TRINITY PUBLIC UTILITIES DISTRICT WILDFIRE MITIGATION PLAN

2022 ADDENDUM

RESPONSES TO WILDFIRE SAFETY ADVISORY
BOARD'S 2022 GUIDANCE ADVISORY OPINION

PURPOSE OF THIS 2022 INFORMATIONAL RESPONSE

The California Wildfire Safety Advisory Board (WSAB) issued the *Guidance Advisory Opinion for* the 2022 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives ("2022 WSAB Guidance Advisory Opinion") on February 10, 2022. Trinity Public Utilities District (TPUD) provides this document to the WSAB in order to respond to each of the recommendations included in the 2022 WSAB Guidance Advisory Opinion. TPUD will provide a narrative response and/or a cross reference to the location in TPUD's Wildfire Mitigation Plan (WMP) where the topic is addressed. Where the recommendation is not applicable to TPUD, the response will provide a brief description supporting this conclusion.

II. CONTEXT SETTING INFORMATION

WSAB requested that POUs provide an informational table to assist the Staff and Board member in understanding the unique characteristics of each POU.

Table 1: Context-Setting Information

Utility Name	TRINITY PUBLIC UTILITIES DISTRICT		
Service Territory Size	[2,200] square miles		
Owned Assets	☐ Transmission x Distribution ☐ Generation		
Number of Customers	[7340] customer accounts		
Served			
Population Within Service	[12,000] people (estimate)		
Territory			
	Number of Accounts	Share of Total Load (MWh)	
	[79]% Residential;	[53]% Residential;	
Customer Class Makeup	[]% Government;	[]% Government;	
Customer Class Makeup	[]% Agricultural; []% Agricultural;		
	[20]% Small/Medium Business;	[8]% Small/Medium Business;	
	[1]% Commercial/Industrial	[38]% Commercial/Industrial	
	[]% Agriculture		
Service Territory Location/Topography ¹	[]% Barren/Other		
	[85]% Conifer Forest		
	[]% Conifer Woodland		
	[]% Desert		
	[15]% Hardwood Forest		
	[]% Hardwood Woodland		

¹ This data shall be based on the California Department of Forestry and Fire Protection, California Multi-Source Vegetation Layer Map, depicting WHR13 Types (Wildlife Habitat Relationship classes grouped into 13 major land cover types) *available at*: https://www.arcgis.com/home/item.html?id=b7ec5d68d8114b1fb2bfbf4665989eb3.

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	[]% Herbaceous
	[]% Shrub
	[]% Urban
	[]% Water
Service Territory	[]% Wildland Urban Interface;
Wildland Urban Interface ²	[]% Wildland Urban Intermix;
(based on total area)	
Percent of Service	□Includes maps
Territory in CPUC High Fire	Tier 2: [100]%
Threat Districts (based on	Tier 3: []%
total area)	
Prevailing Wind Directions	☐ Includes maps
& Speeds by Season	[Description]
	Overhead Dist.: [565] miles
	Overhead Trans.: [0] miles
	Underground Dist.: [151] miles
Miles of Owned Lines	Underground Trans.: [0] miles
Underground and/or	Explanatory Note 1 - Methodology for Measuring "Miles": [CIRCUIT MILES]
Overhead	
	Explanatory Note 2 – Description of Unique Ownership Circumstances: [N/A]
	Explanatory Note 3 – Additional Relevant Context: [N/A]
	Overhead Distribution Lines as % of Total Distribution System
	Overhead Distribution Lines as % of Total Distribution System
	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)
Percent of Owned Lines in	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]%
CPUC High Fire Threat	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]%
	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: [_]%
CPUC High Fire Threat	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: [_]% Tier 3: [_]%
CPUC High Fire Threat	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: [_]% Tier 3: [_]% Explanatory Note 4 – Additional Relevant Context: [e.g., explain any
CPUC High Fire Threat	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: [_]% Tier 3: [_]% Explanatory Note 4 – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for
CPUC High Fire Threat Districts	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: [_]% Tier 3: [_]% Explanatory Note 4 – Additional Relevant Context: [e.g., explain any
CPUC High Fire Threat Districts Customers have ever lost	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: [_]% Tier 3: [_]% Explanatory Note 4 – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for
CPUC High Fire Threat Districts Customers have ever lost service due to an IOU PSPS	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: [_]% Tier 3: [_]% Explanatory Note 4 – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for this form]
CPUC High Fire Threat Districts Customers have ever lost service due to an IOU PSPS event?	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: [_]% Tier 3: [_]% Explanatory Note 4 – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for this form] □ X Yes □ No
CPUC High Fire Threat Districts Customers have ever lost service due to an IOU PSPS event? Customers have ever been	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: [_]% Tier 3: [_]% Explanatory Note 4 – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for this form]
CPUC High Fire Threat Districts Customers have ever lost service due to an IOU PSPS event? Customers have ever been notified of a potential loss	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: [_]% Tier 3: [_]% Explanatory Note 4 – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for this form] □ X Yes □ No
Customers have ever lost service due to an IOU PSPS event? Customers have ever been notified of a potential loss of service to due to a	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: [_]% Tier 3: [_]% Explanatory Note 4 – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for this form] □ X Yes □ No
CPUC High Fire Threat Districts Customers have ever lost service due to an IOU PSPS event? Customers have ever been notified of a potential loss	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory) Tier 2: [100]% Tier 3: [_]% Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory) Tier 2: [_]% Tier 3: [_]% Explanatory Note 4 – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for this form] □ X Yes □ No

² This data shall be based on the definitions and maps maintained by the United States Department of Agriculture, as most recently assembled in *The 2010 Wildland-Urban Interface of the Conterminous United States, available at* https://www.fs.fed.us/nrs/pubs/rmap/rmap/rmap nrs8.pdf.

Has developed protocols	□ X Yes □ No
to pre-emptively shut off	
electricity in response to	
elevated wildfire risks?	
	☐ Yes ☐ X No
Has previously pre-	If yes, then provide the following data for calendar year 2021:
emptively shut off	
electricity in response to	Number of shut-off events: []
elevated wildfire risk?	Customer Accounts that lost service for >10 minutes: []
	For prior response, average duration before service restored: [

III. CROSS REFERENCE TO STATUTORY REQUIREMENTS

WSAB requested that POUs provide a clear roadmap as to where each statutory requirement is addressed within the POU WMP.

Table 2: Cross References to Statutory Requirements

Requirement	Statutory Language	Location in WMP
Persons	PUC § 8387(b)(2)(A): An accounting of the responsibilities of	Section 8.1
Responsible	persons responsible for executing the plan.	Page [69]
Objectives of	PUC § 8387(b)(2)(B): The objectives of the wildfire mitigation	Section [1.2/1.3
the Plan	plan.	Page: [2-5]
Preventive Strategies	PUC § 8387(b)(2)(C): A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Section [3] Page [11]
Evaluation Metrics	PUC § 8387(b)(2)(D): A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance and the assumptions that underlie the use of those metrics.	Section [8.2] Page [71]
Impact of Metrics	PUC § 8387(b)(2)(E): A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	Section [8.2.1] Page [71]
Deenergization Protocols	PUC § 8387(b)(2)(F): Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.	Section [6.1.1] Page [37]

Customer Notification Procedures	PUC § 8387(b)(2)(G): Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.	Section[7.1/7.2] Page [57, 59]
Vegetation Management	PUC § 8387(b)(2)(H): Plans for vegetation management.	Section [6.3] Page [48]
Inspections	PUC § 8387(b)(2)(I): Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Section [6.2] Page [40]
Prioritization of Wildfire Risks	PUC § 8387(b)(2)(J): A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric utility's or electrical cooperative's service territory. The list shall include, but not be limited to, both of the following: (i) Risks and risk drivers associated with design, construction, operation, and maintenance of the local publicly owned electric utility's or electrical cooperative's equipment and facilities. (ii) Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned electric utility's or electrical cooperative's service territory.	Section [4, 4.5.2, 4.5.3] Page [15, 22,]
CPUC Fire Threat Map Adjustments	PUC § 8387(b)(2)(K): Identification of any geographic area in the local publicly owned electric utility's or electrical cooperative's service territory that is a higher wildfire threat than is identified in a commission fire threat map, and identification of where the commission should expand a high fire threat district based on new information or changes to the environment.	Section [5.1] Page [24]
Enterprisewide Risks	PUC § 8387(b)(2)(L): A methodology for identifying and presenting enterprisewide safety risk and wildfire-related risk.	Section [4.2] Page [17]
Restoration of Service	PUC § 8387(b)(2)(M): A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	Section [7.4] Page [66]
Monitor and Audit	PUC § 8387(b)(2)(N): A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following (i) Monitor and audit the implementation of the wildfire mitigation plan. (ii) Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies.	Section [8.3/ 8.3.3./8.3.2] Page [74, 76]

	(iii) Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, other applicable statutes, or commission rules.	
Qualified Independent Evaluator	PUC § 8387(c): The local publicly owned electric utility or electrical cooperative shall contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan. The independent evaluator shall issue a report that shall be made available on the Internet Web site of the local publicly owned electric utility or electrical cooperative, and shall present the report at a public meeting of the local publicly owned electric utility's or electrical cooperative's governing board.	Section [9.1.1] Page [79]

IV. WSAB GUIDANCE ADVISORY OPINION RECOMMENDATIONS

The following are responses to the 2022 Guidance Advisory Opinion as issued by the California Wildfire Safety Advisory Board:

- 1. The Board appreciates many POUs providing an informational response to the Board's 2021 Guidance Advisory Opinion bud did not receive such a submittal from Trinity. In Trinity's 2022 and subsequent WMPs, the utility should include the upfront template and add other information pursuant to the 2021 Guidance Advisory Opinion. (Response) Trinity PUD has included the up front template in this submission.
- 2. The Board appreciates the submittal of a "redline" document showing changes between Trinity's 2020 and 2021 WMPs and notes some significant changes but believes that a more complete update could have been submitted. For example, on page 75 of the WMP, Trinity promises an annual IE review this does not appear to have been done. Similarly on page 81, Trinity suggests that 2019 Board adoption minutes will be added, and this does not appear to have happened. In addition, it is not clear whether the conclusion recommendations of the 2019 IE have been addressed. (Response)Trinity PUD has updated the the WMP to exclude an annual IE review. The Board Adoption Minutes are located at the end of Appendix I on page 109. The conclusion recommendations of the 2019 IE were addressed prior to the adoption of the plan.
- 3. The Board appreciates Trinity's adoption of innovative wildfire mitigation techniques such as drone inspections. from the 2021 WMP update, it appears, but is not 100% clear, that Trinity has expanded its drone resources. The Board encourages clarification here and continued examination of innovative techniques in future WMP's. (Response) Trinity PUD has updated the District's use of drone technology, as well as other innovative techniques in the 2022 Update of its WMP.
- 4. The Board appreciates Trinity's longstanding commitment and attention to wildfire prevention, which is apparent int he comprehensive Trinity WMP filing. Trinity also addresses changing conditions due to climate change and other factors and the Board encourages continutation of this practice. One question is whether Trinity's definition of the wildfire season on page 39 of the WMP may be extended in consideration of climate change. (Response) The onset of fire season has been updated to May 1 of each year in the 2022 Update of the WMP.

5. The Board commends Trinity for dynamic consideration of advanced equipment and revised protocols to continue to reduce wildfire risk. For example, Trinity suggests that they are investigating radio-controlled reclosers rather than relying on manual reclosers, have incorporated LIDAR technology in their inspection protocols, are considering moving away from mineral oil transformer fluid use, and are moving away from expulsion fuses and tree attachments. The Board looks forward to additional information about progress in these areas in trinity's future WMPs. The Board cautions Trinity to be careful reducing vegetation management practices as they move away from expulsion fuses. (Response)

Trinity PUD continues to make progress in the area of advanced equipment and revised protocols, while maintaining and/or increasing the annual Vegetation Management Budget. The District continues to pursue LIDAR Technology and is working towards the use of satellite imagery for Vegetation Management.

- 6. The Board appreciates Trinity's treatment of defensible space and protocols in the 2021 WMP but does not see any information about building hardening and construction to minimize ignition risk. The Board encourages Trinity to research and inform customers about these techniques. (Response) Trinity PUD will continue to research these topics.
- 7. The Board again appreciates Trinity's continual consideration of advancements and looks forward to more information in future WMPs about the WRAP program, the Outage Management System, SCADA adoption, and the Advanced Radio communications programs being considered. (Response) Trinity PUD and WAPA's WRAP Project is making its way through the NEPA/CEQA Process. An Outage Management System has been implemented for both identifying outage locations and communicating with customers who have opted in via text or e-mail. In addition, Trinity PUD has implemented a VOIP Phone System with software that allows for automated outbound phone call notifications for planned outages or public safety power shut-offs.
- 8. Trinity's WMP does a commendable job of describing metrics to be used to evaluate wildfire risk reduction programs and progress. However, the WMP notes that section 8387(b)(2)(E) requires a discussion of how previously applied metrics have informed the WMP and promises that discussion in the 2021 update, which has apparently not occurred. The Board encourages Trinity to include historical results of metric tracking and discuss how they inform the current WMP. The Board is also curious about the reduction of the sub-transmission IR inspection metric to 25% and would appreciate inclusion of rationale for such significant changes in metrics. (Response) Trinity PUD informs its Board at each Board Meeting on the Reporting Metrics. In 2021 Trinity PUD chose to focus on Intrusive Pole Inspections that are due, and has continued that effort into 2022, resulting in a reduction of the sub-transmission IR inspection metric.

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