Final Report

Independent Review of Los Angeles Department of Water and Power Wildfire Mitigation Plan

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1. Executive Summary

In response to Senate Bill (SB) 901 signed into law on September 21, 2018, Los Angeles Department of Water and Power (LADWP) engaged Siemens/Advisian as an independent evaluator of its wildfire mitigation plan (WMP). SB901 was codified in the California Public Utilities Code Section 8387 for publicly owned utilities. In addition, the California Public Utilities Code was updated on July 12, 2019 by assembly bill (AB) 1054, which created the California Wildfire Safety Advisory Board to advise and oversee wildfire mitigation plans.

Siemens/Advisian were retained by LADWP to be the qualified independent evaluator of the WMP as stipulated under PUC Section 8387(c). This report includes the following sections:

- Background and legislative requirements
- Comprehensiveness review
- Statutory compliance review (see results in Appendix A)
- Summary of recommendations to enhance the WMP
- Appendices

The Siemens/Advisian consulting team deems the LADWP wildfire mitigation plan to be comprehensive and complete, and that the plan fulfills all requirements of Public Utilities Code Section 8387.

The consultant team has listed recommendations in Section 4 for possible enhancements to the plan in future versions.

2. Background and Legislative Requirements

2.1 Background

Following the deadly wildfires in 2017, the State of California enacted legislation that mandates all electric utilities to provide an annual Wildfire Mitigation plan (WMP) to document their efforts in preventing wildfires caused by utility equipment.

2.2 Legislative requirements

2.2.1 Senate Bill 901

On August 31, 2018, the California Legislature passed Senate Bill (SB) 901 that requires electric utilities to prepare a WMP that should include mitigation and response elements in each utility's strategies, protocols, and programs. SB901 requires each electric utility to prepare a WMP before January 1, 2020. The Public Utilities Code was consequently updated, and the requirements for publicly owned utilities were reflected in PUC Section 8387. SB 901, as passed by the Legislature, does not make any changes to the state's legal doctrine of inverse condemnation.

2.2.2 Assembly Bill 1054

Assembly Bill 1054 was passed by California's state legislature upon findings and recommendations from the SB 901 Commission. AB 1054 establishes the State's Wildfire Safety Advisory Board to advise the Wildfire Safety Division at the California Public Utilities Commission. Publicly owned utilities shall submit their WMPs to the Wildfire Safety Advisory Board for review and recommendations by July 1 of each year starting 2020. Publicly owned utilities are required to comprehensively update their WMPs at least once every three years.

2.3 LADWP Plan and Independent Evaluator Approach

LADWP issued its first WMP report for review by the Independent Evaluator (IE) in December 2019. The report is organized in the following sections:

- Overview
- Roles and Responsibilities
- Wildfire Risks and Risk Drivers
- Wildfire Preventative Strategies
- Restoration of Service
- Community Outreach and Public Awareness
- Evaluating the Plan

- Independent Evaluator
- Conclusion
- Revision History
- Appendices

Furthermore, LADWP presented its first WMP to its Board of Commissioners on December 10, 2019.

Siemens/Advisian reviewed the plan in its entirety from a comprehensiveness perspective (see Section 3). In reviewing the plan, the consulting team drew upon industry best practices in wildfire prevention and mitigation practices, currently employed by utilities around the world. Additionally, the consulting team examined LADWP's WMP for statutory compliance with PUC Section 8387 (see Appendix A).

2.4 Independent Review Consultant Qualifications

The primary consultant conducting the WFM Plan independent review was Siemens Industry, Inc., through its Power Technologies International group, and supported by subcontractor Worley Parsons Group. The focus of the consultant was on identifying and managing risks of sparks and flames exposed to combustible resources across LADWP's generation, transmission, and distribution resources. The assigned team provided expertise in equipment design, conditions and aging, operations, maintenance practices, vegetation management practices and standards, root cause analysis and risk management, regulatory requirements, compliance, and operational audits.

Siemens is a global energy business with 380,000 employees worldwide, providing a comprehensive range of power equipment, information systems, and services. Siemens has provided risk management services to the U.S. power industry for over twenty years. Worley is an international power engineering and technical consulting firm with over 54,000 employees.

A sample list of prior projects is provided in Appendix B.

3. Comprehensiveness Review

3.1 Roles & Responsibilities

This section shows the regulatory expectation for each area as referenced in the code, and a brief summary of LADWP's response in the WFM plan.

PUC Section 8387
(A) An accounting of the responsibilities of persons responsible for executing the plan,

Section 2 of the WMP describes responsibilities of LADWP's organizational entities during normal and emergency conditions, maintenance and inspection, regulatory compliance, communication with firefighting agencies, and the role of emergency operation center.

3.2 Objectives

PUC Section 8387
(B) The objectives of the wildfire mitigation plan.

In section 1.2 LADWP states the objectives of WMP as follows:

- Ensure public safety by minimizing sources of ignition
- Improve resiliency of the grid
- Maximize efficiency and improve programs and protocols

3.3 Preventative Strategies

PUC Section 8387
(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.

LADWP's mitigation strategies can be summarized as the following:

- Construction and design standards
- Improved vegetation management
- Provision of high wind and fire area maps
- Inspection and Maintenance and Power System Reliability Program (PSRP)
- Workforce training and operation protocols

3.3.1 Design, Construction Standards, and Infrastructure

WMP section 4.2 indicates that LADWP has increased its design and construction standard to meet and exceed G.O.95 requirements by implementing a series of grid hardening measures through its Power System Reliability Program (PSRP). However, it is advisable that WMP shows how LADWP keeps track of these upgrades specifically with respect to portions of upgrades that are within LADWP assets in its high fire threat areas.

In addition, several other utilities are describing in their WMPs new technologies in fire mitigation that they have evaluated or deployed. It would be beneficial to present to the Wildfire Advisory Board technologies that LADWP has evaluated but not deployed due to other reasons, such as limited benefit or prohibitive costs.

3.3.2 Power System Reliability Program (PSRP)

It is worth noting that Section 4.5 of the WMP clearly indicates LADWP metrics on replaced poles, cross-arms, and transformer and conductors as part of its PSRP program. The WMP shows the future PSRP investment on its entire network; however, a description of how much of this program's backlog and ramp up investment is related to HFTDs would be beneficial to the Wildfire Advisory Board.

3.4 Metrics

PUC Section 8387
(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.
(E) A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.

To measure WMP performance LADWP describes tracking and monitoring criteria in section 7.1. It should be noted that since this is LADWP's first WMP, previous metrics were not available. However, as stipulated in section 7.2, LADWP plans to establish a robust data collection history to improve its WMP over time.

3.5 Blocking Reclosers

PUC Section 8387
(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.

In Section 4.7 LADWP identifies its OEM group as the responsible entity for communications and providing notices to the Energy Control Center (ECC), who is responsible for blocking reclosers in tier 2 and tier 3 HFTDs.

In this section LADWP states that all 4.8kV distribution reclosers will be blocked in Tier 3 HFTDs, either remotely or by field personnel. 34.5kv reclosers will be blocked based on the nature of the incident and prevailing conditions, while considering the possible negative impacts of service interruptions to its customers. Although LADWP blocks its reclosers during red flag warning conditions as a preventive measure, it is recommended that the WMP should provide more details on the operational procedure and practicality of dispatching personnel. Additionally, it is advisable that the WMP clarifies whether or not there are any plans for sectionalizer deployments that will provide a more granular control on the network and will help minimize impacts of widespread outages during recloser block events, similar to the efforts of other major utilities in California.

3.6 Communication and Enterprise-wide Safety Risk

PUC Section 8387
(G) Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall direct notification to all public safety offices, critical first responders, health care facilities, and operators of telecommunications infrastructure with premises within the footprint of potential de-energization for a given event.

In sections 4.6 and 4.7, the WMP describes LADWP's internal and external communication plans, employee training plans, including wildfire prevention measures, as well as operating protocols during red flag warning conditions.

LADWP is a member of the CUEA, which coordinates with operators of telecommunication infrastructure and other utilities during emergencies. LADWP also participates in the WRMAG's Western Region Mutual Assistance Agreement, which covers Western utilities.

3.6.1 Public Safety Impact and Customer Notifications

Given LADWP's incident-based de-energization approach, section 4.7 describes LADWP's communication plan with public agencies, internal parties and customers during outages. LADWP employs a website and text message notification system to communicate outages to its customer base. This section of the WMP also describes power system communications tools used by LADWP. It is, however, advisable that LADWP clarify its procedures for notifying operators of telecom companies.

3.6.2 Workforce Training

According to section 4.6, LADWP has a series of training activities for employees involved with the implementation of the WMP. These training modules include tabletop drills as well as hands-on exercises in the field.

3.6.3 Operating Protocols

Under section 4.7 LADWP indicates the vegetation clearing, working protocols and equipment to be carried by its personnel during normal conditions and deployed to prevent sparks. This section also elaborates on such protocols during red flag events.

In addition, section 4.7 describes sources used by Office of Emergency Management (OEM) group for weather condition monitoring and LADWP's collaboration with local fire departments.

3.7 Vegetation Management

PUC Section 8387
(H) Plans for vegetation management.

Section 4.3 of the WMP elaborates on the vegetation management program that LADWP conducts, including its 12-month inspection cycles with extra half cycle inspections for HFTD to maintain G.O. 95 clearances. This is considered an industry best practice and is achieved by LADWP given the limited assets in HFTDs.

3.8 Inspection and Maintenance

PUC Section 8387
(I) Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.

Although section 4.4 of WMP provides details on LADWP's regular inspection and maintenance programs, it is recommended that the WMP also include metrics documenting LADWP's efforts to demonstrate what percent of its asset base within high fire threat maps and HFTDs tiers 2 and 3 are flagged and addressed through its inspection and maintenance programs. Additionally, if current or future LADWP inspection and maintenance practices include enhanced programs such as drone inspections, similar to those of other major utilities in California, it is advisable that WMP elaborate on details of such plans and/or programs or look into these practices at other major utilities to understand their benefits in reducing risk of downed power lines.

3.9 Wildfire Risks & Risk Drivers

PUC Section 8387
(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.
PUC Section 8387
(L) A methodology for identifying and presenting enterprise-wide safety risk and wildfire-related risk.

Section 3 of WMP is dedicated to Wildfire Risks and Risk Drivers and it is further broken down as follows:

- Wildfire risks and risk drivers associated with topographic and climatological risk factors
- CPUC designated fire threat districts
- Wildfire risks and risk drivers associated with design, construction, operation, and maintenance
- LADWP Risk Assessment

3.9.1 Wildfire risks and risk drivers associated with topographic and climatological risk factors

In section 3.1 WMP identifies the main factors that LADWP considers during its vegetation management and inspection programs. Those factors are:

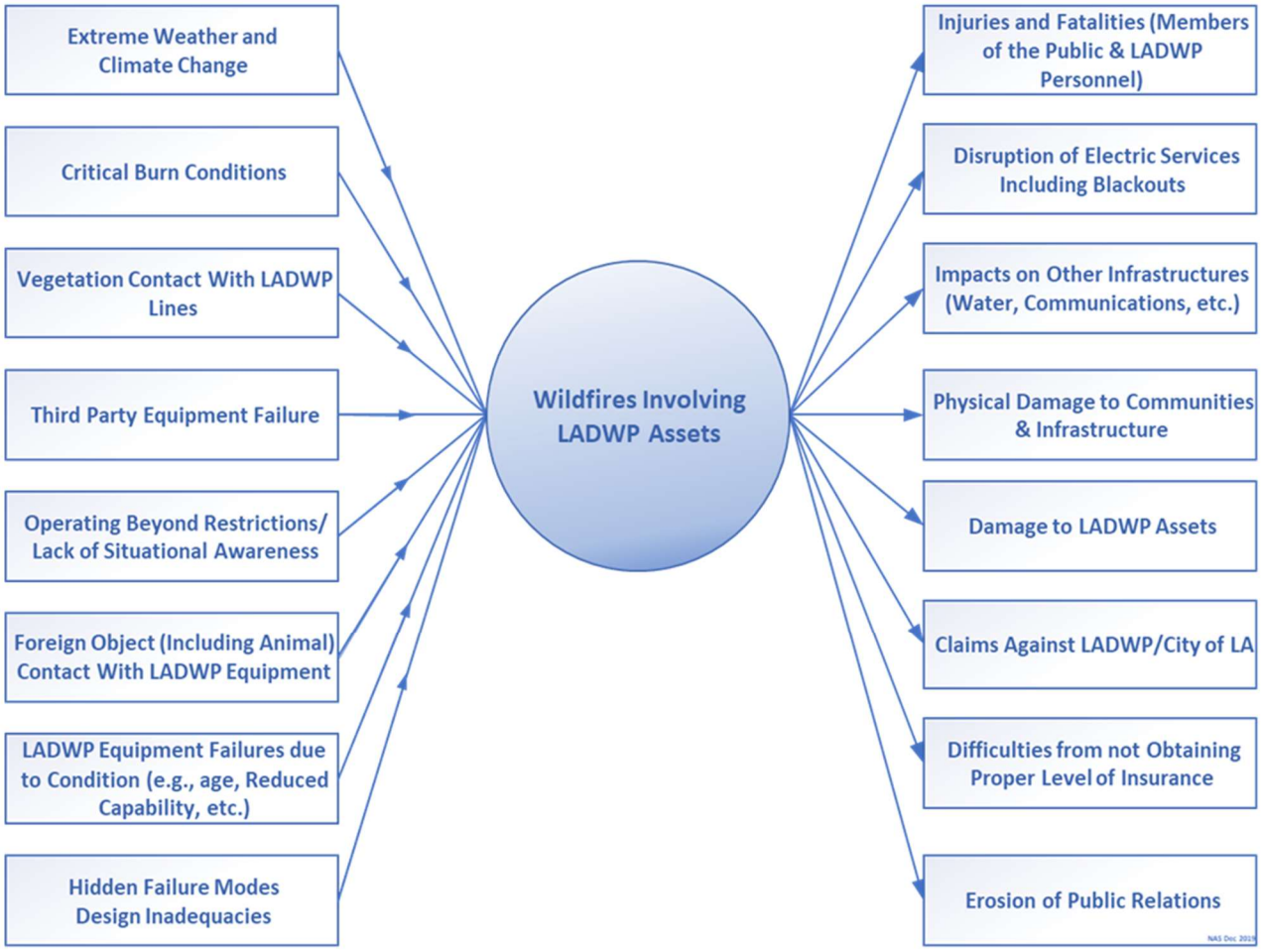
- The terrain and the accessibility for first responders to react to an incident
- Vegetation type and density
- Extended drought conditions
- Current weather conditions
- Changing weather patterns (climate change)

3.9.2 Wildfire risks and risk drivers associated with design, construction, operation, and maintenance

LADWP outlines risk drivers, mitigations as well as measures and programs in place in section 3.3 of the WMP. As an electric utility company consisting of generation, transmission and distribution assets, the LADWP system has a variety of ignition sources similar to those of IOUs with similar asset classes. One major difference for LADWP compared to the large IOUs in the State is that its service territory is predominantly urban, with a smaller portion of facilities traversing higher risk areas as compared to the IOUs. Nonetheless, it is suggested that LADWP examine some of the common risk drivers in Figure 1 and how LADWP's WMP addresses these risks.

Although LADWP has identified risk drivers and outlined associated mitigation plans, it is advisable to include impacts of each risk on LADWP to demonstrate how WMP mitigation strategies help to minimize these impacts on LADWP and its customers. To that end, a risk bowtie such as the following could help tie identified risks with drivers and impacts more clearly. This is a more comprehensive list to suggest possible risk drivers to consider.

Figure 1: Recommended Risk Bowtie



3.9.3 LADWP Risk Assessment

Section 3.4 provides data on how much of LADWP's asset base is distributed between the LAFD Fire Zone and CPUC Tier 2 and Tier 3. This help to establish baseline metrics for the number of assets within high fire risk areas.

3.10 CPUC Designated Fire Threat Districts

PUC Section 8387
(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.

In Section 4.1 the WMP highlights LADWP's approach to developing fire threat area maps and updated construction standards as a basis for fire prevention strategies. As a municipal utility with a mostly urban customer base located primarily within the Coastal, L.A. Basin and San Fernando Valley communities of Los Angles, LADWP' has limited exposure to vegetation fuel sources, and consequently Tier 2 and Tier 3 High Fire Threat Districts (HFTD) when compared to investor-owned utilities, such as Pacific Gas & Electric (PG&E) and Southern California Edison (SCE). However, its WMP shows that except for the Owens Valley service territory and its bulk transmission system, LADWP has conservatively considered City of Los Angeles Very High Fire Hazard Severity Zone (LAFD Fire Zone) in addition to CPUC HFTD tier 2 and tier 3 maps to create its own unique fire threat area map for its Los Angeles service territory.

Figure 2. LADWP Fire Threat Area Map (City of Los Angeles Service Territory)

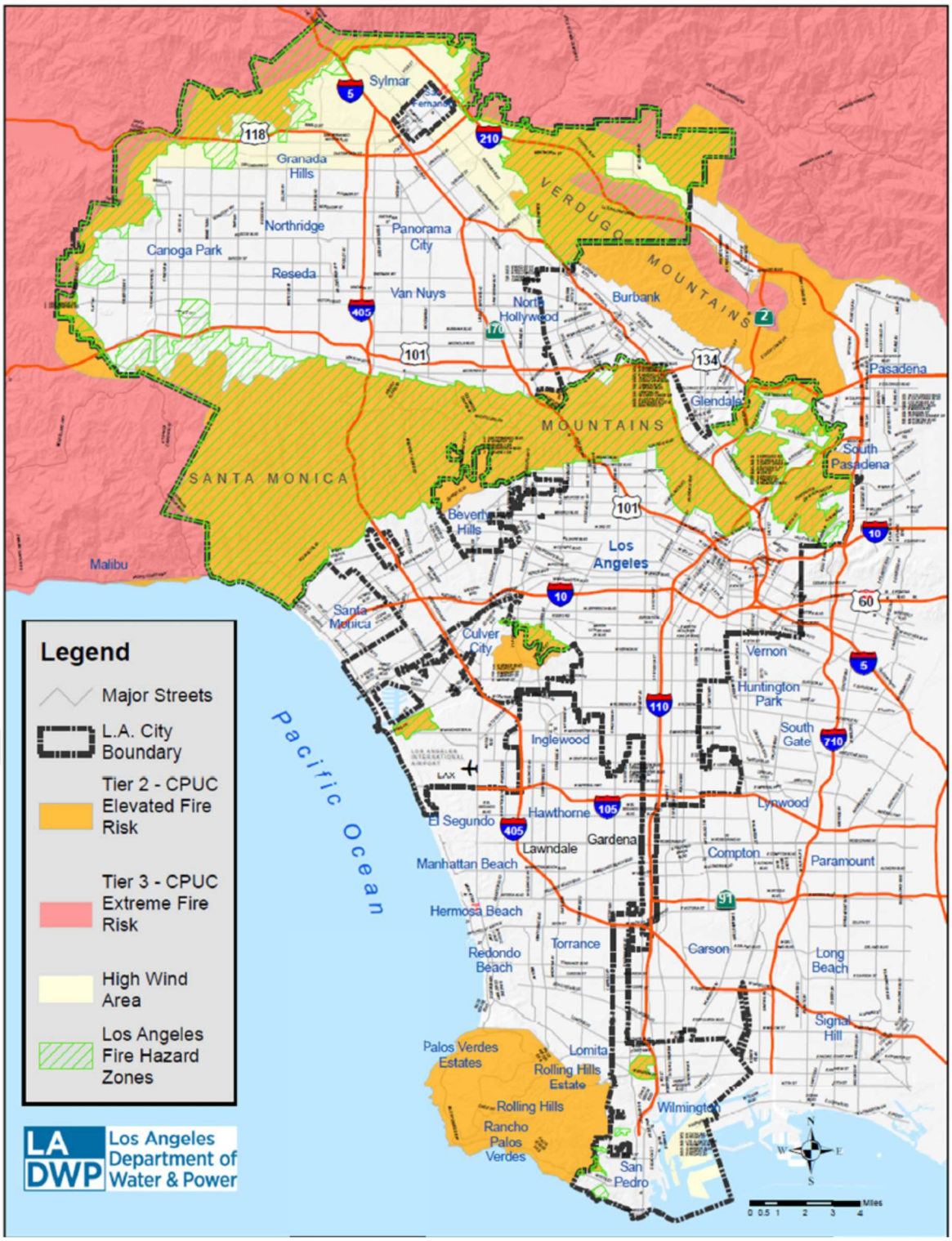


Figure 3. LADWP Fire Threat Area Map (Owens Valley Service Territory)

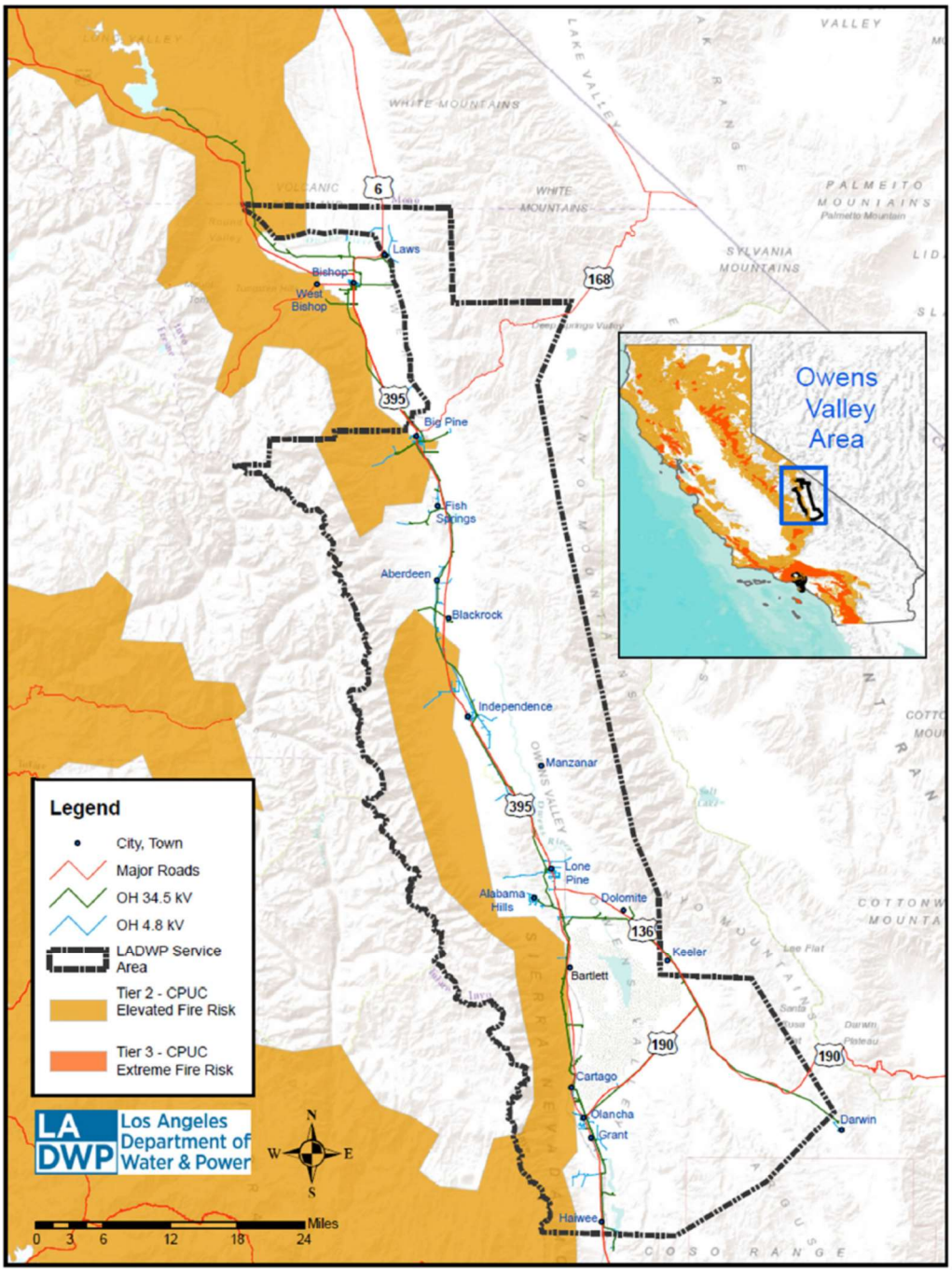
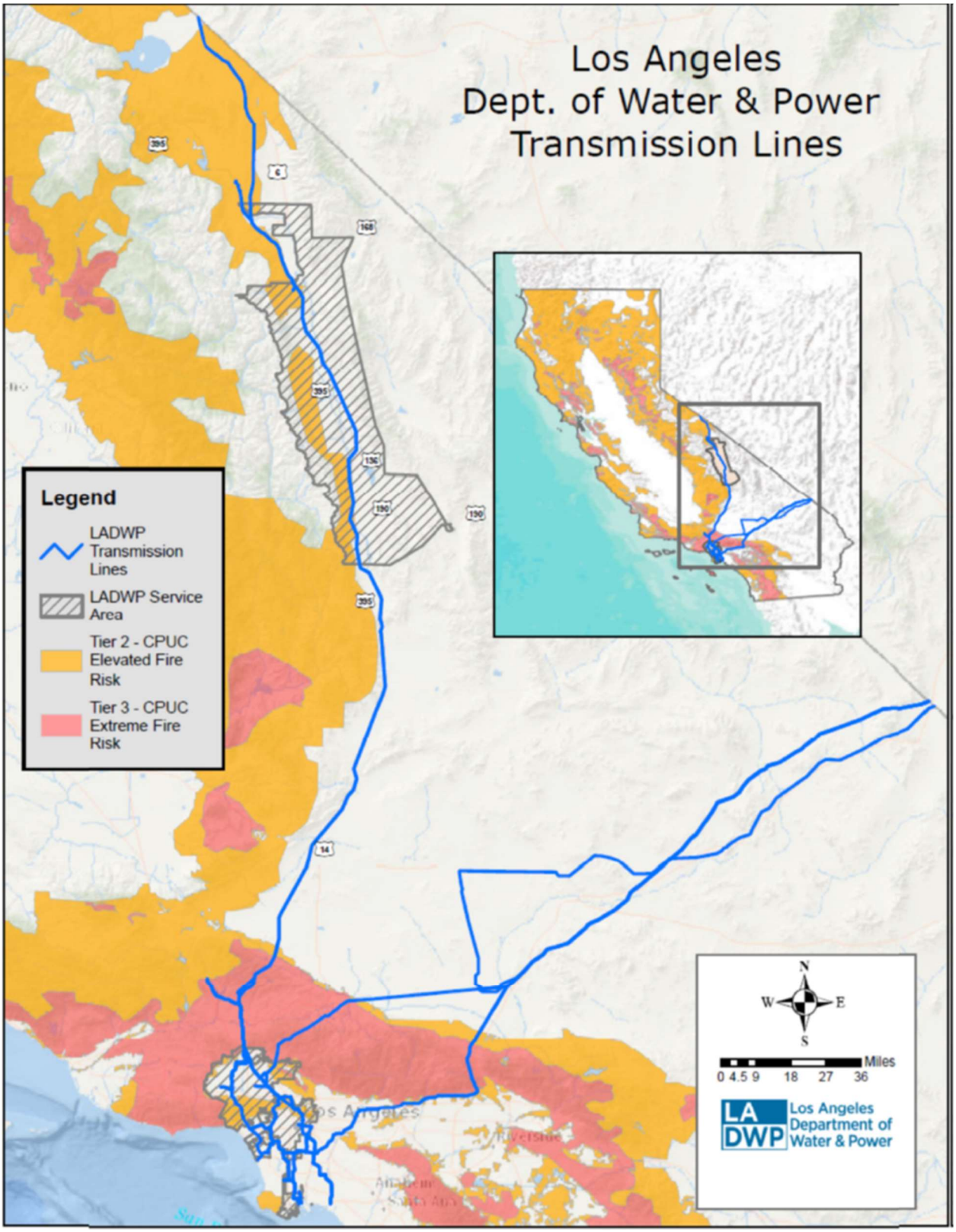


Figure 4. LADWP Fire Threat Area Map (Bulk Transmission System)



LADWP's approach to combine LAFD fire zone map and CPUC's Tier 2 & Tier 3 maps for its Los Angeles service area, in addition to acknowledging risks associated with transmission lines traversing Tier 2 & Tier 3 into Los Angeles and including those assets in its wildfire mitigation strategies demonstrates that LADWP has committed to wildfire risk mitigation beyond the State's high fire threat districts (HFTD) within its service territory.

3.11 Restoration of Service

PUC Section 8387
(M) A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.

Section 5 of the WMP elaborates LADWP statements with respect to restoration of service. It is, however, advisable that LADWP further expand this section to outline its step by step approach to restoration of service.

3.12 Monitoring and Auditing of WMP

PUC Section 8387
(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.

In section 7.3 & 7.4, LADWP commits to annual review and updates of the plan with comprehensive updates every three (3) years, in addition to the organization-wide approach to monitor, review and address WMP's deficiencies.

4. Results

4.1 Conclusion and Recommendations

Upon reviewing the WMP, the consultant team finds that LADWP's wildfire mitigation conforms to all the provisions of PUC 8387.

For future revisions of the wildfire mitigation plan, LADWP should consider the following enhancements:

- Provide greater detail of risk identification and potential consequences, risk drivers, and prioritization.
- Develop specific wildfire metrics, tied to wildfire incidents (ignitions caused by LADWP equipment), including smaller and moderate incidents which could be precursors of risk of larger events; include root-cause analysis and lessons learned.
- Prioritize and track mitigation actions from these lessons learned above; use the metrics, lessons learned, and mitigation tracking to demonstrate in future updates how the WMP is informed by historical wildfire performance.
- Provide greater specificity in roles and responsibilities, including actions, assignments, and targets to address risks; ensure the plan is actionable with clear accountabilities.
- Provide greater specificity describing technologies (equipment, vegetation management, or inspection/maintenance) that may be implemented to further reduce the risk of wildfires.
- Provide more detail on protocols for disabling reclosers and deenergizing circuits.
- Address transmission assets including: PDCI, IPPDC, and Victorville-Century; address substation and generation assets.
- Document links between identified assets and LADWP's ongoing investment and mitigation efforts such as inspections, maintenance, grid hardening and resiliency in a more detailed manner in order to establish a basis for regular status update submittals to the California Wildfire Advisory Board.
- Track maintenance work orders related to wildfire risk management in Tier 2 and 3 zones; demonstrate continuous reduction of maintenance backlogs related to high priority wildfire risk mitigation actions.
- Consider other major utilities' practices in using new technologies such as LiDAR for vegetation management, unmanned aerial vehicles (drones) for inspections, as well deployment of

sectionalizers at distribution network levels to provide more granular control of the distribution network during red flag conditions and minimize the impact of widespread outages during red flag events.

Other recommendations referenced in the body of the report include:

- Show how LADWP keeps track of facility upgrades and investments, specifically with respect to portions of upgrades that are within LADWP assets in its high fire threat areas.
- Present to the Wildfire Advisory Board technologies that LADWP has evaluated but not deployed due to other reasons, such as limited benefit or prohibitive costs.
- Explain how the PSRP investments listed in the WMP are related to HFTDs would be beneficial to the Wildfire Advisory Board.
- Continue wildfire incident data collection for cause analysis and build a history of data that can be used to improve the WMP over time.
- The WMP should provide more details on the operating procedures and practicality of dispatching personnel for recloser blocking.
- Clarify whether there are any plans for sectionalizer deployments that will provide a more granular control on the network and will help minimize impacts of widespread outages during recloser block events, similar to the efforts of other major utilities in California.
- Although section 4.4 of WMP provides details on LADWP's regular inspection and maintenance programs, the WMP should also be more specific on what percent of its assets within high fire threat maps and HFTDs tiers 2 and 3 are flagged and addressed through its inspection and maintenance programs.
- If current or future LADWP inspection and maintenance practices include enhanced programs such as drone inspections, similar to those of other major utilities in California, it is advisable that WMP elaborate on details of such plans.
- Although LADWP has identified risk drivers and outlined associated mitigation plans, it is advisable to include estimated impacts of each risk - such as financial and operational - on LADWP to quantify how WMP mitigation strategies help to minimize these impacts. To that end, a risk bowtie such as such as that in Figure 1 could help tie in identified risks with drivers and impacts more clearly.
- LADWP should further expand Section 5 to outline in greater detail its plans to restore service.

Appendix A: Statuary Compliance Review

The Siemens/Advisian consulting team reviewed LADWP's WMP's elements based on PU 8387 and results are as follows:

PUC 8387 Requirement	LADWP WMP Reference	WMP Key Elements	IE Compliance Determination
(a) Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment.	N/A		Outside plan review scope
(b)(1) The local publicly owned electric utility or electrical cooperative shall, before January 1, 2020, prepare a wildfire mitigation plan. After January 1, 2020, a local publicly owned electric utility or electrical cooperative shall prepare a wildfire mitigation plan annually and shall submit the plan to the California Wildfire Safety Advisory Board on or before July 1 of that calendar year. Each local publicly owned electric utility and electrical cooperative shall update its plan annually and submit the update to the California Wildfire Safety Advisory Board by July 1 of each year. At least once every three years, the submission shall be a comprehensive revision of the plan.	N/A	• Public meeting on December 10. 2019 • Expected submission before July 1, 2020	Yes
(2) The wildfire mitigation plan shall consider as necessary, at minimum, all of the following:			Yes
(b)(2)(A) An accounting of the responsibilities of persons responsible for executing the plan.	Sections 2.1 - 2.13	• Roles and responsibilities presented from GM down to execution personnel	Yes
(b)(2)(B) The objectives of the wildfire mitigation plan.	Section 1.2	• Ensure public safety by minimizing sources of ignition • Improve resiliency of the grid • Maximize efficiency and improve programs and protocols	Yes
(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.	Sections 4.1 - 4.7	• High Fire Threat idenification, standards, VM, Inspection & Maintenance, PSRP, Training, Operation Protocols	Yes
(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	• Metrics for equipment, location, causes, maintenance times, dispatch times, threat identification, repair status	Yes
(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.	N/A	• N/A as this is the 1st revision of WMP	Yes

PUC 8387 Requirement	LADWP WMP Reference	WMP Key Elements	IE Compliance Determination
(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 4.7; BLOCKING RECLOSERS	• ECC will block reclosers in Tier 3 HFTDs either remotely or by dispatching personnel	Yes
(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 4.7; IMPACTS TO PUBLIC SAFETY	• List of stakeholders identified	Yes
(b)(2)(H) Plans for vegetation management.	Section 4.3		Yes
(b)(2)(I) Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Section 4.4	• Patrol inspections, detailed inspections, pole inspections, and infrared inspections	Yes
(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:	N/A		Yes
(b)(2)(J)(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.	Section 3.3		Yes
(b)(2)(J)(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 3.1		Yes
(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 3.4; Appendix A	N/A	Yes
(b)(2)(L) A methodology for identifying and presenting enterprisewide safety risk and wildfire-related risk.	Section 3.4; Appendix A	Map Overlay	YEs
(b)(2)(M) A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	Section 5		Yes
(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:	N/A		Yes
(b)(2)(N)(i) Monitor and audit the implementation of the wildfire mitigation plan.	Section 7.3		Yes
(b)(2)(N)(ii) Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies.	Section 7.3		Yes
(b)(2)(N)(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 7.1		Yes
(b)(3) The local publicly owned electric utility or electrical cooperative shall, on or before January 1, 2020, and not less than annually thereafter, present its wildfire mitigation plan in an appropriately noticed public meeting. The local publicly owned electric utility or electrical cooperative shall accept comments on its wildfire mitigation plan from the public, other local and state agencies, and interested parties, and shall verify that the wildfire mitigation plan complies with all applicable rules, regulations, and standards, as appropriate.	N/A	• LADWP presented the plan on December 10, 2019 to the Board of Commissioners. Public comment was available	Yes
(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 website 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	• Siemens is the independent evaluator (IE) • The IE will issue a report to LADWP to be posted on the website • Siemens will present to the board in Q1/Q2 2020	Yes

Appendix B: Independent Review Consultant Experience

The following is a sample of project experience of Independent Review Consultant:

- PG&E Drone Analysis for Wildfire Mitigation
- PG&E Transmission Tower and Pole Condition Assessment
- San Diego Gas & Electric (SDG&E) FiRM True-up Projects for Wildfire Mitigation
- Los Angeles Department of Water and Power (LADWP) Castaic/Haskell Canyon Transmission Line Construction Engineering, Fire Plan, and Fire Marshal Services
- LADWP Transmission Assessment and Generator Interconnection Studies, including NERC Compliance
- Alliant Energy Analysis and Recommendations for Improving Overhead Lines Lightning Performance and Quality of Supply
- NERC MOD-025, -026 and -027 Compliance Testing for over 50 power plants representing more than 15,300 MVA installed capacity
- AEP Recommendations for Connection and Disconnection of Temporary Grounding Sets to Overhead Lines
- CIGRE Guide for Prevention of Fires Caused by Overhead Lines
- Freeport Electric Analysis of Pipeline Induced Voltages due to the 69 kV underground lines for electromagnetic compatibility, including simulations electric line operation under steady-state and short-circuit conditions
- CIP-014-1 Dynamics Study Support and Training – Lincoln Electric System
- KEPCO Customized Course on OHTL for Maintenance Engineers including, Asset Management of overhead line components (Degradation Mode, Failure Mode, Inspection, Condition Assessment, Maintenance Actions); Lightning performance improvement; Conductor vibration; Corrosion of line components; Dynamic thermal rating monitoring systems; Overhead line uprating & upgrading; Overview on live-line maintenance; Vegetation management; Inspection and Maintenance Plans
- Australia Victoria Province Wildfire Risk Mitigation - 10 years' experience working with Victoria Brushfires Royal Commission, field testing and metrics development
- Construction engineering support for LADWP, including quality assurance and quality control (QA/QC), a fire plan, and fire marshal services for new construction related to the 230kV circuit transmission line from Castaic Power Plant to Haskell Canyon Switching Station.