

CITY OF LOMPOC WILDFIRE MITIGATION PLAN

2021 INFORMATIONAL RESPONSE

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

July 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 City of Lompoc Electric Division (Lompoc Electric) provides this document to the WSAB in order to respond to each of the recommendations included in the 2021 WSAB Guidance Advisory Opinion. Lompoc Electric will provide a narrative response and/or a cross reference to the location in Lompoc Electric’s Wildfire Mitigation Plan (WMP) where the topic is addressed. Where the recommendation is not applicable to Lompoc Electric, 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	City of Lompoc	
Service Territory Size	[12] square miles	
Owned Assets	<input type="checkbox"/> Transmission <input checked="" type="checkbox"/> Distribution <input type="checkbox"/> Generation	
Number of Customers Served	[15,166] customer accounts	
Population Within Service Territory	[42,853] people	
Customer Class Makeup	<i>Number of Accounts</i>	<i>Share of Total Load (MWh)</i>
	[88]% Residential; [1]% Government; [0]% Agricultural; [N/A]% Small/Medium Business; We do not collect this data. [11]% Commercial/Industrial	[50]% Residential; [9]% Government; [0]% Agricultural; [N/A]% Small/Medium Business; We do not collect this data. [41]% Commercial/Industrial
Service Territory Location/Topography¹	[2]% Agriculture [3]% Barren/Other [0]% Conifer Forest [0]% Conifer 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>.

	<p>[0]% Desert [0]% Hardwood Forest [12]% Hardwood Woodland [25]% Herbaceous [7]% Shrub [51]% Urban [0]% Water</p>												
Service Territory Wildland Urban Interface² (based on total area)	<p>[43]% Wildland Urban Interface; [2]% Wildland Urban Intermix;</p>												
Percent of Service Territory in CPUC High Fire Threat Districts (HFTD) (based on total area)	<p><input type="checkbox"/> Includes maps Tier 2: [28.6]% Tier 3: [0]%</p>												
Prevailing Wind Directions & Speeds by Season	<p><input type="checkbox"/> Includes maps Lompoc's prevailing wind directions are as follows: Easterly Winds - Jan, Feb, Nov, Dec Westerly Winds - March through Oct</p> <p>Wind speeds by month are as follows:</p> <table> <tr> <td>Jan - 5.7 mph</td> <td>May - 8.6 mph</td> <td>Sept - 6.1 mph</td> </tr> <tr> <td>Feb - 6.9 mph</td> <td>June - 8.5 mph</td> <td>Oct - 6 mph</td> </tr> <tr> <td>March - 7.2 mph</td> <td>July - 7.7 mph</td> <td>Nov - 6.1 mph</td> </tr> <tr> <td>April - 7.6 mph</td> <td>August - 7.1 mph</td> <td>Dec - 6 mph</td> </tr> </table>	Jan - 5.7 mph	May - 8.6 mph	Sept - 6.1 mph	Feb - 6.9 mph	June - 8.5 mph	Oct - 6 mph	March - 7.2 mph	July - 7.7 mph	Nov - 6.1 mph	April - 7.6 mph	August - 7.1 mph	Dec - 6 mph
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Miles of Owned Lines Underground and/or Overhead	<p>Overhead Dist.: [59.7] miles Overhead Trans.: [0] miles Underground Dist.: [64] miles Underground Trans.: [0] miles</p>												
	Explanatory Note 1 - Methodology for Measuring "Miles": [e.g., circuit miles, line miles.] Line miles.												
	Explanatory Note 2 – Description of Unique Ownership Circumstances: [N/A]												
	Explanatory Note 3 – Additional Relevant Context: [e.g., percentage of lines located outside service territory] [0]												
Percent of Owned Lines in CPUC High Fire Threat Districts	<p><i>Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)</i></p>												
	<p>Tier 2: [1.25]% Tier 3: [0] %</p>												
	<p><i>Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)</i></p>												
	<p>Tier 2: [0] %</p>												

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.

	Tier 3: [0] %
	Explanatory Note 4 – Additional Relevant Context: [e.g., explain any difference from data reported in WMP due to different numerator used for this form] [N/A]
Customers have ever lost service due to an IOU PSPS event?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, then provide the following data for calendar year 2020: <i>Number of shut-off events:</i> [____] <i>Customer Accounts that lost service for >10 minutes:</i> [____] <i>For prior response, average duration before service restored:</i> [____]

III. CROSS REFERENCE TO STATUTORY REQUIREMENTS

WSAB requested that POU's 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(B)] Page [9]
Objectives of the Plan	PUC § 8387(b)(2)(B): The objectives of the wildfire mitigation plan.	Section [2] Page: [6]
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(A-H)] Page [19-24]
Evaluation Metrics	PUC § 8387(b)(2)(D): A description of the metrics the local publicly owned electric utility or electrical cooperative plans	Section [8(A)] Page [26-27]

	to use to evaluate the wildfire mitigation plan’s performance and the assumptions that underlie the use of those metrics.	
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(B)] Page [27]
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(H)] Page [23-24]
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 [5(G)] Page [23]
Vegetation Management	PUC § 8387(b)(2)(H): Plans for vegetation management.	Section [5(A)] Page [19-20]
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(B)] Page [20-21]
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 [4(C)] Page [19]
Enterprisewide Risks	PUC § 8387(b)(2)(L): A methodology for identifying and presenting enterprisewide safety risk and wildfire-related risk.	Section [4(A)] Page [13]

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] Page [25-26]
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 [8(C)] Page [27]
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] Page [28]

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 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: Lompoc Electric presents the WMP to the City of Lompoc City Council on an annual basis. Additionally, the WMP is available on the City's website:

<https://www.cityoflompoc.com/government/departments/utilities/electric>

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: Lompoc Electric's IE report is located at:

<https://www.cityoflompoc.com/government/departments/utilities/electric>

Lompoc Electric does not have plans to enhance future IE reports.

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: A PSPS Event ordered by PG&E has the potential of affecting all customers of Lompoc Electric.

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: Lompoc Electric uses PG&E transmission lines for transmission of power.
- **Does the POU receive advance notification?**
POU Response: Lompoc Electric has not had a PSPS event occur in its service territory area. PG&E has stated that they will provide advance notification.
- **Is the POU affected at the transmission or distribution level?**
POU Response: Transmission and distribution level.
- **Is the POU implementing a mitigation strategy for IOU PSPS?**
POU Response: [No] PG&E would be the lead agency leading efforts to communicate with its customers, including the City. Lompoc Electric will notify its customers to the extent practicable based upon information provided by PG&E.
- **Does the POU have its own permanent or temporary generation, (or customer provision of same) allowing it to withstand an IOU PSPS?**
POU Response: [No] Lompoc Electric does not have generation interior to its service territory. All stationary generation is imported via PG&E transmission.
- **Does the POU distribute back-up generators to customers?**
POU Response: [No] Lompoc Electric does not distribute back-up generators.
- **Does the POU deenergize their own lines when a wildfire threat looms, even if it is not labelled a PSPS?**
POU Response: Lompoc Electric has the authority to preemptively shut off power due to fire threat condition; however, this option will only be used in extraordinary circumstances, or as directed by an emergency agency having jurisdiction.
- **In the above instance, what customer communication takes place?**
POU Response: Prior to an emergency, communication will include regular messages related to wildfire prevention, such as right-of-way management, tree trimming, line inspection, or other relevant topics. Methods of communication

will include website updates, social media posts, and public service announcements on City television and radio stations.

- Is the POU a Balancing Authority Area? If yes, describe any applicable criteria for wildfire related de-energization.

POU Response: [No]

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: Lompoc Electric’s approach to customer communication is discussed in Sections [5(G) and 6] of Lompoc Electric’s WMP.

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: Lompoc Electric’s approach to grid hardening is discussed in Section [5(F)] of Lompoc Electric’s WMP.

The following provides responses to specific questions included in the WSAB’s 2021 WSAB Guidance Advisory Opinion:

- Does the POU perform a circuit-by-circuit analysis to identify essential facilities (and whether they have backup power) like hospitals, communication centers, and community resource centers?

POU Response: [Yes]

- Does the POU assess system hardening measures that could be installed to prevent PSPS for those facilities?

POU Response: [Yes] Lompoc Electric continues to evaluate technologies and practices to enhance resiliency.

- In what way does the POU prepare these facilities for a PSPS or another wildfire related de-energization event?

POU Response: Critical Facilities are contacted by Lompoc Electric staff by phone regarding PSPS events upon notification by PG&E.

- For POU's that power water utilities or supply water themselves, if that water is used for drinking and firefighting, are certain projects being undertaken to harden the system for water delivery purposes?

POU Response: The City is the water purveyor with backup generation for its water treatment plant, including its raw water supply and a distribution network capable of multi-facet redundancy.

- Are the majority installed by the customers themselves or the utility?

POU Response: The utility does not install back up generation for its customers. Backup generators are customer owned and maintained.

- Can the utility open and close taps? Can the utility back-feed?

POU Response: Yes, via isolation points throughout the system, including loop-feed capability.

- Are there wildfire related circumstances wherein either of these tactics would be useful?

POU Response: Yes, and they are deployed. Depending on the location of the wildfire, sections of the HFTD area can be isolated.

- Can the utility sectionalize in a localized fashion?

POU Response: Yes.

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: Lompoc Electric's approach to visual patrols is discussed in Section [5(B)] of Lompoc Electric's WMP.

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: The California Municipal Utilities Association (CMUA) will be holding a special meeting of its Wildfire Preparedness, Response, and Recovery Working

Group this fall, which will be focused on risk drivers for power-line caused catastrophic wildfires and innovative mitigation options. CMUA plans to invite a broad range of utility staff, state agency staff (including the WSAB), industry experts, and academics to participate in this discussion. As part of this meeting, the working group will discuss unidentified wildfire risk drivers and mitigation measures that could address these risks. Based on the input provided during this meeting, CMUA will produce a publicly-available, post-meeting report that summarizes the group's conclusions and recommendations. Lompoc Electric's staff will participate in CMUA's meeting and will discuss any changes that Lompoc Electric has made to its operations in response to the conclusions and recommendations of the working group in a future WMP.

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: Lompoc Electric's assessment of wildfire risks is discussed in Section [4] of Lompoc Electric's WMP. The following provides responses to specific questions included in the WSAB's 2021 WSAB Guidance Advisory Opinion:

- Are there design or construction issues related to the utility's specific topography or geographic location that the Board should be aware of?

POU Response: [No]

- How will the utility address risks associated with facilities requiring power that abut a Tier 2 or Tier 3 HFTD?

POU Response: Only one facility, a landfill, abuts a Tier 2 HFTD. The City of Lompoc Landfill has backup power.

- How does the utility assess its risks associated with system design and construction?

POU Response: Lompoc Electric's assessment of wildfire risks is discussed in Section [4] of Lompoc Electric's WMP.

- What design and construction standards has the POU implemented that go beyond G.O. 95 or other General Order standards related to design and construction?

- *POU Response:* Lompoc Electric's design and construction standards are discussed in Section [5(F)] of Lompoc Electric's WMP.

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: Lompoc is 98 feet above mean sea level and has a mild climate year round. In Lompoc, the summers are short, comfortable, and mostly clear while winters are cold, wet, windy, and partly cloudy. Over the course of the year, the temperature typically varies from 40°F to 72°F and is rarely below 32°F or above 82°F. Lompoc's prevailing wind directions are as follows: Easterly Winds are common in Jan., Feb., Nov., Dec. and Westerly Winds are common March through Oct. The annual average wind speed is 9 mph.

Lompoc Electric's assessment of situational awareness technology is discussed in Section [5(C)] of Lompoc Electric'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: Lompoc Electric's vegetation management program is discussed in Section [5(A)] of Lompoc Electric's WMP. The following provides responses to specific questions included in the WSAB's 2021 WSAB Guidance Advisory Opinion:

The following provides responses to specific questions included in the WSAB's 2021 WSAB Guidance Advisory Opinion:

- Describe how vegetation management in the HFTD or Fire Threat Zones differs from other areas, including within private property and urban landscaping.

POU Response: Lompoc Electric's vegetation management program is discussed in Section [5(A)] of Lompoc Electric's WMP.

- Describe any enhanced vegetation management that goes beyond the minimum G.O. 95 standard.

POU Response: Lompoc Electric’s vegetation management program is discussed in Section [5(A)] of Lompoc Electric’s WMP.

- A list of native and non-native species in the POU’s Service Territory and describe how treatment methods vary.

POU Response: The City has limited plant species in the HFTD. The majority of plant species consist of Coast Live Oak and native grasses. Treatment varies on the location and rate of growth. Trees are trimmed and chemical treatment may be applied to areas with grass.

- Describe how the POU tracks new vegetation growth that occurs in areas that has previously been cleared or treated.

POU Response: City of Lompoc Urban Forestry Division performs visual inspections and uses Davey Tree Keeper software.

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: Lompoc Electric uses the City of Lompoc Urban Forestry Division to assist with vegetation management. The Forestry Division Supervisor is ISA arbor certified. Staff are QAC certified, ACRT certified. The Forestry Division complies with Cal/OSHA standards on Minimum Approach Distances (MAD).

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

POU Response: No. The current program is working in the limited HFTD area.