte/Wild Tree Comments at 23.

¹⁰⁹ Settlement Agreement, Exhibit B.

¹¹⁰ Joint Motion at 45.

and practice of imposing fines on [utilities] as a means of penalizing and deterring, and therefore require PG&E to pay \$300 million of the total penalties and remedies in the form of a fine to the state General Fund.”¹¹¹

The Commission has explained that “[s]ome California utilities are among the largest corporations in the United States and others are extremely modest, one-person operations. What is accounting rounding error to one company is annual revenue to another. The Commission intends to adjust fine levels to achieve the objective of deterrence, without becoming excessive, based on each utility’s financial resources.”¹¹² As noted by Cal Advocates, PG&E is one of the largest combined natural gas and electric energy companies in the United States.¹¹³ PG&E’s last authorized total revenue requirement for 2019 was \$18.184 billion.¹¹⁴

With the modifications adopted by this decision, the total penalties to be imposed on PG&E is \$2.137 billion.¹¹⁵ In recognition of the number and severity of the allegations that are at issue in this investigation, the lives lost and homes destroyed, PG&E’s size, and the Commission’s long-standing policy and practice of imposing fines on utilities as a means of penalizing and deterring future misconduct, the Commission finds that, of the \$2.137 billion in penalties, it is reasonable to impose a fine of \$200 million.

The POD would have imposed a requirement that the fine be paid from funds that would not otherwise be available to satisfy the claims of wildfire

¹¹¹ D.15-04-024 at 3.

¹¹² D.98-12-075 at 38-39.

¹¹³ Cal Advocates Reply Comments at 5-6.

¹¹⁴ Application 18-12-009, filed December 13, 2018 at 7, Table 4.

¹¹⁵ This amount excludes PG&E’s anticipated tax savings associated with these financial obligations that will be credited to ratepayers, rather than shareholders.

victims.¹¹⁶ PG&E objects to this requirement arguing that such a requirement would jeopardize confirmation of its Plan of Reorganization (PoR) in its pending bankruptcy case. In the event that the Commission imposes any fine, PG&E requests that the Commission order that the fine is a Fire Victim Claim under PG&E's PoR, will be paid out of the Fire Victims Trust, and will be subordinated to the Trust's payments to fire victims.¹¹⁷

The Commission does not find it appropriate for this fine to be included in the Fire Victims Trust because the fine is dissimilar in nature to the claims of the wildfire victims and should not compete with such claims. Commissioner Rechtschaffen's request for review proposed that the Commission impose the \$200 million fine without any restriction as to the source of funds but permanently suspend the fine due to: "the unique situation of PG&E's bankruptcy, its indebtedness to hundreds of wildfire claimants for loss of life and property, and the current upheaval in the financial markets."¹¹⁸ The Settling Parties have indicated that they do not oppose this modification to the POD.¹¹⁹

Despite its size, PG&E's ability to raise capital as part of its PoR is not unlimited. The record reflects that PG&E already has wildfire-related liabilities totaling \$25.5 billion.¹²⁰ Moreover, the company is required to resolve its bankruptcy proceeding at a time when there is a great deal of uncertainty with respect to the financial markets. Although the Commission finds that a fine should be imposed for the reasons discussed above, the Commission finds that

¹¹⁶ POD at 72, Ordering Paragraph 1.a.

¹¹⁷ PG&E Motion Requesting Other Relief at 47; PG&E Appeal at 52.

¹¹⁸ Commissioner Rechtschaffen's Request for Review at 2-3.

¹¹⁹ PG&E Response to Request for Review at 3; SED Response to Request for Review at 2; CUE Response to Request for Review at 2.

¹²⁰ Joint Motion at 38-39.

permanent suspension of the fine is warranted in light of these unique and unprecedented circumstances and to ensure that payment of the fine does not reduce the funds available to satisfy the claims of wildfire victims.

8.6. System Enhancement Initiatives

8.6.1 Funding of Initiatives

The settlement agreement sets forth estimates of duration and funding requirements for 20 different System Enhancement Initiatives.¹²¹ The Settling Parties agree that the duration and funding level for each of the System Enhancement Initiatives may be modified upon agreement by PG&E and SED, as long as the shareholder provided settlement funds for the initiatives total \$50 million. The Settling Parties also agree that if PG&E becomes aware that it will not fully expend the shareholder settlement funds estimated for an initiative, it shall inform SED, and PG&E and SED shall make a good faith effort to reach agreement on the method of expending any remaining funds.

TURN argues that the settlement agreement should be modified to reflect that PG&E is required to finish the System Enhancement Initiatives using shareholder funding and will not seek ratepayer recovery for the costs of the initiatives.¹²²

PG&E objects to TURN's proposed modification, arguing that the Settling Parties have made a good faith estimate that the initiatives will require \$50 million in shareholder funds to complete and do not anticipate exceeding that amount.¹²³

¹²¹ Settlement Agreement, Section III.B.

¹²² TURN Comments at 24.

¹²³ PG&E/CUE Reply Comments at 18.

The Commission has not authorized ratepayer funding for the System Enhancement Initiatives. If the costs of implementing the specified initiatives exceed the level of shareholder funding ordered in this decision, PG&E is not barred from seeking ratepayer recovery of these costs. However, any request for ratepayer funding must be found to be reasonable and appropriate in a general rate case or other application.

It is also possible that PG&E may not expend all of the budgeted shareholder funds. The longest estimated duration for any of the System Enhancement Initiatives is within five years of the effective date of the settlement agreement. With the exception of shareholder funds to be spent on the root cause analyses and corrective actions, discussed further below, if PG&E has not spent the budgeted shareholder funds on the specified initiatives within five years of the effective date of the settlement agreement, the remaining balance shall be paid to the General Fund.

8.6.2 Root Cause Analyses

The settlement agreement provides that PG&E shareholders will pay for an independent root cause analysis (RCA) company to conduct an RCA for each of the wildfires included in this OII that were reportable incidents to the Commission and for which CAL FIRE determined that the ignition involved PG&E facilities.¹²⁴ The RCAs for the applicable 2017 wildfires will be initiated within three months of the bankruptcy court's approval of the settlement agreement and will be completed no later than one year after the date of commencement. The RCA for the Camp Fire will commence after the Butte County District Attorney finishes its investigation and CAL FIRE makes

¹²⁴ Settlement Agreement, Exhibit C, Section B.7.

evidence from the Camp Fire available. The total budget set forth in the settlement agreement for the RCAs is \$3 million over a one-year period.

The settlement agreement states: “The purpose of the RCA will be to analyze the factors that contributed to the ignition of the fires and make recommendations as appropriate so that the learnings can be implemented on a go-forward basis to mitigate the risk of similarly caused fires in the future. Analyzing all of these fires will maximize lessons learned not only for PG&E, but also for the Commission.”¹²⁵ The settlement agreement clarifies that “the RCA will consider all potential root causes, and will not be restricted to violations of GO 95.”¹²⁶ The settlement agreement further states that the RCA may “identify systemic, programmatic, management, and structural matters that may need to be addressed to reduce such incidents in the future.”¹²⁷

The proposed settlement agreement provides that the RCA final report(s) will be provided to the Director of SED and served on the service list for Investigation (I.) 19-06-015. Within 30 days after each RCA final report is completed, PG&E will submit a response to the Director of SED and the service list for I.19-06-015 addressing whether and how it will work to incorporate lessons based on the RCA report and its recommendations into its operations or provide an explanation as to why it is declining to incorporate any lessons. PG&E also agrees to make a good faith effort to initiate incorporation of the lessons learned within 12 months after the RCA final report is delivered to PG&E.

¹²⁵ Settlement Agreement, Exhibit C, Section B.

¹²⁶ Settlement Agreement, Exhibit C, Section B.7.

¹²⁷ Settlement Agreement, Exhibit C Section B.7.

Cal Advocates and TURN recommend that the proceeding remain open to evaluate the results of the RCAs of the fires that will be undertaken pursuant to the settlement agreement, among other issues.¹²⁸ TURN also argues that the process for review of the RCAs set forth in the settlement agreement is insufficient because it leaves full discretion for the implementation of mitigation actions with PG&E.¹²⁹

The Commission agrees that the RCAs are a worthy initiative that will potentially yield valuable information and lessons that can aid in efforts to reduce the risk of future catastrophic wildfires. However, the Commission finds that modifications to this initiative are warranted to ensure that the RCAs are scoped with sufficient depth and breadth, and to dedicate resources to implementing corrective actions that may be identified from the RCAs.

First, the Commission finds that a budget of \$3 million for all 17 RCAs may be inadequate to conduct RCAs of sufficient depth and breadth and finds that the total budget to be funded by shareholders should be increased by \$14 million for a total budget of \$17 million. This amount accommodates a budget of up to \$1 million per RCA, and funds can be shifted between the analyses depending on the complexity of each. If the RCAs are conducted for less than \$17 million, any remaining funds shall be used to implement corrective actions.

Second, PG&E shall spend \$50 million of shareholder funds, plus any amount remaining from the budget for conducting the RCAs, to implement

¹²⁸ Cal Advocates Comments at 22; TURN Comments at 26-27.

¹²⁹ TURN Comments at 27.

corrective actions stemming from the RCAs that would otherwise have been funded by ratepayers but for this decision, as described further below.

Third, the settlement agreement provides that SED and OSA will select the consultant for the RCAs and that the consultant shall confer with and work under the direction of SED and OSA.¹³⁰ However, the OSA is no longer an office within the Commission effective January 1, 2020 due to the sunset of Pub. Util. Code § 309.8, which established the OSA. The Commission has established a new division, the Safety Policy Division (SPD), which will carry on many of the activities of OSA in an advisory capacity within the Commission. While SPD will not become a formal party to proceedings, it has a safety policy and advisory role within the Commission and is well positioned to work with SED to manage the consultant selected to perform the RCAs. Therefore, OSA's role with respect to the RCAs shall be replaced by SPD.

Fourth, the Commission addresses the intended scope of the RCAs in order to set expectations. The settlement agreement states that the RCAs will analyze the events and may identify "systemic, programmatic, management, and structural matters that may need to be addressed to reduce such incidents in the future."¹³¹ It is the Commission's expectation that the analyses will not be limited to technical causes of the fires and will be scoped with sufficient depth and breadth to ensure that any physical, procedural, operational, management, and organizational elements that may have contributed to the fires' ignition come to the surface. The Commission also expects the RCAs to be conducted in a

¹³⁰ Settlement Agreement, Exhibit C, Section B.7.

¹³¹ Settlement Agreement, Exhibit C, Section B.7.

manner that will enable the Commission, PG&E, and stakeholders to understand similarities, differences, and trends across the different events.

Fifth, the Commission finds that there must be a more robust process after the completion of the RCAs in order to ensure that appropriate corrective actions are identified and undertaken. The settlement agreement provides that upon completion of the RCA reports (which may be staggered because of the evidence related to the Camp Fire), the reports will be served on the service list as well as on the Director of SED. PG&E will then submit a response within 30 days after each RCA report is completed. The Commission directs PG&E to also serve the RCA reports and PG&E's responses on the Director of SPD and the Director of the Wildfire Safety Division (WSD), which is now responsible for reviewing utilities' annual wildfire mitigation plans required pursuant to Senate Bill (SB) 901 (Stats. 2018).

Within 60 days after PG&E has served its last response addressing the RCA report(s) for the 2017 wildfires, or as soon as practicable, SED and SPD will hold a workshop regarding the 2017 wildfire RCAs, with notification to the service list of I.19-06-015. Within 60 days after PG&E has served its response addressing the RCA report for the Camp Fire, or as soon as practicable, SED and SPD will hold a workshop regarding the Camp Fire RCA, which may also address the RCAs for the 2017 wildfires, with notification to the service list of I.19-06-015.

Following each workshop, SED and SPD will make recommendations to the Commission concerning: (1) any recommended corrective actions based on the RCAs, and (2) a vehicle, such as a proceeding, working group, or series of reports and workshops (or any combination thereof), that can serve as a means for the Commission, PG&E, and stakeholders to further consider the corrective

actions that may be needed and to monitor the implementation of any corrective actions. The budget for the corrective actions shall be \$50 million of PG&E shareholder funds, in addition to any funds remaining from the budget for conducting the RCAs.

8.6.3 Format and Availability of Reports and Data

Under the proposed settlement agreement, PG&E will submit quarterly reports on electric maintenance work to SED and provide data on “near hit” potential fire incidents on a quarterly basis to SED and other Settling Parties that request in writing to receive the data.¹³²

CCSF recommends that the settlement agreement be modified to make the quarterly electric maintenance reports and “near hit” data available to local governments and the general public. CCSF also states that the location information for both the quarterly electric maintenance reports and “near hits” should be presented in a manner that is understandable by local government officials and the general public.

PG&E and CUE respond that the Settling Parties are opposed to amending the settlement to include CCSF’s recommendations due to the need for expedited review and approval of the settlement. However, PG&E states that it is willing to meet with CCSF and further discuss enhanced information sharing.¹³³

To the extent possible, the Commission intends for this information to be made available to local governments and the public in order to promote greater transparency on important issues of public safety. However, there is a lack of specificity in the settlement agreement regarding the format and content of these

¹³² Settlement Agreement, Exhibit C, Sections B.16 and B.19.

¹³³ PG&E/CUE Reply Comments at 21.

reports, and therefore, it is unclear how and to what extent this information should be made more widely available.

The Commission directs PG&E to consult with SED and SPD within 30 days of the effective date of the settlement agreement regarding the appropriate format, content, and treatment (including availability to local governments and the public) of the quarterly electric maintenance reports and “near hit” data. Upon request of SED or SPD, PG&E shall also consult with the Divisions regarding the appropriate format, content, and treatment of other reporting and data sharing requirements set forth in the settlement agreement. As part of consulting with SED and SPD, PG&E shall provide those Divisions with proposed report and data sharing templates for their comment and consideration. PG&E shall file a Tier 1 advice letter with SED within 60 days of the effective date of the settlement agreement to memorialize the format, content, and treatment of the reports and data set forth in the settlement agreement.

8.6.4 Timing of Wildfire Safety Audit

Under the proposed settlement agreement, PG&E shall retain Safety Evaluator(s) who will perform independent audits and reviews of PG&E policies, procedures, practices, compliance with shareholder-funded System Enhancement Initiatives, and financial data related to PG&E’s Wildfire Safety Plans.¹³⁴

Cal Advocates recommends that the Safety Evaluator’s audit of PG&E’s overhead distribution and transmission maintenance program be revised so that the audit starts within one month of the settlement agreement’s effective date rather than within one year as currently drafted.¹³⁵ Cal Advocates argues that

¹³⁴ Settlement Agreement, Exhibit C, Section B.14.

¹³⁵ Cal Advocates Comments at 4.

there is no reason to delay the audit for a year given the serious violations SED alleges related to the Camp Fire.

PG&E disagrees that the audit should start within one month of the effective date of the settlement but initially did not provide any reason why the audit could not commence sooner.¹³⁶ PG&E subsequently explains that “[t]he Settlement’s provision providing that this particular audit shall begin within one year of the effective date of the Settlement is reasonable in light of the threshold steps that must take place (with extensive input from SED) prior to commencement of the first audit.”¹³⁷ PG&E further explains that a single Safety Evaluator may be retained to conduct multiple aspects of the Independent Wildfire Safety Audits and that changing the timeframe for one of the audits may impact other audits or increase costs by requiring one of the audits to be on an accelerated timeline.¹³⁸

Based on the explanation provided by PG&E, the Commission finds it reasonable for the Safety Evaluator’s audit of PG&E’s overhead distribution and transmission maintenance program to start within one year of the effective date of the settlement as proposed in the settlement.

8.7. Tubbs Fire

Del Monte and Wild Tree argue that the proposed settlement is not reasonable in light of the whole record because it does not include any violations related to the Tubbs Fire. Del Monte and Wild Tree contend that the cause of the Tubbs Fire and related violations of law are in dispute in this proceeding.¹³⁹ Del

¹³⁶ PG&E/CUE Reply Comments at 18, fn. 69.

¹³⁷ PG&E Motion Requesting Other Relief at 46.

¹³⁸ PG&E Motion Requesting Other Relief at 46-47.

¹³⁹ Del Monte/Wild Tree Comments at 34-56.

Monte and Wild Tree request that any reference to the Tubbs Fire be removed from the settlement agreement because they contend that the facts and violations associated with the Tubbs Fire were excluded from discovery and not adequately considered in this investigation.¹⁴⁰

Cal Advocates argues that the proposed settlement improperly constrains consideration of any new information concerning the Tubbs Fire. Cal Advocates recommends that the proposed settlement be revised to allow SED to consider violations or enforcement proceedings regarding the Tubbs Fire in the event that CAL FIRE or another state, federal, or local entity determines that PG&E's infrastructure was the cause of the Tubbs Fire.¹⁴¹

TURN agrees with Del Monte, Wild Tree, and Cal Advocates that treatment of the Tubbs Fire by the settlement agreement is inappropriate and recommends that the Commission modify the settlement agreement to remove the Tubbs Fire from its scope.¹⁴²

On November 8, 2019, Del Monte served a copy of the Prepared Direct Testimony of Kenneth E. Buske on behalf of Party Thomas Del Monte (Buske Testimony"), which primarily addressed the origin and cause of the Tubbs Fire. On November 20, 2019, PG&E filed a motion to strike the Buske Testimony to which Del Monte filed a response on December 11, 2019. As discussed below, this testimony has not been admitted into the evidentiary record of this proceeding.

¹⁴⁰ Del Monte/Wild Tree Comments at 57-58. On December 12, 2019, the assigned ALJ issued a ruling granting in part, and denying in part, a motion to compel discovery filed by Del Monte on November 15, 2019. The ruling denied Del Monte's request to compel certain discovery because Del Monte failed to adequately justify his request. Del Monte sought to compel responses to discovery requests that were contingent upon several other data requests but failed to explain why the information requested in the underlying data requests was relevant to matters that are within the scope of this proceeding, and admissible in evidence or reasonably calculated to lead to the discovery of admissible evidence. (December 12, 2019 ALJ Ruling at 3-4.)

¹⁴¹ Cal Advocates Comments at 25.

¹⁴² TURN Reply Comments at 4.

In wildfire-related investigations, SED relies on CAL FIRE as the agency qualified to determine the source of the ignition.¹⁴³ As SED explains, it does not make a determination as to the ignition source of the fire, rather it conducts an investigation and reviews relevant evidence to determine whether there were violations of law. SED conducted its own investigation and reviewed the evidence provided by CAL FIRE and found no violations with respect to the Tubbs Fire.¹⁴⁴ No alleged violations with respect to the Tubbs Fire were identified in the OII or in the scoping memos issued in this proceeding.¹⁴⁵ Therefore, the settlement's exclusion of any violations with respect to the Tubbs Fire does not render it unreasonable.

The proposed settlement agreement states that the Settling Parties "agree to settle, resolve, and dispose of all claims, allegations, liabilities and defenses," including those related to the Tubbs Fire.¹⁴⁶ Under Section IV.D. of the settlement agreement, SED agrees to "release and refrain from instituting, directing, or maintaining any violations or enforcement proceedings against PG&E related to the 2017 Northern California Wildfires and 2018 Camp Fire" based on information that was "known, or that could have been known" to SED at the time SED executed the settlement agreement or substantially similar to the facts alleged in the SED Fire Reports.

¹⁴³ SED Reply Comments at 3. This Commission does not enforce the forest and fire laws set forth in the Public Resources Code. Rather, it is CAL FIRE that enforces these laws. (See Pub. Res. Code, §§ 713, 714, 4119, and 4137.)

¹⁴⁴ SED Reply Comments at 3.

¹⁴⁵ Pursuant to Pub. Util. Code § 1701.1 and Rule 7.3 of the Commission's Rules of Practice and Procedure, the assigned Commissioner is required to issue a scoping memo that sets forth the issues that are to be addressed in a proceeding.

¹⁴⁶ Settlement Agreement at 1.

The Commission rejects the Opposing Parties' assertions that the settlement agreement improperly constrains consideration of any new information concerning the Tubbs Fire. The Settling Parties have confirmed that the settlement agreement preserves SED's authority to investigate and enforce Commission requirements in the event that new evidence, of which SED was not and could not have been aware, were to come to light.¹⁴⁷ Therefore, the Commission does not find it necessary to remove the Tubbs Fire from the settlement agreement.

8.8. Future Review of Costs Associated with 2017 and 2018 Wildfires

Cal Advocates argues that the proposed settlement agreement inappropriately allows PG&E to seek recovery of costs related to fires that were caused by PG&E's failure to operate its electric facilities according to the law. Therefore, Cal Advocates recommends that the settlement agreement be revised to bar PG&E from seeking recovery of costs associated with fires for which SED found violations.¹⁴⁸

PG&E and CUE argue that adoption of Cal Advocates' recommendation would violate PG&E's due process rights and the Public Utilities Code because it would deny PG&E a reasonableness review of these costs, which is required pursuant to Pub. Util. Code § 454.9.¹⁴⁹

With the exception of costs included in the settlement agreement, as modified by this decision, the Commission does not find it reasonable to bar PG&E from seeking future recovery of costs associated with fires for which SED

¹⁴⁷ SED Reply Comments at 3-4; PG&E/CUE Reply Comments at 21.

¹⁴⁸ Cal Advocates Comments at 17.

¹⁴⁹ PG&E/CUE Reply Comments at 11.

found violations in this proceeding. SED's allegations have not been fully adjudicated and the Commission has not made findings that there were violations. Even if the Commission had found violations, such findings would not automatically result in a disallowance of related costs unless stated as such. Instead, those costs would be subject to a reasonableness review. The costs for which Cal Advocates seeks to bar recovery have not been identified and have not been subject to a reasonableness review. In addition, the Commission finds the level of penalties adopted in this decision (with the modifications to the settlement discussed above) to be reasonable in light of the record of this proceeding and does not find that additional disallowances should be imposed as a penalty.

When and if PG&E seeks recovery of costs associated with fires for which SED found violations, the Commission will conduct the reasonableness review required pursuant to Pub. Util. Code §§ 451, 454.9, and any other applicable law. Section IV.C of the settlement agreement states that: "the non-PG&E Settling Parties shall not assert that any violations or conduct underlying the violations alleged or identified by SED in this proceeding are the basis for future disallowances, violations, or penalties...." TURN seeks clarification regarding how this provision impacts the Commission's potential review of these costs.¹⁵⁰ To be clear, this provision of the settlement agreement cannot and does not bar the Commission from undertaking the necessary reasonableness review required by law for any costs for which PG&E seeks ratepayer recovery in the future.

The Settling Parties also cannot agree to provisions that would impose restrictions on non-settling parties. By its own terms, Section IV.C of the

¹⁵⁰ TURN Comments at 22-23 quoting Settlement Agreement § IV.C. at 6.

settlement agreement applies to “non-PG&E Settling Parties,” and therefore, does not impose any restrictions on the assertions that can be made by non-settling parties. However, Section B.7 of Exhibit C of the settlement agreement provides that “non-PG&E parties to this proceeding shall not use the results of the RCA to assert that the Commission should impose any additional financial penalties upon PG&E nor to argue for any additional disallowance.” The Commission finds that this statement should be modified to substitute “non-PG&E Settling Parties” for “non-PG&E parties.”

8.9. Further Consideration of Systemic Issues

Cal Advocates and TURN both argue that the schedule for the proceeding has prevented the Commission from undertaking a thorough investigation of the 2017 and 2018 wildfires, which is necessary to ensure that the underlying causes are well understood in order to reduce the risk of future catastrophic wildfires.¹⁵¹ Therefore, Cal Advocates and TURN recommend that the proceeding remain open to evaluate the results of the RCAs of the fires that will be undertaken pursuant to the settlement agreement, and to review the systemic issues that may have contributed to the fires such as vegetation management issues, transmission inspection issues, and recordkeeping issues.¹⁵² Cal Advocates states that the purpose of this new phase would not be to levy additional fines but to evaluate the systemic issues that contributed to the fires and PG&E’s progress in resolving those issues.¹⁵³

Both SED and PG&E oppose leaving this proceeding open for a second phase. PG&E argues that the settlement agreement includes sufficient processes

¹⁵¹ Cal Advocates Comments at 18-19; TURN Comments at 25-27.

¹⁵² Cal Advocates Comments at 20-24.

¹⁵³ Cal Advocates Comments at 18.

to address longer-term topics following the closure of this proceeding and that the Commission oversees the safe operation of public utility facilities through many other avenues. SED points out that to the extent the root cause analyses result in identification of broader wildfire risk mitigation policies, these issues would be more appropriately considered in a rulemaking applicable to electric utilities statewide. SED also argues that the benefits of leaving the OII open for a second phase must be weighed against the costs in resources to all parties concerned.

Given the continued wildfire risks facing the state, the Commission recognizes the importance of understanding the causes and circumstances of these fires and incorporating any learnings into utility operations and wildfire policies so as to mitigate the risk of similarly caused fires in the future. However, there are already a number of different venues and proceedings in which the Commission is reviewing wildfire risk mitigation policies. Furthermore, as discussed above, this decision establishes a more robust process for review and consideration of the results of the RCAs. Therefore, the Commission does not find it necessary for this investigation to remain open for a second phase. The Commission emphasizes that the closure of this investigation does not mean that the Commission will cease to examine the root causes and systemic issues related to the role PG&E's electric facilities had in igniting these wildfires.

PG&E's wildfire mitigation efforts are currently subject to oversight through the Commission's review of its annual wildfire mitigation plan (WMP) required pursuant to SB 901 and independent audits required pursuant to SB 247 (Stats. 2019), SB 901, and AB 1054. Pub. Util. Code § 8386 requires all California electric utilities to prepare and submit wildfire mitigation plans that describe the

utilities' plans to prevent, combat, and respond to wildfires affecting their service territories. The elements that must be included in the plan include systemic issues that have been raised in this proceeding, such as: inspection and maintenance of electric infrastructure (Sections 8386(a) and (c)(9)); protocols for disabling reclosers and de-energization (Sections 8386(c)(6) and (7)); and vegetation management (Section 8386(c)(8)). The annual WMP process includes reporting, monitoring, evaluation, and updating to ensure the electrical corporations are targeting the greatest risk with effective programs.

To the extent that the results of the RCAs or other information identify areas of PG&E's wildfire risk mitigation efforts that may be deficient, parties may raise these issues as part of the annual WMP review process.¹⁵⁴ To the extent that the RCAs or other information more broadly identify deficiencies in PG&E's operational practices (*e.g.*, recordkeeping practices), these issues may be further considered as part of the Commission's Investigation into PG&E's safety culture (I.15-08-019). As discussed above, the Commission will also receive and review these reports and PG&E's responses to these reports, hold workshops, and assess what further action may be necessary in order to ensure the safe operation of PG&E's electric facilities.¹⁵⁵ If the RCA reports identify broader wildfire risk mitigation policies that should be examined, including potential changes to GO 95, it may be more appropriate for the Commission to consider these issues in a rulemaking applicable to electric utilities statewide.

¹⁵⁴ The 2020 WMPs and comments on the 2020 WMPs will be served on the service list for Rulemaking (R.) 18-10-007. (Resolution WSD-001 at 3.) Persons not already on the service list of R.18-10-007 may contact the Commission's Process Office to request addition to the service list as "Information Only."

¹⁵⁵ The purpose of any further action would not be to levy any additional monetary penalties on PG&E for its role in the 2017 and 2018 wildfires.

8.10. Approval of Proposed Settlement with Modifications

The Commission finds that the provision for penalties set forth in the proposed settlement agreement is inadequate and not commensurate with the scale of the harm caused by the 2017 and 2018 fires. As discussed above, the proposed settlement is inadequate for the following reasons: (1) the effective value of the penalties is uncertain due to the structure of the penalties and the fact that the vast majority of the penalties is in the form of disallowances; (2) PG&E anticipates receiving tax savings associated with the penalties; and (3) the settlement agreement does not include any fines. Therefore, the Commission finds that the proposed settlement agreement as submitted is not reasonable in light of the whole record or in the public interest.

The Commission cannot approve the settlement agreement as submitted. However, the Commission finds that the settlement agreement should be approved with modifications rather than rejected outright. The Commission recognizes the parties' extensive settlement efforts and the Commission's policy favoring settlement. Approval of the settlement agreement with modifications would resolve all issues in this proceeding and minimize the time, expense, and uncertainty of protracted litigation.

Furthermore, there are some meritorious aspects of the settlement agreement for enhancing safety. The settlement agreement requires PG&E to undertake various System Enhancement Initiatives, which include: enhancements to PG&E's vegetation management program and inspection and maintenance program; root cause analyses and audits to help better understand the cause of the fires and to monitor the effectiveness of PG&E's operations in mitigating wildfire risks; and remedies that focus on transparency and

community and customer engagement. Although some parties questioned the funding and mechanics of some of the initiatives, no party opposed the substance of the initiatives.

There is also the unique circumstance of PG&E's pending bankruptcy proceeding to consider. The plan to be confirmed in the bankruptcy proceeding will address and provide for the resolution and satisfaction of all pre-petition claims, such as those arising from the 2017 and 2018 wildfires. Untimely resolution of the issues in this proceeding would create uncertainty and prolong the resolution of the bankruptcy proceeding. Under AB 1054, PG&E's bankruptcy must be resolved by June 30, 2020 in order for PG&E to participate in the wildfire fund created pursuant to that statute. Given these considerations, it is in the public interest to timely resolve issues regarding the monetary penalties to be imposed on PG&E in this investigation.

The Commission finds that the settlement agreement is acceptable if modified to strengthen the effective value of the penalty and to provide a more robust process for review of the root cause analyses of the fires for which SED found violations. Accordingly, the proposed settlement is approved with the modifications set forth in Ordering Paragraph 1, below.

The Commission finds that that the settlement agreement, as modified by this decision, is reasonable in light of the whole record, consistent with the law, and in the public interest. The Commission finds that the outcome adopted by this decision falls within a reasonable range of litigated outcomes. All of the parties face litigation risk. It is possible that the Commission may determine that all of the violations as alleged by SED did not occur, which could result in lower penalties. On the other hand, the Commission may determine that PG&E did commit some or all of the violations as alleged by SED, which would call for

significant penalties given the unprecedented harm caused by the fires and PG&E's safety record. These penalties could also be more punitive in structure by requiring that a higher portion be paid in the form of a fine and would be unlikely to include the wildfire-related expenditures agreed to by the Settling Parties in the settlement agreement.

Cal Advocates questions whether it is reasonable to adopt the proposed settlement when the full extent of PG&E's culpability and damage that resulted from the fires may be unknown. A fully adjudicated investigation would provide certainty regarding the number and days of violations. However, it would not necessarily result in a material increase in the penalties that the Commission would impose on PG&E. For one thing, it is possible that not all of SED's alleged violations may be proven.

Furthermore, the penalties imposed by this decision are substantial and the Commission's ability to impose monetary penalties is not unlimited. The severity of the offense or conduct of the utility are not the only factors that are examined in determining an appropriate penalty. The financial resources of the utility must also be taken into account. For example, in the San Bruno proceedings, based on the number of days that PG&E was found to be in violation, the Commission calculated that the range of potential fines that could be imposed based on Pub. Util. Code § 2107 was from \$9.2 billion to \$254.3 billion.¹⁵⁶ But the Commission recognized that the amount of the penalty to be imposed must be significantly decreased from that potential level in

¹⁵⁶ D.15-04-024 at 79.

consideration of PG&E's financial resources and ultimately imposed a fine and other penalties and remedies totaling \$1.6 billion.¹⁵⁷

Given these considerations, the Commission finds that the provision for penalties set forth in the settlement agreement, as modified by this decision, is within a reasonable range of potentially litigated outcomes and in the public interest. Rather than continued litigation regarding the amount of monetary penalties to be imposed on PG&E, the Commission finds that the public interest is best served by focusing efforts on appropriate corrective actions to help reduce the risk of such catastrophic wildfires in the future.

9. Rulings on Motions

On December 17, 2019, PG&E filed a motion to file under seal supporting documents to the Joint Motion. PG&E requests confidential treatment of customer-identifying information and certain employee-identifying information. Consistent with the ALJ ruling issued on December 20, 2019, PG&E's unopposed motion is granted.

On March 10, 2020, subsequent to the issuance of the Presiding Officer's Decision, Del Monte filed a Motion to Reopen the Record and Accept into Evidence Previously Filed and Timely Served Testimonial Evidence. The motion seeks to reopen the record to have the following documents admitted into evidence: (1) the Prepared Direct Testimony of Ken Buske, and (2) the Deposition of CAL FIRE Lead Investigator, John Martinez, Vols. 1 and 2. These documents were previously attached to Del Monte and Wild Tree's comments on the proposed settlement agreement as Attachments C and B, respectively. An ALJ ruling issued on January 28, 2020 accepted the comments and attachments for

¹⁵⁷ D.15-04-024 at 79.

filing but clarified that these documents were not admitted into the evidentiary record of this proceeding.

PG&E filed a response on March 24, 2020 opposing the motion. Cal Advocates filed a response on March 25, 2020 supporting the admission of Del Monte's documents and also arguing that all other testimony and documents appended to parties' comments on the proposed settlement agreement should be accepted into the evidentiary record.

Rule 13.8(c) of the Commission's Rules of Practice and Procedure states: "Prepared testimony and accompanying exhibits may be offered and received into evidence without direct or cross examination absent objection by any party." In this case, evidentiary hearings have not been held and PG&E has raised objections as to the receipt of these documents into evidence. Therefore, Del Monte's motion to have these documents admitted into the evidentiary record is denied.

The Commission clarifies that all documents filed in the proceeding are part of the proceeding record. The Commission has reviewed and considered these documents in assessing whether the settlement agreement is reasonable in light of the whole record, consistent with the law, and in the public interest. To the extent that these documents have not been accepted into the evidentiary record, they are not relied upon to make an evidentiary finding (i.e., to prove or disprove any disputed issue of material fact).

All outstanding motions filed in the proceeding that have not been addressed in a prior ruling or in this decision are denied.

10. Motion Requesting Other Relief, Appeals, and Request for Review

Pursuant to Rule 12.4(c) of the Commission's Rules of Practice and Procedure, the Commission may propose alternative terms to the parties to a

settlement and allow the parties reasonable time to elect to accept such terms or request other relief. The POD was issued on February 27, 2020 setting forth proposed alternative terms to the Settling Parties. The Settling Parties were provided 20 days from the service of the POD to file and serve a motion accepting the modifications to the proposed settlement or requesting other relief.

On March 18, 2020, PG&E filed a Motion Requesting Other Relief Regarding Presiding Officer's Decision Approving Settlement Agreement with Modifications. PG&E concurrently filed an appeal raising the same issues set forth in its motion requesting other relief. PG&E requests that the Commission issue a decision approving the settlement agreement proposed by the Settling Parties. Alternatively, PG&E requests that the POD be modified to: (1) eliminate the tax benefit provision, and (2) order that any fine payable to the General Fund, including the proposed \$200 million fine, is a Fire Victim Claim under PG&E's PoR, will be paid out of the Fire Victim Trust, and will be subordinated to the Trust's payments to fire victims.

On March 19, 2020, CUE filed an appeal of the POD requesting the same relief set forth in PG&E's motion requesting other relief and appeal. CUE concurrently filed a response supporting PG&E's motion requesting other relief.

On March 19, 2020, SED filed a motion in response to the POD. SED continues to support the settlement agreement as being reasonable in light of the record, consistent with the law, and in the public interest. However, SED neither opposes the modifications to the settlement agreement, nor suggests further modifications.

On March 19, 2020, SED filed a response to PG&E's motion requesting other relief stating that it does not oppose PG&E's proposed modifications to the settlement agreement set forth in the motion.

On March 27, 2020 Del Monte and Wild Tree filed a joint appeal of the POD. The appeal argues that the ratepayer advocates were denied a fair hearing, that the POD fails to apply the appropriate legal standard in considering contested settlements, and that approval of the proposed settlement agreement or the POD would result in the Commission failing to comply with its legal duties to investigate accidents and prosecute violations of the law by public utilities.

On March 27, 2020 Commissioner Rechtschaffen filed a request for review of the POD in order to consider the following issues: (1) whether the \$200 million cash fine should be imposed without any restriction as to the source of funds but expressly state that the obligation to pay the fine is permanently suspended, and (2) whether the tax benefit provision should be limited to apply to tax savings associated with operating expenses only and not apply to any tax savings associated with capital expenditures.

Responses to the motion requesting other relief, appeals, and/or the request for review were filed on March 25, 2020 by the Official Committee of Tort Claimants of PG&E (TCC); on April 2, 2020 by Cal Advocates, TURN, and Del Monte/Wild Tree; on April 9, 2020 by PG&E, SED, CUE, Cal Advocates, TURN, Del Monte/Wild Tree, TCC, and CCSF; and on April 10, 2020 by Alex Canarra and Gene Nelson.¹⁵⁸

The POD has been revised in response to the appeals and request for review as follows:

¹⁵⁸ An ALJ ruling issued on March 30, 2020 required responses to the appeals and request for review to be filed by April 9, 2020. The assigned ALJ authorized the Docket Office to accept Canarra and Nelson's response, which had been served on April 9, 2020, for filing on April 10, 2020.

- The POD has been revised to require PG&E to return only the tax savings (i.e., financial benefits) associated with shareholder obligations for operating expenses in the settlement agreement, as modified by this decision, for the benefit of ratepayers once PG&E has realized the savings. The tax benefit provision shall not apply to tax savings associated with shareholder obligations for capital expenditures.
- The Commission finds that the \$200 million fine should be imposed for the reasons set forth in the POD. However, in view of the unique circumstances of PG&E's pending bankruptcy, the POD has been revised to permanently suspend the fine.
- The POD has been revised to approve the settlement agreement's provision for the Safety Evaluator's audit of PG&E's overhead distribution and transmission maintenance program to commence within one year of the effective date of the settlement.

In all other respects, the motion requesting other relief and appeals are denied.

11. Comments on Decision Different

The Decision Different was issued on April 20, 2020 and parties were provided 10 days from the service of the Decision Different to file concurrent comments. Because parties already had an opportunity to file appeals of the POD, and respond to other parties' appeals, comments were limited to differences between the POD and the proposed Decision Different. To the extent that any comments exceed that scope, they were not considered.

Comments were filed on April 30, 2020 by PG&E, SED, Cal Advocates, TURN, Del Monte/Wild Tree, and TCC and on May 1, 2020 by CUE.¹⁵⁹

Pursuant to Rule 12.4(c) of the Commission's Rules of Practice and Procedure, the Settling Parties in their comments on the Decision Different indicated that they accept the modifications to the settlement agreement set forth in Ordering Paragraph 1, below.¹⁶⁰

The Commission has carefully reviewed the comments and finds that, with the exception of edits to reflect the Settling Parties' acceptance of the modifications to the settlement agreement, no changes to the Decision Different are warranted.

12. Assignment of Proceeding

Clifford Rechtschaffen is the assigned Commissioner and Sophia J. Park is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. SED investigated 17 of the fire incidents that occurred in PG&E's service territory in 2017 and the Camp Fire, which occurred in 2018.
2. CAL FIRE determined that PG&E's electrical facilities ignited all but one of the 18 fire incidents investigated by SED that occurred in 2017 and 2018.
3. With respect to the 2017 wildfires, SED found a total of 33 violations of GO 95 and Resolution E-4184.
4. With respect to the 2018 Camp Fire, SED found 12 violations of GOs 95 and 165, Resolution E-4184, and Public Utilities Code § 451.

¹⁵⁹ An ALJ ruling issued on May 4, 2020 granted CUE's motion to file their comments one day late.

¹⁶⁰ PG&E Comments on Decision Different at 2; CUE Comments on Decision Different at 1; SED Comments on Decision Different at 2.

5. PG&E disagreed with many of the findings in SED's Fire Reports and contested that there were violations of GO 95 and other Commission rules.
6. PG&E does not contest 14 of the violations found by SED.
7. The 2017 and 2018 wildfires resulted in an unprecedented level of physical and economic harm.
8. There are serious questions regarding PG&E's efforts to prevent, detect, and rectify the violations that are at issue in this proceeding.
9. PG&E has a demonstrated record of failing to comply with Commission directives, including those related to vegetation management.
10. The fact that PG&E is currently in bankruptcy proceedings is a factor to consider in assessing the financial resources of the utility.
11. The extent of PG&E's ability to pay a larger penalty is unknown based on the record.
12. The significant loss of life, physical and economic harm, and destruction that are at issue in this proceeding are not comparable to the factual circumstances of prior enforcement proceedings.
13. Under the terms of the settlement agreement, PG&E's shareholders will bear \$1.675 billion in financial obligations, which consists of \$1.625 billion in disallowances of wildfire-related expenses and capital expenditures that PG&E incurred or will incur, as well as \$50 million in System Enhancement Initiatives.
14. Cal Advocates calculates potential penalties of approximately \$943.8 million for the October 2017 wildfires and approximately \$1.5 billion for the 2018 Camp Fire.
15. The provision for penalties set forth in the settlement agreement is inadequate and not commensurate with the magnitude of the allegations and conduct that are at issue.

16. The effective value of the financial obligations imposed on PG&E by the settlement agreement is less than the asserted amount of \$1.675 billion.

17. PG&E may not have otherwise received ratepayer recovery for \$924 million in CEMA costs identified in the settlement agreement, which relate to the 2017 and 2018 wildfires for which SED has alleged violations.

18. Disallowances are only effective as a penalty where shareholders are required to absorb costs that would otherwise be paid by ratepayers.

19. There has been no finding by the Commission that the wildfire-related expenditures identified in the settlement agreement are reasonable.

20. The significant uncertainty regarding the recoverability of the settled CEMA costs must be taken into account when assessing whether the penalty is adequate.

21. The settled penalty amount should be increased to account for the uncertainty of the recoverability of the settled CEMA costs and to ensure that the penalty is commensurate with the scale of the 2017 and 2018 fires.

22. It is reasonable to increase the settled penalty amount by \$462 million, which is half the value of the disputed CEMA costs included in the settlement, in order to ensure that the effective value of the penalty more closely approximates the amount proposed by the Settling Parties.

23. PG&E estimates that all \$1.625 billion of the wildfire-related expenditures identified in the settlement agreement will be deductible for federal tax purposes and that it is possible but not certain that the additional \$50 million invested in System Enhancement Initiatives will also be deductible for federal tax purposes.

24. PG&E estimates that the full \$1.675 billion in financial obligations identified in the settlement agreement will be tax deductible for California state tax purposes.

25. Assuming that the full \$1.675 billion is tax deductible, and depending on many other variables, PG&E estimates tax savings of approximately \$469 million.

26. With this decision's modifications to the settlement agreement, PG&E shareholders will incur additional financial obligations of approximately \$262 million that PG&E may seek to deduct as ordinary business expenses, which would result in tax savings beyond the estimated \$469 million.

27. In order for the penalties adopted in this decision to have the appropriate punitive and deterrent impact, ratepayers, rather than shareholders, should receive the benefit of any tax savings associated with these financial obligations, consistent with IRS rules.

28. The assessment of no fine is not within a reasonable range of potentially litigated outcomes in this case.

29. PG&E is one of the largest combined natural gas and electric energy companies in the United States.

30. Despite its size, PG&E's ability to raise capital as part of its PoR is not unlimited.

31. In light of the unique and unprecedented circumstances of PG&E's bankruptcy, a permanent suspension of the fine is warranted.

32. The Commission has not authorized ratepayer funding for the System Enhancement Initiatives.

33. The RCAs are a worthy initiative that will potentially yield valuable information and lessons that can aid in efforts to reduce the risk of future catastrophic wildfires.

34. Modifications to the RCA initiative are warranted to ensure that the RCAs are scoped with sufficient depth and breadth, and to dedicate resources to implement corrective actions that may be identified from the RCAs.

35. A budget of \$3 million for all 17 RCAs may be inadequate to conduct RCAs of sufficient depth and breadth.

36. There must be a more robust process after the completion of the RCAs in order to ensure that appropriate corrective actions are identified and undertaken.

37. To the extent possible, information on electric maintenance work and “near hits” should be made available to local governments and the public in order to promote greater transparency on important issues of public safety.

38. There is a lack of specificity in the settlement agreement regarding the format and content of the reports on electric maintenance work and “near hit” data, and therefore, it is unclear how and to what extent this information should be made more widely available.

39. It is reasonable for the Safety Evaluator’s review of the overhead distribution and transmission preventative maintenance program and procedures to commence within one year of the effective date of the settlement agreement.

40. No alleged violations with respect to the Tubbs Fire were identified in the OII or in the scoping memos issued in this proceeding.

41. The settlement agreement does not improperly constrain consideration of any new information concerning the Tubbs Fire.

42. The exclusion of any violations with respect to the Tubbs Fire in the settlement agreement is reasonable.

43. With the exception of costs included in the settlement agreement, as modified by this decision, it is not reasonable to bar PG&E from seeking future recovery of costs associated with fires for which SED found violations in this proceeding.

44. Any request for future recovery of costs would be subject to a reasonableness review.

45. There are already a number of different venues and proceedings in which the Commission is reviewing wildfire risk mitigation policies.

46. It is not necessary for this proceeding to remain open for a second phase.

47. It is in the public interest to timely resolve issues regarding the monetary penalties to be imposed on PG&E in this investigation.

48. The outcome adopted by this decision falls within a reasonable range of litigated outcomes.

49. The Commission's ability to impose monetary penalties is not unlimited and the financial resources of the utility must be taken into account.

Conclusions of Law

1. Pursuant to Pub. Util. Code § 451, a public utility cannot recover costs from ratepayers absent Commission review of the costs for reasonableness and approval to recover in rates.

2. A fine payable to the General Fund is not deductible under Section 162 of the Internal Revenue Code or California law since it is a payment to a government for a violation of law or investigation or inquiry into a potential violation of law.

3. Pursuant to IRS normalization rules, a utility receives accelerated tax benefits in the early years of an asset's regulatory life but passes that benefit through to ratepayers ratably over the regulatory useful life of the asset in the form of reduced rates.

4. Requiring PG&E to return only the tax savings (i.e., financial benefits) associated with shareholder obligations for operating expenses in the settlement agreement, as modified by this decision, for the benefit of ratepayers once PG&E

has realized the savings would not result in a violation of IRS normalization rules.

5. It is neither consistent with Commission precedent nor in the public interest for this investigation to conclude without the assessment of a fine.

6. The settlement agreement cannot bar the Commission from undertaking the necessary reasonableness review required by law for any costs for which PG&E seeks ratepayer recovery in the future.

7. The Settling Parties cannot agree to provisions that would impose restrictions on non-settling parties.

8. The proposed settlement is not reasonable in light of the whole record.

9. The proposed settlement is not in the public interest.

10. The proposed settlement should be approved with modifications.

11. The proposed settlement, as modified by this decision, is reasonable in light of the whole record.

12. The proposed settlement, as modified by this decision, is consistent with the law.

13. The proposed settlement, as modified by this decision, is in the public interest.

14. Rule 12.4(c) of the Commission's Rules of Practice and Procedure requires the Settling Parties to be given the opportunity to accept the modifications to the settlement agreement or to seek other relief.

O R D E R

IT IS ORDERED that:

1. The proposed settlement in this proceeding is approved with the following modifications:

- (a) The financial obligations to be imposed on Pacific Gas and Electric Company (PG&E) is increased by an additional \$462 million of which: (i) \$198 million shall go toward future wildfire mitigation expenses that would have otherwise been recovered from ratepayers but for this decision, (ii) \$64 million shall go toward expanding the System Enhancement Initiatives, and (iii) \$200 million shall be in the form of a fine payable to the General Fund, which shall be permanently suspended. The \$198 million shall be applied to wildfire mitigation expenses recorded in the Fire Risk Mitigation Memorandum Account or the Wildfire Mitigation Plan Memorandum Account within four years of the effective date of the settlement agreement.
- (b) Any tax savings (i.e., financial benefits) associated with the financial obligations for operating expenses in the settlement agreement, as modified by this decision, shall be returned for the benefit of ratepayers once PG&E has realized the savings. Once PG&E realizes any such tax savings, PG&E shall report the tax savings, with accompanying supporting testimony and underlying calculations, in its next General Rate Case filing immediately following the realization of the savings. The amount of the tax savings shall be applied to wildfire mitigation expenses recorded in the Fire Risk Mitigation Memorandum Account or the Wildfire Mitigation Plan Memorandum Account that would otherwise have been recovered from ratepayers but for this decision.
- (c) With the exception of shareholder funds to be spent on the root cause analyses (RCAs) and associated corrective actions, if PG&E has not spent the budgeted shareholder funds on the specified System Enhancement Initiatives within five years of the effective date of the settlement agreement, the remaining balance shall be paid to the General Fund.
- (d) The total budget for the RCAs to be funded by shareholders pursuant to Section B.7 of Exhibit C of the settlement agreement is increased by \$14 million for a total budget of \$17 million. The funds may be shifted between the analyses

depending on the complexity of each. If the RCAs are conducted for less than \$17 million, any remaining funds shall be used to implement corrective actions stemming from the RCAs.

- (e) PG&E shall spend \$50 million of shareholder funds, plus any amount remaining from the budget for conducting the RCAs, to implement corrective actions stemming from the RCAs that would otherwise have been funded by ratepayers but for this decision.
- (f) The Office of the Safety Advocate's role with respect to the RCAs shall be replaced by the Safety Policy Division (SPD).
- (g) PG&E shall also serve the RCA reports and PG&E's responses to the reports on the Directors of SPD and the Wildfire Safety Division.
- (h) PG&E shall consult with the Safety and Enforcement Division (SED) and SPD within 30 days of the effective date of the settlement agreement regarding the appropriate format, content, and treatment (including availability to local governments and the public) of the quarterly electric maintenance reports and "near hit" data required pursuant to Sections B.16 and B.19, respectively, of Exhibit C of the settlement agreement. Upon request of SED or SPD, PG&E shall also consult with the Divisions regarding the appropriate format, content, and treatment of other reporting and data sharing requirements set forth in the settlement agreement. As part of consulting with SED and SPD, PG&E shall provide those Divisions with proposed report and data sharing templates for their comment and consideration. PG&E shall file a Tier 1 advice letter with SED within 60 days of the effective date of the settlement agreement to memorialize the format, content, and treatment of the reports and data set forth in the settlement agreement.
- (i) The statement in Section B.7 of Exhibit C of the settlement agreement that "non-PG&E parties to this proceeding shall not use the results of the RCA to assert that the Commission should impose any additional financial penalties upon

PG&E nor to argue for any additional disallowance” is modified to substitute “non-PG&E Settling Parties” for “non-PG&E parties.”

2. Pacific Gas and Electric Company’s Motion for Leave to File Under Seal Supporting Documents to Joint Motion of Pacific Gas and Electric Company, the Safety and Enforcement Division of the California Public Utilities Commission, Coalition of California Utility Employees, and the Office of the Safety Advocate for Approval of Settlement Agreement filed on December 17, 2019 is granted. The confidential version of Exhibit A of the settlement agreement shall remain under seal and shall not be made accessible or disclosed to anyone other than the Commission staff except on further order or ruling of the Commission, the Assigned Commissioner, the Assigned Administrative Law Judge (ALJ), or the ALJ then designated as the Law and Motion Judge.

3. Thomas Del Monte’s Motion to Reopen the Record and Accept into Evidence Previously Filed and Timely Served Testimonial Evidence filed on March 10, 2020 is denied.

4. Pacific Gas and Electric Company (PG&E)’s request that the wildfire safety audit of PG&E’s overhead distribution and transmission maintenance program pursuant to Section B.14(b) of Exhibit C of the settlement agreement commence within one year of the effective date of the settlement is granted. In all other respects, PG&E’s Motion Requesting Other Relief Regarding Presiding Officer’s Decision Approving Settlement Agreement with Modifications filed on March 18, 2020 and the appeals of the Presiding Officer’s Decision are denied.

5. All motions not previously addressed are denied.

6. Upon Bankruptcy Court approval of the settlement agreement, as modified by this decision, this proceeding is closed.

This order is effective today.

Dated _____, at San Francisco, California.

APPENDIX A

**SETTLEMENT AGREEMENT BETWEEN PACIFIC GAS AND ELECTRIC
COMPANY, THE SAFETY AND ENFORCEMENT DIVISION OF THE CALIFORNIA
PUBLIC UTILITIES COMMISSION, COALITION OF CALIFORNIA UTILITY
EMPLOYEES, AND THE OFFICE OF THE SAFETY ADVOCATE RESOLVING
ORDER INSTITUTING INVESTIGATION I.19-06-015**

Pacific Gas and Electric Company (“PG&E”), the Safety and Enforcement Division (“SED”) of the California Public Utilities Commission (“CPUC” or “Commission”), Coalition of California Utility Employees (“CUE”), and the Office of the Safety Advocate (“OSA”) are hereinafter collectively referred to as the Settling Parties. On the following terms and conditions, the Settling Parties hereby agree to settle, resolve, and dispose of all claims, allegations, liabilities and defenses within the scope of Commission proceeding I.19-06-015 entitled “*Order Instituting Investigation on the Commission’s Own Motion Into the Maintenance, Operations and Practices of Pacific Gas and Electric Company with Respect to its Electric Facilities*” (“2017/2018 Wildfire OII” or “proceeding”), including all such claims, allegations, liabilities and defenses related to the 37, Adobe, Atlas, Camp, Cascade, Cherokee, La Porte, Lobo, McCourtney, Norrbom, Nuns, Oakmont/Pythian, Partrick, Pocket, Point, Potter/Redwood, Sulphur, Tubbs, and Youngs Fires (the “2017 Northern California Wildfires and 2018 Camp Fire”).

This Settlement Agreement is entered into as a compromise of disputed claims and defenses in order to minimize the time, expense, and uncertainty of continued litigation. The Settling Parties agree to the following terms and conditions as a complete and final resolution of all claims made by SED and all defenses raised by PG&E in this proceeding. This Settlement Agreement constitutes the sole agreement between the Settling Parties concerning the subject matter of this proceeding. PG&E, CUE, and OSA brought no claims in this proceeding.

I. PARTIES

The parties to this Settlement Agreement are SED, PG&E, CUE, and OSA.

A. SED is a division of the Commission charged with enforcing compliance with the Public Utilities Code and other relevant utility laws and the Commission’s rules, regulations, orders, and decisions. SED is also responsible for investigations of utility incidents, including fires, and assisting the Commission in promoting public safety.

B. PG&E is a public utility, as defined by the California Public Utilities Code. It serves a population of approximately 16 million in a 70,000-square-mile service area within Northern and Central California.

C. CUE is a coalition of unions that represent approximately 34,000 people who work for investor-owned and publicly-owned utilities in California, and for contractors who perform work for utilities and project developers.

D. OSA is an advocacy unit within the Commission charged with advocating for the continuous and cost-effective improvement of the safety management and safety performance of public utilities. To achieve this goal, OSA advocates for effective public utility safety

management and infrastructure improvements and for the transparency of safety information, as well as assists the Commission in holding public utilities accountable for their safe operation.

II. RECITALS

The Settling Parties have stipulated to the facts and violations set forth below for the purpose of this Settlement. The Settling Parties also agree that PG&E has complied with all of the requirements listed in Sections V (PG&E Report Required) and VI (Immediate Corrective Actions) of the 2017/2018 Wildfire OIL.

A. Stipulated Facts

The relevant stipulated facts relating to the 2017 Northern California Wildfires and 2018 Camp Fire and SED's investigation are set forth in Exhibit A to this Settlement Agreement.

B. Violations

SED's alleged violations are presented in Exhibit B to this Settlement Agreement. For the purposes of this Settlement Agreement, Exhibit B also identifies those violations which PG&E disputes or does not contest. The fact that PG&E is not contesting some of these violations is not a concession that the violations occurred, is inadmissible in evidence in court or in any other legal proceeding, and cannot and should not be used for any purpose in any litigation or any other legal proceeding.

III. AGREEMENT

To settle this proceeding, PG&E shall (1) not seek rate recovery of wildfire-related expenses and capital expenditures in the amount of \$1,625,000,000, as specified below, and (2) incur costs of \$50,000,000 associated with the PG&E Shareholder-Funded System Enhancement Initiatives specified below and described further in Exhibit C to this Settlement Agreement.

A. No Recovery of Certain Wildfire-Related Expenditures

PG&E shall not seek rate recovery of the following wildfire-related expenditures in future applications, which will total \$1,625,000,000:

Description	Expense	Capital	Estimated Amount
Distribution Safety Inspections Expense (excludes repairs) (FRMMA ¹ /WMPMA ²)	\$157,000,000	-	\$157,000,000

¹ FRMMA is the Fire Risk Mitigation Memorandum Account.

² WMPMA is the Wildfire Mitigation Plan Memorandum Account.

Distribution Safety Repairs Expense (FRMMA/WMPMA) ³	\$79,000,000	-	\$79,000,000
Transmission Safety Inspections Expense (excludes repairs) (TO) ⁴	\$225,000,000	-	\$225,000,000
Transmission Safety Repairs Expense (TO) ⁵	\$205,000,000	-	\$205,000,000
AWRR Base Camp and Admin Expense (FHPMA) ⁶	\$36,000,000	-	\$36,000,000
2017 Northern California Wildfires CEMA ⁷ Expense and Capital (for amounts associated with fires for which SED or CAL FIRE have alleged violations) (CEMA)	\$86,000,000	\$66,000,000	\$152,000,000
2018 Camp Fire CEMA Expense (CEMA)	\$435,000,000	-	\$435,000,000
2018 Camp Fire CEMA Capital for Restoration (CEMA)	-	\$253,000,000	\$253,000,000
2018 Camp CEMA Capital for Temporary Facilities ⁸	-	\$84,000,000	\$84,000,000
Total:	\$1,222,000,000 ⁹	\$403,000,000	\$1,625,000,000

The amounts set forth in the table above include estimates for expenses and capital expenditures that have not yet been recorded. To the extent the recorded costs for each account apart from Transmission Safety Repairs total an amount that is different from \$1,420,000,000, then the amount for which PG&E shall not seek rate recovery for Transmission Safety Repairs will be adjusted so that the total amount for which PG&E shall not seek rate recovery equals \$1,625,000,000. PG&E will file a Tier 2 Advice Letter within 30 days of a Commission decision approving the settlement, which will provide updated recorded amounts for the foregoing

³ Includes \$26 million forecasted for 2020.

⁴ Transmission costs are recovered through PG&E's Federal Energy Regulatory Commission ("FERC")-jurisdictional Transmission Owner ("TO") rate case.

⁵ Total forecasted transmission safety repairs costs for 2019 are \$369 million. Only a portion are included here to reach \$1.625 billion total.

⁶ FHPMA is the Fire Hazard Prevention Memorandum Account.

⁷ CEMA is the Catastrophic Event Memorandum Account.

⁸ Includes \$66 million forecasted for 2020.

⁹ Amounts do not sum due to rounding.

accounts. If projects funded by the “Camp CEMA Capital for Temporary Facilities” account are still ongoing at that time, PG&E will file another Tier 2 Advice Letter when those projects are completed and the associated capital expenditures have been recorded, and propose a final allocation of the amounts for which PG&E shall not seek rate recovery in accordance with the allocation principle set forth in this paragraph.

B. PG&E Shareholder-Funded System Enhancement Initiatives

A description of the PG&E Shareholder-Funded System Enhancement Initiatives is set forth in Exhibit C to this Settlement Agreement.

The Settling Parties agree on the following estimates of duration and funding requirements for each of the System Enhancement Initiatives identified below. The actual duration and funding level for each of the System Enhancement Initiatives may be modified upon agreement by PG&E and SED, as long as shareholder-provided settlement funds for the System Enhancement Initiatives total \$50 million.

PG&E shall submit reports to SED every six months regarding progress and implementation of each of the below System Enhancement Initiatives until the end of the six-month period in which PG&E has completed the System Enhancement Initiatives. PG&E’s semi-annual reports shall, at a minimum, describe progress on each of the initiatives and indicate amounts expended compared to PG&E’s estimate for the work. PG&E and SED will meet and make a good faith effort to reach agreement on the contents of each semi-annual report. SED understands that the estimates provided by PG&E for each of the initiatives are high-level estimates only, subject to revision and do not constitute a promise by PG&E to complete any System Enhancement Initiative within the estimate provided. If PG&E becomes aware that it will not fully expend the shareholder settlement funds estimated for a System Enhancement Initiative, it shall inform SED as part of its semi-annual report, and PG&E and SED shall make a good faith effort to reach agreement on the method of expending any remaining funds.

Duration and Funding Estimates for PG&E Shareholder-Funded System Enhancement Initiatives

Shareholder-Funded System Enhancement Initiatives	Estimated Duration (Years)¹⁰	Estimated Shareholder Funding (Millions)
Tree Crew Training and Certificate Program	3	\$6.25
Pre-Inspector Training and Certificate Program	3	\$3.5
Vegetation Management Oversight Pilot	1	\$10.0
Development of Recommendations for General Order 165 Revisions	1	— ¹¹

¹⁰ The estimated duration runs from the Effective Date.

¹¹ For any System Enhancement Initiative listed with “—” in the Estimated Shareholder Funding column, the Settling Parties expect any costs to be de minimis or full time employee time only. The Settling Parties have not allocated any shareholder funding to these System Enhancement Initiatives because they expect that the costs of tracking the expenditure of such funds would outweigh the benefits.

Shareholder-Funded System Enhancement Initiatives	Estimated Duration (Years)¹²	Estimated Shareholder Funding (Millions)
Accelerating Commercialization of Non-Diesel Temporary Generation	3	\$10.0
LiDAR Asset Analysis	1 ¹³	\$0.5
Independent Root Cause Analysis	1	\$3.0
Fuel Reduction Funding	1 ¹⁴	\$2.0
Resilience Centers Grant Program	5 ¹⁵	\$2.0
Funding to California Foundation for Independent Living Centers	1 ¹⁶	\$5.0
Officer Safety Town Halls	5	—
Semi-Annual Wildfire Mitigation Meetings	3	—
ISO 55000 Certification	Make good faith effort to initiate final ISO 55000 certification assessment by end of 2020	\$1.0
Independent Wildfire Safety Audits	3	\$6.0
Verification of Safety-Related Filings	3	—
Quarterly Reporting on Electric Maintenance Work	3	—
Local Government Vegetation Management Data Sharing	3	—
Local Government System Hardening Data Sharing	3	—
Documentation of “Near Hit” Potential Fire Incidents	3 ¹⁷	—
Study of Distribution and Transmission System	Not specified	\$0.75
<u>TOTAL</u>		\$50.0

C. This Settlement Agreement shall become effective (“Effective Date”) upon (1) approval by the Commission in a written decision, (2) following such approval by the Commission, approval of the United States Bankruptcy Court, Northern District of California,

¹² The estimated duration runs from the Effective Date.

¹³ Within one year of the Effective Date, PG&E will implement the pilot program.

¹⁴ Funds shall be disbursed or committed for future disbursement by one year from the Effective Date.

¹⁵ Funds shall be disbursed within five years of the Effective Date.

¹⁶ Funds shall be disbursed, or committed for future disbursement, within one year of the Effective Date.

¹⁷ PG&E will review with OSA and SED annually to assess the utility of the data being provided and confirm that the parties wish to continue receiving the data. PG&E will continue this sharing for up to three years following the Effective Date as long as annual reviews determine an ongoing interest or unless the Wildfire Mitigation Plan Proceeding (Rulemaking 18-10-007) determines a scope for utility reporting of “near hit” data that in substance supersedes this System Enhancement Initiative.

San Francisco Division (“Bankruptcy Court”) in PG&E’s bankruptcy proceeding, *In Re Pacific Gas and Electric Company*, Case No. 19-30088 (DM), and (3) the effectiveness of a Plan of Reorganization (“PoR”) that approves the implementation of this Settlement Agreement.

IV. OTHER MATTERS

A. The Settling Parties agree to seek expeditious approval of this Settlement Agreement and the terms of the settlement, and to use their reasonable efforts to secure Commission approval of it without change, including by filing a joint motion seeking approval of this Settlement Agreement and any other written filings, appearances, and other means as may be necessary to secure CPUC approval. PG&E agrees to use reasonable efforts to secure Bankruptcy Court approval of the same, without change, including by filing a motion seeking approval and making any other required filings, appearances, and other means as may be necessary to secure Bankruptcy Court approval.

B. The Settling Parties agree to actively and mutually defend this Settlement Agreement if its adoption is opposed by any other party in proceedings before the Commission. In accordance with Rule 12.6 of the Commission’s Rules of Practice and Procedure, if this Settlement Agreement is not adopted by the Commission, its terms are inadmissible in any evidentiary hearing unless their admission is agreed to by the Settling Parties. In the event the Commission rejects or proposes alternative terms to the Settlement Agreement, Settling Parties reserve all rights set forth in Rule 12.4 of the Rules of Practice and Procedure. The provisions of Paragraph IV.A and B shall impose obligations on the Settling Parties immediately upon the execution of this Settlement Agreement.

C. This Settlement Agreement shall not preclude the non-PG&E parties in this proceeding from opposing any request by PG&E to recover any costs PG&E has incurred or may in the future incur as a result of the 2017 Northern California Wildfires and 2018 Camp Fire; provided, however, that the non-PG&E Settling Parties shall not assert that any violations or conduct underlying the violations alleged or identified by SED in this proceeding are the basis for future disallowances, violations, or penalties, except to the extent PG&E seeks to recover in rates third-party claims costs arising from such wildfires.

D. SED agrees to release and refrain from instituting, directing, or maintaining any violations or enforcement proceedings against PG&E related to the 2017 Northern California Wildfires and 2018 Camp Fire based on the information: (a) known, or that could have been known, to SED at the time that SED executes this Settlement Agreement, or (b) substantially similar to the facts alleged in the SED Fire Reports. This information will include any reports or findings made by the California Department of Forestry and Fire Protection (“CAL FIRE”) and information produced in *In re PG&E Corp. & Pacific Gas and Electric Company*, U.S.D.C., 3:19-cv-05257-JD and in *California North Bay Fire Cases*, Cal. Super., No. CJC17004955.

E. Nothing in this Settlement Agreement constitutes a waiver by SED of its legal obligations, authority, or discretion to investigate and enforce applicable safety requirements and standards (including, without limitation, provisions of GO 95 and GO 165) as to any future conduct by PG&E that SED may identify as the basis for any alleged violation(s). SED shall retain such authority regardless of any factual or legal similarities that future conduct and any

alleged violation(s) may have to PG&E's conduct/alleged violations related to the 2017 Northern California Wildfires and 2018 Camp Fire. Accordingly, any such similarities shall not preclude non-PG&E parties from using future conduct and alleged violation(s) as a basis for seeking future disallowances.

F. The Settling Parties have bargained in good faith to reach the agreement set forth herein. The Settling Parties intend the Settlement Agreement to be interpreted as a unified, interrelated agreement. The Settling Parties agree that no provision of this Settlement Agreement shall be construed against any of them because a particular party or its counsel drafted the provision. The representatives of the Settling Parties signing this Settlement Agreement are fully authorized to enter into this Settlement Agreement.

G. The rights conferred and obligations imposed on any of the Settling Parties by this Settlement Agreement shall inure to the benefit of or be binding on that Settling Party's successors in interest or assignees as if such successor or assignee was itself a party to this Settlement Agreement.

H. Should any dispute arise between the Settling Parties regarding the manner in which this Settlement Agreement or any term shall be implemented, the Settling Parties agree, prior to initiation of any other remedy, to work in good faith to resolve such differences in a manner consistent with both the express language and the intent of the Settling Parties in entering into this Settlement Agreement.

I. This Settlement Agreement is not intended by the Settling Parties to be precedent for any other proceeding, whether pending or instituted in the future. The Settling Parties have assented to the terms of this Settlement Agreement only for the purpose of arriving at the settlement embodied in this Settlement Agreement. Each Settling Party expressly reserves its right to advocate, in other current and future proceedings, or in the event that the Settlement Agreement is rejected by the Commission, positions, principles, assumptions, arguments and methodologies which may be different than those underlying this Settlement Agreement, and the Settling Parties expressly declare that, as provided in Rule 12.5 of the Commission's Rules of Practice and Procedure, this Settlement Agreement should not be considered as a precedent for or against them.

J. The Settling Parties are prohibited from filing a petition for modification of a Commission decision approving this Settlement Agreement regarding any issue resolved in this Settlement Agreement.

K. This Settlement Agreement may be executed in counterparts.

L. The Settling Parties hereby agree that this Settlement Agreement is entered into as a compromise of disputed claims and defenses in order to minimize the time, expense, and uncertainty of continued litigation in the 2017/2018 Wildfire OII.

M. Nothing in this Settlement Agreement relieves PG&E from any safety responsibilities imposed on it by law or Commission rules, orders, or decisions.

N. In reaching this Settlement Agreement, the Settling Parties expect and intend that neither the fact of this settlement nor any of its specific contents will be admissible as evidence of fault or liability in any other proceeding before the Commission, any other administrative body, or any court. In this regard, the Settling Parties are relying on Evidence Code Section 1152(a) and Public Utilities Code Section 315. Furthermore, such use of this Settlement Agreement or any of its contents in any other proceeding before the Commission, any other administrative body, or any court would frustrate and interfere with the Commission's stated policy preference for settlements rather than litigated outcomes. See Pub. Util. Code § 1759(a).

IN WITNESS WHEREOF, the Settling Parties hereto have duly executed this Settlement Agreement.

[Signatures immediately follow this page]

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Dated: December 17, 2019

Pacific Gas & Electric Company

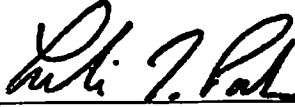
By: Robert S. Kenney

Robert S. Kenney
Vice President, State and
Regulatory Affairs
Pacific Gas & Electric Company

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Dated: 12/17/19

Safety and Enforcement Division
California Public Utilities Commission

By: 

Leslie L. Palmer
Director, Safety and Enforcement
Division
California Public Utilities
Commission

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Dated: December 17, 2019

Coalition of California Utility Employees

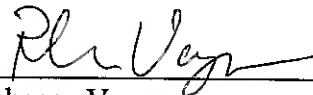


By: _____
Rachael E. Koss
Attorney for Coalition of California
Utility Employees

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Dated: 12/17/2019

Office of the Safety Advocate

By: 
Rebecca Vorpe
Attorney for Office of the Safety
Advocate

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Exhibit A

Stipulated Facts Relevant to the 2017 Northern California Wildfires and 2018 Camp Fire

I. Stipulated Facts Relevant to the 2017 Northern California Wildfires

A. Definitions

1. 2017 October Fire Siege: SED investigated 17 fires that were alleged to have been caused by PG&E's facilities in October 2017.
2. CEMA¹ Patrol: A type of vegetation management ("VM") visual inspection under PG&E's Drought and Tree Mortality Response Program. A CEMA Patrol performed in the Wildland-Urban Interface ("WUI"), defined as areas where homes are built near or among lands prone to wildland fire, is referred to as a CEMA WUI Patrol.
3. Pre-inspectors: Term used by PG&E to describe Vegetation Management (VM) inspectors that inspect vegetation along PG&E's lines to identify vegetation hazards or clearance issues related to electric facilities and prescribe direction for trim or removal to Tree Contractors.
4. Project Management Database: The Project Management Database is a PG&E database used to track PG&E's annual vegetation management plan and schedule vegetation management work.
5. SED 2017 Report: SED's individual investigation reports for each of the 17 fires that occurred in October 2017.
6. Tree Contractors: Term used by PG&E to describe employees or contractors that perform physical trimming or removal of vegetation identified by pre-inspectors.

B. General Observations

7. PG&E VM pre-inspectors do not record the characteristics, such as tree height or diameter, of the individual trees they inspect unless tree work is prescribed for the tree.

¹ CEMA is the acronym for PG&E's Catastrophic Event Memorandum Account. The term also is used at PG&E to refer to PG&E's Drought and Tree Mortality Response Program.

8. With one exception, none of the subject trees for which SED identified a vegetation management related violation were identified for trimming or removal by PG&E VM pre-inspectors during the pre-inspections for the previous five years leading up to the 2017 October Fire Siege. The one exception was the subject tree for the Pocket Fire which was trimmed twice in the same five-year time frame.
9. SED requested PG&E's contracted fire investigator's reports for the 2017 October Fire Siege incidents. On August 3, 2018, PG&E informed SED that no such reports existed. As of the date that SED executed this Settlement Agreement, SED has not received any such reports from PG&E.²

C. Stipulated Facts Relevant to Specific Fires

Adobe

10. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 8, 2017, at approximately 2234 hours, a eucalyptus tree fell and contacted overhead conductors of PG&E's Dunbar-1101 12 kV circuit. When the tree damaged PG&E's insulated conductors, the Adobe Fire ignited near 8555 Sonoma Highway in Kenwood, Sonoma County.³
11. On October 10, 2017, PG&E filed an Electric Safety Incident Report concerning an incident that occurred near 8555 Sonoma Highway (Highway 12), Kenwood, Sonoma County.⁴ When PG&E was granted access to the incident location, PG&E observed a eucalyptus tree that had fallen and was laying on three of the conductors of a Dunbar 1101 (12 kV) primary tap line on the ground.⁵ The eucalyptus tree was approximately 120 feet tall and rooted approximately 60 feet from the distribution conductors.⁶
12. Between December 14, 2012, and October 8, 2017, PG&E did not identify the subject eucalyptus tree for vegetation trim or removal.⁷

² Attachment 1 (PGE-CPUC_DR-071918_Common_Q04).

³ SED 2017 Report, Adobe 001.

⁴ PG&E Response to Notice re California Wildfires ("Alsup Report"), 3:14-cr-00175-WHA, ECF 956, Exhibit L at 1 (December 31, 2018), which is available in the record at SED Camp Report, CAMP-0136. All additional citations to the SED Camp Report for facts related to the 2017 Northern California Wildfires are citations to exhibits to the Alsup Report, which are the factual reports for the 2017 Northern California Wildfires filed therewith.

⁵ SED Camp Report, CAMP-0137 (Alsup Report, Exhibit L (Adobe) at 2).

⁶ SED Camp Report, CAMP-0137 (Alsup Report, Exhibit L (Adobe) at 2).

⁷ SED 2017 Report, Adobe 007-9.

13. In Mark Porter's⁸ report evaluating the subject eucalyptus tree's failure, he identified the subject eucalyptus tree as an "epicormic shoot approximately 109 feet high, [that] was weakly attached to a rotting stump."⁹ The report also identified that "the epicormics shoot developed with a one-sided buttress root"^{10 11} which created an "unequaled mechanical stress."¹² Mr. Porter concluded that "this failure was preventable had a qualified arborist inspected the tree and the site conditions."¹³
14. PG&E's Project Management Database indicates that a 2015 CEMA WUI Patrol was completed on the subject circuit.¹⁴ However, after a search of its records, PG&E was unable to locate the maps for these patrols.¹⁵ PG&E's vegetation management records associated with this incident location, produced to the CPUC on February 28, 2018, indicate that no work was prescribed at the incident location during this CEMA patrol, as no inspection record or work order is created unless PG&E determines that work is indeed necessary after a CEMA inspection.¹⁶
15. Work for a cross-arm replacement (work order #103891848) was completed on January 14, 2010, 15 days after its original December 31, 2009, due date.¹⁷

Atlas

16. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 8, 2017, a black oak tree fell on one of PG&E's Pueblo-1104 12 kV conductors, bringing it to the ground and igniting a fire (Atlas 1). On the same date but at a second location, a branch from a valley oak tree fell and contacted PG&E's Pueblo-1104 12 kV overhead conductors thus igniting another fire (Atlas 2). The two fires burned into each other, and together are called the Atlas Fire.¹⁸

⁸ International Society of Arboriculture (ISA) Certified Arborist #WE465, contracted by CAL FIRE.

⁹ SED 2017 Report, Adobe 010.

¹⁰ SED 2017 Report, Adobe 010.

¹¹ Buttress roots are the roots at the trunk base that help support the tree and equalize mechanical stress.

¹² SED 2017 Report, Adobe 010.

¹³ SED 2017 Report, Adobe 065.

¹⁴ SED 2017 Report, Adobe 093 (Response to CPUC Common Data Request Question 10 – Part 3).

¹⁵ SED 2017 Report, Adobe 093 (Response to CPUC Common Data Request Question 10 – Part 3).

¹⁶ SED 2017 Report, Adobe 093 (Response to CPUC Common Data Request Question 10 – Part 3); *see also* Utility Bulletin: TD-7102B-007, Second Patrol – Scope of Work Requirements, July 17, 2017 (produced as part of PG&E's Attachment B Report at PGE-2017Wildfires-OII-0000003192) at 2 ("Trees identified for work are issued on a Work Request to TC [the tree contractors]."); *id.* at 4 ("Trees identified by PI [pre-inspector] as requiring work are entered into a handheld device.").

¹⁷ SED 2017 Report, Adobe 089-91 (work order).

¹⁸ SED 2017 Report, Atlas 001.

17. On October 21, 2017, when PG&E was granted access to the Atlas 1 incident location, PG&E observed a California black oak tree that had broken at the base and was lying on the ground near the Atlas 1 incident location.¹⁹ The base of the California black oak tree was burned and rooted approximately 20 feet from the distribution conductors.²⁰
18. On October 19, 2017, when PG&E was granted access to the Atlas 2 incident location, PG&E observed a broken tree limb and broken field-phase primary insulator on the Pueblo 1104 (12 kV) Circuit.²¹ A tree limb had fallen from a California white oak/valley oak rooted approximately 15 feet from the distribution conductors and came to rest on the lower of two communications cables.²²
19. In Mark Porter's report evaluating the black oak tree in the Atlas 1 fire area, he stated that the tree displayed "extensive decay in the trunk as well as the buttress roots" and concluded that "[s]ince the black oak had such dangerous conditions close to high voltage lines, it should have been condemned years ago, due to the severity of the consequences."²³
20. In other parts of Mark Porter's report relevant to Atlas 2, he stated that he "observed a structural branch defect on a 19-inch diameter valley oak tree..." and noted that "[t]he branch of the valley oak broke at a codominant stem." Mr. Porter "concluded that the valley oak codominant branch failure (a defect) could have been avoided if correctional pruning had been employed years earlier. Both tree failures have visible defects."²⁴
21. Repair work for a utility pole (work order #102506022) was completed on August 19, 2013, 676 days after its original October 3, 2011, due date.²⁵

Cascade

22. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 8, 2017, at approximately 2234 hours, two PG&E 12-kV overhead conductors contacted each other and ignited the Cascade Fire, near 13916 Cascade Way in Browns Valley, Yuba County.²⁶

¹⁹ SED Camp Report, CAMP-0147-148 (Alsup Report, Exhibit M (Atlas) at 2-3) (note, the identification of the Atlas 1 and Atlas 2 incident locations, as defined by the CPUC's December 7, 2017, letter, in Alsup Report, Exhibit M, is the opposite of the terminology used in the SED 2017 Report and in these factual stipulations).

²⁰ SED Camp Report, CAMP-0147-148 (Alsup Report, Exhibit M (Atlas) at 2-3).

²¹ SED Camp Report, CAMP-0147-148 (Alsup Report, Exhibit M (Atlas) at 2-3).

²² SED Camp Report, CAMP-0147-148 (Alsup Report, Exhibit M (Atlas) at 2-3).

²³ SED 2017 Report, Atlas 011.

²⁴ SED 2017 Report, Atlas 012.

²⁵ SED 2017 Report, Atlas 104-108 (work order).

²⁶ SED 2017 Report, Cascade 001.

23. On October 8, 2017, at 2257 hours, PG&E records indicate that 9 of the 13 meters downstream of Fuse 17841 recorded a smart meter event indicative of power loss.²⁷ Fuse 17841 is the nearest protection device upstream of the incident location.
24. On October 13, 2017, a CAL FIRE-contracted engineer, Jim Nolt, identified excessive slack in the high-voltage distribution conductors and evidence of recent arcing on the two conductors.²⁸
25. On October 17, 2017, PG&E accessed the incident location to assist CAL FIRE in collecting evidence and observed that the secondary service line at the incident location appeared to be damaged at mid-span.²⁹
26. Between the date of PG&E's 2009 detailed inspection and October 8, 2017, PG&E's routine patrols and detailed inspections of distribution facilities that included PG&E pole numbers 101288638 and 101288646 did not identify excessive conductor sag between these poles or any other risks that might contribute to conductor-to-conductor contact.³⁰

Lobo

27. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 8, 2017, at approximately 2327 hours, a ponderosa pine tree fell onto PG&E 21 kV overhead conductors near 11218 Lone Lobo Trail in Nevada City, Nevada County. The tree contact caused the ignition of the Lobo Fire.³¹
28. On October 8, 2017, at 2327 hours, PG&E's Line Recloser ("LR") 48484 operated and reclosed. LR 48484 was the nearest, upstream LR relative to the incident location.³²
29. From September 13-15, 2016, a PG&E VM contractor felled 46 ponderosa pine trees around the subject ponderosa pine tree, which increased the exposure of the subject tree.³³

²⁷ SED 2017 Report, Cascade 080.

²⁸ SED 2017 Report, Cascade 063.

²⁹ SED 2017 Report, Cascade 081.

³⁰ SED 2017 Report, Cascade 005.

³¹ SED 2017 Report, Lobo 0001.

³² SED 2017 Report, Lobo 0015-6.

³³ SED 2017 Report, Lobo 0008.

30. In Mark Porter's report evaluating the ponderosa pine tree failure, he stated that he identified an extended open cavity that spanned approximately 40 inches above the groundline to the failure point at 14 feet.³⁴ Mr. Porter concluded that the open cavity, which faced the conductor span, could have been identified during a routine VM inspection; thus, the subject tree should have been removed prior to the incident.³⁵ In addition, Mr. Porter stated that the loss of neighboring trees changed the wind dynamics affecting the subject tree.³⁶
31. PG&E's Project Management Database indicates that a 2014 CEMA Patrol was completed on the subject circuit.³⁷ However, after a search of its records, PG&E was unable to locate the maps for these patrols.³⁸ PG&E's vegetation management records associated with this incident location, provided to the CPUC on February 28, 2018, indicate that no work was prescribed at the incident location during this CEMA patrol, as no inspection record or work order is created unless PG&E determines that work is indeed necessary after a CEMA inspection.³⁹
32. Between November 13, 2012 and October 8, 2017, PG&E's VM pre-inspectors did not identify the subject ponderosa pine tree for vegetation trim or removal.⁴⁰

McCourtney

33. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 8, 2017, at approximately 2348 hours, the McCourtney Fire ignited at two separate locations along the PG&E Grass Valley 1103, 12 kV circuit. An 80-foot ponderosa pine tree fell onto PG&E 12 kV conductors and ignited a fire near 11253 Orion Way in Grass Valley, Nevada County. Shortly afterward, a 12 kV conductor broke at a clamp connector at the source-side of an LR and fell to the ground thus igniting a fire at 11228 McCourtney Road in Grass Valley, Nevada County.⁴¹

³⁴ SED 2017 Report, Lobo 0010.

³⁵ SED 2017 Report, Lobo 0012.

³⁶ SED 2017 Report, Lobo 0012.

³⁷ SED 2017 Report, Lobo 0281 (Response to CPUC Common Data Request Question 10 – Part 3).

³⁸ SED 2017 Report, Lobo 0281 (Response to CPUC Common Data Request Question 10 – Part 3).

³⁹ SED 2017 Report, Lobo 0281 (Response to CPUC Common Data Request Question 10 – Part 3); *see also* Utility Bulletin: TD-7102B-007, Second Patrol – Scope of Work Requirements, July 17, 2017 (produced as part of PG&E's Attachment B Report at PGE-2017Wildfires-OII-0000003192) at 2 ("Trees identified for work are issued on a Work Request to TC [the tree contractors]."); *id.* at 4 ("Trees identified by PI [pre-inspector] as requiring work are entered into a handheld device.").

⁴⁰ SED 2017 Report, Lobo 0006-8.

⁴¹ SED 2017 Report, McCourtney 0001.

34. On October 8, 2017, at approximately 2345 hours, PG&E LR 58498 measured a ground fault of 51.4 amps.⁴²
35. Based on PG&E's 2014 and 2016 overhead distribution patrol documentation for the incident area near 11228 McCourtney Road, PG&E did not identify issues related to the incident facilities.⁴³
36. Based on PG&E's 2012 and 2017 overhead distribution detailed inspection documentation for the incident area near 11228 McCourtney Road, PG&E did not identify issues related to the incident facilities.⁴⁴
37. Between 2013 and 2017, PG&E VM pre-inspectors did not identify the subject ponderosa pine (near 11253 Orion Way) for vegetation trim or removal.⁴⁵
38. In Mark Porter's report evaluating the subject ponderosa pine tree (near 11253 Orion Way), he noted that the subject tree displayed visible wood decay and missing buttress roots. Mr. Porter concluded that the tree defect could have been identified during a routine tree inspection and should have been abated.⁴⁶

Norrbom

39. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 8, 2017, at approximately 2200 hours, a branch of a black oak tree fell and contacted the overhead conductors of PG&E's Sonoma 1103, 12 kV circuit located near 16200 Norrbom Road in Sonoma, Sonoma County. The tree contact ignited the Norrbom Fire.⁴⁷
40. In Mark Porter's report evaluating the subject black oak tree, he noted that the tree had a cavity with pre-existing decay. The report also noted indications of contact with high voltage distribution wires on the tree bark.⁴⁸
41. Between 2013 and October 8, 2017, PG&E VM personnel did not identify the subject black oak tree (near 16200 Norrbom Road) for vegetation trim or removal.

⁴² SED 2017 Report, McCourtney 0019-20.

⁴³ SED 2017 Report, McCourtney 0006-7.

⁴⁴ SED 2017 Report, McCourtney 0006-7.

⁴⁵ SED 2017 Report, McCourtney 0008-11.

⁴⁶ SED 2017 Report, McCourtney 0011-12.

⁴⁷ SED 2017 Report, Norrbom 001.

⁴⁸ SED 2017 Report, Norrbom 010.

Nuns

42. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 8, 2017, at approximately 2218 hours, a branch from an alder tree fell and contacted overhead, secondary voltage conductors of PG&E's Dunbar 1101 circuit supplying power to 1210 Nuns Canyon Road in Glen Ellen, Sonoma County. The tree contact ignited the Nuns Fire.⁴⁹
43. In Mark Porter's report evaluating the subject alder tree, he did not note any visual signs of decay that may have contributed to the branch failure.⁵⁰
44. On September 22, 2017, PG&E identified vegetation (not the alder tree branch) that had made contact with and was causing strain on a secondary service line and created a work order (#113271607) to abate the vegetation contacting the line.⁵¹ PG&E asserts that, based on an assessment of several factors in accordance with PG&E policies, PG&E assigned the work order a priority determination reflecting that the identified issue needed prompt but not immediate resolution.⁵² SED contends that the comments provided on the work order, suggesting a safety concern, required more immediate action than October 8, 2017.

Oakmont/Pythian

45. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 13, 2017, at approximately 1533 hours, a Douglas fir tree fell and contacted overhead conductors of PG&E's Dunbar 1101, 12 kV circuit located near 8050 Pythian Road in Santa Rosa, Sonoma County. The tree contact ignited the Oakmont/Pythian Fire.⁵³
46. In Mark Porter's report evaluating the subject Douglas fir tree, he described the tree as "structurally sound and healthy as it lay horizontally supported by neighboring trees" and he did not note any abnormalities or defects on the tree.⁵⁴

⁴⁹ SED 2017 Report, Nuns 001.

⁵⁰ SED 2017 Report, Nuns 021.

⁵¹ SED 2017 Report, Nuns 098-100 (work order).

⁵² SED 2017 Report, Nuns 098-100 (work order).

⁵³ SED 2017 Report, Oakmont 001.

⁵⁴ SED 2017 Report, Oakmont 009-10.

47. On November 30, 2011, PG&E identified pole #101957837 for reinforcement based on the measured, reduced shell thickness at groundline.⁵⁵ On November 30, 2011, intrusive inspection notes a 0% remaining strength and 0% wood strength.⁵⁶ However, on September 4, 2012, following a visual “stubbing” inspection, PG&E noted that its inspector determined that the pole did not require reinforcement.⁵⁷ PG&E stated that a subsequent intrusive inspection in 2017 and a recent field visit confirmed that no stubbing or reinforcement was necessary.⁵⁸ SED notes that PG&E did not reinforce the pole and in subsequent three intrusive inspections in 2012 and twice in 2017, wood strength increased to 100% and remaining strength remained at 0%.
48. On October 13, 2017, two troublemen patrolled most but not all of the circuit spans downstream of Fuse 1251.⁵⁹ Downstream of Fuse 1251, the circuit forks, with one line going towards the east (“the east line”), and the other line going towards the northwest (“the northwest line”).⁶⁰ The troubleman who patrolled the east line identified wires down, which he isolated prior to closing Switch 14261 and LR 160, which was upstream of Fuse 1251.⁶¹ The northwest line traverses a hill and was patrolled by the second troubleman.⁶² This troubleman patrolled the northwest line up to a gate at the end of Pythian Road, and, from this vantage point, performed a visual inspection of the line beyond the gate.⁶³ He concluded that the portion of the line he could see was intact, but he could not see the portion of the line beyond the crest of the hill.⁶⁴ Although the troubleman could not see part of the circuit beyond the crest of the hill, PG&E proceeded to close LR 160, thus energizing the downstream circuit portions past LR 416 and up to the incident location.⁶⁵
49. Pole replacement work related to woodpecker damage to a pole (work order #103891251) was completed 69 days after its original 2011 due date, on August 18, 2011.⁶⁶ However, PG&E noted that the work order in question was completed as part of PG&E’s CPUC approved plan to address a backlog of work orders; under this plan, the work was completed on time. Regardless, the work was completed late.

⁵⁵ SED 2017 Report, Oakmont 407-09 (pole report).

⁵⁶ SED 2017 Report, Oakmont 408 (pole report).

⁵⁷ SED 2017 Report, Oakmont 408 (pole report).

⁵⁸ SED 2017 Report, Oakmont 407-08 (pole report).

⁵⁹ SED 2017 Report, Oakmont 404-05 (Response to CPUC Oakmont/Pythian Data Request Question 2).

⁶⁰ SED 2017 Report, Oakmont 404-05 (Response to CPUC Oakmont/Pythian Data Request Question 2).

⁶¹ SED 2017 Report, Oakmont 404-05 (Response to CPUC Oakmont/Pythian Data Request Question 2).

⁶² SED 2017 Report, Oakmont 404-05 (Response to CPUC Oakmont/Pythian Data Request Question 2).

⁶³ SED 2017 Report, Oakmont 404-05 (Response to CPUC Oakmont/Pythian Data Request Question 2).

⁶⁴ SED 2017 Report, Oakmont 404-05 (Response to CPUC Oakmont/Pythian Data Request Question 2).

⁶⁵ SED 2017 Report, Oakmont 021.

⁶⁶ SED 2017 Report, Oakmont 411-415 (work order).

Partrick

50. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 8, 2017, at approximately 2348 hours, a coast live oak tree fell and contacted overhead conductors of PG&E's Pueblo 2103, 12 kV circuit at 1721 Partrick Road in Napa, Napa County. One of the 12 kV conductors fell to the ground and, as a result, ignited the Partrick Fire.⁶⁷
51. When PG&E was granted access to the incident location on October 18, 2017, PG&E observed that a 20-inch diameter coast live oak tree, approximately 50 feet tall and rooted approximately 40 feet uphill from the distribution conductors, had broken near the base.⁶⁸ One of the two phases on a 12kV tap line on the Pueblo 2103 Circuit was on the ground.⁶⁹
52. In Mark Porter's report evaluating the subject oak tree, he stated that he observed that the tree failure was associated with visual decay symptoms or pre-existing wounds and defects.⁷⁰
53. Between 2013 and October 8, 2017, PG&E VM personnel did not identify the subject oak tree for vegetation trim or removal.

Pocket

54. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 9, 2017, at approximately 0330 hours,⁷¹ a valley oak tree fell onto PG&E's 12 kV overhead conductors near the intersection of Ridge Ranch Road and Ridge Oaks Road in Geyserville, Sonoma County. The tree contact ignited the Pocket Fire.⁷²
55. On October 17, 2017, when PG&E was permitted to access the incident location, PG&E observed that a top section of a California white oak/valley oak tree had broken and was laying on at least one conductor serving the Cloverdale 1102 (12 kV) Circuit, near the intersection of Ridge Ranch Road and Ridge Oaks Road.⁷³ The California white oak/valley oak was rooted approximately 15 feet from the distribution conductors.⁷⁴ At least one conductor was on the ground.⁷⁵

⁶⁷ SED 2017 Report, Partrick 001.

⁶⁸ SED Camp Report, CAMP-0250-251 (Alsup Report, Exhibit X (Partrick) at 1-2).

⁶⁹ SED Camp Report, CAMP-0250-251 (Alsup Report, Exhibit X (Partrick) at 1-2).

⁷⁰ SED 2017 Report, Partrick 009.

⁷¹ SED 2017 Report, Pocket 013.

⁷² SED 2017 Report, Pocket 001.

⁷³ SED Camp Report, CAMP-0260-262 (Alsup Report, Exhibit Y (Pocket) at 2-4).

⁷⁴ SED Camp Report, CAMP-0260-262 (Alsup Report, Exhibit Y (Pocket) at 2-4).

⁷⁵ SED Camp Report, CAMP-0260-262 (Alsup Report, Exhibit Y (Pocket) at 2-4).

56. In Mark Porter's report evaluating the subject oak tree failure, he stated that he observed a trunk cavity approximately 2'-5" wide and 2'-9" long with woundwood surrounding the cavity. Mr. Porter also stated in his report that the "tree would typically be condemned during an arborist inspection, primarily due to the proximity of powerlines (an immovable target)."⁷⁶
57. Between 2012 and October 9, 2017, PG&E VM personnel trimmed the subject white oak/valley oak tree twice.⁷⁷

Point

58. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 9, 2017, at approximately 0110 hours, a limb from a valley oak tree fell onto a PG&E 12 kV overhead conductor, which ignited the Point Fire near 22894 State Highway 26 in West Point, Calaveras County.⁷⁸
59. On or around October 9, 2017, after CAL FIRE collected what it believed to be potentially relevant evidence at an area of interest for the Point Fire, PG&E personnel disposed of a broken crossarm and a damaged portion of a conductor that had been replaced during restoration work.⁷⁹ PG&E states that PG&E personnel acted without knowledge of disposing of potentially relevant evidence, and without intent to destroy or conceal potentially relevant evidence.⁸⁰ Public Utilities Code Section 316 and GO 95, Rule 19 require a utility to provide SED access to physical evidence under the utility's physical control, custody or possession related to a reportable incident.⁸¹
60. CAL FIRE's arborist found the subject limb to be sound with no evidence of disease or decay at the break point.⁸²

⁷⁶ SED 2017 Report, Pocket 008-9.

⁷⁷ Attachment 2 (PGE-CPUC_DR-112117_Common_Q11); Attachment 3 (PGE-CPUC_00010331); Attachment 4 (PGE-CPUC_00010329).

⁷⁸ SED 2017 Report, Point 001.

⁷⁹ SED 2017 Report, Point 216-18, Point 220-21 (February 16, 2018 letter from PG&E to CPUC; March 16, 2018 letter from PG&E to CPUC).

⁸⁰ SED 2017 Report, Point 216-18, Point 220-21 (February 16, 2018 letter from PG&E to CPUC; March 16, 2018 letter from PG&E to CPUC).

⁸¹ Public Utilities Code § 316 and GO 95, Rule 19.

⁸² SED 2017 Report, Point 019.

Potter/Redwood

61. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 8, 2017, at approximately 2334 hours, a valley oak tree limb fell onto a PG&E 60 kV overhead transmission at 13801 N. Busch Road in Potter Valley, Mendocino County, and that on October 9, 2017, at approximately 0027 hours, a valley oak tree limb fell onto PG&E's 12 kV overhead distribution conductors at 9100 Main Street in Potter Valley, Mendocino County. The tree contacts ignited the Potter Fire and combined with a spot fire found in Redwood Valley which was subsequently called the Redwood Fire.⁸³
62. During the early morning of October 9, 2017, a PG&E troubleman drove down Hawn Creek Road at the time of the 9100 Main Street incident and did not recall seeing any damage to PG&E equipment or evidence that fire burned any area on the east side of the road, where 9100 Main Street is located.⁸⁴ The same troubleman later drove down the same road and recalled seeing one of three phases down on the east side of the road.⁸⁵ Crew members who completed repair work the following day observed only a limited area of burned vegetation and no burned structures on 9100 Main Street.⁸⁶ It was also PG&E's understanding that no PG&E facilities had been collected by CAL FIRE from 9100 Main Street during its investigation of the Potter/Redwood Fire.⁸⁷ PG&E did not believe there was a reportable event at 9100 Main Street and therefore did not file an incident report.⁸⁸
63. On November 6, 2017, CAL FIRE notified PG&E that it was requesting data related to three additional sites, one of which was the Redwood incident location.⁸⁹ According to CAL FIRE, the fire on the property of 9100 Main Street was confirmed to be a separate fire from an overhead conductor which later burned together with the fire near 13801 North Busch Road. The three fires burned together and were named the Redwood incident.⁹⁰

⁸³ SED 2017 Report, Potter Redwood 001, 004.

⁸⁴ SED 2017 Report, Potter Redwood 89 (Redwood Location Fact Report).

⁸⁵ SED 2017 Report, Potter Redwood 89 (Redwood Location Fact Report).

⁸⁶ SED 2017 Report, Potter Redwood 019.

⁸⁷ SED 2017 Report, Potter Redwood 019 (quoting Response to CPUC Redwood Location 2 Data Request Question 1).

⁸⁸ SED 2017 Report, Potter Redwood 019 (quoting Response to CPUC Redwood Location 2 Data Request Question 1).

⁸⁹ SED 2017 Report, Potter Redwood 019.

⁹⁰ SED 2017 Report, Potter Redwood 034.

64. On October 10, 2017, PG&E crews completed repair work at the Redwood incident location for a repair installing approximately 100 feet of new 12 kV conductor and related splices.⁹¹ However, after a search of its records, PG&E states that it has been unable to locate the work order for this repair.⁹²
65. PG&E's Project Management Database indicates that a 2016 CEMA WUI Patrol was completed on the subject circuit.⁹³ However, after a search of its records, PG&E was unable to locate the maps for these patrols.⁹⁴ PG&E's vegetation management records associated with this incident location, produced February 28, 2018, indicate that no work was prescribed at the incident location during this CEMA patrol, as no inspection record or work order is created unless PG&E determines that work is indeed necessary after a CEMA inspection.⁹⁵
66. In Charles Martin's⁹⁶ reports evaluating both trees involved in the Potter/Redwood incident, he did not identify structural defects, disease, or other pests that negatively affected the subject trees.⁹⁷

Sulphur

67. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 8, 2017, a PG&E pole that was part of its Redbud 1102 circuit failed and fell to the ground which resulted in arcing and ignition of the Sulphur Fire. The Sulphur Fire ignited at 1350 Sulphur Bank Drive in Clearlake Oaks, Lake County.⁹⁸

⁹¹ SED 2017 Report, Potter Redwood 094 (Response to CPUC Redwood Location 2 Data Request Question 5).

⁹² SED 2017 Report, Potter Redwood 094 (Response to CPUC Redwood Location 2 Data Request Question 5).

⁹³ SED 2017 Report, Potter Redwood 096 (Response to CPUC Common Data Request Question 10 – Part 3).

⁹⁴ SED 2017 Report, Potter Redwood 096 (Response to CPUC Common Data Request Question 10 – Part 3).

⁹⁵ SED 2017 Report, Potter Redwood 096 (Response to CPUC Common Data Request Question 10 – Part 3); *see also* Utility Bulletin: TD-7102B-007, Second Patrol – Scope of Work Requirements, July 17, 2017 (produced as part of PG&E's Attachment B Report at PGE-2017Wildfires-OII-0000003192) at 2 (“Trees identified for work are issued on a Work Request to TC [the tree contractors].”); *id.* at 4 (“Trees identified by PI [pre-inspector] as requiring work are entered into a handheld device.”).

⁹⁶ Charles Martin is a CAL FIRE employee who is a Registered Professional Forester and Arborist.

⁹⁷ SED 2017 Report, Potter Redwood 013-14.

⁹⁸ SED 2017 Report, Sulphur 001.

68. On October 13, 2017, while performing restoration work, PG&E states that a PG&E contractor inadvertently removed the burnt second pole from the field during its normal course of clearing and hauling burnt PG&E poles.⁹⁹ PG&E states that this happened after the Sulphur Fire and after CAL FIRE collected what was believed, at the time, to be all potentially relevant evidence for the fire.¹⁰⁰ PG&E believes that the contractor disposed of the pole without knowledge that it may have been relevant evidence and without intent to destroy or conceal relevant evidence.¹⁰¹ PG&E later alerted SED explaining what happened to the pole and stated that PG&E attempted to retrieve it from the landfill to which it had been delivered, but the landfill manager reported that there was no way to locate the specific pole.¹⁰² Public Utilities Code Section 316 and GO 95, Rule 19 require a utility to provide SED access to physical evidence under the utility's physical control, custody or possession related to a reportable incident.¹⁰³
69. PG&E's Project Management Database indicates that a 2016 CEMA WUI Patrol was completed on the subject circuit.¹⁰⁴ However, after a search of its records, PG&E states that it is unable to locate the maps for these patrols.¹⁰⁵ PG&E's vegetation management records associated with this incident location, produced February 28, 2018, indicate that no work was prescribed at the incident location during this CEMA patrol, as no inspection record or work order is created unless PG&E determines that work is indeed necessary after a CEMA inspection.¹⁰⁶
70. Between October 17, 2008, and October 8, 2017, PG&E's detailed inspection documentation did not identify issues with the incident pole.¹⁰⁷
71. Between September 2000 and October 8, 2017, PG&E's intrusive inspection documentation did not identify issues with the incident pole.¹⁰⁸

⁹⁹ SED 2017 Report, Sulphur 062 (February 16, 2018 letter from PG&E to CPUC), Sulphur 068-69 (Response to CPUC Sulphur Data Request Question 4).

¹⁰⁰ SED 2017 Report, Sulphur 062 (February 16, 2018 letter from PG&E to CPUC), Sulphur 068-69 (Response to CPUC Sulphur Data Request Question 4).

¹⁰¹ SED 2017 Report, Sulphur 062 (February 16, 2018 letter from PG&E to CPUC), Sulphur 068-69 (Response to CPUC Sulphur Data Request Question 4).

¹⁰² SED 2017 Report, Sulphur 062 (February 16, 2018 letter from PG&E to CPUC), Sulphur 068-69 (Response to CPUC Sulphur Data Request Question 4).

¹⁰³ Pub. Util. Code § 316 and GO 95, Rule 19.

¹⁰⁴ SED 2017 Report, Sulphur 065 (Response to CPUC Common Data Request Question 10 – Part 3).

¹⁰⁵ SED 2017 Report, Sulphur 065 (Response to CPUC Common Data Request Question 10 – Part 3).

¹⁰⁶ SED 2017 Report, Sulphur 065 (Response to CPUC Common Data Request Question 10 – Part 3); *see also* Utility Bulletin: TD-7102B-007, Second Patrol – Scope of Work Requirements, July 17, 2017 (produced as part of PG&E's Attachment B Report at PGE-2017Wildfires-OII-0000003192) at 2 ("Trees identified for work are issued on a Work Request to TC [the tree contractors]."); *id.* at 4 ("Trees identified by PI [pre-inspector] as requiring work are entered into a handheld device.").

¹⁰⁷ SED 2017 Report, Sulphur 006.

¹⁰⁸ SED 2017 Report, Sulphur 006.

Youngs (Maacama)

72. For purposes of resolving this proceeding, PG&E does not contest SED's finding that on October 8, 2017, at approximately 2130 hours, a valley oak tree fell onto PG&E's 12 kV overhead conductors near 995 Maacama Lane in Healdsburg, Sonoma County. The tree contacted PG&E's conductors and caused the ignition of the Youngs Fire.¹⁰⁹
73. On October 18, 2017, PG&E visited the incident location and observed that a California white oak/valley oak tree had broken near its mid-section and was laying on the ground near fallen conductors for the Fulton 1102 (12 kV) Circuit.¹¹⁰ The California white oak/valley oak tree had a diameter at breast height of approximately 30 inches, was rooted uphill approximately 20 feet from the distribution conductors, and is estimated to be approximately 50 feet tall.¹¹¹ PG&E believes the California white oak/valley oak tree broke at a height of approximately 19 feet above ground.¹¹²
74. Between January 2, 2013 and October 8, 2017, PG&E VM personnel did not identify the subject white oak/valley oak tree for vegetation trim or removal.¹¹³
75. According to the CAL FIRE lead investigator, Charlie Laird, the subject white oak/valley oak tree exhibited an extended internal cavity and a vertical open cavity.¹¹⁴

II. Stipulated Facts Relevant to the 2018 Camp Fire

A. Definitions

76. Aerial Patrol – Visual observations to identify abnormalities (i.e., obvious structural problems or hazards) or circumstances that will negatively impact safety; aerial patrols are conducted by helicopter.¹¹⁵
77. Center Phase – The phase between the Left and Right Phases.
78. C-hook – Hardware that is part of an insulator assembly used to attach an insulator assembly to a structure or tower.

¹⁰⁹ SED 2017 Report, Youngs 001.

¹¹⁰ SED 2017 Report, Youngs 065-066.

¹¹¹ SED 2017 Report, Youngs 066.

¹¹² SED 2017 Report, Youngs 066.

¹¹³ SED 2017 Report, Youngs 007-8.

¹¹⁴ SED 2017 Report, Youngs 013, 014.

¹¹⁵ SED Camp Report, CAMP-0035.

- 79. Insulator Assembly – A string of insulators and associated attachment hardware between a high-voltage conductor and a tower structure used to provide mechanical support and electrically isolate the conductor from the tower and other support structures.
- 80. Detailed Climbing Inspection – A detailed supporting-structure-based observation involving climbing of a structure to determine if there are any abnormal or hazardous conditions that adversely impact safety, service reliability, or asset life.¹¹⁶
- 81. Detailed Ground Inspection – A detailed visual observation used to look for abnormalities or circumstances that will negatively impact safety, reliability, or asset life, typically done from the ground with binoculars.¹¹⁷ Individual elements and components are examined carefully through visual and/or routine diagnostic tests, and each abnormal condition is graded and/or recorded.¹¹⁸
- 82. Hanger plate – A part of a tower that serves as an attachment point from which insulator assemblies are suspended.
- 83. Hold-down anchor – Hardware used to anchor an insulator assembly from excessive movement, typically when the insulator assembly is subject to the effects of upward tension because of its location on a tower with lower elevation than an adjacent tower.
- 84. Left Phase - For an observer facing a tower in the southerly direction along the Caribou-Palermo line, the phase on the left-hand side of the tower.
- 85. Right Phase – For an observer facing a tower in the southerly direction along the Caribou-Palermo line, the phase on the right-hand side of the tower.
- 86. Runner arm – A steel cross-member on a structure that can be used to suspend insulator assemblies.
- 87. SED Camp Report – SED’s investigation report for the 2018 Camp Fire.
- 88. Suspension Insulator – A type of insulator that is suspended from the cross-members of a tower and is used to support conductors while electrically insulating them from the tower.

¹¹⁶ SED Camp Report, CAMP-0035.

¹¹⁷ SED Camp Report, CAMP-0035.

¹¹⁸ SED Camp Report, CAMP-0035.

89. Transposition Jumper – A conductor used to complete a phase reconfiguration of the transmission line. The phase reconfiguration consists of a realignment of a phase conductor from the position it occupies on one side of the tower to a different position on the opposite side of the tower for the purpose of improving the electrical characteristics of the transmission line.

B. Stipulated Facts Relevant to 2018 Camp Wildfire

90. The Camp Fire burned approximately 153,336 acres.¹¹⁹
91. The Camp Fire resulted in 85 confirmed fatalities and destroyed 18,804 structures.¹²⁰
92. CAL FIRE identified an ignition point near the community of Pulga in Butte County.¹²¹
93. CAL FIRE identified a second ignition point located near the intersection of Concow Road and Rim Road in the city of Concow in Butte County.¹²² PG&E does not concede that there was a second independent ignition point.

November 8, 2018

94. Wind speed and wind gusts recorded at 0610 hours at the Stirling City weather station were 10.27 mph and 36.39 mph respectively.¹²³ The Stirling City weather station is the closest PG&E weather station to the two ignition points identified by CAL FIRE. The November 1, 2019 Exponent report regarding a study of PG&E's Caribou-Palermo Assets states that the average wind speed experienced by the Caribou-Palermo (North) transmission line, in 2010, was 10.7 mph.¹²⁴
95. The line current on the Caribou-Palermo 115kV Transmission Line for the period from 0400 to 0615 hours is reflected in Figure 1 of SED's Camp Report, which is based on Supervisory Control and Acquisition Data ("SCADA") from the Palermo Substation.¹²⁵
96. PG&E's Caribou-Palermo 115 kV Transmission Line connects PG&E's Palermo Substation and Caribou #1 Powerhouse.¹²⁶

¹¹⁹ SED Camp Report, CAMP-0002.

¹²⁰ SED Camp Report, CAMP-0001-2.

¹²¹ SED Camp Report, CAMP-0038.

¹²² SED Camp Report, CAMP-0038.

¹²³ SED Camp Report, CAMP-0009.

¹²⁴ SED Camp Report, CAMP-0597-598 and CAMP-0601, Figure 38.

¹²⁵ SED Camp Report, CAMP-0021, Figure 1.

¹²⁶ SED Camp Report, CAMP-0009.

97. At 0615 hours, Palermo Substation relay detected a ground fault current of 256 Amps and opened Circuit Breaker (“CB”) 152.¹²⁷
98. At 0615 hours, Caribou #1 Powerhouse relay detected a ground fault current of 202 Amps and opened CB 112. The fault was isolated with both circuit breakers Palermo CB 152 and Caribou CB 112 opening.¹²⁸
99. According to CAL FIRE’s website, the fire started at 0629 hours at 39.82° latitude and -121.44° longitude. These coordinates correspond to a location near Tower :27/222 of the Caribou-Palermo 115 kV Transmission Line.¹²⁹
100. At 0630 hours, a PG&E employee observed fire in the vicinity of Tower :27/222, and this observation was reported to 911 by PG&E employees.¹³⁰
101. At 0645 hours, PG&E LR 1704 operated and the Big Bend 1101 12 kV Distribution Circuit experienced an outage.¹³¹
102. LR 1704 is a protection device on PG&E’s Big Bend 1101 12 kV Distribution Circuit.¹³²
103. Between approximately 0900 and 1300 hours, PG&E conducted an aerial patrol of the Caribou-Palermo 115 kV Transmission Line. At Tower :27/222, the patrol identified a suspension insulator supporting a transposition jumper that had disconnected from an arm on the tower.¹³³
104. Following PG&E’s aerial patrol, PG&E filed an Electric Incident Report at 1806 hours explaining that “PG&E experienced an outage on the Caribou-Palermo 115 kV Transmission Line in Butte County.”¹³⁴

November 9, 2018

105. A PG&E employee on patrol arrived at the location of the pole with LR 1704 on the Big Bend 1101 12 kV Distribution Circuit and observed that the pole and other equipment was on the ground.¹³⁵

¹²⁷ SED Camp Report, CAMP-0009.

¹²⁸ SED Camp Report, CAMP-0009.

¹²⁹ SED Camp Report, CAMP-0009-10.

¹³⁰ SED Camp Report, CAMP-0010.

¹³¹ SED Camp Report, CAMP-0010.

¹³² SED Camp Report, CAMP-0010.

¹³³ SED Camp Report, CAMP-0010.

¹³⁴ SED Camp Report, CAMP-0010, CAMP-040.

¹³⁵ SED Camp Report, CAMP-0046.

November 12, 2018

106. North of LR 1704, a PG&E employee observed wires down and damaged and downed poles near the intersection of Concow Road and Rim Road. At this location, the employee observed several snapped trees, with some on top of the downed wires.¹³⁶

November 13, 2018

107. PG&E assisted CAL FIRE in collecting evidence related to an outage on the Big Bend 1101 12 kV Distribution Circuit.¹³⁷
108. CAL FIRE provided PG&E with receipts for evidence collected prior to PG&E's arrival at the site near the intersection of Concow Road and Rim Road.¹³⁸

November 14, 2018

109. PG&E assisted CAL FIRE in collecting evidence from Tower :27/221 and Tower :27/222 on the Caribou-Palermo 115 kV Transmission Line.¹³⁹ Towers :27/221 and :27/222, as well as their associated equipment, were initially installed between 1919 and 1921, and first went into service on May 6, 1921.¹⁴⁰ Portions of the line have been replaced over time as a result of routine maintenance and emergency work.¹⁴¹
110. PG&E identified original Great Western Power drawings for the construction of Great Western Power Line Number Three (a portion of which is now the line referred to as the Caribou-Palermo line) and the records show that certain components on the line may be original vintage. An example of Great Western Power documents that appear to be associated with Great Western Power Line Number Three is a drawing of a "Suspension Hook" dated "10-11-12."¹⁴²
111. The C-hook that broke on Tower :27/222 on the Caribou-Palermo 115 kV Transmission Line (the "incident hook") bears certain similarities to a C-hook manufactured by Ohio Brass, as determined by design drawings.¹⁴³

¹³⁶ SED Camp Report, CAMP-0046.

¹³⁷ SED Camp Report, CAMP-0046.

¹³⁸ SED Camp Report, CAMP-0046.

¹³⁹ SED Camp Report, CAMP-0045-46.

¹⁴⁰ SED Camp Report, CAMP-0008-9.

¹⁴¹ Attachment 5 (PGE-CPUC_12062018-DR_001_Q37).

¹⁴² Attachment 6 (PGE-CPUC_12062018-DR_002_Q11); Attachment 7 (PGE-CPUC_12062018-DR_002_Q12); Attachment 8 (PGE-CAMP-CPUC-0000031180).

¹⁴³ Attachment 8 (PGE-CAMP-CPUC-0000031180).

112. CPUC staff were at the site to observe the evidence collection.
113. At Tower :27/221 the CPUC staff observed that the right phase insulator hold-down anchor was disconnected.¹⁴⁴ PG&E found this condition during an inspection on September 11, 2018, and assigned it Priority Code E in accordance with its Electric Transmission Preventive Maintenance (“ETPM”) Manual.¹⁴⁵ Under the ETPM Manual, Priority Code E conditions must be addressed within 12 months.¹⁴⁶
114. Post-Camp Fire inspections of the Caribou-Palermo line identified three conditions relating to hold-down anchors that resulted in Priority Code A notifications.¹⁴⁷
115. At Tower :27/222 a suspension insulator had disconnected from its hanger plate, and was hanging from the transposition jumper wire, approximately 20-30 feet above the ground.¹⁴⁸
116. At Tower :27/222, the C-hook holding the left phase suspension insulator (the incident hook) broke and became disconnected from its hanger plate.¹⁴⁹ During evidence collection in November 2018, CAL FIRE took possession of that portion of the incident hook that remained attached to the insulator. PG&E gained access to the area near Tower :27/222 after CAL FIRE collected evidence that it deemed relevant to its investigation. PG&E and SED have been unable to locate the remainder of the incident hook.¹⁵⁰
117. SED made a close visual observation and took photographs before the incident hook was placed in a CAL FIRE truck bed.¹⁵¹ In SED’s assessment: the smooth portion is an indication of wear that occurred over a long period of time prior to failure; the rough upper portion of the cross-section fractured at the time of the incident.¹⁵² PG&E expresses no opinion on SED’s assessment. CAL FIRE collected the incident hook on Tower :27/222 with PG&E’s assistance in November 2018. Neither PG&E nor the CPUC are in possession of the incident hook. As of the date of this stipulation, neither PG&E nor the CPUC has been able to conduct any metallurgical analysis or testing of the incident hook.

¹⁴⁴ SED Camp Report, CAMP-0022, Figure 2.

¹⁴⁵ SED Camp Report, CAMP-450-535.

¹⁴⁶ SED Camp Report, CAMP-0468.

¹⁴⁷ SED Camp Report, CAMP-0656-661.

¹⁴⁸ SED Camp Report, CAMP-0022, Figure 3.

¹⁴⁹ SED Camp Report, CAMP-0011, CAMP-0045-46.

¹⁵⁰ Attachment 9 (PGE-CPUC_12062018-DR_002_Q02).

¹⁵¹ SED Camp Report, CAMP-0023, Figure 4.

¹⁵² SED Camp Report, CAMP-0011 and CAMP-0023, Figure 4.

118. PG&E's transmission inspection procedures, effective prior to and at the time of the Camp Fire, state that components displaying material loss greater than 50% should receive a Priority Code A maintenance notification and be immediately repaired or made safe.¹⁵³
119. Prior to the incident hook breaking on Tower :27/222, the incident hook attached a suspension insulator to a hanger plate on the Tower.
120. There was wear on the working eye of the runner arm where the incident hook was attached on Tower :27/222—both the working eye on the runner arm and the working eye on the attached hanger plate displayed some degree of wear.¹⁵⁴
121. Arc flash marks were present on the transposition jumper and a steel cross-member and leg on Tower :27/222.¹⁵⁵

November 15, 2018

122. At approximately 1800 hours, CAL FIRE held a press conference during which it identified a “possible second origin related to the Camp incident in the Concow area.”¹⁵⁶

November 16, 2018

123. At approximately 1600 hours, PG&E submitted the Electric Incident Report¹⁵⁷ for the second ignition point identified by CAL FIRE at the intersection of Concow Road and Rim Road. PG&E reported an outage on the Big Bend 1101 12 kV Distribution Circuit.¹⁵⁸
124. CPUC Resolution E-4184 requires electric utilities to report electric incidents within 2 hours of a reportable incident during normal working hours or within 4 hours of a reportable incident outside of normal working hours.¹⁵⁹

¹⁵³ SED Camp Report, CAMP-0474, Table 8.

¹⁵⁴ SED Camp Report, CAMP-0024, Figure 6.

¹⁵⁵ SED Camp Report, CAMP-0023, Figure 5.

¹⁵⁶ SED Camp Report, CAMP-0010.

¹⁵⁷ SED Camp Report, CAMP-0010.

¹⁵⁸ SED Camp Report, CAMP-0010.

¹⁵⁹ CPUC Resolution E-4184.

November 19, 2018

125. CAL FIRE removed a tree from an area near the intersection of Concow Road and Rim Road as evidence. CPUC staff were present to see the tree loaded on a trailer. CPUC staff also saw a PG&E crew waiting to assist with removal of PG&E equipment from the area at the request of CAL FIRE.

December 2018

126. PG&E announced the launch of the Wildfire Safety Inspection Program (“WSIP”) to perform accelerated and enhanced inspections of its electric distribution, transmission, and other facilities.¹⁶⁰ PG&E implemented the WSIP following the 2018 Camp Fire.¹⁶¹
127. The WSIP enhanced inspections for transmission facilities involved climbing and utilizing drones to inspect the Caribou-Palermo 115 kV Transmission Line in detail. WSIP inspections are based on a Failure Modes and Effects Analysis (“FMEA”) conducted by PG&E shortly after the Camp Fire in November 2018.¹⁶² The FMEA identifies potential points of failure on transmission assets that could cause a fire ignition. The FMEA involved determination of the ways that an asset or component might fail (i.e., failure modes) and determination of whether the failure may result in an ignition source. Based on the FMEA, inspection techniques for how those failure modes could be evaluated were developed. WSIP inspectors use mobile technology and electronic checklists (known as “Pronto Forms”) to document inspection findings electronically.¹⁶³ According to a PG&E data request response, a Centralized Inspection Review Team (CIRT), comprising individuals with relevant engineering and field expertise personnel that collectively have knowledge and background in transmission and distribution system maintenance and engineering, reviews inspection findings to determine the final priority of identified conditions.¹⁶⁴

¹⁶⁰ Business Wire, PG&E Announces Enhanced Wildfire Prevention and Safety Efforts Including Expanded Inspections; Additional Support for Camp Fire Victims and Their Families (Dec. 10, 2018), *available at* <https://www.businesswire.com/news/home/20181210005882/en/PGE-Announces-Enhanced-Wildfire-Prevention-Safety-Efforts>.

¹⁶¹ SED Camp Report, CAMP-0547.

¹⁶² Attachment 10, (PGE-CPUC_06252019-DR_SED-007_Q06_Camp Fire).

¹⁶³ Attachment 10, (PGE-CPUC_06252019-DR_SED-007_Q06_Camp Fire).

¹⁶⁴ Attachment 10, (PGE-CPUC_06252019-DR_SED-007_Q06_Camp Fire).

March 6, 2019

128. PG&E's ETPM Manual defines the following Priority Codes:

Table 1. Transmission Notification Priority Codes¹⁶⁵

Priority Code	Priority Description
A	The condition is urgent and requires immediate response and continued action until the condition is repaired or no longer presents a potential hazard. SAP due date will be 30 days to allow time for post-construction processes and notification close-out.
B	Corrective action is required within 3 months from the date the condition is identified. The condition must be reported to the transmission line supervisor as soon as practical.
E	Corrective action is required within 12 months from the date the condition is identified.
F	Corrective action is recommended within 24 months from the date the condition is identified, (due beyond 12 months, not to exceed 24 months). Requires Director approval.

129. PG&E provided the CPUC 29 Priority Code "A" maintenance notifications resulting from inspections of the Caribou-Palermo 115 kV Transmission Line that occurred on or after November 8, 2018. The same inspections also identified 495 Priority Code "B," "E" and "F" maintenance notifications for the Caribou-Palermo 115 kV Transmission Line. Those inspections included climbing inspections of the line conducted before the launch of WSIP and climbing and drone inspections conducted pursuant to that program.^{166,167}

March 29, 2019

130. PG&E removed equipment from Tower :24/199, a transposition tower on the Caribou-Palermo 115 kV Transmission Line at the request of law enforcement. Neither PG&E nor SED have physical custody of the equipment that was removed. To PG&E's and SED's knowledge, CAL FIRE has not identified Tower :24/199 as a cause of the Camp Fire.

¹⁶⁵ See Electric Transmission Preventative Maintenance Manual TD-1001M, Publication Date: 11/20/2018, Rev: 04 (produced as part of PG&E's Attachment B Report at PGE-2017Wilfires-OII-0000001151) at 19 (description of Priority Codes, Table 5). Previous version Rev: 03 dated 5/12/16 is in SED Camp Report at CAMP-0468. Rev:04 is modified from Rev:03 to add Director approval for Priority Code F conditions.

¹⁶⁶ SED Camp Report, CAMP-0536-538.

¹⁶⁷ SED Camp Report, CAMP-0539-541.

131. The C-hook removed from the right phase suspension insulator on Tower :24/199 displayed material loss of over 50% in the cross section where it made contact with the hanger plate. SED observed that the cross-section of the C-hook, where the material was worn away, was flat and smooth.¹⁶⁸ PG&E expresses no opinion on SED's assessment.

May 15, 2019

132. CAL FIRE investigators determined that the Camp Fire was caused by electric "transmission lines owned and operated by Pacific Gas and [Electric] (PG&E) located in the Pulga area."¹⁶⁹
133. CAL FIRE investigators also determined that "[t]he cause of a second fire was determined to be vegetation into electrical distribution lines owned and operated by PG&E."¹⁷⁰

November 1, 2019

134. Exponent completed a report titled "PG&E Caribou-Palermo Asset Condition Investigation."¹⁷¹ The report concluded, among other things:
- a. From 2001 to November 2018, the Caribou-Palermo line was subjected to similar ground inspection and patrol frequencies as comparison lines. These inspections and patrols yielded comparable normalized high-priority tag counts between Caribou-Palermo and comparison lines.^{172,173}
 - b. The Caribou-Palermo line was confirmed to have greater post-Camp Fire high-priority ("A" and "B") repair tag counts than all selected comparison lines, as well as an increased per-structure high-priority tag rate when normalized for the number of steel lattice towers.¹⁷⁴

¹⁶⁸ SED Camp Report, CAMP-0012, CAMP-0025, Figure 9.

¹⁶⁹ SED Camp Report, CAMP-0037-38.

¹⁷⁰ SED Camp Report, CAMP-0037-38.

¹⁷¹ SED Camp Report, CAMP-0542-626.

¹⁷² To best compare lines of different lengths with different numbers of structures, tag counts were normalized by the number of steel lattice towers based on approximations from PG&E's GIS data.

¹⁷³ SED Camp Report, CAMP-0626.

¹⁷⁴ SED Camp Report, CAMP-0625.

- c. Cold-end insulator hardware-related issues were responsible for the highest number of “A” priority post-Camp Fire tags on Caribou-Palermo, and the second highest number of “B” priority tags.¹⁷⁵
- d. Foundation-related issues accounted for the greatest number of “B” tags.¹⁷⁶
- e. Tags were generated due to burial of the tower footings or steel lattice members. This type of soil coverage can increase the risk of corrosion of buried steel components. However, unlike wear, soil movement does not necessarily represent tower damage. Further assessment would be required to determine if soil movement associated with high-priority tags resulted in damage.¹⁷⁷
- f. The Caribou-Palermo, Bucks Creek-Rock Creek, and Cresta-Rio Oso lines, each located within the North Fork Feather River Canyon, exhibited high-priority cold-end hardware wear tag counts more than three times higher than the next highest comparison line when normalized for steel lattice towers.¹⁷⁸
- g. Caribou-Palermo North¹⁷⁹ experiences higher annual average wind speeds than non-adjacent comparison lines. Lines analyzed within the North Fork Feather River Canyon may have increased wear tag rates associated with longer-duration high-wind conditions. No apparent correlation between wear tags and temperature, precipitation, or peak wind speed (50-year return) was observed.¹⁸⁰
- h. PG&E’s post-Camp Fire enhanced inspection procedures, including CIRT or DIRT¹⁸¹ reviews, have led to substantial improvements in identifying progressive or wear-related insulator hardware damage.¹⁸²

¹⁷⁵ SED Camp Report, CAMP-0625.

¹⁷⁶ SED Camp Report, CAMP-0625.

¹⁷⁷ SED Camp Report, CAMP-0570.

¹⁷⁸ SED Camp Report, CAMP-0625.

¹⁷⁹ For an explanation of Caribou-Palermo North and Caribou-Palermo South designations, see SED Camp Report, CAMP-0556.

¹⁸⁰ SED Camp Report, CAMP-0626.

¹⁸¹ PG&E’s Drone Inspection Review Team.

¹⁸² SED Camp Report, CAMP-0626.

- i. Caribou-Palermo and other North Fork Feather River Canyon lines appear to have a unique set of factors that contributed to increased rates of high-priority cold-end hardware tags relative to other comparison lines. Factors such as design (link connectors and a relatively large number of non-tensioned insulated conductors), long-duration exposure to higher winds, age, and historical inspection methodologies likely all contributed to these cold-end hardware wear issues.¹⁸³

Prior to the Camp Fire

135. According to PG&E's records, every year from 2001 to 2018, PG&E performed either a ground patrol, air patrol, or detailed inspection of the Caribou-Palermo 115 kV Transmission Line.¹⁸⁴ PG&E's ETPM Manual was first published in August 2005. Under the ETPM Manual Rev: 03, aerial patrols are required annually, detailed inspections by ground are required every 5 years, and climbing or aerial inspections are prescribed as triggered by specific conditions.¹⁸⁵ Prior to the Camp Fire, PG&E's ETPM Manual did not call for routine climbing inspections for non-500 kV towers.¹⁸⁶
136. Consistent with minimum required time intervals in the PG&E ETPM Manual in effect at the time, PG&E's records indicate that detailed ground inspections of the Caribou-Palermo 115 kV Transmission Line were performed in 2009 and 2014. Consistent with the then-applicable guideline, Utilities Operation ("UO") Guideline G0066, which came into effect in November 1996, PG&E's records indicate that PG&E also performed ground patrols of the Caribou-Palermo line in January 2001, August 2003, and August 2005.¹⁸⁷

¹⁸³ SED Camp Report, CAMP-0626.

¹⁸⁴ Attachment 11, (PGE-CPUC_12062018-DR_002_Q20).

¹⁸⁵ SED Camp Report, CAMP-0491 and CAMP-0501.

¹⁸⁶ SED Camp Report, CAMP-0491.

¹⁸⁷ SED Camp Report, CAMP-0014; Attachment 11 (PGE-CPUC_12062018-DR_002_Q20).

137. PG&E inspection records for the period of January 2001 to November 8, 2018, indicate that PG&E performed detailed climbing inspections on approximately 80 towers along the Caribou-Palermo 115 kV Transmission Line between September 19 and November 5, 2018.¹⁸⁸ Notification 114730861 was created following PG&E's decision earlier in 2018 to perform climbing inspections of the Caribou-Palermo 115 kV Transmission Line and multiple other transmission lines as part of an effort to assess the condition of its transmission lines and help inform its broader asset management strategy.¹⁸⁹ Tower :27/221 and Tower :27/222 were not climbed during this period but were subject to ground inspections in 2001, 2003, 2005, 2009 and 2014.¹⁹⁰
138. The inspectors who conducted detailed climbing inspections between September 29 and November 5, 2018 used a Steel Structure Detailed Climbing Inspection form that was dated 03/16.¹⁹¹ A newer version of the form, PG&E's Steel Structure Detailed Climbing Inspection Form TD-1001M-F04 (dated 09/18) was published on PG&E's Technical Information Library ("TIL") on September 1, 2018.¹⁹² PG&E contends that the inspection form dated 09/18 became effective on November 30, 2018 and went into effective status on the TIL on December 7, 2018, at which point the form dated 03/16 was archived and was no longer accessible through the TIL. SED contends that the form dated 03/16 became outdated when the new form was published on the TIL on September 1, 2018. Form TD-1001M-F04 dated 09/18, is shown in Figures 11 and 13 of SED's Camp Report.¹⁹³
139. PG&E's records indicate that a work order was placed in 2009 for Tower :27/222 under Notification #103995542, which called for replacement of a connector.¹⁹⁴ Connectors and C-hooks are different types of equipment. The required end date for that notification was reassessed in 2011 under Notification #105375996, which referred back to Notification #103995542.¹⁹⁵

¹⁸⁸ SED Camp Report, CAMP-0014, CAMP-0675-676; *see also* Attachment 11.

¹⁸⁹ SED Camp Report, CAMP-0675-676; *see also* Attachment 12 (PGE-CAMP-CF-0000023311) (Notification 114730861 states "... CIRCUIT REQUIRES A DETAILED INSPECTION ON ALL STEEL STRUCTURES BY THE TOWER DEPARTMENT NORTH"); Attachment 13 (PGE-CAMP-CF-0000006474) (these were climbing inspections, as evidenced by the inspection form provided ("Steel Structure Detailed Climbing Inspection (Non-500 kV Structures)")).

¹⁹⁰ SED Camp Report, CAMP-0014.

¹⁹¹ SED Camp Report, CAMP-0026 and CAMP-0028, Figures 10 and 12, CAMP-0673-674.

¹⁹² SED Camp Report, CAMP-0029, Figures 11 and 13.

¹⁹³ SED Camp Report, CAMP-0027 and CAMP-0029, Figures 11 and 13.

¹⁹⁴ SED Camp Report, CAMP-0651-653.

¹⁹⁵ SED Camp Report, CAMP-0651-655.

140. Replacement hanger plates had been added to the left and right runner arms on Tower :27/222, possibly before 2000.¹⁹⁶ PG&E has been unable to locate records that identify when the attached hanger plates were installed.¹⁹⁷ However, the original plates that were replaced showed signs of wear on the working eye. See Figure 6 and Figure 7 in SED's Camp Report.¹⁹⁸ Figure 8 in SED's Camp Report shows a typical location of runner arms on transmission towers that have them.¹⁹⁹
141. PG&E's records indicate that PG&E replaced the connector identified in Notification #103995542²⁰⁰ on June 18, 2016. The work was originally scheduled to be completed by November 30, 2015.²⁰¹ PG&E's records do not indicate the reason why the connector replacement work identified in LC Notification #103995542 was completed later than the originally scheduled completion date. PG&E procedures state that notifications that go beyond the due date should document the factor(s) that led to the delayed completion of the notification.²⁰²

¹⁹⁶ SED Camp Report, CAMP-0011, footnote 29.

¹⁹⁷ SED Camp Report, CAMP-011.

¹⁹⁸ SED Camp Report, CAMP-0024, Figures 6 and 7.

¹⁹⁹ SED Camp Report, CAMP-0025, Figure 8.

²⁰⁰ SED Camp Report, CAMP-0651-653.

²⁰¹ SED Camp Report, CAMP-0651-653.

²⁰² SED Camp Report, CAMP-0468-469.

Attachment 1

PACIFIC GAS AND ELECTRIC COMPANY
October 2017 Wildfires
CPUC Data Request – Common

Requesters: Leslie L. Palmer and Nicholas Sher

Request Date: July 19, 2018

Response Date: August 3, 2018

Question 4:

Provide PG&E's contracted fire investigator's report for each incident. If an investigation was not performed, explain why.

Response to Question 4:

No such reports exist for any of the incident locations, as defined by the CPUC's July 19, 2018, Data Request (the "incident locations"). PG&E is investigating the incident locations, including retaining experts, in preparation for litigation. At this time, this investigation, including the work performed by those experts, is privileged. PG&E previously provided Incident Description and Factual Summaries for each incident location, as defined by the CPUC's December 7, 2017, letter, in response to Question 62 of the CPUC's November 21, 2017, Data Request. Factual analysis and review of documents is ongoing.

Response provided by:

Jadwindar Singh, Director, Compliance & Vegetation Management, [REDACTED]
[REDACTED]

Attachment 2

PACIFIC GAS AND ELECTRIC COMPANY
October 2017 Wildfires
CPUC Data Request – Common

Requesters: Leslie L. Palmer and Nicholas Sher

Request Date: November 21, 2017

Question 11:

Please provide all Vegetation Management records (Records for request 7 & 8) for subject tree(s) for the past five (5) years.

Response to Question 11:

In response to Question 10, PG&E produced Vegetation Management records for the incident locations, as defined by the CPUC's December 7, 2017, letter for the last five years.

Based on a reasonable search, PG&E records indicate that, while each incident location was inspected numerous times in the last five years, tree work was prescribed and completed for the subject tree at three incident locations: Cherokee (Incident No. 171010-8557), Potter Valley (Incident No. 171009-8553), and Pocket (Incident No. 171021-8592). The table below identifies the subject tree records (Inspection Records and Work Requests) for these sites, which are contained within the records provided in response to Question 10.

VM Subject Tree Records for October 8, 2012 – October 8, 2017						
Incident #	Incident Name	Inspection Records			Work Requests	
		Bates Number	Tree #	Work Prescribed	Bates Number	Tree #
171010-8557	Cherokee	PGE-CPUC_00010014	3	Routine Side Trim	PGE-CPUC_00010276	66
		PGE-CPUC_00010015	3	None	N/A	N/A
		PGE-CPUC_00010017 ¹	3	Routine Side Trim	PGE-CPUC_00010257	86
		PGE-CPUC_00010018	4	None	N/A	N/A
171021-8592	Pocket	PGE-CPUC_00010138	2	Accelerate Side Trim	PGE-CPUC_00010331	13
		PGE-CPUC_00010140	2	None	N/A	N/A
		PGE-CPUC_00010142	2	Routine Side Trim	PGE-CPUC_00010329	2
		PGE-CPUC_00010144	2	None	N/A	N/A
		PGE-CPUC_00010146	2	None	N/A	N/A
171009-8553	Potter Valley	PGE-CPUC_00010177	4	None	N/A	N/A
		PGE-CPUC_00010178	2	Routine Side Trim	PGE-CPUC_00010351	142
		PGE-CPUC_00010179	2	None	N/A	N/A
		PGE-CPUC_00010180	2	None	N/A	N/A
		PGE-CPUC_00010182	2	None	N/A	N/A

Response provided by:

Principal, Vegetation Management

¹ Please note that the field indicating tree species was inadvertently modified during this inspection activity.

Attachment 3



Pacific Gas & Electric
Vegetation Management
Work Request SRNB1036983

Oct 23, 2012

Division: North Bay
Circuit: CLOVERDALE 1102 #0042821102

0009-9636

CLOVERDALE 1102-1

SSD Routing #: 8200

Contractor: Davey

Contract: ZS4335009C

Work Type: Distribution

Acct Type: Maintenance

Total Loc # 19

General Comments:

Work Request= SRNB1036983 and TL.sAcctType= 'M'

Location Num: 3

Address		City	Quad Map	Thomas Guide	Area	Inspection Date / Time
		CLOVERDALE	H541	T-262-D2	CLOV 1102	10/10/12 11:34 AM
XStreet	Group	County	Loc Rt:	U-Bld	Insp	Inspection Company
		SONOMA	80600	No		WECI
Location Directions			Loc Lat/Lon		Customer Name #1	Customer Phone #1
2.7MI N/O RIDGE OAK RD						
Alerts			Struct1	Struct2	Customer Name #2	Customer Phone #2
Locked Gate						
SRA	Tag Number	Tag Type	Packet Project #	SSD #:	NTW Number	
Yes			0009-9636	1381		

Loc Comments:

P5-P6;4TH SPAN SE/O P2 (SSD#1381).SPAN FROM P5 BELOW RD TO P6. AXS 22000 GATE (COMBO- SEE MAP

Location Summary:	Units: 1	Notification:	Phone
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Completed													
Crew	Tree - Species	Trim Type	Priority	Est Hr	dbh	HV Ctr	Est Qty	Date	Qty	T&M	OT	Hrs	By
Notes:													

Location Num: 4

Address		City	Quad Map	Thomas Guide	Area	Inspection Date / Time
		CLOVERDALE	H541	T-262-D2	CLOV 1102	10/10/12 11:50 AM
XStreet	Group	County	Loc Rt:	U-Bld	Insp	Inspection Company
		SONOMA	80610	No		WECI
Location Directions			Loc Lat/Lon		Customer Name #1	Customer Phone #1
2.6MI N/O RIDGE OAK RD						
Alerts			Struct1	Struct2	Customer Name #2	Customer Phone #2
Locked Gate						
SRA	Tag Number	Tag Type	Packet Project #	SSD #:	NTW Number	
Yes			0009-9636	1381		

Loc Comments:

P6-P7;5TH SPAN SE/O P2 (SSD#1381).SPAN FROM P6 UPHILL TO XFR P7. END OF SPAN XS RD TWICE AXS 22000 GATE (COMBO- SEE MAP

Location Summary:	Units: 2	Notification:	
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Completed													
Crew	Tree - Species	Trim Type	Priority	Est Hr	dbh	HV Ctr	Est Qty	Date	Qty	T&M	OT	Hrs	By
CA	Valley Oak	Side	Accelerat	42	40	12	1	12/4/12	1	TR	0		JP

Com:

Tline: Owner: Private Clearance: 12
Wire Type: None VELB Area: No Tree Lat/Lon: Worked Reason:

Tree Com: .25S;E/O LINES.SPROUTS,TTT.TRIM OV TOO

Worked Comments:

Psc Com:

Alerts:

CA	Valley Oak	Side	Routine	30	48	10	1	12/4/12	1	TR	0		JP
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Com:

Tline: Owner: Private Clearance: 10
Wire Type: None VELB Area: No Tree Lat/Lon: Worked Reason:

Tree Com: .3S;E/O LNS.TTT.TOP B-LO LN HT TOO-ROT @ BASE

Worked Comments:

Psc Com:

Alerts:

Attachment 4



Pacific Gas & Electric
Vegetation Management
Work Request SRNC1005214
Feb 3, 2015

Division: North Coast
Circuit: CLOVERDALE 1102 #0042821102

0012-0127
CLOVERDALE 1102-1

SSD Routing #: 8200
Contractor: Davey Tree
Contract:
Work Type: Distribution
Acct Type: Maintenance
Total Loc # 15

General Comments:

Work Request= SRNC1005214 and TLsAcctType= 'M'

Location Num: 1

Address		City CLOVERDALE	Quad Map H541	Thomas Guide T-262-D2	Area CLOV 1102	Inspection Date / Time 1/20/15 4:37 PM
XStreet	Group	County SONOMA	Loc Rt: 80610	U-Bld No	Insp	Inspection Company WECI
Location Directions 2.6MI N/O RIDGE OAK RD			Loc Lat/Lon		Customer Name #1	Customer Phone #1
Alerts Locked Gate			Struct1	Struct2	Customer Name #2	Customer Phone #2
SRA Yes	Tag Number	Tag Type	Packet Project # 0012-0127			NTW Number

Loc Comments: P6-P7,5TH SPAN SE/O P2 (SSD#1381).SPAN FROM P6 UPHILL TO XFR P7. END OF SPAN XS RD TWICE.AXS 22000 GATE
(COMBO- SEE MAP

Location Summary: Units: 2	Notification: Door Hanger	Phone
Completed		

Grew	Tree - Species	Trim Type	Priority	Est Ht	dbh	HV Clr	Est Cby	Date	Qty	T&M	QT	Hrs	By	Tree #
CA	Valley Oak	Side	Routine	42	40	12	1	3/5/15	1	TR	0		LE	2

Com:

Time: Owner: Private Clearance: 12
Wire Type: None VELB Area: No Tree Lat/Lon: Worked Reason:

Tree Com: .25S;E/O LINES.SPROUTS,TTT.TRIM OV TOO

Worked Comments:

Psc Com:

Alerts:

LA	Bay, Calif.	Side	Routine	45	60	18	1	3/5/15	1	TR	0		LE	4
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Com:

Time: Owner: Private Clearance: 18
Wire Type: None VELB Area: No Tree Lat/Lon: Worked Reason:

Tree Com: .4S; XSTM; SAG/SWY/WND; TTT/L

Worked Comments:

Psc Com:

Alerts:

Notes:

Location Num: 2

Address		City CLOVERDALE	Quad Map H541	Thomas Guide T-262-D2	Area CLOV 1102	Inspection Date / Time 1/20/15 5:13 PM
XStreet	Group	County SONOMA	Loc Rt: 80690	U-Bld No	Insp	Inspection Company WECI
Location Directions 2.1MI N/O RIDGE OAK RD			Loc Lat/Lon		Customer Name #1	Customer Phone #1
Alerts Access			Struct1	Struct2	Customer Name #2	Customer Phone #2
SRA Yes	Tag Number	Tag Type	Packet Project # 0012-0127	SSD #: 17547	NTW Number	

Attachment 5

PACIFIC GAS AND ELECTRIC COMPANY
Camp Wildfire
CPUC Data Request: SED-001

Requesters: Banu Acimis
Request Date: December 6, 2018
Response Sent: February 1, 2019

Question 37:

When was the subject conductor(s) installed?

Response to Question 37:

Incident Location 1 (as defined by the SED's Data Request IV):

PG&E's present understanding based upon its records is that the conductor at Incident Location 1 and the associated equipment were initially installed between 1919 and 1921. PG&E understands towers on the Caribou-Palermo 115 kV Transmission Line first went into service on May 6, 1921. Portions of this line have been replaced over time as a result of routine maintenance and emergency work. PG&E is not presently aware of any records showing if or when the conductor between Towers :27/221 and :27/222 was replaced.

Incident Location 2 (as defined by the SED's Data Request IV):

PG&E's present understanding based upon its records is that the conductor at Incident Location 2 was installed on July 13, 2018.

Response provided by:

[REDACTED] Supervising Engineer, Transmission Line Engineering-North [REDACTED]
[REDACTED]

[REDACTED] Manager Electric Asset Strategy. [REDACTED]

Attachment 6

PACIFIC GAS AND ELECTRIC COMPANY
Camp Wildfire
CPUC Data Request: SED-002

Requesters: Banu Acimis
Request Date: December 6, 2018
Response Date: April 2, 2019

Question 11:

For incident location 1, provide all documents, including but limited to construction drawings and blueprints, showing or pertaining to Caribou-Palermo design, excavation and clearing, installation of towers, wires, all other components on the line, and the beginning of service.

Response to Question 11:

Based on clarification received by the SED, PG&E understands “incident location 1”, as defined by the SED’s Data Request IV, to refer to Towers :27/221 and :27/222 on the Caribou-Palermo 115 kV Transmission Line and the span of conductors in between. Consistent with the SED’s Data Request 002, Question 10, PG&E understands this question to be seeking information regarding the original design and construction of the line associated with Incident Location 1.

PG&E is producing original design drawings, bills of materials and other documents identified to date related to the construction of the section of Great Western Power Line Number Three that corresponds to what is now a section of the Caribou-Palermo 115 kV Transmission line and includes what are now referred to as Towers :27/221 and :27/222 on that line, at Bates range PGE-CAMP-CPUC-0000031176 – PGE-CAMP-CPUC-0000031180, PGE-CAMP-CPUC-0000031189 – PGE-CAMP-CPUC-0000031198, PGE-CAMP-CPUC-0000031623 – PGE-CAMP-CPUC-0000031715.

PG&E notes that some of these documents were included in a recent production to CAL FIRE, which PG&E in turn provided to the CPUC.

Response provided by:

[REDACTED] Manager, Transmission Portfolio Management [REDACTED]
[REDACTED]

Attachment 7

PACIFIC GAS AND ELECTRIC COMPANY
Camp Wildfire
CPUC Data Request: SED-002

Requesters: Banu Acimis
Request Date: December 6, 2018
Response Date: April 2, 2019

Question 12:

For incident location 1, provide all manuals, specifications, and manufacturer instructions for installation, maintenance, weight limits, operation, and specifications of each component of the Caribou-Palermo line.

Response to Question 12:

PG&E understands this question as requesting documents provided by component manufacturers, including manuals, and other documents related to specifications and manufacturer instructions for installation, maintenance, weight limits, and operations of components associated with transmission facilities at Incident Location 1, as defined by the SED's Data Request IV. PG&E is producing the documents identified to date that are responsive to this request.

PG&E is producing a series of drawings related to the original construction of Great Western Power Line Number Three, a portion of which is now part of the Caribou-Palermo 115 kV Transmission Line that encompasses Incident Location 1. These documents set forth, among other things, the specifications for certain components on the line. Those drawings are being produced at Bates range PGE-CAMP-CPUC-0000031179 – PGE-CAMP-CPUC-0000031180, PGE-CAMP-CPUC-0000031198 – PGE-CAMP-CPUC-0000031199, PGE-CAMP-CPUC-0000031700 – PGE-CAMP-CPUC-0000031709, PGE-CAMP-CPUC-0000031768 and PGE-CAMP-CPUC-0000032034.

PG&E is also producing at Bates number PGE-CAMP-CPUC-0000031200 a set of drawings for the connectors that replaced the existing connectors on Tower :27/222 in 2016. This work was described in PG&E's response to the SED's Data Request 001, Question 6.

PG&E is also producing at Bates number PGE-CAMP-CPUC-0000031711, a document showing test loads for type "SA" towers and type "SB" towers, which were originally installed on the Great Western Power Line Number Three and remain on the Caribou-Palermo 115 kV Transmission Line. Tower :27/222 is a type "SB" tower while Tower :27/221 is a type "SA" tower.

At Bates number PGE-CAMP-CPUC-0000031712, PG&E is producing a document showing heights and clearances for type "SB" towers. PG&E is also producing at Bates number PGE-CAMP-CPUC-0000032035 a drawing showing the deflection curve for the conductor on Great Western Power Line Number Three. At Bates number PGE-CAMP-CPUC-0000031710,

PG&E is producing a stress deflection chart for the cable on a section of the Caribou-Golden Gate line, a predecessor name for the Caribou-Palermo 115 kV Transmission Line.

PG&E is also producing two Ohio Brass Catalogs that contain specifications for certain components on the line. The documents at Bates numbers PGE-CAMP-CPUC-0000031769 and PGE-CAMP-CPUC-0000031911 are Ohio Brass catalogs from 1919 and 1921, respectively. PG&E is also producing at Bates number PGE-CAMP-CPUC-0000031716 an Ohio Brass document that addresses the history of certain suspension insulators that it manufactured, including suspension insulators on the Caribou-Palermo 115 kV Transmission Line.

PG&E notes that some of these documents were included in a recent production to CAL FIRE, which PG&E in turn provided to the CPUC.

Response provided by:

[REDACTED] Manager, Transmission Portfolio Management, [REDACTED]
[REDACTED]

Attachment 8

13000 in 8765
 Suspension Mark #11540
 #3 - done

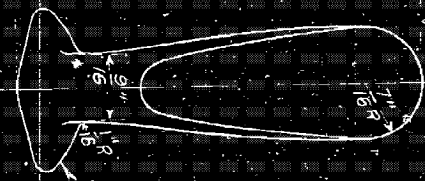
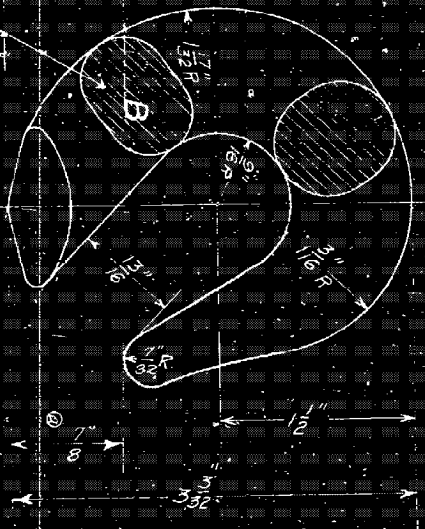
3

RECORD PRINT No. 607957
 PROPERTY OF PACIFIC GAS & ELECTRIC CO.

CARIBOU-GOLDEN
 GATE 165KV
 LINE N° 603
 TURN TO DRAFTING DEPT.

THE OHIO BRASS CO.
 MASSARD, OHIO

607957



For detail of ball end
 See DWG 8645

ARTICLE SUSPENSION HOOK.

Scale Full
 Date 10-11-12
 By T.M. 293
 Filed 10-11-12
 8765

Attachment 9

PACIFIC GAS AND ELECTRIC COMPANY
Camp Wildfire
CPUC Data Request: SED-002

Requesters: Banu Acimis
Request Date: December 6, 2018
Response Date: April 2, 2019

Question 2:

Have PG&E employees or agents noted any other damage to any of the towers or attached equipment, or noted parts missing from any towers, in addition to the tower damage noted in the aerial survey? If so, provide:

- a. The date and circumstances in which such damage was found, or part missing was noted.
- b. The nature and location of the damage and the components damaged, and the identity and function of the part or parts missing.
- c. PG&E's assessment of how the damage occurred, and whether PG&E understands that CalFire had taken custody of the missing parts.
- d. PG&E's assessment of whether the damage occurred independently of the first damaged tower or whether the condition of either tower damaged the other tower or increased damaged to the other tower.

Response to Question 2:

PG&E understands this question as requesting information about damage to Towers :27/221 and :27/222 on the Caribou-Palermo 115 kV Transmission Line.

Damage Noted During Evidence Collection with CAL FIRE

PG&E has provided an Incident Description and Factual Summary (the "Report") for the Incident Locations, as defined by the SED's Data Request IV. This Report was emailed to the CPUC contemporaneously with PG&E's December 31, 2018 filing as Exhibit A (titled "Camp Fire Incident Description & Factual Summary") to PG&E's response to the Northern District of California District Court's November 27, 2018 Notice re California Wildfires in the matter captioned *United States of America v. Pacific Gas and Electric Company*, Case No. 3:14-cr-00175-WHA. PG&E provided the Report with its response to the SED's Data Request 001, Question 56.

As noted in the Report, on November 14, 2018, PG&E assisted CAL FIRE's collection of assets from Towers :27/222 and :27/221. At the time of the collection, PG&E observed a broken C-hook that had attached the suspension insulator to a tower arm, along with wear at the connection point. In addition, PG&E observed a flash mark on Tower :27/222 near where the jumper was suspended and damage to the transposition jumper and suspension insulator. At Tower :27/221, there was an insulator hold down anchor (a non-energized piece of equipment) that had become disconnected. To date, PG&E has not located the remainder of the broken C-hook from Tower :27/222.

It is possible that CAL FIRE collected evidence, including the remainder of the broken C-hook that PG&E has been unable to locate, either before November 14, 2018, or between November 14, 2018 and the release of Incident Location 1 by CAL FIRE on November 17, 2018. PG&E is not aware of what evidence, if any, CAL FIRE may have collected from Incident Location 1 prior to November 14, 2018. The evidence collected by CAL FIRE of which PG&E is presently aware is set forth in the evidence log PG&E produced in its response to the SED's Data Request 002, Question 8.

Damage Noted After CAL FIRE Released Incident Location 1

CAL FIRE released Incident Location 1 on November 17, 2018. After the release of Incident Location 1, PG&E observed remains of broken insulators in the area surrounding Towers :27/222 and :27/221. PG&E, assisted by Fire Cause Analysis ("FCA"), a third party vendor, collected and logged these insulator fragments. PG&E produced FCA's evidence catalog in response to the SED's Data Request 001, Questions 41 and 42. FCA is continuing to catalog the evidence that it collected, and additional evidence may be added to the log.

Issues Noted During Enhanced Inspections

On January 22, 2019, as part of PG&E's Wildfire Safety Inspection Program ("WSIP"), PG&E conducted climbing inspections of Towers :27/222 and :27/221. On Tower :27/222, six findings, not all of which relate to "damage" to the tower, were identified: (1) "No high [voltage] signs"; (2) "Dead end arm is bent"; (3) "Top peak has not been painted"; (4) "A lot of rust and corrosion on top of structure"; (5) "C hook is rusty and corrosion is set on"; and (6) "Frog plates are corroded and rusty".

On Tower :27/221, four findings, not all of which relate to "damage" to the tower, were identified: (1) "Dirt/soil has deposited on both sides of structure and a big rock"; (2) "Has old high [voltage] sign and only on one side"; (3) "Five cross members are bent[,] three in lower positions[,] two in the air"; and (4) "Frog plates are oblong and showing signs of corrosion". These findings were recorded on inspection forms that set out an electronic checklist for assessing conditions identified during the WSIP inspections.

PG&E is producing the inspection forms for the January 22, 2019 WSIP inspections of Towers :27/222 and :27/221 at Bates range PGE-CAMP-CPUC-0000016745 to PGE-CAMP-CPUC-0000016769 and PGE-CAMP-CPUC-0000031216 to PGE-CAMP-CPUC-0000031234.¹

In addition, on January 29, 2019, also as part of the WSIP, PG&E conducted drone inspections of Towers :27/222 and :27/221. On Tower :27/222, the following findings, not all of which

¹ The findings identified on these forms may, but do not always, result in the generation of a preliminary ("S5") notification. A preliminary S5 notification is generated when the field inspector or drone reviewer identifies a condition that they believe is in need of repair. These preliminary notifications are subject to review by a Centralized Inspection Review Team ("CIRT"), which determines whether the findings warrant generation of a Line Corrective ("LC") Notification in accordance with PG&E's Electric Transmission Preventive Maintenance ("ETPM") Manual.

relate to “damage” to the tower, were identified: (1) “Danger sign is missing”; (2) “Paint is not complete”; (3) “Buried footing”; (4) “Corrosion on insulator caps”; (5) “Moderate to severe corrosion on hardware”; (6) “Ha[n]ger is heavily corroded”; and (7) “Corona plates have moderate rust”. On Tower :27/221, the following findings, not all of which relate to “damage” to the tower, were identified: (1) “Danger sign is missing”; (2) “Buried footing”; (3) “Insulators are dirty”; and (4) “Corona plates have moderate rust”. PG&E is producing the Drone Inspection Forms for the January 29, 2019 drone inspections of Towers :27/222 and :27/221 at Bates range PGE-CAMP-CPUC-0000016717 to PGE-CAMP-CPUC-0000016744.

How the Damage Occurred and the Relationship Between Damage to the Towers

As to all of the damage and conditions noted above, PG&E has not reached a conclusion as to how the damage or conditions occurred.

As to all of the damage noted above, PG&E has not reached a conclusion as to “whether the damage occurred independently of the first damaged tower or whether the condition of either tower damaged the other tower or increased damage to the other tower.” PG&E is not presently aware of any facts that suggest damage on either tower caused or increased damage to the other tower.

As stated in PG&E's Specific Objection to this Question, set forth in PG&E's Specific Objections to Data Request Number SED-001-Camp Wildfire, PG&E is preparing for litigation, including retaining experts and collecting evidence. At this time, this work for purposes of litigation preparation, including the work performed by those experts, is protected by the attorney-client privilege and protections of the attorney work product doctrine. As such, PG&E must assert its right to withhold documents subject to the attorney-client privilege or the work product doctrine and, on that basis, objects to this data request to the extent it calls for such information.

PG&E will provide non-privileged information, to the extent any exists, in response to this request should it later become available. Other privileged information protected by the attorney-client privilege or as attorney work product will not be produced as part of this response.

Response provided by:

Manager, Transmission Portfolio Management & Change Control

Attachment 10

PACIFIC GAS AND ELECTRIC COMPANY
Camp Wildfire
CPUC Data Request: SED-007

Requesters: Banu Acimis
Request Date: June 25, 2019
Response Date: August 23, 2019

Question 6:

WSIP revealed a large number of tags on the CP 115kV line. Which of these should have been identified during the previous regular inspections and patrols? Has PG&E conducted a study on how these tags were not detected during regular inspections/patrols? What is the difference between regular inspection and enhanced inspection?

Response to Question 6:

Since the November 8, 2018 Camp Fire, PG&E has significantly enhanced its inspection efforts in Tier 2 and Tier 3 High Fire-Threat District (“HFTD”) areas. PG&E’s WSIP inspections differ from its prior routine inspections in various ways. For example:

- Under WSIP, every transmission asset in Tier 2 or Tier 3 HFTD areas is subject to both a climbing inspection and a drone inspection. In contrast, under PG&E’s routine inspection program, only towers operating at 500 kV are climbed on a routine basis, and towers operating at less than 500 kV are climbed only as triggered by specific events specified in PG&E’s Electric Transmission Preventive Maintenance (“ETPM”) Manual. In addition, under WSIP, a Drone Inspection Review Team (“DIRT”) reviews drone photographs of transmission assets to identify potential conditions requiring repair. PG&E’s routine inspection program did not use drone technology.
- A Centralized Inspection Review Team (“CIRT”) comprising individuals with relevant engineering and field expertise reviews inspection findings to determine the final priority of identified conditions. PG&E’s routine inspection program did not utilize CIRT teams.
- WSIP inspections are based on a Failure Modes and Effects Analysis (“FMEA”) that PG&E conducted shortly after the Camp Fire in November 2018. The FMEA identifies potential points of failure on transmission assets that could cause a fire ignition. In contrast, inspections conducted pursuant to PG&E’s routine inspection program were not informed by the findings of a FMEA.
- WSIP inspections differ from prior routine inspections in that WSIP inspectors use mobile technology and electronic checklists (known as “Pronto Forms”) to document inspection findings electronically. In contrast with previous routine inspections, the WSIP inspection process requires inspectors to document and record findings for every component on an inspected structure, regardless of whether the components are

determined to require repair, which provides additional information on asset condition and increases the verifiability of inspections.

As PG&E has publicly disclosed, those efforts have identified thousands of conditions requiring repairs on PG&E's system that had not been previously identified.

As the description above makes clear, there are numerous possible reasons why conditions would be identified for the first time during an enhanced inspection. By way of example, the condition may have arisen or become more visible since the last inspection or patrol, or the enhanced inspection methods may have provided a better vantage point for detecting the condition. PG&E has not conducted a study to determine how many of the thousands of conditions identified during WSIP inspections should or should not have been detected during a prior inspection or patrol.

Response provided by:

Tom Wright Jr., Director, T&S Risk Analytics, [REDACTED]
[REDACTED]

Attachment 11

PACIFIC GAS AND ELECTRIC COMPANY
Camp Wildfire
CPUC Data Request: SED-002

Requesters: Banu Acimis
Request Date: December 6, 2018
Response Date: April 2, 2019

Question 20:

With respect to the Caribou-Palermo line, identify by date and characteristic each inspection done from January 1, 2000 until November 8, 2018, and provide the reasons why the inspection was conducted.

Response to Question 20:

PG&E understands this question to refer to patrols and inspections of transmission lines performed in accordance with the standards outlined in PGE's Electric Transmission Preventive Maintenance ("ETPM") Manual. PG&E's ETPM Manual supports PG&E's compliance with the CPUC's General Order ("GO") 165 Inspection Requirements for Electric Distribution and Transmission Facilities.

PG&E's understanding based upon records it has identified to date is that the Caribou-Palermo 115 kV Transmission Line was subject to the patrols and inspections identified in the table below for the period January 1, 2000 through November 8, 2018. The below table also identifies the dates on which each such patrol or inspection was performed, as well as the Bates numbers corresponding to the relevant records for each such patrol or inspection.

The reasons for and characteristics of PG&E's inspections and patrols of transmission lines, including the Caribou-Palermo 115 kV Transmission Line, are set forth in detail in the ETPM Manual, and are summarized below.

In accordance with the ETPM Manual, PG&E conducts routine patrols and inspections of transmission lines according to the schedules outlined in the ETPM Manual at Tables 10 and 11. During a routine patrol, PG&E personnel are instructed to visually observe transmission assets to identify abnormalities (*i.e.*, obvious structural problems or hazards) or circumstances that will negatively impact safety. Routine patrols are typically done by air. During a detailed inspection, PG&E personnel are instructed to visually examine transmission assets and look for and document abnormalities or circumstances they observe that will negatively impact safety, reliability, or asset life. Detailed inspections are typically done by ground with binoculars.

In accordance with the ETPM Manual, PG&E also conducts three primary types of non-annual patrols of transmission lines: non-routine, infrared, and emergency.

PG&E conducts non-routine patrols of transmission lines in the event of specific conditions that require follow up, including, for example, third-party observations and complaints, component

defects identified from a less-than-ideal vantage point, and concerns about the fast growth of vegetation. Non-routine patrols can be done by air (typically helicopter) or by ground. Non-routine patrols occur independent of and in addition to the routine schedule for patrols and inspections.

PG&E conducts infrared patrols using thermographic technology to identify abnormal conditions on electrical equipment. These patrols are typically done by air. Pursuant to the ETPM Manual, infrared patrols are conducted when required by Utility Procedure TD-1004P-04, which is being produced at Bates number PGE-CAMP-CPUC-0000020050-0060, or as triggered by specific conditions, such as component failure or a high fire hazard. In addition, PG&E conducts infrared patrols for lines that have exceeded their emergency ratings for 30 minutes or more to inspect for possible component damage.

In addition, PG&E conducts emergency patrols in response to momentary or sustained outages caused by unknown conditions on overhead or underground transmission lines. An emergency patrol is a visual check made either by ground or by air to look for the specific condition that caused the outage.

Inspections Performed from January 1, 2000 through November 8, 2018 on the Caribou-Palermo 115 kV Transmission Line			
Notification or Order Number	Description	Date Completed	Bates Number
114730861	Caribou-Palermo Non-Routine Ground Patrol	In-Progress	PGE-CAMP-CPUC-0000017231
115332698	Caribou-Palermo Emrg Air Patrol	12/12/2018	PGE-CAMP-CPUC-0000012110-2113
115095827	Caribou-Palermo Line Inspection Ground Patrol	10/28/2018	PGE-CAMP-CPUC-0000018118-8121
43219839	2018 Aerial Patrol	9/19/2018	PGE-CAMP-CPUC-0000000516-520
114624783	Caribou-Palermo Line Inspection Infrared	5/31/2018	PGE-CAMP-CPUC-0000004115-4116
114354005	Caribou-Palermo Line Inspection Ground Patrol	3/2/2018	PGE-CAMP-CPUC-0000018108-8110
114122605	Caribou-Palermo Line Inspection Ground Patrol	12/21/2017	PGE-CAMP-CPUC-0000018091
42889355	2017 Aerial Patrol	9/13/2017	PGE-CAMP-CPUC-0000000510-515
113164291	Caribou-Palermo Line Inspection Airp	8/16/2017	PGE-CAMP-CPUC-0000004110-4114
112791582	Caribou-Palermo Infrared Patrol	5/23/2017	PGE-CAMP-CPUC-0000004109
112828418	Caribou-Palermo Non-Routine Ground Patrol	5/17/2017	PGE-CAMP-CPUC-0000018117
112616464	Colgate-Palermo Non-Routine Air Patrol	2/21/2017	PGE-CAMP-CPUC-0000004106-4108

Inspections Performed from January 1, 2000 through November 8, 2018 on the Caribou-Palermo 115 kV Transmission Line			
Notification or Order Number	Description	Date Completed	Bates Number
112549499	Caribou-Palermo Non Routine Air	1/24/2017	PGE-CAMP-CPUC-0000004100-4105
112475924	Table Mtn Jan 2017 Wind/Rain Event	1/11/2017	PGE-CAMP-CPUC-0000004098-4099
112533961	Caribou-Palermo 24/200 Conductor	1/10/2017	PGE-CAMP-CPUC-0000018079-8085
112475652	Caribou - Palermo Non Routine Air Patrol	1/9/2017	PGE-CAMP-CPUC-0000004095-4097
112390933	Caribou-Palermo Non-Routine Ground	12/6/2016	PGE-CAMP-CPUC-0000018096-8101
112010351	Caribou-Palermo Non-Routine Air	10/3/2016	PGE-CAMP-CPUC-0000004093-4094
42583149	2016 Aerial Patrol	8/5/2016	PGE-CAMP-CPUC-0000000443-447
111643890	Caribou Palermo 2016 Infrared Patrol Fire Area	5/26/2016	PGE-CAMP-CPUC-0000004090-4092
111071959	Caribou-Palermo Non-Routine Air Patrol	12/10/2015	PGE-CAMP-CPUC-0000004088-4089
111072159	Caribou-Palermo Non-Routine Ground Patrol	12/10/2015	PGE-CAMP-CPUC-0000018107
110529506	Caribou Palermo Non-Routine Ground Patrol	7/22/2015	PGE-CAMP-CPUC-0000018102-8103
42292776	2015 Aerial Patrol	7/20/2015	PGE-CAMP-CPUC-0000000448-509
110403178	Caribou Palermo 2015 Infrared Fire Area	6/3/2015	PGE-CAMP-CPUC-00000004087
110370832	Caribou Palermo Non-Routine Air Patrol	5/5/2015	PGE-CAMP-CPUC-00000004086
110177818	Caribou-Palermo Non-Routine Air Patrol	4/14/2015	PGE-CAMP-CPUC-00000004085
110030646	Caribou Palermo Non-Routine Air Patrol	2/7/2015	PGE-CAMP-CPUC-00000004084
41980167	2014 Detailed Inspection	8/28/2014	PGE-CAMP-CPUC-0000003997-4056
107938102	Caribou-Palermo 2014 Infrared Patrol (Wildfire	5/22/2014	PGE-CAMP-CPUC-0000004076-4082
107981920	Caribou-Palermo Non-Routine Air Patrol	5/5/2014	PGE-CAMP-CPUC-00000004083
107597189	Caribou-Palermo Non-Routine Ground Patrol	1/13/2014	PGE-CAMP-CPUC-0000018087
107477009	Caribou-Palermo Non-Routine Air Patrol	11/23/2013	PGE-CAMP-CPUC-00000004075

Inspections Performed from January 1, 2000 through November 8, 2018 on the Caribou-Palermo 115 kV Transmission Line			
Notification or Order Number	Description	Date Completed	Bates Number
41815952	2013 Aerial Patrol	8/15/2013	PGE-CAMP-CPUC-0000003866-3927
107061440	Caribou-Palermo Non-Routine Ground Patrol	8/1/2013	PGE-CAMP-CPUC-0000018127
106634988	Caribou Palermo Non-Routine Grd Patrol	1/9/2013	PGE-CAMP-CPUC-0000018114
106600637	Caribou-Palermo Non-Routine Ground Patrol	12/24/2012	PGE-CAMP-CPUC-0000018104
106572605	Caribou-Palermo Non-Routine Air Patrol	12/3/2012	PGE-CAMP-CPUC-0000018113
106156838	Caribou Palermo NR Air Patrol	8/8/2012	PGE-CAMP-CPUC-0000018128
41619753	2012 Aerial Patrol	8/6/2012	PGE-CAMP-CPUC-0000003803-3865
106000207	Caribou Palermo Infrared Air Patrol	5/31/2012	PGE-CAMP-CPUC-0000004074
105898520	Caribou Palermo Non-Routine Air Patrol	1/23/2012	PGE-CAMP-CPUC-0000018105
105822882	Caribou Palermo Non-Routine Air Patrol/Storm	12/8/2011	PGE-CAMP-CPUC-0000018078
41440593	2011 Aerial Patrol	7/27/2011	PGE-CAMP-CPUC-0000003740-3802
105341808	Caribou-Palermo Non Routine Air Patrol	6/17/2011	PGE-CAMP-CPUC-0000018122-8125
41504355	Caribou-Palermo Non Routine Patrol	6/15/2011	PGE-CAMP-CPUC-0000016973
105223329	Caribou Palermo Non - Routine Air Patrol	2/25/2011	PGE-CAMP-CPUC-0000018106
105180842	Caribou Palermo Non - Routine Grd Patrol	1/6/2011	PGE-CAMP-CPUC-0000018126
104890485	Caribou Palermo Non - Routine Grd Patrol	10/15/2010	PGE-CAMP-CPUC-0000018092
104884393	Caribou Palermo Non - Routine Air Patrol	10/12/2010	PGE-CAMP-CPUC-0000018076
41233615	2010 Aerial Patrol	8/6/2010	PGE-CAMP-CPUC-0000003678-3739
104687592	Caribou Palermo Infrared Air Patrol	5/4/2010	PGE-CAMP-CPUC-0000004073
104436864	Caribou Palermo Non - Routine Air Patrol	2/5/2010	PGE-CAMP-CPUC-0000018090
41011565	2009 Detailed Inspection	8/31/2009	PGE-CAMP-CPUC-0000003928-3996

Inspections Performed from January 1, 2000 through November 8, 2018 on the Caribou-Palermo 115 kV Transmission Line			
Notification or Order Number	Description	Date Completed	Bates Number
103949626	Caribou Palermo Non - Routine Grd Patrol/Fire	8/16/2009	PGE-CAMP-CPUC-0000018095
103655045	Caribou Palermo Non - Routine Air Patrol	1/14/2009	PGE-CAMP-CPUC-0000018093
103307720	Caribou Palermo Infrared Non -Routine Ptrl	10/17/2008	PGE-CAMP-CPUC-0000004072
40898009	2008 Aerial Patrol	8/22/2008	PGE-CAMP-CPUC-0000016924-6972
103165797	Caribou Palermo Non - Routine Grd Patrol/Fire	7/19/2008	PGE-CAMP-CPUC-0000018116
103161265	Caribou Palermonon Rnt Grd Patrol/Fires	7/14/2008	PGE-CAMP-CPUC-0000018094
103155367	Caribou Palermo Non Rnd Grd Patrol	7/8/2008	PGE-CAMP-CPUC-0000018077
103129923	Caribou Palermo Non - Routine Grd Patrol/Fire	7/7/2008	PGE-CAMP-CPUC-0000018088
103117780	Caribou -Palermo Non Routine Patrol	6/22/2008	PGE-CAMP-CPUC-0000018112
102876082	Caribou Palermo Non - Routine Patrol	2/12/2008	PGE-CAMP-CPUC-0000018089
102835999	Caribou Palermo N - Routine Air Patrol	1/11/2008	PGE-CAMP-CPUC-0000018111
40700549	2007 Aerial Patrol	6/7/2007	PGE-CAMP-CPUC-0000016876-6923
102315958	Caribou-Palermo Non-Routine Air Patrol	3/28/2007	PGE-CAMP-CPUC-0000018164
102290387	Caribou-Palermo Non-Routine Air Patrol	2/23/2007	PGE-CAMP-CPUC-0000018171
102290384	Caribou-Palermo Non-Routine Ground Patrol	2/22/2007	PGE-CAMP-CPUC-0000018165
102287591	Caribou-Palermo Non-Routine Air Patrol	2/20/2007	PGE-CAMP-CPUC-0000018163
102263830	Caribou-Palermo Non-Routine Air Patrol	1/22/2007	PGE-CAMP-CPUC-0000018172
102216467	Caribou-Palermo Non-Routine Ground Patrol	11/16/2006	PGE-CAMP-CPUC-0000018167
40597326	2006 Aerial Patrol	8/22/2006	PGE-CAMP-CPUC-0000016974-7065
102072527	Caribou-Palermo Non-Routine Ground Patrol	7/13/2006	PGE-CAMP-CPUC-0000018160
40432681	2005 Ground Patrol	8/15/2005	PGE-CAMP-CPUC-0000016774-6820

Inspections Performed from January 1, 2000 through November 8, 2018 on the Caribou-Palermo 115 kV Transmission Line			
Notification or Order Number	Description	Date Completed	Bates Number
101791317	Caribou Palermo Emergency A-Patrol	6/29/2005	PGE-CAMP-CPUC-0000018170
40377249	2004 Aerial Patrol	9/1/2004	PGE-CAMP-CPUC-0000017066-7113
101316411	Caribou-Palermo Emergency Ground Patrol	3/18/2004	PGE-CAMP-CPUC-0000018166
101280778	Caribou-Palermo Emergency Ground Patrol	2/4/2004	PGE-CAMP-CPUC-0000018161
40255152	2003 Ground Patrol	8/11/2003	PGE-CAMP-CPUC-0000017114-7148
101028212	Caribou-Palermo Emergency Air Patrol On Relay	6/24/2003	PGE-CAMP-CPUC-0000018162
40124199	2002 Aerial Patrol	8/20/2002	PGE-CAMP-CPUC-0000017149-7188
100703476	Caribou-Palermo Emergency Air Patrol	4/25/2002	PGE-CAMP-CPUC-0000018169
N/A	Emergency Patrol Inspection Datasheet	10/22/2001	PGE-CAMP-CPUC-0000016872-6873
100546280	Caribou-Palermo Emergency Air Patrol	9/27/2001	PGE-CAMP-CPUC-0000018168
40083387	Caribou-Palermo Emergency Air Patrol	9/24/2001	PGE-CAMP-CPUC-0000016874-6875
40112802	2001 Infrared Patrol	7/31/2001	PGE-CAMP-CPUC-0000016870-6871
40105141	2001 Aerial Patrol	7/10/2001	PGE-CAMP-CPUC-0000033029-3072
100487040	Caribou-Palermo :18/157 Emergency Patrol	7/4/2001	PGE-CAMP-CPUC-0000018173
40035884	2001 Ground Patrol	1/25/2001	PGE-CAMP-CPUC-0000016821-6869

Response provided by:

Manager, Transmission Portfolio Management.

Attachment 12



CARIBOU-PALERMO NON RTN GROUND PATROL

LC # 114730861
Priority E - Schd Compl Yr 0
Work Type 539 - BFY-PatrolGround-Emergency

Line Name 10391 CARIBOU-PALERMO
Functional Location ETL.3190 - 10391 CARIBOU-PALERMO
Equipment
Structure ID
Main Work Center TABLEMTN - Table Mountain Required End Date 6/12/2019
Planner Group TLM - GC Tower -TABLEMTN Order # 43382525
Voltage Wood ☐ Steel ☐
Latitude 0 Longitude 0
Bird report event log Bird Incident #

Facility	Damage	Activity
LINE Non-Routine Patrol	INVG Investigate	GRPT Ground Patrol

Status - Cond/Oper Info	Status - Field Ident	Status - Field Cond (Expo)	Status - Field Cond (Access)	Status - Other
NONR Non-Routine				

Street
Cross Street
Division NV
City Zip 00000
County 004 - Butte County

Crew Size
Estimated Labor Hours

Reported by Date Found 6/12/2018

Completed By Date Actual Labor Hours
Reviewed By Date
Signature
I verify that all maintenance on this notification is completed

Field Notes

Long Text

06/26/2018 14:54:17
PER ()CIRCUIT REQUIRES A DETAILED INSPECTION ON ALL STEEL
STRUCTURES BY TOWER DEPARTMENT NORTH

Attachment 13



**Steel Structure Detailed Climbing Inspection
(Non-500 kV Structures)**

The 500 kV Tower Line Climbing Inspection Form provides a ready reference to ensure a thorough inspection.

- It is intended that the items on Page 2 of the form will be inspected during the climbing inspection.
- Refer to the ETPM Manual for guidance regarding the Facility, Damage, and Action

Structure #: 10/86	Line Name: CARIBOU-PALERMO	Voltage: 115	SAP Structure ID #: 40816572
Date Inspected: 10/30/18	Inspected By: [Redacted]	[Redacted] # [Redacted]	
Order #: 43382525	Notification Required:	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>	Notification #:
Comments:	[Redacted]		
Inspector Review:	[Redacted] (Signature)	LAN ID [Redacted]	Date: 10/30/18
Supervisor Review:	[Redacted] (Signature)	LAN ID:	Date:

PRIORITY CODES

N/A	Does not apply to this location
NP	No problem found
Using Priority Code requires a Condition and Action to be documented	
PC	Problem corrected at the time of inspection
A	Perform work immediately
B	Perform work within 3 months
E	Perform work within 12 months
F	Perform work within 24 months

INSTRUCTIONS.

1. The Facility, Damage, and Action Codes (FDA), are to be in accordance with the Electric Transmission Preventive Maintenance Manual.
2. Send completed forms to:
Tower Dept. Davis
500Kv Inspection file
316 "L" Street,
Davis, CA 95616

Steel Structure Detailed Climbing Inspection (Non-500 kV Structures)

Elec. Trans.
ETPM Form
TD-1001M-FXX
03/16

CHECK THIS ITEM	Condition Found							Damage	Action	COMMENTS
	N/A	NP	PC	A	B	E	F			
ANCHOR FOUNDATION										
Concrete is at least 6" above ground line	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Concrete is not cracked or deteriorated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Concrete is sealed and water proofed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Earth around anchors is not eroded	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Anchors have no evidence of pull out?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Do anchors consist of loops or rods?	<input checked="" type="checkbox"/>	<input type="checkbox"/> Loops		<input type="checkbox"/> Rods						
GUY WIRE										
Guys are properly tensioned	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Turnbuckle punched	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Proper guy cable and hardware used	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
6" of travel left in turnbuckle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Preform cross ties properly installed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Guy tails clipped properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Preform grips in thimbles	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Correct number of guys	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Automatic Guy Splice Present	<input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes							
STRUCTURE FOUNDATIONS										
Concrete is at least 6" above ground line	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Concrete is not cracked or deteriorated	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Rebar Exposed	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Concrete is sealed and water proofed	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Earth around structure is not eroded	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Direct buried steel grillage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Piles exposed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Piles rotted/deteriorated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
STRUCTURE/STEEL										
Tower is plumb and not leaning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Tower legs straight, not bowed or twisted	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
High voltage signs per E.D. 022168	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Tower no. & line name per E.D. 022168	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Anti-climbing guard per E.D. 022168	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Climbing steps installed correctly & are in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Broken or bent members	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Loose or missing steel members	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Loose bolts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Missing bolts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
All bolt threads are double punched	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Galvanized finish is OK	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Galvanox applied to unfinished areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Working eyes and shackles free of wear	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Bird nests present	<input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes							
Cell antenna attachments	<input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes							
Unauthorized attachments	<input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes							
Bird Mitigation installed	<input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes							
Bird Mitigation recommended	<input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes							

Steel Structure Detailed Climbing Inspection (Non-500 kV Structures)

CHECK THIS ITEM	Condition Found							Damage	Action	Comments
	N/A	NP	PC	A	B	E	F			
CONDUCTOR										
Conductor is in good condition, no broken strands or birdcaging at the connectors or in the span	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
All dampers are present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
All dampers are in good condition, not fatigued with drooping messenger or missing weight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
OVERHEAD GROUND WIRE										
Shield wire or OPGW is grounded properly	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Shield wire is in good condition, no broken strands at the connectors or in the span	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
All dampers are in present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
All dampers are in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
HARDWARE & INSULATORS										
Insulator cap(s) are free of corrosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
All insulators are intact and in good condition, not chipped or broken?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
VEGETATION										
Vegetation impact foundation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Vegetation impact structure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Comments and Overall Condition of Foundations, Guys, Structure, & Conductor:

Tower is in great condition

Exhibit B

Violations Alleged by SED and PG&E's Positions as Part of Settlement

The below tables list all violations alleged by SED in this proceeding. For purposes of this settlement agreement, PG&E does not contest the violations that are identified as “Not contested” in the PG&E Position column. The fact that PG&E is not contesting these violations is not a concession that the violations occurred, is inadmissible in evidence in court or in any other legal proceeding, and cannot and should not be used for any purpose in any litigation or any other legal proceeding.

A. Violations related to 2017 Wildfires

No.	Fire Name	Alleged Violation	PG&E Position
1.	Adobe	GO 95, Rule 31.1 – Hazardous tree not identified and abated	Disputed
2.	Adobe	GO 95, Rule 31.1 – Records of 2015 CEMA inspection not retained	Not contested
3.	Adobe	GO 95, Rule 31.1 – Work order completed late	Not contested
4.	Atlas	GO 95, Rule 31.1 – Failure to identify and abate hazardous Black Oak tree at Atlas 1 site	Disputed
5.	Atlas	GO 95, Rule 31.1 – Failure to identify and perform correctional prune of hazardous Valley Oak codominant branch at Atlas 2 site	Disputed
6.	Atlas	GO 95, Rule 35 – Vegetation clearance not maintained at Atlas 1 site	Disputed
7.	Atlas	GO 95, Rule 35 – Vegetation clearance not maintained at Atlas 2 site	Disputed
8.	Atlas	GO 95, Rule 31.1 – Work order completed late	Not contested
9.	Cascade	GO 95, Rule 38 – Conductor clearance not maintained	Disputed
10.	Cherokee	No violations identified	N/A
11.	La Porte	No violations identified	N/A
12.	Lobo	GO 95, Rule 31.1 – Hazardous tree with open cavity not identified and abated	Disputed
13.	Lobo	GO 95, Rule 31.1 – Failure to identify unsafe condition that left the subject tree exposed to high winds	Disputed
14.	Lobo	GO 95, Rule 31.1—Records of 2014 CEMA inspection not maintained	Not contested

15.	Lobo	GO 95, Rule 35 – Vegetation clearance not maintained	Disputed
16.	McCourtney	GO 95, Rule 31.1 – Failure to identify and remove a hazard tree	Disputed
17.	McCourtney	GO 95, Rule 35 – Vegetation clearance not maintained	Disputed
18.	Norrbom	GO 95, Rule 31.1 – Hazardous tree not identified and abated	Disputed
19.	Norrbom	GO 95, Rule 35 – Vegetation clearance not maintained	Disputed
20.	Nuns	GO 95, Rule 35 - Improper prioritization and delay in abating vegetation strain on secondary conductor	Disputed
21.	Oakmont/Pythian	GO 95, Rule 31.1 – Incomplete patrol prior to re-energizing circuit	Not contested
22.	Oakmont/Pythian	GO 95, Rule 31.1 – Failed to complete work order and reinforce a pole	Disputed
23.	Oakmont/Pythian	GO 95, Rule 31.1 – Completed a work order late	Not contested
24.	Partrick	GO 95, Rule 31.1 – Hazardous tree not identified and abated	Disputed
25.	Partrick	GO 95, Rule 35 – Vegetation clearance not maintained	Disputed
26.	Pocket	GO 95, Rule 31.1 – Hazardous tree not identified and abated	Disputed
27.	Pocket	GO 95, Rule 35 – Vegetation clearance not maintained	Disputed
28.	Point	GO 95, Rule 19 – Evidence disposal	Not contested
29.	Potter/ Redwood	Resolution E-4184 – Second fire located at 9100 Main St., Potter Valley not reported	Disputed
30.	Potter/Redwood	GO 95, Rule 31.1 – Repair records not maintained	Not contested
31.	Potter/Redwood	GO 95, Rule 31.1 – Records of 2016 CEMA inspection not maintained	Not contested
32.	Sulphur	GO 95, Rule 19 – Evidence disposal	Not contested
33.	Sulphur	GO 95, Rule 31.1 – Records of 2016 CEMA inspection not maintained	Not contested
34.	Tubbs	No violations identified	N/A
35.	Youngs/ Maacama	GO 95, Rule 31.1 – Hazardous tree not identified and abated	Disputed
36.	Youngs/ Maacama	GO 95, Rule 35 – Vegetation clearance not maintained	Disputed
37.	37	N/A, not a reportable incident	N/A

B. Violations related to 2018 Wildfires

No.	Fire Name	Alleged Violation	PG&E Position
1.	Camp	GO 95, Rule 44.3 - PG&E failed to replace or reinforce the C-hook on Tower :27/222 (Incident Tower) before its safety factor was reduced to less than two-thirds of the safety factor specified in Rule 44.1, Table 4, which is a violation of Rule 44.3.	Disputed
2.	Camp	GO 95, Rule 31.1 - PG&E failed to maintain the C-hook supporting the transposition jumper on the Incident Tower :27/222 for its intended use and regard being given to the conditions under which it was to be operated.	Disputed
3.	Camp	GO 95, Rule 31.2 - PG&E failed to inspect Incident Tower thoroughly and failed to detect an immediate Safety Hazard or Priority A condition on the incident C-hook.	Disputed
4.	Camp	GO 165, § IV - PG&E failed to follow its procedures by failing to document the factors and reasons that led to the delay in the repair work on the Incident Tower.	Not contested
5.	Camp	GO 165, § IV - PG&E failed to conduct detailed climbing inspections when conditions to trigger climbing inspections were evident as specified in PG&E's procedures. Wear on the original working eyes that remained on the Incident Tower is an indication of a known condition with potential to recur on the added hanger plates with working eyes, which should have triggered detailed climbing inspection to examine the added hanger plates.	Disputed
6.	Camp	GO 95, Rule 31.1 - The condition of the C-hook (material loss > 50%) supporting the transposition jumper on Tower :24/199 demonstrates that PG&E did not maintain the tower for its intended use.	Disputed
7.	Camp	GO 95, Rule 31.2 - PG&E failed to inspect	Disputed

		Tower :24/199 thoroughly and failed to detect an immediate Safety Hazard or Priority A Condition on the C-hook.	
8.	Camp	GO 165, § IV - C-hook on Tower :24/199 had material loss of over 50%. PG&E failed to detect and correct the Priority A condition as specified in PG&E's procedures.	Disputed
9.	Camp	GO 95, Rule 18 - PG&E assigned an incorrect priority for an immediate Safety Hazard (disconnected insulator hold-down anchor on Tower :27/221).	Disputed
10.	Camp	GO 165, § IV - PG&E failed to follow its procedures by using an outdated inspection form during the detailed climbing inspections that PG&E conducted from September 19 to November 5, 2018.	Not contested
11.	Camp	Res. E-4184 - PG&E failed to report the reportable incident on the Big Bend 1101 12kV Distribution Circuit in a timely manner.	Not contested
12.	Camp	CA Public Utilities Code, § 451 - PG&E failed to maintain an effective inspection and maintenance program to identify and correct hazardous conditions on its transmission lines in order to furnish and maintain service and facilities, as are necessary to promote the safety and health of its patrons and the public.	Disputed

Exhibit C

Description of PG&E Shareholder-Funded System Enhancement Initiatives

A. Funding and Duration of PG&E Shareholder-Funded System Enhancement Initiatives. \$50 million in shareholder-provided settlement funds shall be spent on the System Enhancement Initiatives identified in Part B below, which will be undertaken to enhance, among other things, PG&E's Vegetation Management and Electric Operations compliance and capabilities and the safety and reliability of PG&E's electrical system.

The Settling Parties agree on the following estimates of duration and funding requirements for each of the System Enhancement Initiatives identified in Section B. The actual duration and funding level for each of the System Enhancement Initiatives may be modified upon agreement by PG&E and SED, as long as shareholder-provided settlement funds for the System Enhancement Initiatives total \$50 million.

SED understands that the estimates provided by PG&E for each of the initiatives are high-level estimates only, subject to revision and do not constitute a promise by PG&E to complete any System Enhancement Initiative within the estimate provided. If PG&E becomes aware that it will not fully expend the shareholder settlement funds estimated for a System Enhancement Initiative, it shall inform SED as part of its semi-annual report as described in Section III.B of the Settlement Agreement, and PG&E and SED shall make a good faith effort to reach agreement on the method of expending any remaining funds.

Duration and Funding Estimates for PG&E Shareholder-Funded System Enhancement Initiatives

Shareholder-Funded System Enhancement Initiatives	Estimated Duration (Years) ¹	Estimated Shareholder Funding (Millions)
Tree Crew Training and Certificate Program	3	\$6.25
Pre-Inspector Training and Certificate Program	3	\$3.5
Vegetation Management Oversight Pilot	1	\$10.0
Development of Recommendations for General Order 165 Revisions	1	— ²
Accelerating Commercialization of Non-Diesel Temporary Generation	3	\$10.0

¹ The estimated duration runs from the Effective Date.

² For any System Enhancement Initiative listed with “—” in the Estimated Shareholder Funding column, the Settling Parties expect any costs to be de minimis or full time employee time only. The Settling Parties have not allocated any shareholder funding to these System Enhancement Initiatives because they expect that the costs of tracking the expenditure of such funds would outweigh the benefits.

Shareholder-Funded System Enhancement Initiatives	Estimated Duration (Years)³	Estimated Shareholder Funding (Millions)
LiDAR Asset Analysis	1 ⁴	\$0.5
Independent Root Cause Analysis	1	\$3.0
Fuel Reduction Funding	1 ⁵	\$2.0
Resilience Centers Grant Program	5 ⁶	\$2.0
Funding to California Foundation for Independent Living Centers	1 ⁷	\$5.0
Officer Safety Town Halls	5	—
Semi-Annual Wildfire Mitigation Meetings	3	—
ISO 55000 Certification	Make good faith effort to initiate final ISO 55000 certification assessment by end of 2020	\$1.0
Independent Wildfire Safety Audits	3	\$6.0
Verification of Safety-Related Filings	3	—
Quarterly Reporting on Electric Maintenance Work	3	—
Local Government Vegetation Management Data Sharing	3	—
Local Government System Hardening Data Sharing	3	—
Documentation of “Near Hit” Potential Fire Incidents	3 ⁸	—
Study of Distribution and Transmission System	Not specified	\$0.75
<u>TOTAL</u>		\$50.0

³ The estimated duration runs from the Effective Date.

⁴ Within one year of the Effective Date, PG&E will implement the pilot program.

⁵ Funds shall be disbursed or committed for future disbursement by one year from the Effective Date.

⁶ Funds shall be disbursed within five years of the Effective Date.

⁷ Funds shall be disbursed, or committed for future disbursement, within one year of the Effective Date.

⁸ PG&E will review with OSA and SED annually to assess the utility of the data being provided and confirm that the parties wish to continue receiving the data. PG&E will continue this sharing for up to three years following the Effective Date as long as annual reviews determine an ongoing interest or unless the Wildfire Mitigation Plan Proceeding (Rulemaking 18-10-007) determines a scope for utility reporting of “near hit” data that in substance supersedes this System Enhancement Initiative.

B. System Enhancement Initiatives. PG&E shall undertake the following System Enhancement Initiatives:

Vegetation Management-Focused Initiatives

1. Tree Crew Training and Certificate Program. PG&E, in partnership with International Brotherhood of Electrical Workers (“IBEW”) and educational institutions in Northern California, will establish a multi-week training program designed to provide the skills and knowledge necessary to perform tree crew work safely and competently. The Tree Crew Training Program will provide both classroom and in-the-field instruction, which will focus on safety, climbing, and line clearance qualifications. Those who successfully complete the program will receive a certificate. Certificate holders will meet the minimum requirements to be hired as entry-level tree workers by PG&E and its contractors; and receive support in obtaining certification as International Society of Arboriculture (“ISA”) Certified Tree Worker Climber Specialists. PG&E estimates that completion of the course work required to obtain ISA Certified Tree Worker Climber Specialist certification would take up to three years. PG&E will adopt a continuous improvement element to the Training Program and, therefore, may also adjust training elements based on user feedback and performance after initial implementation. The Settling Parties estimate that the Tree Crew Training Program will be shareholder-funded for a three-year period from the Effective Date and not exceed \$6.25 million of shareholder funding.

2. Pre-Inspector Training and Certificate Program. PG&E, in partnership with educational institutions in Northern California, will establish a multi-week training program designed to provide the skills and knowledge necessary to perform pre-inspector work safely and competently. Pre-Inspectors are the vegetation management personnel that are responsible for identifying hazardous and diseased trees for trimming. The Pre-Inspector Training Program will provide both classroom and in-the-field instruction. Those who successfully complete the program will receive a certificate and support in obtaining ISA certification. PG&E will adopt a continuous improvement element to the Training Program and therefore also may adjust training elements based on user feedback and performance after initial implementation. The Settling Parties estimate that the Pre-Inspector Training Program shall be shareholder-funded for a three-year period from the Effective Date and not exceed \$3.5 million of shareholder funding.

3. Vegetation Management Oversight Pilot. PG&E will implement a Vegetation Management Oversight (“VMO”) pilot program designed to provide enhanced oversight of pre-inspection and tree work performed on behalf of PG&E. The VMO pilot program will consist of two main initiatives. First, PG&E will add additional in-field workers directly responsible for real-time observation of and direct feedback to pre-inspectors and tree workers regarding safety, productivity, and quality. These field observers will also assess workers’ adherence to PG&E procedures. Consistent with PG&E procedures, field observers will be subject to PG&E’s universal “Stop the Job” policy. Under the “Stop the Job” policy, field observers who identify a safety risk or compliance issue will intervene in order to address and correct the identified safety risk or compliance issue. Second, PG&E will bolster its Quality Control team, which helps to ensure that pre-inspectors and tree crews meet PG&E’s vegetation management goals. PG&E expects these efforts to include trend analysis, additional internal reporting, and a “work verification team” that provides verification on all Enhanced Vegetation Management work. The

Settling Parties estimate that the VMO pilot program shall be shareholder-funded for a one-year period from the Effective Date and shall not exceed \$10 million of shareholder funding.

Electric Operations-Focused Initiatives

4. Development of Recommendations for General Order 165 Revisions. During a one-year period following the Effective Date, PG&E will collaborate with SED and other interested Settling Parties to develop recommendations for revisions to GO 165, which could include revisions to its provisions regarding both transmission facilities and distribution facilities. Recommendations may include the incorporation of components of PG&E's enhanced electric transmission inspection program, scheduled to launch in 2020.

5. Accelerating Commercialization of Non-Diesel Temporary Generation. PG&E will issue a Request for Information ("RFI") intended to identify non-diesel generators capable of meeting a range of use cases including (but not limited to) planned outages, unplanned outages, and temporary micro-grids for Public Safety Power Shutoff ("PSPS") events, including Resilience Zones.⁹ If the RFI identifies a solution that is ready for deployment, PG&E will commit commercialization funds of up to \$10 million to acquire the product(s) for use. If a ready-for-deployment solution is not identified, PG&E will augment the RFI with funding up to \$10 million in order to incentivize market competition for the development of workable, cost-effective solutions. The Settling Parties estimate that this initiative will be shareholder-funded for a three-year period from the Effective Date and not exceed \$10 million of shareholder funding.

System-Wide Analyses

6. LiDAR Asset Analysis. Within one year of the Effective Date, PG&E will implement a pilot program for the purpose of: (1) designing and testing a Light Detection and Ranging ("LiDAR") data-based methodology capable of estimating the probability of contact between overhead distribution conductors that are exposed to high wind in Tier 3 HFTD¹⁰ areas; and (2) creating modeling and analytical tools designed to supplement the evaluation of overhead distribution conductors during inspections. The pilot program will include the following phases: (a) categorization of the data collected for the purpose of converting the data into inputs for the computer system; (b) building the model using the collected, categorized data; (c) training and testing the model using the collected, categorized data; and (d) utilization of the model in order to answer questions about the data. The data collected for use in the pilot program will be either data that is in PG&E's possession or data that PG&E is in the process of collecting for other purposes. PG&E will adopt a continuous improvement element to the pilot program and will

⁹ As used in the Settlement Agreement, "Resilience Zones" refers to designated areas for which PG&E provides electricity to central community resources during a PSPS.

¹⁰ As used in Exhibit C, Tier 2 and Tier 3 High Fire-Threat District ("HFTD") areas mean those areas that the Commission has designated as Tier 2 – Elevated or Tier 3 – Extreme Fire-Threat Areas. The areas designated as such may be found at cpuc.ca.gov/FireThreatMaps.

consider whether to include load data, temperature data, or other data inputs in the pilot program. PG&E will commit \$500,000 of shareholder funds to this initiative.

7. Independent Root Cause Analysis. PG&E shareholders shall pay for an independent root cause analysis company to conduct a Root Cause Analysis (RCA) for each of the wildfires included in this OII that were reportable incidents to the CPUC and for which CAL FIRE determined that the ignition involved PG&E facilities.¹¹ The RCA for the applicable 2017 wildfires will be started within three months of bankruptcy court approval of this OII Settlement and completed no later than one year after the date on which the RCA commences. Due to the inaccessibility of evidence related to the Camp Fire and to ensure that a thorough RCA is conducted, the RCA for the 2018 Camp Fire will be started upon conclusion of the Butte County District Attorney's investigation related to the Camp Fire and after CAL FIRE provides access to the evidence. The Settling Parties estimate that the cost of this study will not exceed \$3 million of shareholder funding.

PG&E will select three consultants qualified to perform an RCA, from which SED and OSA will select one consultant to perform the RCA. PG&E shall enter into a contract with the RCA consultant selected by SED and OSA. The RCA consultant shall confer with and work under the direction of SED and OSA. SED and OSA shall review and approve the terms and scope of work prior to PG&E entering into the contract with the RCA consultant.

The purpose of the RCA will be to analyze the factors that contributed to the ignition of the fires and make recommendations as appropriate so that the learnings can be implemented on a go-forward basis to mitigate the risk of similarly caused fires in the future. Analyzing all of these fires will maximize lessons learned not only for PG&E, but also for the Commission. The information revealed may show that areas of GO 95 should be modified. The RCA shall consider all potential root causes, and shall not be restricted to violations of GO 95. The RCA may identify systemic, programmatic, management, and structural matters that may need to be addressed to reduce such incidents in the future.

The RCA final report(s) shall be provided to the Director of SED and served on the service list for I.19-06-015. A separate RCA final report will be issued for the Camp Fire if needed to avoid delay in the RCA final report for the 2017 wildfires. PG&E will submit a response to the Director of SED and the service list for I.19-06-015 within 30 days after each RCA final report is submitted to address whether and how it will work to incorporate lessons learned based on the RCA report and its recommendations into its operations, to the extent not already reflected therein based on other corrective actions and system improvements. If PG&E declines to incorporate any lessons learned into its operations, PG&E will explain its reasoning in its response. PG&E will make a good faith effort to initiate incorporation of the lessons learned within 12 months after the RCA final report is delivered to PG&E. The non-PG&E parties to this proceeding shall not use the results of the RCA to assert that the Commission should impose any additional financial penalties upon PG&E nor to argue for any additional disallowance.

¹¹ For the avoidance of doubt, the fires to be included are the Adobe, Atlas, Camp, Cascade, Cherokee, La Porte, Lobo, McCourtney, Norrbom, Nuns, Oakmont/Pythian, Partrick, Pocket, Point, Potter/Redwood, Sulphur, and Youngs Fires.

Community Engagement-Focused Initiatives

8. **Fuel Reduction Funding.** Within one year of the Effective Date, PG&E shall disburse or commit for future disbursement \$2 million total in additional funding to the California Fire Safe Council. This additional disbursement will be funded by PG&E shareholders. PG&E intends that the California Fire Safe Council will, in turn, distribute these funds to local Fire Safe Councils within PG&E's service territory and/or other nonprofit Council partner organizations. Local Fire Safe Councils are community-led organizations that focus on wildfire prevention and mitigation efforts. These organizations implement projects (e.g., hazardous-fuel-reduction projects) and educational programming regarding wildfire safety, preparedness, and planning. PG&E will collaborate with SED and other interested Settling Parties regarding the parameters of this funding to determine the most effective and mutually agreeable earmarks for these funds.

9. **Resilience Centers Grant Program.** Within five years of the Effective Date, PG&E will disburse a total of \$2 million in funding to support the development of local "resilience centers" aimed at PSPS events, wildfire risks, and other climate-driven extreme weather events. This disbursement will be funded by PG&E shareholders. Resilience centers are designated areas designed to provide residents and customers with a safe, energized location to receive basic power needs (e.g., to charge mobile phones and laptops; to access Wi-Fi connection, where possible), and to provide residents and customers up-to-date information about PSPS events. This funding will be distributed through a competitive solicitation and bid process to eligible nonprofit or governmental organizations (including tribal governments) within PG&E's service territory.

10. **Funding to California Foundation for Independent Living Centers.** Within one year of the Effective Date, PG&E shall disburse or commit for future disbursement up to \$5 million total in shareholder funds to the California Foundation for Independent Living Centers ("CFILC"), for a pilot program currently in development. This funding will be used to help alleviate some disruptive impacts for, and support the safety and welfare of, vulnerable customers before, during, and after disasters and PSPS events. The funding is expected to fund activities such as disaster relief events, activities, and trainings for community members; coordination of housing for vulnerable individuals during disasters and PSPS events; and provision of access to backup batteries during disasters and PSPS events.

11. **Officer Safety Town Halls.** During the two years following the Effective Date, PG&E will hold a total of 24 "Town Hall" meetings (12 annually) at various locations across its service territory. PG&E intends that the "Town Hall" meetings will take place one to two times per month during most of the year, and will not be held during the highest fire threat months (September, October, and November). PG&E expects that Town Halls will be held at locations across PG&E's service territory, including urban population centers and more rural locales, and that the event locations will prioritize areas that are at a higher risk of wildfire or have seen higher impacts from PG&E activities such as vegetation work and PSPS.

During the Town Halls, PG&E will share safety and utility service-related information with attendees and gather feedback from members of the community. At least one PG&E officer

(Vice President level or higher) will attend each event. PG&E will prepare a summary report following each event, which will be submitted to the Commission and posted to the PG&E website within 30 days of the Town Hall which the report summarizes.

Ahead of the end of the two-year period following the Effective Date, PG&E and SED will discuss and agree upon any desired changes to the schedule, format, and locations of Town Halls or similar community events to be held monthly during the following three years, with the exception of September through November, for a total of nine events annually. These potential changes for Town Halls or similar community events are intended to allow the events to be tailored to emerging community concerns, priorities, and program updates that may arise in intervening years. PG&E will continue to meet in communities throughout the PG&E service territory with a focus on those communities at the highest risk of wildfire.

During the five years following the Effective Date, with the exception of September through November, PG&E will also hold monthly webinars. Like the Town Halls, during each webinar PG&E will share safety and utility service-related information. At least one PG&E officer (Vice President level or higher) will attend each webinar. PG&E will prepare a summary report following each webinar, which will be submitted to the Commission and posted to the PG&E website within 30 days of the webinar which the report summarizes.

12. Semi-Annual Wildfire Mitigation Meetings. At least once every six months for three years after the Effective Date, leadership from the PG&E electric operations wildfire team will hold a meeting with local government planning, public works, emergency services, and fire leadership to exchange feedback and information regarding ongoing wildfire safety activities. In any given semi-annual period, PG&E will hold multiple region-specific meetings to cover its entire service territory (with PG&E to determine what constitutes each “region” for these purposes). PG&E may, at its discretion, hold the meetings in person or via teleconference. Following the conclusion of each set of semi-annual meetings, PG&E will prepare a single report for the meetings held during the preceding semi-annual period that identifies: (1) issues raised by the local governments; (2) action items to address identified issues; and (3) a progress report for previously-identified action items. PG&E will submit this report to SED or its designee, and will serve the report on the service list for the Wildfire Mitigation Plan Rulemaking¹² or its successor docket. Local governments will have the opportunity to submit a written response to PG&E’s report within 20 days.

Transparency and Accountability-Focused Initiatives

13. ISO 55000 Certification. PG&E shall make a good faith effort to initiate the final International Organization for Standardization (“ISO”) 55000 certification assessment required to obtain ISO 55000 certification from an accredited organization for its Electric Operations by the end of 2020.¹³ Within three months of the Effective Date of this settlement agreement, PG&E shall provide OSA and SED with a report on the status of its ISO 55000 certification

¹² R.18-10-007.

¹³ ISO 55000 is an international standard for asset management. ISO 55000 certification means that an accredited organization has determined that the company meets the standards set forth in ISO 55000.

implementation, including any remaining non-conformances to be addressed prior to applying for certification. PG&E shall inform OSA and SED in advance of scheduled gap-assessment closeout meetings. OSA and SED shall be allowed to participate in gap-assessment closeout meetings and PG&E will share assessment reports with OSA and SED, including the final assessment report. PG&E shareholders shall pay the costs to address any gaps up to a total of \$1 million over the certification period. PG&E shall notify OSA and SED when it applies for certification and when it receives certification. Once certification is received, PG&E shall make a good faith effort to maintain certification status during the three-year certification period. After certification is received, PG&E will invite its third-party ISO 55000 auditor to conduct a surveillance audit of its ISO 55000 program every six months. After each six-month audit, PG&E will report to OSA and SED on the status of its ISO 55000 certification. These reports will include the third-party ISO 55000 auditor's audit report.

Before the initial three-year certification period ends, PG&E shall re-apply for certification and shall again make a good faith effort to obtain and maintain certification for an additional three-year certification period ("Second Certification Period"). If PG&E decides not to re-apply for certification after the Second Certification Period, PG&E shall notify OSA and SED in writing at least six months prior to the end of the Second Certification Period. In this notification, PG&E shall: (1) explain its reasons for declining to seek re-certification, and (2) demonstrate that the safety management system in place at the end of the Second Certification Period will be comparable to or more robust than that required for ISO 55000 certification.

14. Independent Wildfire Safety Audits. PG&E shall retain Safety Evaluator(s), defined as independent consultant(s) who will perform the following Independent Safety Evaluations: (1) audits and reviews of PG&E policies, procedures, and practices surrounding the areas identified in (a) through (d) below ("policy and procedure audits"); (2) audits and reviews of PG&E compliance with the shareholder-funded System Enhancement Initiatives agreed upon as part of this Settlement Agreement ("compliance audits"); and (3) audits and reviews of PG&E financial data related to PG&E's Wildfire Safety Plans ("financial audits"). These compliance audits and financial audits shall be conducted annually for a three-year period after the Effective Date at an estimated cost of \$6 million of shareholder funding.

For each audit, PG&E shall provide SED with a list of reasonably qualified Safety Evaluators, with experience in auditing electric utility records and the subject matter of the audit. For each audit, SED shall select qualified Safety Evaluator(s) from the list provided by PG&E. PG&E shall enter into a contract with the Safety Evaluator(s) selected by SED. The Safety Evaluator(s) will consult with and work under the direction of SED. SED shall review and approve the terms and scope of work prior to PG&E entering into the contract(s) with the Safety Evaluator(s). PG&E acknowledges that a single Safety Evaluator may not be able to conduct all the evaluations identified in this System Enhancement Initiative. Safety Evaluators will be separate and distinct from Independent Evaluators contemplated by Senate Bills 247 and 901 and Assembly Bill 1054. To the extent that the Safety Evaluators' evaluations or findings overlap with the Wildfire Mitigation Plan Independent Evaluator, the Safety Evaluators may coordinate with the Wildfire Mitigation Plan Independent Evaluators.

The samples and methodology will be developed in accordance with the Safety Evaluator's professional judgment and standard practices in similar contexts and in consultation

with SED. Prior to the outset of the audits, the Safety Evaluator shall present SED with the methodology and a description of the anticipated final product of the audit based upon the goals and objectives identified in this Settlement Agreement. Within the scope identified here, SED may consult with the Safety Evaluator about the methodology and plans to achieve the goals identified herein. The selected Safety Evaluator will audit PG&E's policies, procedures, and practices regarding each of the following:

a) *Vegetation Management: PG&E's Tree Tracker Application ("Tree Tracker App").*¹⁴ The Safety Evaluator will: (i) audit samples of records from PG&E's Tree Tracker App, a soon-to-be deployed mobile application intended to improve PG&E's tracking of its vegetation management work, or its successor program; (ii) utilize the Tree Tracker App (or its successor program) to conduct field reviews of samples of pre-inspector and tree work in order to assess adherence to applicable PG&E procedures; (iii) survey vegetation management contractors and employees who utilize the Tree Tracker App (or its successor program) in the field to validate adherence to PG&E's Tree Tracker App (or its successor program) procedures, consistency of use, and overall usability of the tool; and (iv) recommend improvements to PG&E's Tree Tracker App (or its successor program) based on the Safety Evaluator's review. The Safety Evaluator's review of the Tree Tracker App (or its successor program) will commence six months after the Tree Tracker App (or its successor program) is implemented at PG&E.

b) *Overhead Distribution and Transmission Preventive Maintenance Program.* The Safety Evaluator will: (i) field audit samples of work orders generated in connection with patrols and inspections of PG&E overhead distribution and transmission facilities; (ii) review samples of work orders for adherence to PG&E policies and procedures; and (iii) recommend improvements to PG&E's distribution and transmission inspection and maintenance procedures based on the Safety Evaluator's review of PG&E's overhead distribution and transmission preventive maintenance program. The Safety Evaluator's review of PG&E's overhead distribution and transmission preventive maintenance program and procedures shall commence within one year of the Effective Date.

c) *Local Conditions Study of PG&E Territory.* The Safety Evaluator will: (i) assess PG&E's current practices and procedures for identifying and addressing local conditions that may warrant modifications to the design, construction, or maintenance of PG&E's distribution or transmission assets, consistent with GO 95, Rule 31.1; and (ii) recommend improvements to PG&E's practices and procedures related to identifying local conditions in accordance with GO 95, Rule 31.1.

d) *Evidence Collection and Retention.* The Safety Evaluator will: (i) conduct field reviews of reportable incidents and samples of outage events that may be attributable to PG&E facilities for the purpose of identifying errors or areas of improvement in PG&E's

¹⁴ The Tree Tracker App is a software and mobile application system that allows pre-inspectors to enter prescriptions from a mobile device and to mark segments of conductor as "inspected" on a digital map, rather than highlighting a paper map.

evidence collection and retention practices and procedures; and (ii) recommend improvements to PG&E's evidence collection and retention practices and procedures.

The Safety Evaluator audit reports shall be provided to the Director of SED and served on the service list for I.19-06-015. PG&E will submit a response to the Director of SED and the service list for I.19-06-015 within 30 days after each audit report is submitted to address whether and how it will implement the recommendations provided by the Safety Evaluator(s).

15. **Verification of Safety-Related Filings.** For three years following the Effective Date, PG&E will provide to the Commission verification of safety-related filings by either a Senior Vice President, Vice President, Senior Director, Director, or Manager, as provided below. For each safety-related filing outlined below, the designated officer, director, or manager will be tasked with verifying that the filing is accurate and complete. Verification requirements will be designed to enhance accountability among senior-level personnel at PG&E as well as the public's confidence in PG&E's commitment to safety and reliability. After this three-year period and if desired, PG&E will work with SED to evaluate effectiveness, continued need, and potential expansion of the verifications described in this System Enhancement Initiative.

Electric Safety-Related Communication to the Commission

General Order Reporting

Item	Name	Level of Verification
1	GO 166 Report	Vice President
2	GO 174 Report	Vice President
3	GO 165 Report	Vice President

Compliance and Incident Reporting

Item	Name	Level of Verification
1	Self-Reports	Vice President
2	20-Day Reports	Manager
3	PSPS 10-Day Reports	Vice President
4	Citation Responses	Senior Vice President

NOVs

Item	Name	Level of Verification
1	Notice(s) of Violation Responses	Senior Director

Audits

Item	Name	Level of Verification
1	Audit Report Responses	Senior Director

Gas Safety-Related Communication to the Commission

General Reporting

Item	Name	Level of Verification
1	GO 112F Annual Report	Vice President
2	Gas Pipeline Patrol Report	Director
3	Class Location Report	Director
4	Meter Protection Program	Director
5	Gas Pipeline Replacement Program	Director
6	Gas Safety Report	Vice President

Incident Reporting and Notifications

Item	Name	Level of Verification
1	Self-Reports	Vice President

NOPVs

Item	Name	Level of Verification
1	Notice(s) of Probable Violation Responses	Director
2	Citation Responses	Senior Vice President

Audits

Item	Name	Level of Verification
1	Audit Report Responses	Director

16. Quarterly Reporting on Electric Maintenance Work. For three years following the Effective Date, PG&E will prepare quarterly reports, to be submitted to SED, summarizing the status of maintenance work generated by the Wildfire Safety Inspection Program (“WSIP”). Through WSIP, PG&E performs enhanced inspections on an accelerated schedule for electric facilities in Tier 2 and Tier 3 HFTD areas. These enhanced inspections focus on conditions that could lead to fire ignitions. Each of these reports will include at a minimum: (1) the number, status, and locations of any open maintenance tags and (2) a table summarizing the status of all tags identified in the report.

17. Local Government Vegetation Management Data Sharing. For counties within PG&E’s service territory that request in writing to be included in these report distributions, PG&E will provide electronic month-ahead reports of planned vegetation management activity in each county. Nothing in this provision shall prohibit PG&E from undertaking vegetation management activities in each jurisdiction that did not originally appear on a month-ahead report or from accelerating the original timeline for work or from not completing planned activities included in a month-ahead report. Such changes are frequently necessary due to the diverse exigencies of PG&E’s wildfire reduction efforts.

Beginning with the first full month after the Effective Date, and for three years following the Effective Date, PG&E will submit the relevant month-ahead reports to designated county recipients on or before the last day of the preceding month (*e.g.*, the report for April 2021 will be provided on or before March 31, 2021). After that three-year period and if desired, PG&E will work with the Commission and the participating local governments to evaluate effectiveness, continued need, and potential expansion to other counties or conclusion of the data sharing.

These reports will include the following data from PG&E's Enhanced Vegetation Management, Catastrophic Event Memorandum Account (CEMA), and routine vegetation management programs for PG&E's distribution and transmission systems:

- Addresses of planned work, scheduled inspection date, and name of third-party contractor performing this work.
- Summaries of any applicable plans or permits required by law for the relevant work scheduled to take place.
- The number of tree-trims or tree-removals scheduled to take place.
- Whether PG&E has contacted the relevant property owner(s) at the location(s) of any planned work.

18. Local Government System Hardening Data Sharing. For counties within PG&E's service territory that request in writing to be included in these report distributions, PG&E will provide electronic month-ahead reports of planned system hardening work in each county. These reports will be based upon a mutually agreed upon data set or template. Nothing in this provision shall prohibit PG&E from undertaking system hardening activities in each jurisdiction that did not originally appear on a month-ahead report or from accelerating the original timeline for work. Such changes are frequently necessary due to the diverse exigencies of PG&E's wildfire reduction efforts.

Beginning with the first full month after the Effective Date, and for three years following the Effective Date, PG&E will submit the relevant month-ahead reports to designated county recipients on or before the last day of the preceding month (*e.g.*, the report for April 2021 will be provided on or before March 31, 2021). After that three-year period and if desired, PG&E will work with the Commission and the participating local governments to evaluate effectiveness, continued need, and potential expansion to other counties or conclusion of the data sharing.

These reports will include, at the local government's request, engineering drawings and plans, work schedules, and re-grade/relocation permits per franchise agreements. The sharing of system hardening data may require non-disclosure agreements with each of the local governments receiving the reports.

19. Documentation of “Near Hit”¹⁵ Potential Fire Incidents. PG&E will document “near hit” potential fire incidents, such as arcing or sparking, that could have resulted in an ignition but did not, as well as fire ignitions that travelled one meter or less from the ignition point. This documentation will include the following categories of data:

- (1) Data from PG&E’s Field Automation System (“FAS”), to the extent such data is collected in FAS as of the Effective Date, for events categorized with specific existing FAS codes to be agreed upon among PG&E, OSA, and SED. This data will include information related to “near hit” incidents from customer and service calls (inclusive of incidents detected by Smart meters), as well as “near hit” incidents data concerning secondary facilities and service drops;
- (2) All unplanned momentary and sustained outage data associated with PG&E’s primary distribution facilities (inclusive of outages detected by Smart meters);
- (3) All unplanned outage data and path interruptions associated with PG&E’s facilities operating at a transmission voltage level, whether or not customers were affected; and
- (4) Any fire ignitions that travelled one meter or less from an ignition point.¹⁶

All data will be provided on a quarterly basis to SED and other Settling Parties that request in writing to receive this data. Data for each of the four above items shall be provided in a format that is searchable and sortable, for example, by location and cause of the incident described in each entry (e.g., failed transformer, animal, slapping conductors, failed conductor, etc.). Within 30 days of the Effective Date, SED and PG&E will meet and confer regarding the specific data within these four categories to be provided, including the specific existing FAS codes as outlined above, and the sorting of the data. PG&E will begin this “near hit” reporting system within three months of the Effective Date. After this implementation date, PG&E will review with OSA and SED annually to assess the utility of the data being provided and confirm that the parties wish to continue receiving the data. PG&E will continue this sharing for up to three years following the Effective Date as long as annual reviews determine an ongoing interest or unless the Wildfire Mitigation Plan Proceeding (Rulemaking 18-10-007) determines a scope for utility reporting of “near hit” data that in substance supersedes this System Enhancement Initiative.

20. Independent Study of Distribution and Transmission System. PG&E shareholders shall pay for an independent engineering firm to study the grounding methods and circuit and transformer configuration in PG&E’s distribution system and transmission system. PG&E will recommend three independent engineering firms qualified to perform this study; SED and OSA may select one of these firms or, in consultation with PG&E, a different firm, to perform this

¹⁵ The term “near miss” is used at times to refer to a similar or identical concept as “near hit” as used in this System Enhancement Initiative.

¹⁶ This reporting requirement goes beyond the reporting currently required for “reportable events” under Decision 14-02-015. Note also that events reported under this provision may be duplicative of other events reported as part of this System Enhancement Initiative.

study. PG&E shall enter into a contract with the firm selected by SED and OSA. This study will consider PG&E's unique territory as well as topics discussed in SED's 2013 Liberty Consulting Report on PG&E and analyze opportunities to reduce wildfire risk and the occurrence of energized wires down including, but not limited to, system configuration. The study should also consider factors such as the costs and benefits of potential mitigations. The final scope of the study will be developed by SED and OSA in consultation with PG&E. The contracted firm shall work at the direction of SED and OSA. PG&E, along with SED and OSA, will have the opportunity to review and comment on drafts of the study prior to it being finalized. PG&E will consider adoption of any recommendations from this report. The final study report shall be provided to the Director of SED and served on the service list for I.19-06-015. PG&E will submit a response to the Director of SED and the service list for I.19-06-015 within 30 days after the final study report is submitted to address whether and how it will implement the recommendations provided by the independent engineering firm. If PG&E declines to incorporate any recommendation, PG&E will explain its reasoning in writing to the Director of SED and the service list for I.19-06-015. The Settling Parties estimate that the cost of this study will not exceed \$0.75 million of shareholder funding.