



**OFFICE OF ENERGY INFRASTRUCTURE SAFETY** 715 P Street, 15th Floor | Sacramento, CA 95814 916.902.6000 | www.energysafety.ca.gov

November 21, 2025

Subject: Office of Energy Infrastructure Safety's Draft Decision for Trans Bay Cable's 2026-2028 Base Wildfire Mitigation Plan

Dear Wildfire Mitigation Plan Stakeholders:

Enclosed is the Office of Energy Infrastructure Safety's (Energy Safety) Draft Decision approving Trans Bay Cable's (TBC)'s 2026-2028 Base Wildfire Mitigation Plan.

This Draft Decision is published for public review and comment. Opening comments must be submitted no later than December 15, 2025. Reply comments must be submitted no later than December 26, 2025.

Comments must be submitted to Energy Safety's e-filing system in the 2026-2028 Wildfire Mitigation Plans docket (#2026-2028-Base-WMPs).¹ Energy Safety's Policy Division Process Guidelines provides more information on submitting opening and reply comments.²

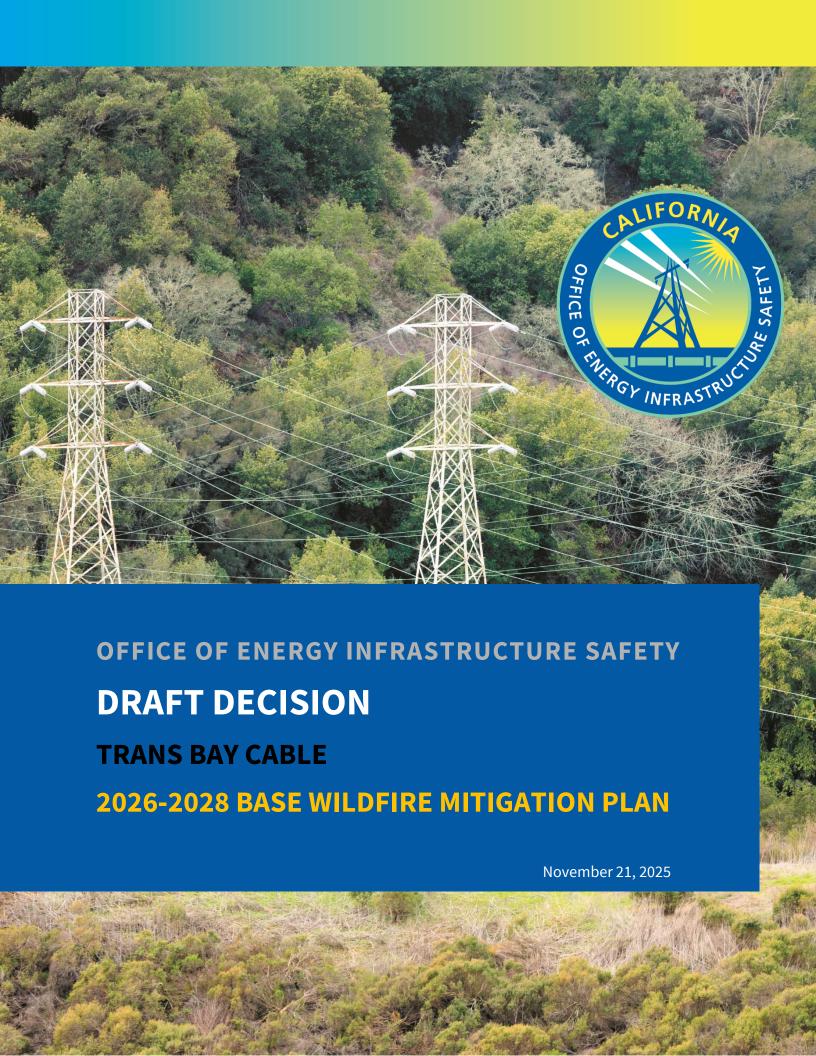
Sincerely,

/s/ Tony Marino

Tony Marino
Deputy Director | Electrical Infrastructure Directorate
Office of Energy Infrastructure Safety

<sup>&</sup>lt;sup>1</sup> Submit comments via the <u>2026-2028-Base-WMPs docket</u> on Energy Safety's e-filing system, URL:(https://efiling.energysafety.ca.gov/EFiling/DocketInformation.aspx?docketnumber=2026-2028-Base-WMPs).

<sup>&</sup>lt;sup>2</sup> ESPD Process Guidelines.



#### 1. Executive Summary

The Trans Bay Cable (TBC) 2026-2028 Base Wildfire Mitigation Plan (WMP) is approved.

The Office of Energy Infrastructure Safety (Energy Safety) works to ensure electrical corporations construct, maintain, and operate electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment. Pursuant to Public Utilities Code section 8386.3(a), this Decision serves as Energy Safety's assessment and approval of the TBC 2026-2028 Base WMP, dated September 16, 2025, which is inclusive of all changes resulting from the previously submitted errata.

TBC is an independent transmission owner. Independent transmission owners are transmission-only electrical corporations with no end-use customers. These electrical corporations have limited assets and footprints compared to the large investor-owned utilities and small and multi-jurisdictional investor-owned utilities in California.

In its 2026-2028 Base WMP, TBC demonstrated continued progress in vegetation management. TBC provided its quarterly substation vegetation inspection targets for the Pittsburg Converter Station, set as once per quarter. TBC also required any necessary landscape maintenance to be completed within one day. The quarterly inspections represent a step forward from its 2023-2025 Base WMP, which did not include vegetation management targets. Although TBC's wildfire consequence from TBC's facilities is very low due to its buried and submerged assets, establishing these measures reflects TBC's commitment to maintaining its facilities and further reducing its already minimal vegetation-related wildfire risk.

Energy Safety does not have any required improvements for TBC's 2026-2028 Base WMP. However, as part of its vegetation landscape maintenance, TBC reported performing ad hoc trimming of one of three nearby palm trees. Palm fronds can become airborne in high winds and pose a risk of entanglement with electrical equipment. While it may not present a current compliance gap, Energy Safety recommends that TBC, as its vegetation program matures, consider coordinating with adjacent property owners to remove palm trees taller than the facility wall and within 100 feet of its perimeter. Doing so would promote proactive vegetation risk reduction and support long-term system safety.

#### **TABLE OF CONTENTS**

1.	Exe	ecutive Summary	i
TΑ	ABLE (	OF CONTENTS	. ii
2.	Int	roduction	. 1
	2.1	2026-2028 Base WMP Submission and Publication Summary	
	2.2	Consultation with California Department of Forestry and Fire Protection	. 1
	2.3	Public Comment	
	2.4	Environmental Compliance	
	2.5	Area for Continued Improvement Reporting	
3.	Int	roductory Sections of the WMP	. 3
4.	Pro	ojected Expenditures	. 4
5.	Ris	k Methodology and Assessment	. 6
	5.1	Discussion	. 6
	5.2	Areas for Continued Improvement	. 7
6.	Wi	dfire Mitigation Strategy Development	. 8
	6.1	Discussion	
	6.2	Areas for Continued Improvement	. 9
7.	Pu	blic Safety Power Shutoffs	
	7.1	Discussion	
	7.2	Areas for Continued Improvement	10
8.	Gri	d Design, Operations, and Maintenance	11
	8.1	Discussion	11
	8.2	Areas for Continued Improvement	12
9.	Ve	getation Management and Inspections	13
	9.1	Summary of Anticipated Risk Reduction	13
	9.2	Discussion	13
	9.3	Areas for Continued Improvement	14
10	. Sit	uational Awareness and Forecasting	15
	10.1	Discussion	15
	10.2	Areas for Continued Improvement	17
11	. Em	ergency Preparedness, Collaboration, and Community Outreach	18

11.1	Discussion	18
11.2	Previous Areas for Continued Improvement	18
11.3	Areas for Continued Improvement for Future WMP Submissions	20
12. Ent	erprise Systems	21
12.1	Discussion	21
12.2	Areas for Continued Improvement	21
13. Les	sons Learned	22
13.1	Discussion	22
13.2	Areas for Continued Improvement	23
14. Con	oclusion	24
14.1	Discussion	24
14.2	Approval	24
LIST O	FTABLES	
Table 4-	1. TBC Projected Expenditure Comparison	. 4
Table 4-2	2. TBC Projected Expenditure Comparison HFTD vs Non-HFTD	. 5
LICTO	FAPPENDICES	
LIST OI		
Appendi	x A References Table	2
Appendi	x B Status of Previous Areas for Continued Improvement	٠-4
Appendi	x C Consolidated List of Areas for Continued Improvement and Required Progress	
Appendi		
Appendi	x E Definitions	۱-9

#### 2. Introduction

Energy Safety approves the TBC 2026-2028 Base Wildfire Mitigation Plan (2026-2028 Base WMP), R1, which includes revisions resulting from the previously submitted errata.

TBC submitted its revised 2026-2028 Base WMP on September 16, 2025. This Base WMP covers a three-year period from 2026 through the end of 2028 (the WMP cycle). TBC prepared its Base WMP in accordance with the requirements set forth in the Energy Safety WMP Guidelines.

## 2.1 2026-2028 Base WMP Submission and Publication Summary

This section provides a list of the 2026-2028 Base WMP submissions and publications by TBC and Energy Safety. Information regarding the submission types can be found in the Energy Safety WMP Guidelines.

- 06/13/2025 TBC submitted its 2026-2028 Base WMP Pre-Submission
- 06/27/2025 Energy Safety issued the Pre-Submission Check Sufficiency Determination for the TBC 2026-2028 Base WMP Pre-Submission
- 07/25/2025 TBC submitted its 2026-2028 Base WMP
- 07/29/2025 TBC submitted its 2026 Maturity Survey
- 09/02/2025 Energy Safety issued a Notice on Errata for TBC 2026-2028 Base WMP R0
- 09/16/2025 TBC submitted its revised 2026-2028 Base WMP R1

## 2.2 Consultation with California Department of Forestry and Fire Protection

The Office of the State Fire Marshal is part of the California Department of Forestry and Fire Protection (CAL FIRE). Public Utilities Code section 8386.3(a) requires Energy Safety to consult with the Office of the State Fire Marshal in reviewing electrical corporation WMPs. The Office of the State Fire Marshal provided meaningful consultation and input on the evaluation, but this Decision is solely an action of Energy Safety and not the Office of the State Fire Marshal or CAL FIRE.

#### 2.3 Public Comment

Energy Safety did not receive any public comments on the TBC 2026-2028 Base WMP.

#### 2.4 Environmental Compliance

An approved WMP shall not be construed as relieving any electrical corporation from complying with all applicable local, state, or federal environmental requirements. A list of selected examples of state environmental requirements is available on Energy Safety's website for reference. Electrical corporations should reach out to the primary agency responsible for an environmental requirement for any additional information.

#### 2.5 Area for Continued Improvement Reporting

Reporting of required progress for areas for continued improvement in this Decision fall into the categories of due by next WMP Update or next Base WMP. Areas for continued improvement that require progress by the next WMP Update will be due no sooner than a 2027 WMP Update. The timing and period covered by the next Base WMP have yet to be decided. The schedule for upcoming WMP submissions is pending development due to ongoing implementation of 2025 California Legislative Service Chapter 119 (Senate Bill 254, Becker) ("SB 254").

SB 254, which became law on September 19, 2025, impacts WMP cycles, submission schedules, and technical requirements, and imposes new and amended statutory requirements on the existing WMP process. Energy Safety is working to implement the changes from SB 254 and expects to hold at least one public workshop to gather feedback from electrical corporations and stakeholders on potential changes. Energy Safety plans to issue a WMP submission schedule and to revise its WMP Guidelines to reflect the changes and new requirements.

<sup>&</sup>lt;sup>1</sup> Examples of State Environmental Requirements.

## 3. Introductory Sections of the WMP

TBC provided the required information for the following sections in accordance with Chapter III of the WMP Guidelines:

- Section 1: Executive Summary
- Section 2: Responsible Persons
- Section 3: Overview of the WMP (Primary Goal, Plan Objectives, Prioritized List of Wildfire Risks and Risk Drivers, Performance Metrics, Projected Expenditures, and Climate Change)
- Section 4: Overview of the Service Territory (Service Territory, Catastrophic Wildfire History, and Frequently Deenergized Circuits)



#### 4. Projected Expenditures

TBC provided the required information<sup>2</sup> regarding projected expenditures in accordance with Chapter III, Section 3.6 of the WMP Guidelines. TBC provided additional information regarding projected expenditure in accordance with the Energy Safety Data Guidelines;<sup>3</sup> a summary of this information is presented below.

Table 4-1 presents the territory-wide expenditure per initiative category by ITOs. Table 4-2 provides ITOs' expenditures per initiative category by HFTD vs non-HFTD.

<u>`</u>						
	Trans Bay Cable		Horizon West		LS Power	
WMP Initiative Category	Total Territory	% of Grand Total	Total Territory	% of Grand Total	Total Territory	% of Grand Total
Wildfire Mitigation Strategy	\$0	\$0	\$0	\$0	\$0.0	0.00%
Vegetation Management and Inspections	\$0	\$0	\$1.2M	61.9%	\$82.0K	11.04%
Situational Awareness and Forecasting	\$0	\$0	\$0	\$0	\$452.0K	60.8%
Risk Methodology and Assessment	\$0	\$0	\$0	\$0	\$0.0	0.00%
Grid Design, Operations, and Maintenance	\$0	\$0	\$0	\$0	\$137.0K	18.4%
Enterprise Systems	\$0	\$0	\$0	\$0	\$0.0	0.00%
Emergency Preparedness, Collaboration and Public Awareness	\$0	\$0	\$750.0K	38.1%	\$72.0K	9.7%
Grand Total	\$0	0%	\$2.0M	100%	\$743.0K	100%

Table 4-1. TBC Projected Expenditure Comparison⁴

<sup>&</sup>lt;sup>2</sup> Energy Safety's WMP evaluation and decision on a WMP is not an approval of, or agreement with, costs listed in the WMP.

<sup>&</sup>lt;sup>3</sup> Data Guidelines, pages 165-167.

<sup>&</sup>lt;sup>4</sup> Trans Bay Cable reported "Not applicable" for all expenditure. Horizon West and LS Power reported "Not applicable" in categories where zero is reported here. Specifically, Trans Bay Cable, Horizon West, and LS Power reported no planned expenditure for covered conductor, undergrounding, asset inspections, or customer support in wildfire and PSPS emergencies.

Table 4-2. TBC Projected Expenditure Comparison HFTD vs Non-HFTD⁵

	Trans Bay Cable		Horizon West		LS Power				
WMP Initiative Category	HFTD	Non- HFTD	% Spend in HFTD	HFTD	Non- S	% Spend in HFTD	HFTD	Non- HFTD	% Spend in HFTD
Wildfire Mitigation Strategy	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$</b> 0	\$0	0%
Vegetation Management and Inspections	\$0	\$0	\$0	\$1.2M	\$0.0	100%	\$0	\$82.0K	0%
Situational Awareness and Forecasting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$452.0K	0%
Risk Methodology and Assessment	\$0	\$0	<b>\$</b> 0	\$0	\$0	\$0	\$0	\$0	0%
Grid Design, Operations, and Maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$45.0K	\$92.0K	33%
Enterprise Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
Emergency Preparedness, Collaboration and Public Awareness	\$0	\$0	\$0	\$750.0K	\$0.0	100%	\$8.0K	\$64.0K	11%
Grand Total	\$0	<b>\$</b> 0	\$0	\$2.0M	\$0	100%	\$53.0K	\$690.0K	7.1%

<sup>&</sup>lt;sup>5</sup> Only Horizon West reported planned expenditures for vegetation management and inspections in HFTD.

## 5. Risk Methodology and Assessment

Chapter III, Section 5 of the WMP Guidelines requires the electrical corporation to provide an overview of its risk methodology, key input data and assumptions, risk analysis, and risk presentation (i.e., the results of its assessment). The TBC 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

#### 5.1 Discussion

This section discusses Energy Safety's evaluation of the risk methodology and assessment section of the TBC 2026-2028 Base WMP.

#### 5.1.1 Methodology

TBC's methodology allows TBC to understand the risk on its system and identify mitigation activities at an appropriate level.

TBC stated that it does not use risk modeling to assess wildfire risk given TBC limited scope and scale of operations. Instead, TBC reported it applied a failure modes and effects analysis (FMEA) methodology to evaluate wildfire risk. TBC used this approach to identify potential equipment failure modes, assess the effectiveness of current processes and controls, and inform the selection of wildfire mitigation activities. FMEA is a structured, qualitative approach that identifies potential equipment failure modes and evaluates their effects on system performance and safety. Unlike quantitative risk modeling, which estimates the probability and consequence of wildfire events through data-driven methods, FMEA focuses on process- and equipment-level vulnerabilities. Given that wildfire consequence from TBC's facilities is very low due to its buried or submerged assets, FMEA provides a sufficient level of analysis that allows TBC to understand the risks on its system and to identify mitigation activities.

<sup>&</sup>lt;sup>6</sup> Pub. Util. Code §§ 8386(c)(3), (8), (12)-(13), (17)-(18).

<sup>&</sup>lt;sup>7</sup> TBC, 2026-2028 Base WMP R1, page 38.

<sup>&</sup>lt;sup>8</sup> TBC, 2026-2028 Base WMP R1, page 35.

<sup>&</sup>lt;sup>9</sup> TBC, 2026-2028 Base WMP R1, page 35.

<sup>&</sup>lt;sup>10</sup> TBC, 2026-2028 Base WMP R1, page 12.

#### **5.1.2** Risk Analysis Framework

TBC reported that in its FMEA analysis, TBC identified and ranked risk drivers across these three dimensions: (1) the degree of impact once an event occurs; (2) the likelihood of an event taking place; and (3) the ability to recognize when an event has occurred. Given the limited scale and location of TBC assets, these three factors provide a structured framework that aligns with TBC risk profile and supports the evaluation of potential wildfire mitigation activities.

#### 5.1.3 Risk Analysis Results and Presentation

TBC reported that the highest-risk components on its system identified by its FMEA analysis were its four transformers, which are all located outside of the HFTD.<sup>12</sup> This outcome is consistent with the risk analysis findings of the other ITOs.

#### **5.1.4 Quality Assurance and Quality Control**

TBC stated that its field engineers and senior leadership conducted an annual review of the FMEA process to consider potential improvements.<sup>13</sup> Given the low wildfire risk and the limited change in TBC's risk profile, the annual review provides a structured opportunity to evaluate whether the methodology continues to align with TBC's risk conditions.

#### 5.1.5 Risk Assessment Improvement Plan

TBC reported that it does not have any current risk assessment improvement plan. <sup>14</sup> Given that wildfire risk from TBC's assets is very low, the FMEA analysis provides a sufficient level of analysis for TBC to understand the risk on its system.

#### **5.2** Areas for Continued Improvement

Energy Safety identifies no previous or new areas for continued improvement in the Risk Methodology and Assessment section for the TBC 2026-2028 Base WMP.

<sup>&</sup>lt;sup>11</sup> TBC, 2026-2028 Base WMP R1, page 38.

<sup>&</sup>lt;sup>12</sup> TBC, 2026-2028 Base WMP R1, page 40.

<sup>&</sup>lt;sup>13</sup> TBC, 2026-2028 Base WMP R1, pages 40-41.

<sup>&</sup>lt;sup>14</sup> TBC, 2026-2028 Base WMP R1, page 41.

## 6. Wildfire Mitigation Strategy Development

Chapter III, Section 6 of the WMP Guidelines requires the electrical corporation to provide a high-level overview of the risk evaluation process that inform its selection of a portfolio of initiative activities, as well as its overall wildfire mitigation strategy. <sup>15</sup> The TBC 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

#### 6.1 Discussion

This section discusses Energy Safety's evaluation of the wildfire mitigation strategy development section of the TBC 2026-2028 Base WMP.

#### 6.1.1 Risk Evaluation

TBC's overall wildfire risk is low due to its system's limited scope and scale.

TBC identified the Pittsburg Converter Station as its highest wildfire risk asset due to its proximity to a Tier 2 high fire threat district (HFTD). However, TBC also noted that all aboveground transmission equipment in the Pittsburg Converter Station is fully contained within its 12-foot walls. In addition, the remainder of facilities are underground or submerged underwater, with no transmission lines extending into wildlands or the wildland-urban interface (WUI). Thus, though TBC's Pittsburg Converter Station is its highest wildfire risk asset, full containment of aboveground assets within 12-foot walls and the location of the remainder in water means its and TBC's wildfire risk is low.

#### **6.1.2** Wildfire Mitigation Strategy

TBC reported that it does not anticipate material change in its risk profile.<sup>19</sup> Given TBC's very low wildfire risk profile, no material changes to its wildfire mitigation strategy are reasonable at this time.

<sup>&</sup>lt;sup>15</sup> Pub. Util. Code §§ 8386(c)(3), (12)-(14).

<sup>&</sup>lt;sup>16</sup> TBC, 2026-2028 Base WMP R1, page 43.

<sup>&</sup>lt;sup>17</sup> TBC, 2026-2028 Base WMP R1, page 47.

<sup>&</sup>lt;sup>18</sup> TBC, 2026-2028 Base WMP R1, page 43.

<sup>&</sup>lt;sup>19</sup> TBC, 2026-2028 Base WMP R1, page 58.

#### **6.2** Areas for Continued Improvement

Energy Safety identifies no previous or new areas for continued improvement in the Wildfire Mitigation Strategy Development section for the TBC 2026-2028 Base WMP.



#### 7. Public Safety Power Shutoffs

Chapter III, Section 7 of the WMP Guidelines requires the electrical corporation to provide an overview narrative of planned initiative actions to reduce the impacts of Public Safety Power Shutoff (PSPS) events.<sup>20</sup> The TBC 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

#### 7.1 Discussion

This section discusses Energy Safety's evaluation of the PSPS section of the TBC 2026-2028 Base WMP.

TBC highlighted that as an ITO without a service territory or end-use customers, it operates two converter stations connected by a submarine cable outside wildfire risk zones and has no deenergized circuits for wildfire mitigation.<sup>21</sup> TBC does not expect to initiate a PSPS, and any PSPS impacting the Pittsburg Substation would be initiated by Pacific Gas and Electric company (PG&E), taking the Trans Bay System offline.<sup>22</sup>

#### 7.2 Areas for Continued Improvement

Energy Safety identifies no previous or new areas for continued improvement in the Public Safety Power Shutoffs section for the TBC 2026-2028 Base WMP.

<sup>&</sup>lt;sup>20</sup> Pub. Util. Code, § 8386(c)(8).

<sup>&</sup>lt;sup>21</sup> TBC, 2026-2028 Base WMP R1, page 65.

<sup>&</sup>lt;sup>22</sup> TBC, 2026-2028 Base WMP R1, page 65.

## 8. Grid Design, Operations, and Maintenance

Chapter III, Section 8 of the WMP Guidelines requires the electrical corporation to include plans for grid design, operations, and maintenance programmatic areas in its WMP.<sup>23</sup> The TBC 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

#### 8.1 Discussion

This section discusses Energy Safety's evaluation of the grid design, operations, and maintenance section of the TBC 2026-2028 Base WMP.

#### 8.1.1 Grid Design and System Hardening

TBC currently has no planned grid design or system hardening initiatives or activities. This is reasonable given that no material changes to TBC's infrastructure are anticipated during the 2026-2028 Base WMP cycle and that TBC's current wildfire risk is already very low.

#### 8.1.2 Asset Inspections

TBC's asset inspection program sufficiently addresses wildfire risks given consideration to TBC's limited footprint and scope of operations. TBC stated that it performs monthly visual inspections of the Pittsburg Converter Station, and conducts additional inspections ahead of extreme weather conditions at the discretion of operations personnel.<sup>24</sup> This meets regulatory requirements under General Order (GO) 174<sup>25</sup> and is aligned with the other ITOs. Energy safety considers this a satisfactory inspection interval for TBC to mitigate wildfire risk.

#### 8.1.3 Equipment Maintenance and Repair

TBC's equipment maintenance schedules follow regulatory requirements, manufacturer recommendations, and industry best practices. This may mitigate wildfire risk.

#### 8.1.4 Quality Assurance and Quality Control

TBC stated that it documents any issues identified during monthly inspections in Inspection of Watch (IOW) reports.<sup>26</sup> The IOWs are used to record observed conditions and identify any

<sup>&</sup>lt;sup>23</sup> Pub. Util. Code §§ 8386(c)(3), (6), (10), (14)-(15).

<sup>&</sup>lt;sup>24</sup> TBC, 2026-2028 Base WMP R1, page 80.

<sup>&</sup>lt;sup>25</sup> CPUC, General Order 174

<sup>&</sup>lt;sup>26</sup> TBC, 2026-2028 Base WMP R1, page 93.

deviations from normal operations that require corrective action.<sup>27</sup> Monthly inspection reports are standard for the ITOs and are an effective inspection tracking method.

TBC did not calculate quality assurance and quality control audit pass rates, as it does not have planned auditing of wildfire mitigation activities.<sup>28,29</sup> This is reasonable given the very low wildfire risk, location, and limited scope of TBC's operations.

#### 8.1.5 Grid Operations and Procedures

TBC stated that it monitors the high voltage direct current (HVDC) converter and associated transmission system in real-time.<sup>30</sup> TBC also stated that its transmission system already possesses fault monitoring and detection capabilities that block transmission within microseconds of fault detection and can initiate an emergency shutoff in milliseconds.<sup>31</sup> Given the location, limited scope, and nature of its assets, TBC's monitoring and operational practices can be expected to effectively mitigate wildfire.

#### 8.2 Areas for Continued Improvement

Energy Safety identifies no previous or new areas for continued improvement in the Grid Design, Operations, and Maintenance section for the TBC 2026-2028 Base WMP.

<sup>&</sup>lt;sup>27</sup> TBC, 2026-2028 Base WMP R1, page 93.

<sup>&</sup>lt;sup>28</sup> TBC, 2026-2028 Base WMP R1, page 94.

<sup>&</sup>lt;sup>29</sup> TBC, 2026-2028 Base WMP R1, page 96.

<sup>&</sup>lt;sup>30</sup> TBC, 2026-2028 Base WMP R1, page 101.

<sup>&</sup>lt;sup>31</sup> TBC, 2026-2028 Base WMP R1, page 101.

## 9. Vegetation Management and Inspections

Chapter III, Section 9 of the WMP Guidelines requires the electrical corporation to include plans for vegetation management in its WMP. <sup>32</sup> The TBC 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

#### 9.1 Summary of Anticipated Risk Reduction

TBC's continued progress in its quarterly vegetation inspections and remediation further reduces the already minimal risk of vegetation contact with energized equipment.<sup>33</sup>

TBC facilities are located in an urban, industrial environment, with transmission facilities either buried or submerged beneath the San Francisco Bay.<sup>34</sup> As a result, wildfire risk from vegetation contact is minimal. At its aboveground facilities, TBC manages vegetation through landscape maintenance, including trimming palm trees outside the perimeter wall.<sup>35</sup>

#### 9.2 Discussion

This section discusses Energy Safety's evaluation of the vegetation management and inspections section of the TBC 2026-2028 Base WMP.

#### 9.2.1 Inspections

TBC has demonstrated a commitment to maintaining its facilities and further reducing its already minimal vegetation-related ignition risk.

In *Table 9-2 Vegetation Inspections and Pole Clearing Targets by Year*, TBC provided quarterly targets to inspect its Pittsburg Converter Station for vegetation maintenance needs once per quarter and to complete landscape maintenance within one day of identifying the need.<sup>36</sup> This shows continued progress from TBC's 2023-2025 Base WMP, in which TBC established no vegetation management-related inspection targets.<sup>37</sup>

<sup>&</sup>lt;sup>32</sup> Pub. Util. Code §§ 8386(c)(3), (9).

<sup>&</sup>lt;sup>33</sup> TBC, 2026-2028 Base WMP R1, page 109.

<sup>&</sup>lt;sup>34</sup> TBC, 2026-2028 Base WMP R1, page 11.

<sup>&</sup>lt;sup>35</sup> TBC, 2026-2028 Base WMP R1, page 108.

<sup>&</sup>lt;sup>36</sup> TBC, 2026-2028 Base WMP R1, page 109.

<sup>&</sup>lt;sup>37</sup> TBC, 2023-2025 Base WMP R1, page 103.

#### 9.2.2 Pruning and Removal

TBC can further mature its landscape maintenance practice by coordinating with adjacent property owners to remove potential vegetation hazards.

As part of its landscape maintenance, TBC stated that it performs ad hoc trimming of three nearby palm trees.<sup>38</sup> Palm fronds can detach and travel long distances in high winds, and their large surface area make them prone to becoming entangled in electrical lines and equipment. For TBC to continue to mature in its landscape maintenance program, Energy Safety recommends TBC provide, in its next Base WMP, information on coordination with adjacent property owners to remove any palm trees that are within 100 feet of TBC's facility wall and taller than the wall. Removal of these palm trees would promote proactive vegetation risk reduction and support long-term system safety.

#### 9.3 Areas for Continued Improvement

Energy Safety identifies no previous or new areas for continued improvement in the Vegetation Management and Inspections section for the TBC 2026-2028 Base WMP.

<sup>&</sup>lt;sup>38</sup> TBC, 2026-2028 Base WMP R1, page 113.

## 10. Situational Awareness and Forecasting

Chapter III, Section 10 of the WMP Guidelines requires the electrical corporation to include plans for situational awareness in its WMP.<sup>39,40</sup> The TBC 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

#### 10.1 Discussion

This section discusses Energy Safety's evaluation of the situational awareness section of the TBC 2026-2028 Base WMP.

#### 10.1.1 Environmental Monitoring Systems

TBC's environmental monitoring systems adequately manage the wildfire risk to its assets given the location and limited scale of its operations and the low potential wildfire contribution of its assets.

TBC stated that its facilities are located in an urban and industrial environment, and its transmission facilities are either buried or submerged beneath the San Francisco Bay. 41 TBC does not operate any overhead transmission lines. 42 As a result, environmental factors do not have a significant impact on TBC's operations. However, TBC utilizes its own weather station and has developed a wildfire risk index to support environmental monitoring and situational awareness. 43

In addition, TBC stated that it plans to utilize multiple applications provided by a third-party system to enhance its monitoring of surrounding areas.<sup>44</sup> The applications support daily asset-based risk modeling and provide real-time wildfire spread modeling for areas surrounding TBC's infrastructure.<sup>45</sup> Using these applications will provide greater situational awareness of a wildfire near the facility.

<sup>&</sup>lt;sup>39</sup> Pub. Util. Code §§ 8386(c)(2)-(5).

<sup>&</sup>lt;sup>40</sup> WMP Guidelines, pages 125-139.

<sup>&</sup>lt;sup>41</sup> TBC, 2026-2028 Base WMP R1, page 146.

<sup>&</sup>lt;sup>42</sup> TBC, 2026-2028 Base WMP R1, page 146.

<sup>&</sup>lt;sup>43</sup> TBC, 2026-2028 Base WMP R1, page 146.

<sup>&</sup>lt;sup>44</sup> TBC, 2026-2028 Base WMP R1, page 143.

<sup>&</sup>lt;sup>45</sup> TBC, 2026-2028 Base WMP R1, page 143.

#### 10.1.2 Grid Monitoring Systems

TBC's monitoring and operational practices adequately manage the wildfire risk to its assets, given its location, limited scope, and the nature of its assets.

TBC stated that its system is a 400 MW HVDC system consisting of two converter stations connected by an approximately 53-mile submarine cable. The system is transmission-only, with no overhead lines and no distribution elements. The Given its limited footprint, location, and scale of its operations, TBC does not utilize a traditional grid management system. TBC also stated that its transmission system already possesses fault monitoring and detection capabilities that block transmission within microseconds of fault detection and can initiate an emergency shutoff in milliseconds.

#### 10.1.3 Ignition Detection Systems

TBC does not have ignition detection systems of its own. Instead, TBC provided that it relies on coordination with California Independent System Operation (CAISO) and PG&E to maintain situational awareness. <sup>50</sup> TBC noted that CAISO is TBC's balancing authority. <sup>51</sup> CAISO is in constant communication with all utilities regarding environmental and grid conditions, providing TBC with an additional layer of situational awareness. In addition, TBC stated that it operates entirely within PG&E's service territory. <sup>52</sup> TBC benefits from PG&E's awareness of local environmental conditions and potential wildfire concerns that could affect its facilities.

TBC reported that it has increased situational awareness of local conditions through close coordination with CAISO and with PG&E, its only neighboring electrical corporation. TBC also noted that weather, red flag warning days, and fire index have negligible impact on its operational profile because its transmission path is fully underground or submerged.<sup>53</sup> This approach addresses system ignition risk given the location, limited scale, and scope of its operations.

<sup>&</sup>lt;sup>46</sup> TBC, 2026-2028 Base WMP R1, page 148.

<sup>&</sup>lt;sup>47</sup> TBC, 2026-2028 Base WMP R1, page 148.

<sup>&</sup>lt;sup>48</sup> TBC, 2026-2028 Base WMP R1, page 148.

<sup>&</sup>lt;sup>49</sup> TBC, 2026-2028 Base WMP R1, page 149.

<sup>&</sup>lt;sup>50</sup> TBC, 2026-2028 Base WMP R1, page 154.

<sup>&</sup>lt;sup>51</sup> TBC, 2026-2028 Base WMP R1, page 154.

<sup>&</sup>lt;sup>52</sup> TBC, 2026-2028 Base WMP R1, page 154.

<sup>&</sup>lt;sup>53</sup> TBC, 2026-2028 Base WMP R1, page 154.

#### 10.1.4 Weather Forecasting

TBC stated that weather conditions do not have a material impact on its operations, and it does not have any assets located in HFTD.<sup>54</sup> However, TBC monitors current weather conditions through a weather station it installed in 2022 and receives twice-daily forecast emails on wildfire risk conditions.<sup>55</sup> This adequately addresses wildfire risk given TBC's limited risk exposure and limited scale and scope of operations.

#### 10.1.5 Fire Potential Index

TBC uses a number of mitigation activities related to Fire Potential Index (FPI). TBC stated that it utilizes multiple data sources within a third-party wildfire risk index (WRI) program to assess the relative risk of explosive wildfires.<sup>56</sup> The WRI provides a scale of low, elevated, high, and extreme fire risk.<sup>57</sup> The automated model produces visualizations that can be used internally for validation, refinement, and customer question and answer.<sup>58</sup>

TBC noted that although it does not have any operations in HFTD, TBC utilizes the program to monitor conditions that could lead to brush or grassland fires in the surrounding area for situational awareness purposes.<sup>59</sup> This approach provides sufficient situational awareness given TBC's limited exposure to wildfire risk and its limited scale, location, and the scope of its operations.

#### 10.2 Areas for Continued Improvement

Energy Safety identifies no previous or new areas for continued improvement in the Situational Awareness and Forecasting section for the TBC 2026-2028 Base WMP.

<sup>&</sup>lt;sup>54</sup> TBC, 2026-2028 Base WMP R1, page 158.

<sup>&</sup>lt;sup>55</sup> TBC, 2026-2028 Base WMP R1, page 158.

<sup>&</sup>lt;sup>56</sup> TBC, 2026-2028 Base WMP R1, page 158.

<sup>&</sup>lt;sup>57</sup> TBC, 2026-2028 Base WMP R1, page 158.

<sup>&</sup>lt;sup>58</sup> TBC, 2026-2028 Base WMP R1, page 158.

<sup>&</sup>lt;sup>59</sup> TBC, 2026-2028 Base WMP R1, page 158.

## 11. Emergency Preparedness, Collaboration, and Community Outreach

Chapter III, Section 11 of the WMP Guidelines requires the electrical corporation to provide an overview of its emergency plan and describe its communication strategy with public safety partners, essential customers, and other stakeholder groups regarding wildfires, outages due to wildfires, and PSPS and service restoration. The TBC 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section. However, many of the specific requirements and subsections within this section are not applicable to ITOs, given the nature and scope of their operations.

#### 11.1 Discussion

This section discusses Energy Safety's evaluation of the emergency preparedness, collaboration, and public awareness section of the TBC 2026-2028 Base WMP.

#### 11.1.1 Emergency Preparedness and Recovery Plan

TBC's general emergency plans are sufficient given TBC's low wildfire exposure and limited operational footprint.

TBC stated that given the limited scope and scale of TBC's operations, and the fact that TBC does not have any assets in HFTD, wildlands, or wildland-urban interface (WUI) areas, it does not maintain emergency preparedness plans specifically for wildfires or PSPS events. <sup>61</sup> Instead, TBC stated it has general emergency plans that would be implemented in the event of any emergency, including wildfires or PG&E-initiated PSPS events. <sup>62</sup> TBC conducts its emergency preparedness and responses in close coordination with CAISO, PG&E, and local emergency service providers. <sup>63</sup>

#### 11.2 Previous Areas for Continued Improvement

In the Energy Safety Decision for the TBC 2025 WMP Update, Energy Safety identified areas related to emergency preparedness, collaboration, and public awareness where TBC must

<sup>&</sup>lt;sup>60</sup> Pub. Util. Code § 8386(c)(7), (11), (16), (19)-(21).

<sup>&</sup>lt;sup>61</sup> TBC, 2026-2028 Base WMP R1, page 162.

<sup>&</sup>lt;sup>62</sup> TBC, 2026-2028 Base WMP R1, page 162.

<sup>&</sup>lt;sup>63</sup> TBC, 2026-2028 Base WMP R1, page 162.

continue to improve its wildfire mitigation capabilities. This section summarizes the requirements imposed by those areas for continued improvement, TBC's response to those requirements, and Energy Safety's evaluation of the response.

#### 11.2.1 TBC-23B-02. Documentation of Sharing Best Practices

For this area for continued improvement, Energy Safety required TBC to provide documented examples of its sharing of best practices in its 2026-2028 Base WMP.<sup>64</sup>

#### 11.2.1.1 TBC-23B-02. TBC Response Summary

In its 2026-2028 Base WMP, TBC reported that its representatives attended two PG&E wildfire conferences in 2024 and one conference in 2025.<sup>65</sup> TBC noted that its representatives also participated in a webinar on near-term wildfire mitigation strategies hosted by AEGIS insurance company in 2025.<sup>66</sup> TBC also noted that TBC leverages collaboration with its affiliate, Horizon West Transmission, which has joined two industry groups focused on wildfire mitigation.<sup>67,68</sup> TBC stated that although TBC's operations are limited in scope and scale, it participated in these events to gain exposure to new systems, technologies, and operational approaches from companies with more extensive experience in wildfire mitigation.<sup>69</sup>

For example, through its attendance at a PG&E wildfire seminar, TBC learned about the benefits of third-party fire monitoring and notification applications as an additional source of information for ignition detection and real-time wildfire updates. TAS a result, TBC operations personnel now utilize a third-party application to receive notifications and monitor ignitions and wildfires near the Pittsburg Converter Station.

#### 11.2.1.2 TBC-23B-02. Energy Safety Evaluation

TBC reported documented examples of sharing of best practices required by Energy Safety. By joining the seminars with industry groups focused on wildfire mitigation, TBC highlighted progress in this area by seeking opportunities to learn from and engage with industry experts.

<sup>&</sup>lt;sup>64</sup> Decision for TBC 2025 WMP Update, page 18.

<sup>&</sup>lt;sup>65</sup> TBC, 2026-2028 Base WMP R1, page 225.

<sup>&</sup>lt;sup>66</sup> TBC, 2026-2028 Base WMP R1, page 225.

<sup>&</sup>lt;sup>67</sup> TBC, 2026-2028 Base WMP R1, page 197.

<sup>&</sup>lt;sup>68</sup> HWT, 2026-2028 Base WMP R1, page 200.

<sup>&</sup>lt;sup>69</sup> TBC, 2026-2028 Base WMP R1, pages 196-197.

<sup>&</sup>lt;sup>70</sup> TBC, 2026-2028 Base WMP R1, page 196.

<sup>&</sup>lt;sup>71</sup> TBC, 2026-2028 Base WMP R1, page 196.

As such, TBC sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement.

## 11.3 Areas for Continued Improvement for Future WMP Submissions

Energy Safety identifies no new areas for continued improvement in the Emergency, Preparedness, Collaboration, and Community Outreach section for the TBC 2026-2028 Base WMP.



#### 12. Enterprise Systems

Chapter III, Section 12 of the WMP Guidelines requires the electrical corporation to provide an overview of inputs to, operation of, and support for various enterprise systems it uses for vegetation management, asset management and inspection, grid monitoring, ignition detection, weather forecasting, and risk assessment initiatives. <sup>72</sup> The TBC 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

#### 12.1 Discussion

This section discusses Energy Safety's evaluation of the enterprise systems section of the TBC 2026-2028 Base WMP.

In *Table 12-1 Enterprise Systems Targets*, TBC did not provide any activities.<sup>73</sup> TBC explained that, given its limited footprint, extensive enterprise systems would be outsized for its scope of operations.<sup>74</sup> Instead, TBC reported that it utilizes its own asset management program (AMP) and SharePoint for document storage.<sup>75</sup> TBC's AMP is a custom-built, in-house asset management program managed at the corporate level of NextEra Energy's power delivery business unit and its dedicated IT department.<sup>76</sup> This approach effectively supports wildfire mitigation given TBC's limited operational scale and scope of operations.

#### 12.2 Areas for Continued Improvement

Energy Safety identifies no previous or new areas for continued in the Enterprise Systems section for the TBC 2026-2028 Base WMP.

<sup>&</sup>lt;sup>72</sup> Pub. Util. Code § 8386(c)(10), (14), (18).

<sup>&</sup>lt;sup>73</sup> TBC, 2026-2028 Base WMP R1, page 191.

<sup>&</sup>lt;sup>74</sup> TBC, 2026-2028 Base WMP R1, page 191.

<sup>&</sup>lt;sup>75</sup> TBC, 2026-2028 Base WMP R1, page 191.

<sup>&</sup>lt;sup>76</sup> TBC, 2026-2028 Base WMP R1, page 192.

#### 13. Lessons Learned

Chapter III, Section 13 of the WMP Guidelines requires the electrical corporation to discuss the lessons learned it uses to drive continual improvement in its WMP.<sup>77</sup> The TBC 2026-2028 Base WMP met the requirements of the WMP Guidelines for this section.

#### 13.1 Discussion

This section discusses Energy Safety's evaluation of the lessons learned section of the TBC 2026-2028 Base WMP.

TBC listed three lessons learned that may guide improvements to its wildfire mitigation practices. TBC may improve the effectiveness, standardization, and long-term maturity of its wildfire mitigation program from these lessons learned. For instance:

- TBC attended a wildfire seminar hosted by PG&E and identified value of leveraging the expertise of industry leaders in wildfire situational awareness, forecasting, and modeling to improve its internal capabilities to predict, observe, plan, and mitigate to ignitions and wildfires.<sup>78</sup> As a result, TBC will leverage a third-party application to support situational awareness, improve forecasting, and enhance real-time wildfire spread modeling for areas surrounding its facilities.<sup>79</sup> By incorporating this lesson, TBC may strengthen its ability to predict and respond to potential wildfire events.
- TBC attended a wildfire seminar hosted by PG&E and identified the value of third-party fire monitoring and notification applications as supplemental sources of information for ignition detection and real-time wildfire situation awareness. As a result, TBC field engineers now utilize a third-party application to receive notifications and monitor ignitions and wildfires in the vicinity of the Pittsburg Converter Station. By incorporating this lesson, TBC may improve its ability to detect and respond quickly to potential ignition events.
- TBC attended wildfire seminars hosted by PG&E and AEGIS and found the importance
  of participating in industry groups to gain exposure to new systems, technologies, and
  operational practices.<sup>82</sup> Although TBC's operations are limited in scale, its engagement
  with industry experts enables the organization to learn from electrical corporations

<sup>&</sup>lt;sup>77</sup> Pub. Util. Code §§ 8386(a) & (c)(5), (22).

<sup>&</sup>lt;sup>78</sup> TBC, 2026-2028 Base WMP R1, page 196.

<sup>&</sup>lt;sup>79</sup> TBC, 2026-2028 Base WMP R1, page 196.

<sup>&</sup>lt;sup>80</sup> TBC, 2026-2028 Base WMP R1, page 196.

<sup>81</sup> TBC, 2026-2028 Base WMP R1, page 196.

<sup>82</sup> TBC, 2026-2028 Base WMP R1, page 225.

with more extensive wildfire mitigation experiences, and this engagement supports continuous improvement of TBC's wildfire mitigation practices.<sup>83</sup> By incorporating this lesson, TBC could strengthen its organizational knowledge base and enhance the maturity of its wildfire program over time.

#### 13.2 Areas for Continued Improvement

Energy Safety identifies no previous or new areas for continued in the Lessons Learned section for the TBC 2026-2028 Base WMP.



 $<sup>^{\</sup>rm 83}$  TBC, 2026-2028 Base WMP R1, pages 196-197.

#### 14. Conclusion

#### 14.1 Discussion

Each electrical corporation must construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment. When Energy Safety approves a WMP, it does so with the aim of continued improvement and may list areas for continued improvement which the electrical corporation must address. Energy Safety's evaluation of TBC's 2026-2028 Base WMP identified TBC demonstrated steady progress in maintaining its facilities and further reducing already low vegetation-related wildfire risk.

TBC established quarterly vegetation inspection targets for the Pittsburg Converter Station and set a one-day turnaround for completing any necessary landscape maintenance. These measures represent a meaningful step forward from its 2023-2025 Base WMP, which did not include specific vegetation management targets. Although wildfire consequence from TBC's facilities remains very low due to buried and submerged nature of its assets, these improvements reflect TBC's commitment to maintaining high operational standards and proactively minimizing risk.

Energy Safety did not identify any required improvements for TBC's 2026-2028 Base WMP. However, as TBC's vegetation management program matures, Energy Safety recommends that TBC consider coordinating with adjacent property owners to remove tall palm trees within 100 feet of the facility perimeter to prevent potential debris hazards. Such proactive coordination would further support long-term system safety and reinforce TBC's already low wildfire risk.

At this stage in its maturity, Energy Safety expects TBC to continue building on its demonstrated progress and maintain its performance in vegetation management and facility maintenance. While no specific areas for improvement were identified, Energy Safety encourages TBC to further strengthen its proactive risk reduction measures and sustain the high level of diligence reflected in this cycle. Energy Safety will continue to monitor TBC's progress and assess its continued growth and maintenance of best practices in future WMP evaluations.

#### 14.2 Approval

The TBC 2026-2028 Wildfire Mitigation Plan is approved.

Catastrophic wildfires remain a serious threat to the health and safety of Californians. Electrical corporations, including TBC, must continue to make progress toward reducing wildfire risk.

Energy Safety expects TBC to effectively implement its wildfire mitigation activities to reduce wildfire and outage program risk.

TBC must meet the commitments in its approved WMP and address areas for continued improvement identified within this Decision to ensure it meaningfully reduces wildfire and outage program risk within its service territory over the plan cycle.



# DATA DRIVEN FORWARD-THINKING INNOVATIVE SAFETY FOCUSED



OFFICE OF ENERGY INFRASTRUCTURE SAFETY A California Natural Resources Agency www.energysafety.ca.gov

715 P Street, 15th Floor Sacramento, CA 95814 916.902.6000





### **APPENDICES**



#### **APPENDICES**

Appendix A. References Table		A-2
Appendix B. Status of Previous Areas for Contin	ued Improvement	A-4
Appendix C. Consolidated List of Areas for Conti	inued Improvement and Red	quirementsA-6
Appendix D. Maturity Survey Results		A-7
Appendix E. Definitions		A-9
Terms Defined in Other Codes		A-9
Terms Not Defined		A-9
Definition of Terms		Δ-9

#### **Appendix A. References Table**

Citation	Reference
D.14-02-015	California Public Utilities Commission, <u>Decision Adopting Regulations to</u> Reduce the Fire Hazards Associated with Overhead Electric utility Facilities and Aerial Communication Facilities (D.14-02-015), Issued February 10, 2024, URL:(https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M087/K8 92/87892306.PDF).
Glossary of Wildland Fire	National Wildfire Coordinating Group, <u>Glossary of Wildland Fire</u> , Accessed May 13, 2024, URL:( <u>https://www.nwcg.gov/node/439827</u> ).
Historical NWS Data	Iowa State University, <u>Archived National Weather Service (NWS) Watch</u> , <u>Warnings</u> , <u>Advisories</u> , <u>Accessed April 8</u> , 2025, URL:( <a href="https://mesonet.agron.iastate.edu/request/gis/watchwarn.phtml">https://mesonet.agron.iastate.edu/request/gis/watchwarn.phtml</a> ).
Introduction to International Disaster Management	Coppola, Daman, Introduction to International Disaster Management, Published October 13, 2020.
Maturity Model	Office of Energy Infrastructure Safety, <u>Electrical Corporation Wildfire</u> <u>Mitigation Maturity Model and Survey Guidelines</u> , Published March 20, 2025, URL:( <a href="https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58118">https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58118</a> <u>&amp;shareable=true</u> ).
Maturity Survey.	Office of Energy Infrastructure Safety, <u>Electrical Corporation Wildfire</u> <u>Mitigation Maturity Survey</u> , Published March 20, 2025, URL:( <a href="https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58119">https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58119</a> <u>&amp;shareable=true</u> ).
Pub. Res. Code § 4525.7	Public Resources Code section 4525.7, Added 1973, URL: (https://leginfo.legislature.ca.gov/faces/codes displaySection.xhtml ?sectionNum=4525.7.&lawCode=PRC).

Citation	Reference					
Pub. Util. Code § 8386	Public Utilities Code section 8386, Effective January 1, 2022, URL:(https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml ?sectionNum=8386&lawCode=PUC).					
Substantiating a Fire Model for a Given Application	Society of Fire Protection Engineers, Substantiating a Fire Model for a Given Application, Published 2010.					
WMP Guidelines	Office of Energy Infrastructure Safety, <u>Wildfire Mitigation Plan Guidelines</u> , Published February 24, 2025, URL:( <a href="https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58026">https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58026</a> & shareable=true).					
Examples of State Environmental Requirements	Office of Energy infrastructure Safety, Examples of State Environmental Requirements, Accessed April 28, 2025, URL:(https://energysafety.ca.gov/wp-content/uploads/2025/04//examples-of-state-environmental-requirements.pdf).					
TBC, 2026-2028 Base WMP	Trans Bay Cable, <u>TBC 2026-2028 Base WMP R0</u> , Published July 28, 2025, URL: (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=59060&shareable=true).					
TBC, 2026-2028 Base WMP R1	Trans Bay Cable, <u>TBC 2026-2028 Base WMP R1 Clean</u> , Published July 28, 2025, URL: ( <a href="https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=59393&amp;shareable=true">https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=59393&amp;shareable=true</a> ).					
TBC, 2023-2025 Base WMP R1	Trans Bay Cable, <u>TBC 2023-2025 Base WMP R1 – Clean REDACTED</u> , Published July 28, 2025, URL: (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56997&shareable=true).					
HWT, 2026- 2028 Base WMP R1	Horizon West Transmission, <a href="https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=59396&amp;shareable=true">https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=59396&amp;shareable=true</a> ).					

# Appendix B. Status of Previous Areas for Continued Improvement

Energy Safety Decision for the TBC 2025 WMP Update identified areas for continued improvement. Areas for continued improvement are areas in which TBC must continue to improve its WMP. As part of the 2026-2028 Base WMP evaluation, Energy Safety reviewed the progress reported by TBC in addressing previously identified areas for continued improvement.

Areas for continued improvement identified in Energy Safety Decisions for the TBC 2025 WMP Update and that required progress reporting in the TBC 2026-2028 Base WMP are listed in Table B-1. The status column indicates whether each has been fully addressed.

Table B-1. TBC Previous Areas for Continued Improvement

ID	Title	Status
TBC-23B-02	Documentation of Sharing Best Practices	TBC has sufficiently responded to this area for continued improvement. No further reporting is required for this area for continued improvement. See Section 11.2 for Energy Safety's evaluation of this area for continued improvement.



# Appendix C. Consolidated List of Areas for Continued Improvement and Requirements

Energy Safety did not find any areas for continued improvement for TBC's 2026-2028 Base WMP.

## Appendix D. Maturity Survey Results

The Energy Safety Electrical Corporation Wildfire Mitigation Maturity Model (Maturity Model) and 2025 Electrical Corporation Wildfire Mitigation Maturity Survey (Maturity Survey) together provide a quantitative method to assess electrical corporation wildfire risk mitigation capabilities and examine how electrical corporations propose to continuously improve in key areas of their WMP.

The Maturity Model consists of 38 individual capabilities, each relevant to an electrical corporation's ability to mitigate wildfire and PSPS risk within its service territory. Maturity levels range from 0 (below minimum requirements) to 4 (beyond best practice). The 38 capabilities are aggregated into seven categories. The seven categories are:

- A. Risk Assessment and Mitigation Strategy
- B. Situational Awareness and Forecasting
- C. Grid Design, Inspections, and Maintenance
- D. Vegetation Management and Inspections
- E. Grid Operations and Protocols
- F. Emergency Preparedness
- G. Community Outreach and Engagement

TBC's responses to the Maturity Survey, listed by category, are depicted in the figure below.

Figure D-1. TBC 2025 Responses to the Maturity Survey

		1. Capability			2. Cap	ability			3. Cap	ability			4. Cap	ability		5. Capability				6. Capability				
		2025	2026	2027	2028	2025	2026	2027	2028	2025	2026	2027	2028	2025	2026	2027	2028	2025	2026	2027	2028	2025 20	26 202	27 2028
A. Risk Assessment and		Statistical weather, climate, and wildfire modeling				Calculation of wildfire and PSPS     hazard and exposure to societal     values			3. Calculation of community vulnerability to wildfire and PSPS			4. Calculation of risk and risk components			5. Risk event tracking and integration of lessons learned			6. Risk-informed wildfire mitigation strategy						
Mitigation Strategy	Minimum of Sub-Cap.  Average of Sub-Cap.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 1.3	0.0 1.3			0.0 0.		
B. Situational Awareness and	Average of sub-cap.	7. Ignition likelihood estimation			8. Weather forecasting ability			9. Wildfire spread forecasting			10. Data collection for near-real-time conditions			11. Wildfire detection and alarm systems		_	12. Centralized monitoring of real-time conditions							
Forecasting	Minimum of Sub-Cap.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 0.		
C. Grid Design, Inspections,	Average of Sub-Cap.	0.0 13. Asse	et invento			0.4	0.4 1. Asset in	0.4 nspection	0.4 ns	0.1 15. Asse	0.2 et mainte		0.2 d repair	0.6 16. G	0.6 Grid design	0.6 and resi	0.6 liency	I	et and gri aining and	d person		0.8 0.	8 0.8	8.0.8
and Maintenance	Minimum of Sub-Cap.  Average of Sub-Cap.	0.0 1.5	0.0 1.5	0.0 1.5	0.0 1.5	0.0 1.3	0.0 1.3	0.0 1.3	0.0 1.3	0.0 0.5	0.0 0.5	0.0 0.5	0.0 0.5	0.0	0.0	0.0	0.0	0.0 1.0	0.0 1.3		0.0 1.3			
D. Vegetation Management		18.	Vegetatio	on invent	tory	19. Vegetation inspections			20. Vegetation treatment			21. Vegetation personnel training and quality			22. Best Management Practices for Transmission Rights-Of- Ways (ROWs)									
and Inspections	Minimum of Sub-Cap.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0			
E. Grid Operations and	Average of Sub-Cap.	0.0 0.0 0.0 0.0  23. Protective equipment and device settings			0.0 0.0 0.0 0.0  24. Incorporation of ignition risk factors in grid control			0.0 0.0 0.0 0.0 0.0 25. PSPS operating model			0.8 0.8 0.8 0.8  26. Protocols for PSPS re- energization			0.0 0.0 0.0 0.0  27. Ignition prevention and suppression		o.o ind								
Protocols	Minimum of Sub-Cap.  Average of Sub-Cap.	0.0 1.2	0.0 1.2	0.0 1.2	0.0 1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 1.3	0.0 1.3	0.0 1.3	0.0	1.0 1.7	2.0		2.0			
F. Emergency Preparedness		28. Wild	fire and P	SPS eme	rgency &	29. Colla with		and coor fety part			0. Public o	_	у	31. Prep		and plan	_		omer supp I PSPS eme	ort in wi		33. Learni and	ng after PSPS eve	
	Minimum of Sub-Cap.  Average of Sub-Cap.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 2.2	0.0 2.2	0.0 2.2	0.0	0.0	0.0			0.0 0.		
G. Community Outreach and Engagement	The age of San Cup.		lic outread awar	ch and ed		35. Public engagement in electrical corporation wildfire mitigation planning			electrical	36. Engagement with AFN and socially vulnerable populations			N and	37. Collaboration on local wildfire mitigation planning			38. Cooperation and best practice sharing with other electrical corporations		est ner		- 0.0	- 010		
engagement	Minimum of Sub-Cap.  Average of Sub-Cap.	0.0	0.0	0.0 0.0	0.0	0.0	0.0 0.3	0.0 0.3	0.0 0.3	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0	0.0	0.0 0.0	0.0 0.0	0.0 0.7	1.0 1.0		1.0			

### **Appendix E. Definitions**

Unless otherwise expressly stated, the following words and terms, for the purposes of this Decision, have the meanings shown in this chapter.

#### **Terms Defined in Other Codes**

Where terms are not defined in this Decision and are defined in the Government Code, Public Utilities Code, or Public Resources Code, such terms have the meanings ascribed to them in those codes.

#### **Terms Not Defined**

Where terms are not defined through the methods authorized by this section, such terms have ordinarily accepted meanings such as the context implies.

#### **Definition of Terms**

Term	Definition
Access and functional needs population (AFN)	Individuals, including, but not limited to, those who have developmental or intellectual disabilities, physical disabilities, chronic conditions, or injuries; who have limited English proficiency or are non-English speaking; who are older adults, children, or people living in institutionalized settings; or who are low income, homeless, or transportation disadvantaged, including, but not limited to, those who are dependent on public transit or are pregnant. (Gov. Code, § 8593.3(f)(1).)
Asset (utility)	Electric lines, equipment, or supporting hardware.
Benchmarking	A comparison between one electrical corporation's protocols, technologies used, or mitigations implemented, and other electrical corporations' similar endeavors.
Burn likelihood	The likelihood that a wildfire with an ignition point will burn at a specific location within the service territory based on a probabilistic set of weather profiles, vegetation, and topography.

Term	Definition			
Catastrophic wildfire	A fire that caused at least one death, damaged over 500 structures, or burned over 5,000 acres.			
Circuit miles	The total length in miles of separate transmission and/or distribution circuits, regardless of the number of conductors used per circuit (i.e., different phases).			
Circuit segment	A specific portion of an electrical circuit that can be separated or disconnected from the rest of the system without affecting the operation of other parts of the network. This isolation is typically achieved using switches, circuit breakers, or other control mechanisms.			
Consequence	The adverse effects from an event, considering the hazard intensity, community exposure, and local vulnerability.			
Contact from object ignition likelihood	The likelihood that a non-vegetative object (such as a balloon or vehicle) will contact utility-owned equipment and result in an ignition.			
Contact from vegetation likelihood of ignition	The likelihood that vegetation will contact utility-owned equipment and result in an ignition.			
Contractor	Any individual in the temporary and/or indirect employ of the electrical corporation whose limited hours and/or time-bound term of employment are not considered "full-time" for tax and/or any other purposes.			
Critical facilities and infrastructure	Facilities and infrastructure that are essential to public safety and that require additional assistance and advance planning to ensure resiliency during PSPS events. These include the following:			
	Emergency services sector:			
	Police stations			
	Fire stations			
	Emergency operations centers			

Term	Definition
	<ul> <li>Public safety answering points (e.g., 9-1-1 emergency services)</li> </ul>
	Government facilities sector:
	• Schools
	Jails and prisons
	Health care and public health sector:
	Public health departments
	<ul> <li>Medical facilities, including hospitals, skilled nursing facilities, nursing homes, blood banks, health care facilities, dialysis centers, and hospice facilities (excluding doctors' offices and other non-essential medical facilities)</li> </ul>
	Energy sector:
	<ul> <li>Public and private utility facilities vital to maintaining or restoring normal service, including, but not limited to, interconnected publicly owned electrical corporations and electric cooperatives</li> </ul>
	Water and wastewater systems sector:
	<ul> <li>Facilities associated with provision of drinking water or processing of wastewater, including facilities that pump, divert, transport, store, treat, and deliver water or wastewater</li> </ul>
	Communications sector:
	Communication carrier infrastructure, including selective routers, central offices, head ends, cellular switches, remote terminals, and cellular sites
	Chemical sector:
	<ul> <li>Facilities associated with manufacturing, maintaining, or distributing hazardous materials and chemicals (including Category N-Customers as defined in D.01-06-085)</li> </ul>
	Transportation sector:

Term	Definition
	Facilities associated with transportation for civilian and military purposes: automotive, rail, aviation, maritime, or major public transportation
	(D.19-05-042 and D.20-05-051)
Customer hours	Total number of customers, multiplied by average number of hours (e.g., of power outage).
Dead fuel moisture	The moisture content of dead organic fuels, expressed as a percentage of the oven dry weight of the sample, that is controlled entirely by exposure to environmental conditions.
Detailed inspection	In accordance with General Order (GO) 165, an inspection where individual pieces of equipment and structures are carefully examined, visually and through routine diagnostic testing, as appropriate, and (if practical and if useful information can be so gathered) opened, and the condition of each is rated and recorded.
Disaster	A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability, and capacity, leading to one or more of the following: human, material, economic, and environmental losses and impacts. The effect of the disaster can be immediate and localized but is often widespread and could last a long time. The effect may test or exceed the capacity of a community or society to cope using its own resources. Therefore, it may require assistance from external sources, which could include neighboring jurisdictions or those at the national or international levels. (United Nations Office for Disaster Risk Reduction [UNDRR].)
Discussion-based exercise	Exercise used to familiarize participants with current plans, policies, agreements, and procedures or to develop new plans, policies, agreements, and procedures. Often includes seminars, workshops, tabletop exercises, and games.
Electrical corporation	Every corporation or person owning, controlling, operating, or managing any electric plant for compensation within California,

Term	Definition
	except where the producer generates electricity on or distributes it through private property solely for its own use or the use of its tenants and not for sale or transmission to others.
Emergency	Any incident, whether natural, technological, or human caused, that requires responsive action to protect life or property but does not result in serious disruption of the functioning of a community or society. (FEMA/UNDRR.)
Enhanced inspection	Inspection whose frequency and thoroughness exceed the requirements of a detailed inspection, particularly if driven by risk calculations.
Equipment caused ignition likelihood	The likelihood that utility-owned equipment will cause an ignition through either normal operation (such as arcing) or failure.
Exercise	An instrument to train for, assess, practice, and improve performance in prevention, protection, response, and recovery capabilities in a risk-free environment. (FEMA.)
Exposure	The presence of people, infrastructure, livelihoods, environmental services and resources, and other high-value assets in places that could be adversely affected by a hazard.
Fire hazard index	A numerical rating for specific fuel types, indicating the relative probability of fires starting and spreading, and the probable degree of resistance to control; similar to burning index, but without effects of wind speed. <sup>1</sup>
Fire potential index (FPI)	Landscape scale index used as a proxy for assessing real-time risk of a wildfire under current and forecasted weather conditions.
Fire season	The time of year when wildfires are most likely for a given geographic region due to historical weather conditions, vegetative characteristics, and impacts of climate change. Each electrical corporation defines the fire season(s) across its service

 $^{1}$  Glossary of Wildland Fire.

Term	Definition
	territory based on a recognized fire agency definition for the specific region(s) in California.
Fireline intensity	The rate of heat release per unit time per unit length of fire front. Numerically, it is the product of the heat yield, the quantity of fuel consumed in the fire front, and the rate of spread. <sup>2</sup>
Frequency	The anticipated number of occurrences of an event or hazard over time.
Frequent PSPS events	Three or more PSPS events per calendar year per line circuit.
Fuel continuity	The degree or extent of continuous or uninterrupted distribution of fuel particles in a fuel bed thus affecting a fire's ability to sustain combustion and spread. This applies to aerial fuels as well as surface fuels. <sup>3</sup>
Fuel density	Mass of fuel (vegetation) per area that could combust in a wildfire.
Fuel management	Act or practice of controlling flammability and reducing resistance to control of wildland fuels through mechanical, chemical, biological, or manual means, or by fire, in support of land management objectives. <sup>4</sup>
Fuel moisture content	Amount of moisture in a given mass of fuel (vegetation), measured as a percentage of its dry weight.
Full-time employee (FTE)	Any individual in the ongoing and/or direct employ of the electrical corporation whose hours and/or term of employment are considered "full-time" for tax and/or any other purposes.
GO 95 nonconformance	Condition of a utility asset that does not meet standards established by GO 95.

 $<sup>^{2}</sup>$  Glossary of Wildland Fire.

 $<sup>^{\</sup>rm 3}$  Glossary of Wildland Fire.

<sup>&</sup>lt;sup>4</sup> Glossary of Wildland Fire.

Term	Definition
Grid hardening	Actions (such as equipment upgrades, maintenance, and planning for more resilient infrastructure) taken in response to the risk of undesirable events (such as outages) or undesirable conditions of the electrical system to reduce or mitigate those events and conditions, informed by an assessment of the relevant risk drivers or factors.
Grid topology	General design of an electric grid, whether looped or radial, with consequences for reliability and ability to support PSPS (e.g., ability to deliver electricity from an additional source).
Hazard	A condition, situation, or behavior that presents the potential for harm or damage to people, property, the environment, or other valued resources.
Hazard tree	A tree that is, or has portions that are, dead, dying, rotten, diseased, or otherwise has a structural defect that may fail in whole or in part and damage utility facilities should it fail
High Fire Threat District (HFTD)	Areas of the state designated by the CPUC as having elevated wildfire risk, where each utility must take additional action (per GO 95, GO 165, and GO 166) to mitigate wildfire risk. (D.17-01-009.)
High Fire Risk Area (HFRA)	Areas that the electrical corporation has deemed at high risk from wildfire, independent of HFTD designation.
Highly rural region	Area with a population of less than seven persons per square mile, as determined by the United States Bureau of the Census. For purposes of the WMP, "area" must be defined as a census tract.
High-risk species	Species of vegetation that (1) have a higher risk of either coming into contact with powerlines or causing an outage or ignition, or (2) are easily ignitable and within close proximity to potential arcing, sparks, and/or other utility equipment thermal failures. The status of species as "high-risk" must be a function of species-specific characteristics, including growth rate; failure rates of limbs, trunk, and/or roots (as compared to other species); height at maturity; flammability; and vulnerability to disease or insects.

Term	Definition
High wind warning (HWW)	Level of wind risk from weather conditions, as declared by the National Weather Service (NWS). For historical NWS data, refer to the Iowa State University archive of NWS watches/warnings.
HWW overhead (OH) circuit mile day	Sum of OH circuit miles of utility grid subject to a HWW each day within a given time period, calculated as the number of OH circuit miles under a HWW multiplied by the number of days those miles are under said HWW. For example, if 100 OH circuit miles are under a HWW for one day, and 10 of those miles are under the HWW for an additional day, then the total HWW OH circuit mile days would be 110.
Ignition likelihood	The total anticipated annualized number of ignitions resulting from electrical corporation-owned assets at each location in the electrical corporation's service territory. This considers probabilistic weather conditions, type and age of equipment, and potential contact of vegetation and other objects with electrical corporation assets. This should include the use of any method used to reduce the likelihood of ignition. For example, the use of protective equipment and device settings (PEDS) to reduce the likelihood of an ignition upon an initiating event.
Incident command system (ICS)	A standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.
Initiative activity	See mitigation activity.
Initiative construction standards	The standard specifications, special provisions, standards of practice, standard material and construction specifications, construction protocols, and construction methods that an electrical corporation applies to activities undertaken by the electrical corporation pursuant to a WMP initiative in a given compliance period.
Level 1 finding	In accordance with GO 95, an immediate safety and/or reliability risk with high probability for significant impact.

Term	Definition
Level 2 finding	In accordance with GO 95, a variable safety and/or reliability risk (non-immediate and with high to low probability for significant impact).
Level 3 finding	In accordance with GO 95, an acceptable safety and/or reliability risk.
Limited English proficiency (LEP) population	Population with limited English working proficiency based on the International Language Roundtable scale.
Line miles	The number of miles of transmission and/or distribution conductors, including the length of each phase and parallel conductor segment.
Live fuel moisture content	Moisture content within living vegetation, which can retain water longer than dead fuel.
Locally relevant	In disaster risk management, generally understood as the cope at which disaster risk strategies and initiatives are considered the most effective at achieving desired outcomes. This tends to be the level closest to impacting residents and communities, reducing existing risks, and building capacity, knowledge, and normative support. Locally relevant scales, conditions, and perspectives depend on the context of application.
Match-drop simulation	Wildfire simulation method forecasting propagation and consequence/impact based on an arbitrary ignition.
Memorandum of Agreement (MOA)	A document of agreement between two or more agencies establishing reciprocal assistance to be provided upon request (and if available from the supplying agency) and laying out the guidelines under which this assistance will operate. It can also be a cooperative document in which parties agree to work together on an agreed-upon project or meet an agreed objective.
Mitigation	Undertakings to reduce the loss of life and property from natural and/or human-caused disasters by avoiding or lessening the impact of a disaster and providing value to the public by creating

Term	Definition
	safer communities. Encompasses mitigation categories, mitigation initiatives, and mitigation activities within the WMP.
Mitigation activity	A measure that contributes to or accomplishes a mitigation initiative designed to reduce the consequences and/or probability of wildfire or outage event. For example, covered conductor installation is a mitigation activity under the mitigation initiative of Grid Design and System Hardening.
Mitigation category	The highest subset in the WMP mitigation hierarchy. There are five Mitigation Categories in total: Grid Design, Operations, and Maintenance; Vegetation Management and Inspections; Situational Awareness and Forecasting; Emergency Preparedness; and Enterprise Systems. Contains mitigation initiatives and any subsequent mitigation activities.
Mitigation initiative	Efforts within a mitigation category either proposed or in process, designed to reduce the consequences and/or probability of wildfire or outage event. For example, Asset Inspection is a mitigation initiative under the mitigation category of Grid Design, Operations, and Maintenance.
Model uncertainty	The amount by which a calculated value might differ from the true value when the input parameters are known (i.e., limitation of the model itself based on assumptions). <sup>5</sup>
Mutual aid	Voluntary aid and assistance by the provision of services and facilities, including but not limited to electrical corporations, communication, and transportation. Mutual aid is intended to provide adequate resources, facilities, and other support to an electrical corporation whenever its own resources prove inadequate to cope with a given situation.
National Incident Management System (NIMS)	A systematic, proactive approach to guide all levels of government, nongovernment organizations, and the private sector to work together to prevent, protect against, mitigate, respond to, and recover from the effects of incidents. NIMS

\_

 $<sup>^{\</sup>rm 5}{\rm Adapted}$  from: Substantiating a Fire Model for a Given Application.

Term	Definition
	provides stakeholders across the whole community with the shared vocabulary, systems, and processes to successfully deliver the capabilities described in the National Preparedness System. NIMS provides a consistent foundation for dealing with all incidents, ranging from daily occurrences to incidents requiring a coordinated federal response.
Operations-based exercise	Type of exercise that validates plans, policies, agreements, and procedures; clarifies roles and responsibilities; and identifies resource gaps in an operational environment. Often includes drills, functional exercises (FEs), and full-scale exercises (FSEs).
Outage program risk	The measure of reliability impacts from wildfire mitigation related outages at a given location.
Overall utility risk	The comprehensive risk due to both wildfire and PSPS incidents across a utility's territory; the aggregate potential of adverse impacts to people, property, critical infrastructure, or other valued assets in society.
Overall utility risk, PSPS risk	See Outage program risk.
Parameter uncertainty	The amount by which a calculated value might differ from the true value based on unknown input parameters. (Adapted from Society of Fire Protection Engineers [SFPE] guidance.)
Patrol inspection	In accordance with GO 165, a simple visual inspection of applicable utility equipment and structures designed to identify obvious structural problems and hazards. Patrol inspections may be carried out in the course of other company business.
Performance metric	A quantifiable measurement that is used by an electrical corporation to indicate the extent to which its WMP is driving performance outcomes.
Population density	Population density is calculated using the American Community Survey (ACS) one-year estimate for the corresponding year or, for

Term	Definition
	years with no such ACS estimate available, the estimate for the immediately preceding year.
Preparedness	A continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response. Within the NIMS, preparedness focuses on planning, procedures and protocols, training and exercises, personnel qualification and certification, and equipment certification.
Priority essential services	Critical first responders, public safety partners, critical facilities and infrastructure, operators of telecommunications infrastructure, and water electrical corporations/agencies.
Property	Private and public property, buildings and structures, infrastructure, and other items of value that may be destroyed by wildfire, including both third-party property and utility assets.
Protective equipment and device settings (PEDS)	The electrical corporation's procedures for adjusting the sensitivity of grid elements to reduce wildfire risk, other than automatic reclosers (such as circuit breakers, switches, etc.). For example, PG&E's "Enhanced Powerline Safety Settings" (EPSS).
PEDS outage consequence	The total anticipated adverse effects from an outage occurring while increased sensitivity settings on a protective device are enabled at a specific location, including reliability and associated safety impacts.
PEDS outage exposure potential	The potential physical, social, or economic impact of an outage occurring when PEDS are enabled on people, property, critical infrastructure, livelihoods, health, local economies, and other high-value assets.
PEDS outage likelihood	The likelihood of an outage occurring while increased sensitivity settings on a protective device are enabled at a specific location given a probabilistic set of environmental conditions.
PEDS outage risk	The total expected annualized impacts from PEDS enablement at a specific location.

Term	Definition
PEDS outage vulnerability	The susceptibility of people or a community to adverse effects of an outage occurring when PEDS are enabled, including all characteristics that influence their capacity to anticipate, cope with, resist, and recover from the related adverse effects (e.g., high AFN population, poor energy resiliency, low socioeconomics).
PSPS consequence	The total anticipated adverse effects of a PSPS for a community. This considers the PSPS exposure potential and inherent PSPS vulnerabilities of communities at risk.
PSPS event	The period from notification of the first public safety partner of a planned public safety PSPS to re-energization of the final customer.
PSPS exposure potential	The potential physical, social, or economic impact of a PSPS event on people, property, critical infrastructure, livelihoods, health, local economies, and other high-value assets.
PSPS likelihood	The likelihood of an electrical corporation requiring a PSPS given a probabilistic set of environmental conditions.
PSPS risk	The total expected annualized impacts from PSPS at a specific location. This considers two factors: (1) the likelihood a PSPS will be required due to environmental conditions exceeding design conditions, and (2) the potential consequences of the PSPS for each affected community, considering exposure potential and vulnerability.
PSPS vulnerability	The susceptibility of people or a community to adverse effects of a PSPS event, including all characteristics that influence their capacity to anticipate, cope with, resist, and recover from the adverse effects of a PSPS event (e.g., high AFN population, poor energy resiliency, low socioeconomics).
Public safety partners	First/emergency responders at the local, state, and federal levels; water, wastewater, and communication service providers; community choice aggregators (CCAs); affected publicly owned electrical corporations/electrical cooperatives; tribal

Term	Definition
	governments; Energy Safety; the Commission; the California Office of Emergency Services; and CAL FIRE.
Qualitative target	Specific, measurable, achievable, realistic, and timely outcomes for the overall WMP strategy, or mitigation initiatives and activities that a utility can implement to satisfy the primary goals and subgoals of the WMP program.
Quantitative target	A forward-looking, quantifiable measurement of work to which an electrical corporation commits to in its WMP. Electrical corporations will show progress toward completing targets in subsequent reports, including data submissions and WMP Updates.
RFW OH circuit mile day	Sum of OH circuit miles of utility grid subject to RFW each day within a given time period, calculated as the number of OH circuit miles under RFW multiplied by the number of days those miles are under said RFW. For example, if 100 OH circuit miles are under RFW for one day, and 10 of those miles are under RFW for an additional day, then the total RFW OH circuit mile days would be 110.
Risk	A measure of the anticipated adverse effects from a hazard considering the consequences and frequency of the hazard occurring. <sup>6</sup>
Risk component	A part of an electric corporation's risk analysis framework used to determine overall utility risk.
Risk evaluation	The process of comparing the results of a risk analysis with risk criteria to determine whether the risk and/or its magnitude is acceptable or tolerable. (ISO 31000:2009.)

\_

 $<sup>^{\</sup>rm 6}$  Adapted from: Introduction to International Disaster Management.

Term	Definition
Risk event	An event with probability of ignition, such as wire down, contact with objects, line slap, event with evidence of heat generation, or other event that causes sparking or has the potential to cause ignition. The following all qualify as risk events:
	• Ignitions
	Outages not caused by vegetation
	Outages caused by vegetation
	Wire-down events
	• Faults
	Other events with potential to cause ignition
Risk management	Systematic application of management policies, procedures, and practices to the tasks of communication, consultation, establishment of context, and identification, analysis, evaluation, treatment, monitoring, and review of risk. (ISO 31000.)
Rule	Section of Public Utilities Code requiring a particular activity or establishing a particular threshold.
Rural region	In accordance with GO 165, area with a population of less than 1,000 persons per square mile, as determined by the U.S. Bureau of the Census. For purposes of the WMP, "area" must be defined as a census tract.
Seminar	An informal discussion, designed to orient participants to new or updated plans, policies, or procedures (e.g., to review a new external communications standard operating procedure).
Sensitivity analysis	Process used to determine the relationships between the uncertainty in the independent variables ("input") used in an analysis and the uncertainty in the resultant dependent variables ("output"). (SFPE guidance.)

Term	Definition
Situational Awareness	An on-going process of gathering information by observation and by communication with others. This information is integrated to create an individual's perception of a given situation. <sup>7</sup>
Slash	Branches or limbs less than four inches in diameter, and bark and split products debris left on the ground as a result of utility vegetation management. 8
Span	The space between adjacent supporting poles or structures on a circuit consisting of electric lines and equipment. "Span level" refers to asset-scale granularity.
Tabletop exercise (TTX)	A discussion-based exercise intended to stimulate discussion of various issues regarding a hypothetical situation. Tabletop exercises can be used to assess plans, policies, and procedures or to assess types of systems needed to guide the prevention of response to, or recovery from a defined incident.
Trees with strike potential	Trees that could either, in whole or in part, "fall in" to a power line or have portions detach and "fly in" to contact a power line in high-wind conditions.
Uncertainty	The amount by which an observed or calculated value might differ from the true value. For an observed value, the difference is "experimental uncertainty"; for a calculated value, it is "model" or "parameter uncertainty." (Adapted from SFPE guidance.)
Urban region	In accordance with GO 165, area with a population of more than 1,000 persons per square mile, as determined by the U.S. Bureau of the Census. For purposes of the WMP, "area" must be defined as a census tract.

 $<sup>^{\</sup>rm 7}$  Glossary of Wildland Fire.

<sup>&</sup>lt;sup>8</sup> Pub. Res. Code § 4525.7.

Term	Definition
Utility-related ignition	An event that meets the criteria for a reportable event subject to fire-related reporting requirements. <sup>9</sup>
Validation	Process of determining the degree to which a calculation method accurately represents the real world from the perspective of the intended uses of the calculation method without modifying input parameters based on observations in a specific scenario. (Adapted from ASTM E 1355.)
Vegetation management (VM)	The assessment, intervention, and management of vegetation, including pruning and removal of trees and other vegetation around electrical infrastructure for safety, reliability, and risk reduction.
Verification	Process to ensure that a model is working as designed, that is, that the equations are being properly solved. Verification is essentially a check of the mathematics. (SFPE guidance.)
Vulnerability	The propensity or predisposition of a community to be adversely affected by a hazard, including the characteristics of a person, group, or service and their situation that influences their capacity to anticipate, cope with, resist, and recover from the adverse effects of a hazard.
Wildfire consequence	The total anticipated adverse effects from a wildfire on a community that is reached. This considers the wildfire hazard intensity, the wildfire exposure potential, and the inherent wildfire vulnerabilities of communities at risk.
Wildfire exposure potential	The potential physical, social, or economic impact of wildfire on people, property, critical infrastructure, livelihoods, health, environmental services, local economies, cultural/historical resources, and other high-value assets. This may include direct or indirect impacts, as well as short- and long-term impacts.

<sup>9</sup> D.14-02-015, page C-3.

Term	Definition
Wildfire hazard intensity	The potential intensity of a wildfire at a specific location within the service territory given a probabilistic set of weather profiles, vegetation, and topography.
Wildfire likelihood	The total anticipated annualized number of fires reaching each spatial location resulting from utility-related ignitions at each location in the electrical corporation service territory. This considers the ignition likelihood and the likelihood that an ignition will transition into a wildfire based on the probabilistic weather conditions in the area.
Wildfire mitigation strategy	Overview of the key mitigation initiatives at enterprise level and component level across the electrical corporation's service territory, including interim strategies where long-term mitigation initiatives have long implementation timelines. This includes a description of the enterprise-level monitoring and evaluation strategy for assessing overall effectiveness of the WMP.
Wildfire risk	The total expected annualized impacts from ignitions at a specific location. This considers the likelihood that an ignition will occur, the likelihood the ignition will transition into a wildfire, and the potential consequences—considering hazard intensity, exposure potential, and vulnerability—the wildfire will have for each community it reaches.
Wildfire spread likelihood	The likelihood that a fire with a nearby but unknown ignition point will transition into a wildfire and will spread to a location in the service territory based on a probabilistic set of weather profiles, vegetation, and topography.
Wildfire vulnerability	The susceptibility of people or a community to adverse effects of a wildfire, including all characteristics that influence their capacity to anticipate, cope with, resist, and recover from the adverse effects of a wildfire (e.g., AFN customers, Social Vulnerability Index, age of structures, firefighting capacities).
Wildland-urban interface (WUI)	The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetation fuels (National Wildfire Coordinating Group).

Term	Definition
Wire down	Instance where an electric transmission or distribution conductor is broken and falls from its intended position to rest on the ground or a foreign object.
Work order	A prescription for asset or vegetation management activities resulting from asset or vegetation management inspection findings.
Workshop	Discussion that resembles a seminar but is employed to build specific products, such as a draft plan or policy (e.g., a multi-year training and exercise plan).