ANZA ELECTRIC COOPERATIVE, INC.
WILDFIRE MITIGATION PLAN
2022 ADDENDUM

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

May 26, 2022

I. PURPOSE OF THIS 2022 ADDENDUM

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. This Addendum to Anza Electric Cooperative's (AEC) 2022 Wildfire Mitigation Plan (WMP) responds to each of the recommendations included in the 2021 WSAB Guidance Advisory Opinion. AEC will provide a narrative response and/or a cross reference to the location in the Cooperative's WMP where the topic is addressed. Where the recommendation is not applicable to AEC, the Cooperative's response is intended to provide a brief description supporting this conclusion.

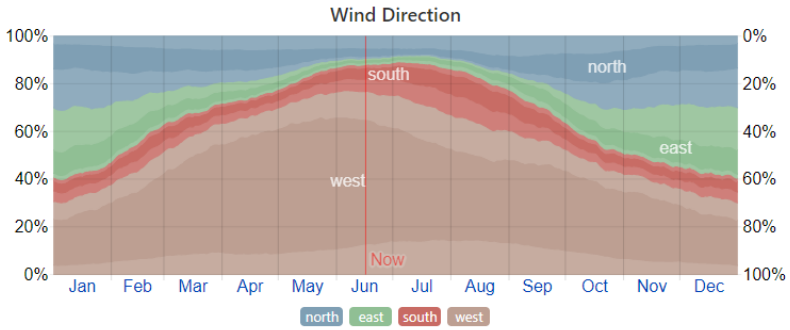
II. CONTEXT SETTING INFORMATION

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

Table 1: Context-Setting Information

Utility Name	**Anza Electric Cooperative, inc.**	
Service Territory Size	550 square miles	
Owned Assets	x Transmission x Distribution x Generation (solar)	
Number of Customers Served	4898 member accounts	
Population Within Service Territory	10,000 residents (estimate)	
Customer Class Makeup	*Number of Accounts*	*Share of Total Load (MWh)*
	93.2% Residential; 0% Government; .28% Agricultural; 6.3% Small/Medium Business; .10% Commercial/Industrial	83% Residential; 0% Government; .07% Agricultural; 12% Small/Medium Business; 4.8% Commercial/Industrial
Service Territory Location/Topography[1]	5% Agriculture 30% Barren/Other (Indian Reservation) 0% Conifer Forest 0% Conifer Woodland 10% Desert	

[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.

<table>
<tr><td></td><td>0% Hardwood Forest
0% Hardwood Woodland
80% Herbaceous
75% Shrub
2% Urban
1% Water</td></tr>
<tr><td>Service Territory
Wildland Urban Interface</td><td>30% Wildland Urban Interface;[2]
70% Wildland Urban Intermix;</td></tr>
<tr><td>Prevailing Wind Directions & Speeds by Season</td><td>Annual Wind Direction Summary[3]
The predominant average hourly wind direction in Anza is from the west throughout the year.
 

The percentage of hours in which the mean wind direction is from each of the four cardinal wind directions, excluding hours in which the mean wind speed is less than 1.0 mph. The lightly tinted areas at the boundaries are the percentage of hours spent in the implied intermediate directions (northeast, southeast, southwest, and northwest).
Prevailing winds are typically westerly – SW to NW year-round with the exception of Santa Ana wind events</td></tr>
<tr><td rowspan="2">Miles of Lines Underground and/or Overhead</td><td>In Service Territory</td><td>Outside Service Territory</td></tr>
<tr><td>Overhead Dist.: 498 miles
Overhead Trans. 25 miles
Underground: 228 miles</td><td>Overhead Dist.: 0 miles
Overhead Trans.: 0 miles
Underground: 0 miles</td></tr>
<tr><td rowspan="2">Number of Poles</td><td>In Service Territory</td><td>Outside Service Territory</td></tr>
<tr><td>Wooden: 11197
Steel: 274 (as of December 31, 2021)
Composite:0</td><td>Wooden: 0
Steel: 0
Composite: 0</td></tr>
<tr><td rowspan="2">Number of Cross Arms</td><td>In Service Territory</td><td>Outside Service Territory</td></tr>
<tr><td>Wooden: ~13500
Steel: 0
Fiberglass: 81
Composite: 0</td><td>Wooden: 0
Steel: 0
Fiberglass: 0
Composite: 0</td></tr>
<tr><td></td><td>In Service Territory</td><td>Outside Service Territory</td></tr>
</table>

[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.

[3] This data was provided by weather spark available at https://weatherspark.com/y/2096/Average-Weather-in-Anza-California-United-States-Year-Round

Miles of covered conductor	0 miles	0 miles
Percent of Service Territory in CPUC High Fire Threat Districts	Map included in the Wildfire Mitigation Plan on page 17 Tier 2: 70% Tier 3: 20%	
Percent of Service Territory in CAL FIRE FRAP Map Fire Threat Zones	Extreme: 10% Very High: 65% High: 5%	
Customers have ever lost service due to an IOU PSPS event?	☐ Yes x No	
Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	x Yes ☐ No	
Expects to initiate its own PSPS?	x Yes ☐ No Only as a last resort to mitigate the potential for a wildfire event.	

III. CROSS REFERENCE TO STATUTORY REQUIREMENTS

WSAB requested that cooperatives provide a clear roadmap as to where each statutory requirement is addressed within the cooperative's 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 III. (A) Page 8
Objectives of the Plan	**PUC § 8387(b)(2)(B):** The **objectives** of the wildfire mitigation plan.	Section II. (A)(B)(C) Page 6
Preventive Strategies	**PUC § 8387(b)(2)(C):** A description of the **preventive strategies and programs to be adopted by the electric cooperative** to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Section V. Page 17
Evaluation Metrics	**PUC § 8387(b)(2)(D):** A description of the **metrics the electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance** and the assumptions that underlie the use of those metrics.	Section VIII Page 34

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 VIII. (B) Page 35
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 V. (H) Page 30
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 III. (C) Page 10
Vegetation Management	**PUC § 8387(b)(2)(H):** Plans for vegetation management.	Section V. (D) Page 25
Inspections	**PUC § 8387(b)(2)(I): Plans for inspections** of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Section V. (E) Pages 28
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 IV. Page 12
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 V Page 17
Enterprise-wide Risks	**PUC § 8387(b)(2)(L):** A methodology for identifying and presenting **enterprise-wide** safety risk and wildfire-related risk.	Section IV. (B) 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 VII Page 33
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.	Section VIII. (C) Page 36
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 IX. Page 37

IV. WSAB GUIDANCE ADVISORY OPINION RECOMMENDATIONS

The WSAB Guidance Advisory Opinion identifies 13 specific recommendations that electric cooperatives are requested to address in their 2021 WMPs. As specified in Public Utilities Code § 8387(b)(1), each electric cooperative is required to perform a comprehensive revision to the cooperative's WMP at least once every three years. Pursuant to this guidance, the cooperatives 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 submission, the cooperatives 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 electric cooperative 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 cooperative's WMP this topic is addressed; (3) describe why the

recommendation is not applicable to the cooperative; or (4) inform the WSAB of the cooperative's intent to address the recommendation at the point of the cooperative's next comprehensive revision, occurring in either the 2022 or 2023 WMP.

A. Plan Structure

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

Cooperative's Response: See Sections II and III above.

WSAB Recommendation #2: Provide a short description of the electric cooperative'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.

Cooperative's Response: In accordance with PUC §8387, AEC updated its WMP and presented to its governing board of directors for approval on an annual basis, beginning with the first WMP approval June 2018.

During 2019 AEC updated its WMP and submitted it to an independent evaluator for review in accordance with PUC §8387. Once the final report was provided by the independent evaluator, AEC presented its WMP update to its governing board of directors for review and approval. During this presentation, the final independent review report was discussed and presented by the independent evaluator to the cooperative's governing board of directors. After review, AEC's governing board of director's approved the cooperative's 2019 WMP update as presented. AEC held its first WMP public meeting on April 24, 2019.

The next WMP update occurred during 2020 AEC. The updated WMP was presented to the cooperative's governing board of directors for review and approval in June 2020. Once approved, AEC submitted its WMP to the WSAB for review on July 1, 2020. AEC presented its updated WMP to the cooperative's membership virtually in August 2020.

The cooperative's approved updated WMP and report from the IE are available for review on AEC's website. Additionally, a link to AEC's U-Tube page is provided on the cooperative's website to view the 2020 WMP update virtual meeting presentation.

AEC has created specific ledger accounts to track and budget for WMP measures. The WMP budget is included within the cooperative's general budget and approved on an annual basis by the cooperative's governing board of directors.

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

> ***Cooperative's Response:*** In accordance with PUC § 8387(c), AEC contracted with an IE (section IX., page 35) and has presented the report provided by the IE on the cooperative's website for review. At this time AEC does not have plans to enhance any reports received from an IE, however any recommendations presented by the IE will be carefully considered for adoption and implementation in future WMPs.
>
> The cooperative will continue to provide any future reports received from an IE in the form in which it is received on the cooperative's website as required.

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

> ***Cooperative's Response:*** This Addendum is intended to include, as appropriate, responses to the recommendations in the WSAB's Guidance Advisory Opinion for the Cooperative's 2021 WMP. This Addendum also represents the combined effort of the electric cooperative 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 cooperative customers (members) and how the cooperative manages these impacts. For cooperative's that are also balancing authorities, describe the criteria for wildfire related de-energizations.

> ***Cooperative Response:*** AEC is an all-requirements member of its generation and transmission (G&T) cooperative in Arizona. AEC's G&T procures generation resources and purchases energy on behalf of AEC. As part of this agreement for services, AEC (via its G&T) has a wheeling contract with SCE for transmission of energy on the IOU's lines through a single radial feed to AEC's switching station in Mountain Center, California at which point AEC takes delivery and then distributes to its members.
>
> AEC's service territory is 550 square miles of rural terrain located in the San Jacinto Mountains and includes three Indian Reservations. If SCE determines the need to de-energize the transmission circuit that feeds AEC, it will cause a system-side outage to

the cooperative's members. To address this scenario, AEC has completed the installation of a 3.5MW solar array with 4.5MW/9.5MWhs of battery storage that will have the capability to keep portions of our service territory energized to mitigate a complete system-wide outage for an extended period depending on the size of the load at the time.

AEC is not a balancing authority therefore this question is not applicable.

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.

Cooperative's Response: AEC plans to begin notifying members approximately 48 hours in advance of a potential PSPS event and will attempt to notify members approximately 24 hours before power is shut off. Additional notifications will be made once the power has been de-energized, throughout the outage, and when it has been restored. There may be situations which prevent AEC from providing advance notice. The actual onset of extreme weather conditions and other circumstances beyond our control may impact coordination and notification efforts.

Notification may occur via a combination of phone calls, member messaging, anzaelectric.org, and social media.

Specific details related to AEC's notification processes are in the cooperative's WMP under Section II. (C), page 10.

C. The Grid

WSAB Recommendation #7: Provide details on each electric cooperative'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.

Cooperative's Response: Table 2 under Section IV. (B) on page 15 of AEC's WMP provides a summary of the preventive strategies the cooperative has undertaken to mitigate utility caused wildfire events.

To date, AEC has not initiated a PSPS event. AEC has provided notification to members that the cooperative is monitoring conditions for a possible event however the cooperative has never de-energized for a PSPS event. A PSPS event will only occur as an absolute last resort if conditions are conducive to mitigate a utility caused wildfire event.

WSAB Recommendation #8: Describe annual visual patrols on potentially impacted circuits and the risks the electric cooperative is inspecting for. Describe whether and how system inspections lead to system improvements.

Cooperative's Response: Section V. (E), page 28 of AEC's WMP provides the cooperative's inspection protocols. Additionally, under the Wood-to-Ductile Iron Pole Replacement Program on Section V. (C), page 24, the cooperative noted that as a result of inspections conducted during 2020, 54 unserviceable wood poles were replaced with ductile iron poles.

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

Cooperative's Response: AEC is a member of the Golden State Power Cooperative (GSPC) association and regularly meets to discuss legislative and regulatory requirements including WMPs. The Cooperative shares information and resources with association members and seeks guidance as needed. Additionally, AEC has developed a public safety partnership with SCE and participates in all SCE PSPS workshops and uses information shared as a resource to help identify previously unidentified risks that could lead to a wildfire event.

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.

Cooperative's Response: As noted on page 12, Section IV. Of AEC's WMP, the cooperative has identified the following risks associated with system design and construction:

- Weather
    - Extended drought
    - High winds
    - Lightning
    - Low humidity
    - Lack of early fall rains
- Vegetation
    - Vegetation type
    - Fuel moisture
    - Tree mortality
    - Steep terrain
- Contact from object
    - Mylar balloons
    - Trampolines
    - Vehicle
    - Animal
    - Tarps
    - Green house remnants
    - Vegetation contact with conductors
    - Unknown object
    - Wire-to-wire
- Other
    - Unknown human activity (examples: local transient population on private property, power theft, misuse of generators, increase volume of traffic, smoking, etc.)
    - Vandalism
    - Third party acts (Telecommunication providers, construction, etc.)
    - Equipment/facility failure
    - Earthquake
    - Cyber Security Attacks

All AEC's overhead construction is subject to G.O. 95 without exception.

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.

Cooperative's Response: Prevailing winds are typically westerly – SW to NW year-round with the exception of Santa Ana wind events. Winter temperatures vary from a highs of 35 to 65 degrees and a lows of 25 – 35 degrees. Snow accumulations at the higher elevations in AEC's service territory range from trace to a couple of feet. Spring temperatures on average vary from highs of 65 – 75 degrees with average low temperatures around 40 degrees. Summers are hot, arid, and mostly clear, however a during a typical summer there may be a week or two with monsoonal thunderstorm activity. Temperatures on average are in the mid 80's to upper 90's but have exceeded 100 degrees. During October the weather pattern begins to cool down considerably with high temperatures in the 60's to upper 70's and lows in the 40 degree range.

Although the risk of fire is a year-round reality, there are certain recurring environmental and weather conditions, particularly during the late summer and early fall, when the risks of and from fire, particularly from uncontrolled wildfires, in the AEC service territory are abnormally high and the dangers most severe. AEC's fire-prevention and risk-mitigation activities begin with intensive data gathering and data analysis so that, when these abnormal and dangerous conditions are anticipated or occur, AEC is prepared to mobilize personnel and resources to abate, mitigate and respond to these conditions and any potential fire threats.

AEC's utilizes weather databases that are constantly updated using weather data provided by several sources, including the United States National Weather Service (NWS) and AEC's weather monitoring stations. To date, AEC has installed weather monitoring stations at 5 strategic locations in the high fire threat District 2 and District 3 and will actively deploy more as the need arises. To further improve our situational awareness, AEC has added three high visibility, high resolution cameras are controlled remotely and can rotate a full 360 degrees and AEC is considering adding additional cameras in the near future.

AEC's weather monitoring stations provide over 3,000 data points per day. Additionally, AEC has developed a partnership with SCE and SDG&E to share weather related data on

the borders in which the SCE, SDG&E and AEC's service territories meet. Last AEC pays close attention to the USDA Forest Service's National Fire Danger Rating System and has incorporated this rating system into our operating conditions assessment.

The combined resources will provide a detailed daily forecast of weather conditions relevant to AEC's operations. The forecasts, a combination of heat, humidity, wind, and other conditions, are combined into an "Operating Condition" assessment, which tracks the potential for fires occurring in any region of the AEC service territory.

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.

Cooperative's Response: Non-exempt poles are cleared of vegetation within a 10 ft. radius at the base of the pole and a pre-emergent herbicide is applied to the cleared area. Limbs and branches from growing trees and vegetation are cut away 10 ft. or greater from live non-insulated conductors. Dead trees that pose a threat within the fall zone of power lines are cut down to safe height or removed.

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 electric cooperative's staff that manages the contractors performing vegetation management. Describe measures the electric cooperative takes to ensure that staff and contractors comply with or verify compliance with Cal/OSHA standards on Minimum Approach Distances (MAD).

Cooperative's Response: AEC utilizes its weather monitoring stations and meteorology reports that are generated daily, daily weather updates from the National Weather Service (NWS) and participates in webinars provided by the NWS when offered for forecasted weather events (example: extreme heat/high wildfire risk weather, Santa Ana wind events, extreme rain/snow weather, etc.). AEC is a small not-for-profit distribution utility with an average of 28 full time employees. The cooperative does not employ scientific experts in ecology, fire ecology, fire behavior, geology, or meteorology, however, in 2022, AEC will offer a paid internship program for college students enrolled in a forestry management program, with the potential to lead to regular full-time work once participants have completed their degree program.

All AEC staff is thoroughly versed in applicable Cal/OSHA standards regarding Minimum Approach Distances at our system voltages. Vegetation Management contractors are briefed on compliance and certified by the state.