ALAMEDA MUNICIPAL POWER
WILDFIRE MITIGATION PLAN
2021 INFORMATIONAL RESPONSE

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

APRIL 21, 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. Alameda Municipal Power (AMP) provides this document to WSAB in order to respond to each of the recommendations included in the 2021 WSAB Guidance Advisory Opinion. AMP will provide a narrative response and/or a cross reference to the location in AMP's Wildfire Mitigation Plan (WMP) where the topic is addressed. Where the recommendation is not applicable to AMP, 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 members in understanding the unique characteristics of each POU.

Table 1: Context-Setting Information

Utility Name	**ALAMEDA MUNICIPAL POWER**	
Service Territory Size	22.8 square miles	
Owned Assets	☒ Transmission ☒ Distribution ☐ Generation	
Number of Customers Served	34,979 customer accounts	
Population Within Service Territory	78,338 people	
Customer Class Makeup	*Number of Accounts*	*Share of Total Load (MWh)*
	89% Residential; 1% Government; Agricultural; Small/Medium Business; 10% Commercial/Industrial	73% Residential; 2% Government; Agricultural; Small/Medium Business; 25% Commercial/Industrial
Service Territory Location/Topography[1]	% Agriculture % Barren/Other % Conifer Forest % Conifer Woodland % Desert % 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.

	% Herbaceous % Shrub 98% Urban 2% Water
Service Territory Wildland Urban Interface[2] (based on total area)	0% Wildland Urban Interface; 0% Wildland Urban Intermix;
Percent of Service Territory in CPUC High Fire Threat Districts (based on total area)	☐Includes maps Tier 2: 0% Tier 3: 0%
Prevailing Wind Directions & Speeds by Season	☐ Includes maps Westerly onshore winds with average wind speed of: Winter, 3 mph; Spring, 6 mph; Summer, 7 mph; Fall, 5 mph
Miles of Owned Lines Underground and/or Overhead	Overhead Dist.: 86.1 miles Overhead Trans.: 6.8 miles Underground Dist.: 178.1 miles Underground Trans.: 1.9 miles
	Explanatory Note 1 - *Methodology for Measuring "Miles":* **Circuit miles**
	Explanatory Note 2 – *Description of Unique Ownership Circumstances:* **n/a**
	Explanatory Note 3 – *Additional Relevant Context:* **.5%, percentage of lines located outside service territory**
Percent of Owned Lines in CPUC High Fire Threat Districts	*Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)*
	Tier 2: 0% Tier 3: 0%
	Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)
	Tier 2: 0% Tier 3: 0%
	Explanatory Note 4 – *Additional Relevant Context:* n/a
Customers have ever lost service due to an IOU PSPS event?	☐ Yes ☒ No
Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	☒ Yes ☐ No
Has developed protocols to pre-emptively shut off	☒ 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_nrs8.pdf.

electricity in response to elevated wildfire risks?	
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?	☐ Yes ☒ No If yes, then provide the following data for calendar year 2020: *Number of shut-off events*: 0 *Customer Accounts that lost service for >10 minutes:* 0 *For prior response, average duration before service restored:* n/a

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 3 Page 7
Objectives of the Plan	**PUC § 8387(b)(2)(B):** The **objectives** of the wildfire mitigation plan.	Section 2 Page 7
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 5 Page 14
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 Page 19
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 7 Page 20
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 Page 17

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.	Not applicable
Vegetation Management	**PUC § 8387(b)(2)(H):** Plans for vegetation management.	Section 5 Page 15
Inspections	**PUC § 8387(b)(2)(I): Plans for inspections** of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Section 5 Page 16
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 Page 13
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 Page 14
Enterprisewide Risks	**PUC § 8387(b)(2)(L):** A methodology for identifying and presenting **enterprisewide** safety risk and wildfire-related risk.	Section 4 Page 14
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 6 Page 17
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 7 Page 19

	(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 8 Page 22

IV. WSAB GUIDANCE ADVISORY OPINION RECOMMENDATIONS

The WSAB Guidance Advisory Opinion identifies 14 specific recommendations that POUs 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 POUs 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 POUs 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 refence 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:*** AMP presents a draft WMP to the City of Alameda Public Utilities Board (PUB) at a public meeting for their review and approval. If there is a need for funding to address wildfire mitigation activity, a request for budget approval is presented to the PUB as well.

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 most recent IE Report is posted on the AMP public website. Future IE Reports will be shared publicly in the same manner.

WSAB Recommendation #4: Develop, in collaboration with POU industry associations, WMP guidelines for future WMPs, understanding that it may take multiple cycles for POUs 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 POUs' 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 POUs 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:*** AMP's customers are unlikely to be directly impacted by a PG&E ordered PSPS event because in recent years, AMP has not been directed by PG&E to participate in a PSPS event. In addition, it is unlikely that AMP's customers will be impacted by a PSPS event due to its T&D network being served from a PG&E local transmission system that does not originate from a High Fire Threat district.

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:*** AMP has not developed a utility customer communication plan specifically for a wildfire and/or PSPS event due to not being in a High Fire Threat district. AMP has an established customer communication protocol for any system disturbances.

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.

> ***POU Response:*** Since AMP's T&D system in not located in a High Fire Threat District, they do not have a system hardening program related to wildfire risk. However, AMP implements a thorough asset management strategy annually that maintains a safe and reliable T&D system which is reflected in its top quartile system reliability metrics.

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:*** As stated in Section 5, AMP's Inspection & Maintenance Program follows the requirements stated in GO 165 for its T&D facilities. There has not been any critical fire events in AMP's service territory so there are no special patrols done.

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:*** AMP has evaluated the wildfire risks within its service territory and determined that there are no additional risks that were not previously identified.

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:*** AMP's assessment of wildfire risks is discussed in Section 4 of its WMP. Since there is very minimal risk of wildfire in AMP's service territory, there are no design and/or construction changes planned to mitigate possible wildfire threats.

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:*** Due to the very low risk of wildfires in the AMP service territory, there are no plans to install any situational awareness technology equipment. The prevailing westerly onshore winds off the Pacific Ocean average 4 – 9 miles per hour in all seasons and therefore do not pose a significant risk of wildfire spread. Also, there are no high fire threat areas adjacent to the AMP service territory since it is situated on an island in the San Francisco Bay.

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:*** AMP's vegetation management program is discussed in Section 4D of AMP's WMP. The approach used is to analyze tree growth rates and pruning methods to maintain tree health to maintain adequate vegetation - line clearance.

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:*** AMP outsources its vegetation management services to a certified arborist that is fully versed in the prudent vegetation practices in the State of California, including proper clearances from high, medium and low voltage facilities. Since AMP's service territory is not in a high fire threat zone, these fundamental vegetation management practices are adequate.

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

> ***POU Response:*** Amp has not considered any other innovative or alternative approaches to vegetation management.