

**POWER & WATER RESOURCES
POOLING AUTHORITY
WILDFIRE MITIGATION PLAN
2021 INFORMATIONAL RESPONSE**

**RESPONSES TO WILDFIRE SAFETY ADVISORY
BOARD'S 2021 GUIDANCE ADVISORY OPINION**

June 1, 2021

I. PURPOSE OF THIS 2021 INFORMATIONAL RESPONSE

The California Wildfire Safety Advisory Board (WSAB) issued the *Guidance Advisory Opinion for the 2021 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives* (“2021 WSAB Guidance Advisory Opinion”) on December 15, 2020. The Power & Water Resources Pooling Authority (PWRPA) provides this document to the WSAB in order to respond to each of the recommendations included in the 2021 WSAB Guidance Advisory Opinion. PWRPA will provide a narrative response and/or a cross reference to the location in PWRPA’s Wildfire Mitigation Plan (WMP) where the topic is addressed. Where the recommendation is not applicable to PWRPA, 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	Power & Water Resources Pooling Authority
Service Territory Size	[_N/A_] square miles. PWRPA is the retail service provider at 647 points of delivery (POD) located within the PG&E service territory. Approximately 97% of the PODs are agricultural water pumping loads located in the Central Valley.
Owned Assets	<p>No owned transmission facilities</p> <p>Distribution - Electrical distribution service to all 647 PODs is provided by PG&E via its Wholesale Distribution Tariff (WDT). At 639 PODs, the electrical distribution is provided under WDT Service Agreement 17 between PG&E and the Western Area Power Administration (WAPA). At 8 PODs, the electrical distribution is provided under WDT Service Agreements 30 and 56 between PG&E and PWRPA. At 5 of these 8 PODs, PWRPA has title ownership to minimal “intervening facilities” comprising poles, transformers and underground wiring. PWRPA has a separate agreement for each of these 5 PODs providing that the customer has the responsibility to operate and maintain the electrical infrastructure used to serve the respective customer’s electrical delivery point. The PWRPA WMP applies to these 5 PODs.</p> <p>Generation - PWRPA has title ownership to a .936 MW solar facility located at the Sonoma Valley Water Treatment Plant.</p>
Number of Customers Served	15 public agency customer accounts comprising certain loads of 8 irrigation districts, 3 water districts, 2 water agencies, 1 water storage district and 1 reclamation district.

Population Within Service Territory	[_N/A_] people. All of PWRPA's 647 PODs comprise the water-related loads of its 15 public agency customers (pumping, delivery, transfer, etc). There are no residential, commercial or privately-owned industrial loads.	
Customer Class Makeup	<i>Number of Accounts</i>	<i>Share of Total Load (MWh)</i>
	100% Agricultural and municipal water;	100% Agricultural and municipal water;
Service Territory Location/Topography ¹	643 PODs Agriculture 1 POD Barren/Other 3 PODs Urban	
Service Territory Wildland Urban Interface ² (based on total area)	0% Wildland Urban Interface; 0% Wildland Urban Intermix; By the definitions stated in <i>The 2010 Wildland-Urban Interface of the Conterminous United States</i> , all of the PWRPA PODs are located in non-vegetated or agricultural areas with less than 6.18 houses per square km.	
Percent of Service Territory in CPUC High Fire Threat Districts (based on total area)	<input type="checkbox"/> Includes maps Tier 2: [_0_] % Tier 3: [_0_] % None of the 5 PWRPA PODs covered by its WMP are located in either a Tier 2 or Tier 3 area. The PWRPA WMP submitted to the WSAB includes fire threat maps for each POD.	
Prevailing Wind Directions & Speeds by Season	<input type="checkbox"/> Includes maps No data was readily available to provide an accurate answer to this question.	
Miles of Owned Lines Underground and/or Overhead	Overhead Dist.: approx. 50 feet Overhead Trans.: [_N/A_] miles Underground Dist.: approx. 100 feet Underground Trans.: [_N/A_] miles	
	Explanatory Note 1 - Methodology for Measuring "Miles": [e.g., circuit miles, line miles.] N/A	
	Explanatory Note 2 – Description of Unique Ownership Circumstances: [_ See the description in response to the "Owned Assets" question, above.]	
	Explanatory Note 3 – Additional Relevant Context: [e.g., percentage of lines located outside service territory] N/A	

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>.

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_nrs8.pdf.

Percent of Owned Lines in CPUC High Fire Threat Districts	<i>Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)</i>
	Tier 2: [_0_] % Tier 3: [_0_] % None of the 5 PWRPA PODs covered by its WMP are located in either a Tier 2 or Tier 3 area.
	<i>Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)</i>
	Tier 2: [_N/A_] % Tier 3: [_N/A_] %
	Explanatory Note 4 – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for this form]
Customers have ever lost service due to an IOU PSPS event?	None of the 5 PWRPA PODs covered by its WMP have lost service due to an IOU PSPS.
Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	PWRPA has never been directly contacted by PG&E. PWRPA has not collected data on PSPS events at the PG&E service locations.
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?	PWRPA has protocols for disabling reclosers and deenergizing portions of the electrical distribution system at the 5 PODs covered by its WMP as directed by critical first responders.
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?	There have been no preemptive shut offs at any of the 5 PWRPA PODs covered by its WMP.

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 Responsible	PUC § 8387(b)(2)(A): An accounting of the responsibilities of persons responsible for executing the plan.	Section 2 Page 2
Objectives of the Plan	PUC § 8387(b)(2)(B): The objectives of the wildfire mitigation plan.	Section 1 Page 2

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 4 Pages 4-5
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 7.1 Page 7
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.	Sections 7.1, 7.2 Page 7
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 5.2 Page 6
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 6 Page 6
Vegetation Management	PUC § 8387(b)(2)(H): Plans for vegetation management.	Section 4 Page 4
Inspections	PUC § 8387(b)(2)(I): Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Section 4 Page 5
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 3 Page 3
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	Section 3.4 Page 3

	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.	Site-Specific Information Cards on Pages 9-14
Enterprise wide Risks	PUC § 8387(b)(2)(L): A methodology for identifying and presenting enterprise wide safety risk and wildfire-related risk.	Section 3.1 Page 3
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 5 Pages 5-6
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. (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.	Sections 7.3, 7.4, 7.5 Page 7
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 8.2 Page 8

IV. WSAB GUIDANCE ADVISORY OPINION RECOMMENDATIONS

The WSAB Guidance Advisory Opinion identifies 14 specific recommendations that POU's are requested to address in their 2021 WMPs. As specified in Public Utilities Code § 8387(b)(1), each POU is required to perform a comprehensive revision to the POU's WMP at least once every three years. Pursuant to this guidance, the POU's will be updating their WMPs based on the direction of their local governing boards within this 3-year cycle. Because the WSAB's recommendations have been provided after the initial WMP submission, the POU's will have varying capacities to fully address each recommendation in their 2021 WMP. This Section IV restates each of the WSAB recommendations and provides an opportunity for each POU to do

one or more of the following: (1) provide a narrative response to the recommendation; (2) provide a cross reference to where in the POU's WMP this topic is addressed; (3) describe why the recommendation is not applicable to the POU; or (4) inform the WSAB of the POU's intent to address the recommendation at the point of the POU's next comprehensive revision, occurring in either the 2022 or 2023 WMP.

A. Plan Structure

WSAB Recommendation #1: Provide context-setting information about the POU and provide a simple guide to where the statutory requirements are addressed within the WMP.

POU Response: See Sections II and III above.

WSAB Recommendation #2: Provide a short description of the POU's public review and approval (if required) for the WMP. This description may also include a brief explanation of the funding mechanisms for wildfire mitigation efforts.

POU Response: N/A

WSAB Recommendation #3: Identify where the POU has posted the most recent Independent Evaluator (IE) Report and if your POU plans to enhance future IE reports, please summarize in what ways.

POU Response: The PWRPA WMP is posted at www.pwrpa.org/legalnotices/

WSAB Recommendation #4: Develop, in collaboration with POU industry associations, WMP guidelines for future WMPs, understanding that it may take multiple cycles for POU's to integrate these recommendations into the WMPs.

POU Response: This document is intended to include, as appropriate, responses to the recommendations in the WSAB's Guidance Advisory Opinion for the POU's 2021 WMP. This document also represents the combined effort of the POU industry associations to further the development of a template to respond to the WSAB's Guidance Advisory Opinion in a future reporting WMP cycle.

B. Customer Impacts

WSAB Recommendation #5: Describe the potential impact investor-owned utilities (IOU) public safety power shutoff (PSPS) events could have on POU customers and how the POU manages these impacts. For POU's that are also balancing authorities, describe the criteria for wildfire related de-energizations. Responses shall only provide aggregated information that does not provide customer-specific information or other potentially sensitive data.

POU Response: PWRPA’s public agency customers may be impacted by the PSPS events ordered by PG&E. The potential impact would entail reduced agricultural water deliveries. The following provides responses to specific questions included in the WSAB’s 2021 WSAB Guidance Advisory Opinion:

- What is the relationship between the IOU and the POU during PSPS events?

POU Response: The PSPS notices are sent directly to the affected public agency by the PG&E account representative and not to WAPA or PWRPA.

- Is the POU affected at the transmission or distribution level?

POU Response: PG&E provides wholesale distribution services to PWRPA through WAPA and directly at 8 PODs. A PG&E PSPS event would impact that distribution service to PWRPA’s PODs.

- Does the POU deenergize their own lines when a wildfire threat looms, even if it is not labelled a PSPS?

POU Response: The public agency has operational control of the loads after the demarcation of the PWRPA revenue meter. The shut-off procedures are discussed in Section 5 of PWRPA’s WMP.

WSAB Recommendation #6: Describe the utility customer communication plans with respect to wildfires and PSPS, and in particular describe the methods, content and timing used to communicate with the most vulnerable customers, such as Access and Functional Needs (AFN) customers, medical baseline customers, non-English speakers, and those at risk of losing water or telecommunications service.

POU Response: N/A. PG&E communicates directly with PWRPA’s customers in the event of wildfires and PSPS events.

C. The Grid

WSAB Recommendation #7: Provide details on each POU’s system hardening and grid design programs, including: (1) the goals of the programs and the risk any particular program is designed to mitigate; (2) approach to PSPS mitigation and prevention; and (3) identify any resource shortages.

PWRPA’s standards for system design are referenced in Section 3.2 of PWRPA’s WMP. As shown in the Site-Specific Information Cards, the intervening facilities typically comprise one or two poles, a transformer and underground lines.

WSAB Recommendation #8: Describe annual visual patrols on potentially impacted circuits and the risks the POU is inspecting for. Describe whether and how system inspections lead to system improvements. Describe line patrols before, during, and/or after a critical fire weather event, such as a Red Flag Warning with strong winds, or following a fire that burned in areas where electric facilities are or could have been impacted.

POU Response: PWRPA’s visual inspection procedures are discussed in Section 4.2 of PWRPA’s WMP and are performed on a daily or weekly basis.

WSAB Recommendation #9: Describe options considered by POU (including through the joint efforts of the POU associations) to identify previously unidentified risks that could lead to catastrophic wildfires.

POU Response: PWRPA participates in a joint-POU working group that considers wildfire risks, plans, compliance and best practices.

D. Risk Assessment

WSAB Recommendation #10: Describe the particular wildfire risks associated with system design and construction such as topography and location near the HFTD areas of another utility’s service territory. Describe any G.O. 95 exempt assets and possible updates to G.O. 95 that could facilitate more resilient utility transmission and distribution assets.

POU Response: PWRPA’s assessment of wildfire risks is discussed in Section 3 of PWRPA’s WMP. As shown in the Site-Specific Information Cards, the intervening facilities are compact and have minimal overhead components.

E. SITUATIONAL AWARENESS TECHNOLOGY

WSAB Recommendation #11: Provide context-setting information about the prevailing wind directions and speeds, differentiated by season, along with average weather conditions by season. Describe how and why situational awareness technology is installed, and where on the system. Describe the decision-making process regarding the installation of situational awareness technology, including constraints such as budgets, availability of equipment, knowledge to effectively deploy, or qualified personnel to install and monitor effectively. Identify any other agencies, utilities, or fire professionals that the data from these devices is shared with.

POU Response: PWRPA’s operational procedures relating to situational awareness are discussed in Sections 4.2 and 4.3 of PWRPA’s WMP.

F. VEGETATION MANAGEMENT

WSAB Recommendation #12: Describe treatment plans for all types of vegetation associated with utility infrastructure, from the ground to the sky, which includes vegetation above and below electrical lines.

POU Response: PWRPA's vegetation management program is discussed in Section 4.1 of PWRPA's WMP. As shown in the Site-Specific Information Cards, the intervening facilities are compact and largely clear of any vegetation.

WSAB Recommendation #13: List the qualifications of any experts relied upon, such as scientific experts in ecology, fire ecology, fire behavior, geology, and meteorology. Specify the level of expertise of the POU staff that manages the contractors performing vegetation management. Describe measures each POU takes to ensure that POU staff and contractors comply with or verify compliance with Cal/OSHA standards on Minimum Approach Distances (MAD).

POU Response: District abatement staff monitors the vegetation conditions of all ditch banks and well sites at least weekly, and dispatches personnel to mow and/or spray these areas on an as-needed basis in order to maintain minimal vegetation growth and safe conditions

WSAB Recommendation #14: Describe whether the POU has considered innovative and alternative approaches to vegetation management.

POU Response: No.