[FINAL]

Eldorado – Lugo – Mohave Series Capacitor Project

Fire Management Plan

Prepared for

Southern California Edison

2244 Walnut Grove Avenue
Rosemead, CA 91770

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Prepared By
Fire Pro Solutions LLC/BETA Engineering

Applicable agencies
California Public Utilities Commission
San Bernardino County Fire Department
Bureau of Land Management
National Park Service
CAL FIRE

CONTENTS

TABLES

Acronyms and Abbreviations

Beta	Beta Engineering
BLM	Bureau of Land Management
CAISO	California Independent System Operator
CAL FIRE	California Department of Forestry & Fire Protection
CEQA	California Environmental Quality Act
CPS	Critical Protection Site
CPUC	California Public Utilities Commission
ELM	Eldorado-Lugo-Mohave Series Capacitor Project
EMS	Emergency medical services
FM	Fire Marshal
ICS	
kV	kilovolt
MM	Mitigation Measure
mph	Miles per hour
NDF	Nevada Division of Forestry
NEPA	National Environmental Policy Act
NPS	National Park Service
OPGW	Optical ground wire
Plan	Fire Management Plan
RFW	Red Flag Warning
ROW	Rights-of-way
SBCFD	San Bernardino County Fire Department
SCE	Southern California Edison
TSP	Tubular steel pole

1 Introduction

Southern California Edison (SCE) is proposing to construct two new mid-line series capacitors and other improvements to increase capacity and power flow along three existing 500-kilovolt (kV) transmission lines under the Eldorado-Lugo-Mohave Series Capacitor Project (ELM Project). This Project Fire Management Plan (Plan) has been prepared to satisfy California Environmental Quality Act (CEQA) Mitigation Measure (MM) WF-1 and National Environmental Policy Act (NEPA) MM HM-7.

MM WF-1 and MM HM-7 require SCE to prepare and implement a Fire Management Plan for the ELM Project. This plan has been prepared to satisfy both the CEQA and NEPA measures and will be implemented project-wide. The measures require that potentially significant wildland fire impacts associated with the ELM Project be reduced to less than significant. Implementation of MM WF-1 and MM HM-7 also require that appropriate fire prevention and protection tools and equipment be maintained and implemented onsite.

A qualified project Fire Marshal (FM) or person of similar title and fire experience will be established by the Contractor to implement and enforce all provisions of the approved Fire Management Plan as well as perform other duties related to fire detection, prevention, and suppression for the project. The FM will monitor construction activities to ensure implementation and effectiveness of the plan.

Plan reviewers will include CPUC, BLM, California Department of Forestry & Fire Protection (CAL FIRE), and San Bernardino County. CPUC shall review and approve the final Plan, which shall be provided to the Plan reviewing agencies at least 30 days prior to the initiation of construction activities. Each responsible fire agency will have at least 90 days before the start of construction activities in areas designated as Very High or High Fire Hazard Severity Zones with a request for comments. The Beta Engineering (Beta) FM will meet with the responsible fire agencies in person to complete this process. SCE/Beta and all Contractors, acting on behalf of SCE or Beta, will adopt this Plan. This Plan will ensure compliance with all local, state and federal regulations and provides the fire prevention objectives and strategies for the ELM Project.

A list of Fire Management Definitions for this Plan are included in Appendix A.

2 Project Overview

The ELM Project is located in San Bernardino County, California and Clark County, Nevada and includes activities on private, state, and federal lands (Appendix B). With installation of the new series capacitors and additional work at the substations, the ELM Project would provide for an operating capacity or entitlement increase. The Proposed Project would not increase the nominal voltage of the three 500 kV transmission lines. The ELM Project will provide the following:

- Meet the target in-service date of June 2022 in an effort to support the requirements as outlined and required by the California Renewables Portfolio Standard (RPS) 3 including 33 percent by 2020 and the increased requirement of 60 percent by 2030 Ensure compliance with California Public Utilities Commission (CPUC) General Order 95 and the National Electrical Safety Code.
- Continue to provide safe and reliable electrical service.
- Maintain system reliability within the Los Angeles Basin as well as the entire California Independent System Operator (CAISO) grid, which is defined as the Electrical Needs Area (ENA).

- Increase power flow through the existing Eldorado-Lugo, Eldorado- Mohave and Lugo-Mohave 500 kV Transmission Lines for the purpose of increasing the amount of power delivered from California, Nevada, and Arizona to the ENA5 through the SCE system in an effort to meet requirements associated with the California RPS6.
- Reduce SCE's current flow into the LADWP transmission system for the purpose of mitigating power flow overloads under abnormal system conditions.
- Ensure compliance with all applicable reliability planning criteria required by the North American Electric Reliability Corporation, Western Electricity Coordinating Council, and CAISO.
- Integrate planned generation resources in order for those facilities to become fully deliverable.
- Meet the requirements of existing Interconnection Agreements that require the Proposed Project to achieve full capacity deliverability status for generation facilities.
- Meet Proposed Project needs while minimizing environmental impacts.
- Design and construct the Proposed Project in conformance with SCE's approved engineering, design, and construction standards for substation, transmission, sub transmission, and distribution system projects.

3 Lead and Consulting Agencies

3.1 Lead Agencies

Lead agencies have discretionary approval over the Project and are responsible for reviewing aspects of the measures documented in this Plan. The CPUC is California's lead agency responsible for compliance with CEQ for Project areas on non-federal lands. The CPUC issued an Initial Study/Mitigated Negative Declaration for the Project under CEQA. The Bureau of Land Management (BLM) Desert District Office is the federal lead agency responsible for compliance with NEPA for the Project areas on federal lands.

3.2 Cooperating Agencies

Because the Project also crosses the Mojave National Preserve, the National Park Service (NPS) elected to participate as a cooperating agency for the environmental review of the Project. Although the existing transmission lines associated with the Project also cross lands administered by the Bureau of Reclamation and the Department of Defense, the NPS represents the only federal cooperating agency at this time.

3.3 Consulting Agencies

Consulting agencies are public agencies, other than the lead agencies, that may provide guidance or information needed to satisfy the requirements of the measures contained in this Plan. Consulting agencies for select mitigation measures listed in Table 1 include CAL FIRE and San Bernardino County Fire Department (SBCFD).

4 Mitigation Measures

This Plan addresses specific mitigation measures as defined in the Final Mitigated Negative Declaration (Application No. A.1805007) and Environmental Assessment (DOI-BLM-CA-2020-0010-EA) (BLM 2020).

The following measures are the impetus of this Plan:

Table 1 Mitigation Measures and/or Conservation Measures Addressed

Measure	Description
MM WF-1 (CPUC)	**Prepare and implement a Fire Management Plan.** A project-specific **Fire Management Plan** for construction of the ELM project shall be prepared by SCE and submitted for review and approval by the CPUC prior to initiation of construction. The draft copy of the Plan must also be provided to each responsible fire agency at least 90 days before the start of construction activities in areas designated as Very High or High Fire Hazard Severity Zones with a request for comments on the Plan's adequacy within 30 days. Plan reviewers shall include CPUC, BLM, CAL FIRE, and San Bernardino County. Comments received on the draft Plan shall be provided to SCE from all other reviewers, and SCE shall resolve each comment in consultation with the commenting agency. CPUC shall approve the final Plan, which shall be provided to the Plan reviewing agencies at least 30 days prior to the initiation of construction activities in the Fire Hazard Severity Zones. SCE shall fully implement the Plan during all construction activities. A qualified project Fire Marshal or person of similar title and experience shall be established by SCE to implement and enforce all provisions of the approved Fire Management Plan as well as perform other duties related to fire detection, prevention, and suppression for the project. The Fire Marshal shall monitor construction activities to ensure implementation and effectiveness of the plan. The Plan shall cover: • The purpose and applicability of the plan; • Responsibilities and duties; • Preparedness training and drills; • Procedures for fire reporting, response, and prevention that include: – identification of daily site-specific risk conditions, – the appropriate tools and equipment needed on vehicles and to be on hand at sites, – reiteration of fire prevention and safety considerations during tailboard meetings, and – daily monitoring of the red-flag warning system with appropriate restrictions on types and levels of permissible activity; • Coordination procedures with BLM and San Bernardino County fire officials; • Crew training, including fire safety practices and restrictions; and • Methods for verification that Plan protocols and requirements are being followed.
MM HM-7 (BLM)	A Fire Management Plan shall be prepared and implemented.

5 Applicable Activities and Project Areas and Timing

5.1 Applicable Activities and Project Areas

This Project will increase capacity and power flow between SCE's existing Eldorado, Lugo, and Mohave Substations to safely deliver renewable power to the Los Angeles Basin from the Eldorado and Mohave Substations. The Project includes the following main components:

- Construct 2 new 500 kV mid-line series capacitors (i.e., the proposed Newberry Springs Series Capacitor and Ludlow Series Capacitor) and associated equipment.
- Provide 2 communication paths between the mid-line series capacitor sites:
    - Install approximately 2 miles of overhead and 700 feet of underground telecommunications facilities as one path to connect the proposed series capacitors to SCE's existing communication system.
    - Install approximately 2 miles of underground telecommunications facilities as a second communication path to connect the proposed series capacitors to SCE's existing communication system.
- Provide station light and power to the proposed series capacitors by extending and/or rerouting existing lines to create approximately 2 miles of overhead and 700 feet of underground 12 kV distribution circuits. (The new distribution poles would support overhead telecommunication facilities as well as the electric distribution lines.)
- Construct 3 new fiber optic repeater facilities (Barstow, Kelbaker, and Lanfair) within the Lugo-Mohave right-of-way (ROW).
- Install distribution lines for light and power at the 3 proposed fiber optic repeater sites.
- Install underground telecommunications facilities from existing transmission structures to the Barstow, Kelbaker, and Lanfair fiber optic repeater sites.
- Address 16 potential overhead clearance discrepancies at 14 locations by:
    - Relocating, replacing, or modifying existing transmission, subtransmission, and distribution facilities at approximately 12 locations along the Eldorado-Lugo, Eldorado-Mohave, and Lugo-Mohave 500 kV transmission lines to address 14 of the overhead clearance discrepancies. Tower modifications would include raising 9 towers up to approximately 18.5 feet by inserting new lattice-steel sections in tower bodies.
    - Performing minor grading at 2 locations along the Lugo-Mohave 500 kV transmission line to address 2 of the overhead clearance discrepancies.
- Install approximately 232 miles of optical ground wire (OPGW) (approximately 59 miles on the Eldorado-Mohave transmission line and approximately 173 miles on the Lugo-Mohave transmission line and approximately 3 miles of underground telecommunications facilities in the vicinity of the Mohave Substation).
- Modify and strengthen the ground wire peak of existing suspension towers where OPGW splices would occur. (Some of these towers would also require minor modifications to the steel in the tower body.)

- Install approximately 2,000 feet of underground telecommunications facilities within the existing Lugo, Mohave, and Eldorado substations.
- Within Lugo Substation, perform modifications on the existing series capacitors and install new terminating equipment and remove 2 existing tubular steel poles (TSP) and install 2 new TSPs on the Eldorado-Lugo and Lugo-Mohave 500 kV transmission lines.
- Within the Eldorado Substation, perform modifications on the existing series capacitors and upgrade the terminal equipment on the Eldorado-Lugo 500 kV transmission line.
- Within the Mohave Substation, replace existing series capacitors on the Lugo-Mohave 500 kV transmission line and install new terminal equipment on the Eldorado-Mohave and Lugo-Mohave 500 kV transmission lines.
- Install (if necessary) cathodic protection on approximately 60 miles of SoCalGas's natural gas pipelines parallel to SCE's Lugo-Mohave 500 kV transmission line and on other pipelines as needed.

This Plan is applicable to all project activities.

5.2 Timing

The measures and activities described in this Plan are to be followed and implemented throughout the duration of SCE ELM Project activities. The anticipated start date for the project is November 2020 and is expected to be energized in June 2022. ELM Project activities will be ongoing through these dates.

6 Fire Prevention Personnel and Responsibilities

Construction personnel will be designated to fill the following positions and perform the activities described in the following sections. All construction personnel are empowered and authorized to stop construction activities to prevent fire hazards. All project Foremen and designated individuals will act as site-specific fire personnel monitoring, overseeing and providing status of the day-to-day weather and fire watch conditions on-site. Furthermore, the project Superintendent, General Foreman, and project Safety Manager will provide oversight of all construction activities and monitor potential fire danger activities for the project.

6.1 Fire Marshal

- Oversees the entire project for fires and emergencies, and is responsible for fire prevention, fire safety, and identification of fire hazards.
- Responsible and accountable for fire prevention, risk management, early detection of fires, rapid extinguishment and emergency medical services (EMS).
- Accomplishes *co-laterally* with other work duties but must be ready to respond with appropriate fire equipment for fire suppression.
- Ensures compliance with the applicable mitigation measures.
- Creates and distributes Fire and Safety Management Cards to all working personnel (Appendix C).

- Monitors National Weather Service forecasts and conditions and provides daily fire weather conditions to field management personnel via email each morning, which is then provided to all crews and personnel at the morning tailboard briefings. In addition, daily fire weather conditions will be included on Task of the Day (TOD) email notifications.
- Develops Fire Evacuation Plans (Appendix D).
- Coordinates with local fire agencies as needed (Appendix E).
- Designates, oversees, and delegates responsibilities to all fire personnel.
- Oversees assigned ELM Project fire personnel and equipment, including vehicle patrols, water tenders, etc.
- Oversees the prevention, detection, and extinguishing of fires to the extent that it is safe to do as a result of construction activity.
- Reviews the Fire Management Plan with the Safety Manager, Construction Site Managers and construction workers prior to starting work at each project area, and provides daily updates regarding fire danger level in the project areas to crews at tailboard briefings, via text and email.
- Ensures that all construction personnel are trained in situational awareness and fire safety measures relevant to their responsibilities. At a minimum, construction personnel will be able and equipped to extinguish small fires when it is safe to do so.
- Monitors that construction personnel are equipped with communication devices such as radio, satellite, or cell phone communication capability.
- Maintains an updated daily project personnel and visitor roster for accountability (Appendix F).
- Monitors construction activities to ensure implementation and effectiveness of this plan.

6.2 Safety Manager

- Assists the FM with implementation of the Fire Management Plan
- Coordinates with the FM to address potential fire hazards and implement fire hazard controls
- Conducts safety orientation and training
- Assures all required personnel complete the FM's power point fire safety training for fire safe storage, use, and handling of flammable materials, the use of firefighting equipment, and the requirements of this Fire Management Plan
- Logs all training completed (Appendix G)
- Ensures compliance with project safety plans, manages project safety incidents
- Coordinates project safety meetings
- Conducts field/facility investigations and communicates incidents and injuries with Project Management

6.3 Fire Patrol

- Monitors between active tower and series capacitor construction sites along the ROW, outside of active substations cleared of vegetation
- Maintains and operates a fire patrol vehicle equipped with a full 150 gallon water or foam tank and firefighting equipment
- Conducts risk management along the ROW
- Detects and suppresses incipient fires
- Provide EMS

6.4 Construction Site Managers

- Ensure that fire extinguishing equipment is kept at least 25 feet from flammable vegetation and/or that appropriate fire protection measures (e.g., watering of area, fire blankets, etc.) will be employed in the event the minimum buffer is infeasible
- Ensure flammable material storage areas are properly maintained
- Ensure that employees follow smoking rules and postings
- Ensure employees evacuate from assigned areas during a fire

6.5 Construction Site Foremen

- Complete the Daily Fire Analysis form in (Appendix H) when working outside of existing facilities cleared of flammable vegetation and ensure compliance with the FM
- Conduct daily tailboard briefings and document daily (Appendix G)
- Provide a head count to FM/Construction Site Manager in the event of an emergency evacuation
- Communicate evacuation procedures with crew members

6.6 All Construction Personnel

- Use spark arrestors on all gasoline and diesel equipment
- Report violations of the Plan to FM/Construction Site Manager immediately
- Take reasonable actions to suppress incipient fires, report fires, and comply with this Plan
- Follow requirements of this Plan
- Abide by all rules and signs
- Abide by smoking rules
- Follow evacuation protocols and report to evacuation location

7 Fire Prevention Methods

7.1 Potential Hazards

Fire and explosion hazards can exist in almost any work area. Potential hazards include:

- Improper operation or maintenance of gasoline-powered equipment
- Improper storage or use of flammable liquids
- Smoking in prohibited areas
- Accumulation of trash
- Unauthorized hot work (riveting, welding, flame cutting or other fire or spark-producing operation)
- Sparks from electrical or other equipment
- Vehicle fires

7.2 Fire Hazard Analysis and Control

A Fire Hazard Analysis form (Appendix H) will be completed prior to the start of operations that require the use of open flames, sparking tools, or other direct ignition sources in work areas located outside of existing facilities cleared of flammable vegetation. The assessment form will be used to assess the work site, develop an emergency plan, identify known hazards, and ensure that workers are working in the safest possible environment. It is the responsibility of the individual Construction Site Foreman/FM to complete the form in addition to conducting a Daily Job Briefing.

Fire hazards reporting is the responsibility of all personnel working on the project. Fire hazards will be reported immediately to the FM, or Construction Site Manager. It is the responsibility of the FM or Designee, or Construction Site Manager to implement corrective action of a fire hazard.

7.3 Coordination with Fire Department and Other Agencies

The Beta Fire Marshal is the single point of contact who will coordinate with the Fire Agencies and will provide documentation of notifications in Appendix E of this Plan.

This Plan will be submitted to CPUC, BLM and the Fire Agencies for approval prior to construction.

8 Potential Fire Hazards

8.1 Smoking and Fire Rules

Smoking will not be permitted during Red Flag Warnings (RFW) (Appendix I). Permitted smoking areas will be located in designated areas. FM, Construction Site Managers and Foremen will require and ensure compliance with these rules.

Smoking will be prohibited under the following circumstances:

- No smoking in areas that have vegetation.
- No smoking during operation of light or heavy equipment.

- No smoking within 100 feet of any area in which combustible materials (including fuels, gases, and solvents) are stored.
- No smoking in any project area during an RFW that applies to the Project area.
- No smoking will be permitted in project areas within High or Very High Fire Hazard Severity Zones east of Lugo Substation to the Burlington Northern Santa Fe crossing at M19-T3 (CAL FIRE 2007). The remainder of the Project is located in lands classified as moderate fire hazard severity zones.
- No smoking except in project areas designated by the Fire Agencies.

Smoking will only be allowed in clearly designated project areas meeting the following conditions:

- Designated smoking areas shall be located at least 25 feet from all vegetation.
- An approved smoking materials disposal container shall be provided near the center of the designated smoking area
- The container will be resistant to high wind gusts either by design or an adequate form of securing.
- Smoking must be kept within 5 feet of the container.
- The container will be removed from the construction area and cleaned daily.

The following minimum fire tools shall be located at the smoking container at all times:

- One (1) water backpack
- One (1) fire extinguisher
- One (1) type O shovel (with a minimum 48-inch handle)

Smoking-related debris (e.g., matches, cigarette butts, etc.) observed on the ground in or near the designated smoking area will result in the elimination of the smoking privileges. These rules shall be posted near the smoking container with contact information for the person(s) responsible for periodic removal and service of the disposal container.

8.2 Elimination of Ignition Sources

All nonessential ignition sources must be eliminated where flammable liquids are used or stored. The following is a list of some of the more common potential ignition sources and means that will be implemented to reduce the potential for ignition:

- Welding activities will be confined to cleared areas having a minimum radius of 25 feet as measured from the place of welding. All welding activities will be observed by the FM or the FM's designee, regardless of the location of the welding activity. In the event native habitat is located beyond the 25-foot clear zone, welding screens will be used to prevent sparks from affecting native habitat.
- SCE/Beta shall select a welding site that is free of native combustible material and/or clear the site of such material to minimize the fire hazard. All welding on supporting structures shall be performed during fabrication of the structures at the fabricator's yard, to the extent practicable. If welding occurs in the project area, FM or the FM's designee shall observe the operation, regardless of the location of the welding activity. SCE/Beta will confine welding activity to cleared areas having a minimum radius of 25 feet as measured from place of welding and employ a welding screen when welding in the vicinity of combustible material. A fire patrol vehicle with

water will monitor between active tower and series capacitor construction sites along the ROW, outside of active substations cleared of flammable vegetation.

- All welding rigs shall be equipped with a minimum of one 20 pound or two 10 pound fire extinguishers, and a minimum of five gallons of water in a firefighting apparatus.
- Vehicle idling. Vehicles will not be allowed to idle on dirt roads with dead combustible vegetation under the vehicle.
- Diesel and gasoline internal combustion engines will be equipped with spark arresters that are in good working order and meet applicable regulatory standards. This applies to diesel and gasoline internal combustion engines, both stationary and mobile.

8.3 Dispensing and Storage of Gasoline, Diesel, and Combustible Chemicals

Gasoline, diesel, other fuels, and combustible chemicals will be stored in OSHA/ANSI approved containers, out of the sun and away from other heat sources, in accordance with applicable federal, state and/or local fire codes. Flammable materials will be stored off the ground. Gasoline, diesel, other fuels, and combustible chemicals will be dispensed in compliance with the California Fire Code.

8.4 Vegetation Clearance

Vegetation will be cleared or trimmed within construction work sites. Vegetation clearance at each construction site will be limited to the extent necessary to ensure safe construction while minimizing vegetation impacts when feasible.

8.5 Electric Grounding

Grounding of overhead circuits will be done in accordance with SCE, IEEE standards and Cal OSHA requirements. For towers and TSPs, grounding will be done to the structure. Alternately, and as necessary, a ground-driven rod will be used for grounding.

8.6 Hot Work (Welding and Cutting)

Welding activities will be confined to cleared areas having a minimum radius of 25 feet as measured from the place of welding as possible. Welding activities (including multiple welders) will be observed by the FM or that person's designee in work areas located outside of existing facilities cleared of flammable vegetation. All hot work will include a one hour fire watch after completion of the work by the FM or that person's designee.

SCE/Beta shall select a welding site that is free of native combustible material and/or clear the site of such material to minimize the fire hazard. All welding on supporting structures shall be performed during fabrication of the structures at the fabricator's yard, to the extent practicable. If welding occurs in the project area, the FM or that person's designated fire monitor shall observe the operation in work areas located outside of existing facilities cleared of flammable vegetation. Contractors will confine welding activity to cleared areas having a minimum radius of 25 feet as measured from place of welding.

Welding locations shall be equipped with a minimum of one 20 pound or two 10-pound fire extinguishers, and a minimum of five gallons of water in a firefighting apparatus (water requirement is not applicable to active substations).

8.7 Helicopter Use

Helicopters may be used during operation of the ELM Project. At least one day prior to any helicopter use, the helicopter contractor will contact SCE Air Ops and the Fire Agencies and provide the following information:

- Radio frequencies to be used by the helicopters
- Helicopter identifier data
- Information about the number of helicopters to be used dates of helicopter use, helicopter flight patterns, construction areas where helicopters would be used, and fueling and landing areas

Helicopter use will cease as directed by the Fire Agency representatives in response to fire incidents.

9 Fire Hazard Controls

9.1 Fire Safety Inspections and Housekeeping

The FM will conduct regular fire safety inspections at each of the project areas during construction activities to ensure that proper housekeeping is maintained.

SCE/Beta and their respective construction contractors will maintain all construction areas in an orderly, safe, and clean manner. All oily rags and used oil filters will be removed from project construction areas. After construction activities are completed in each project area, the area will be cleaned of all trash and surplus materials. All extraneous flammable materials will be cleared from equipment staging areas and parking areas.

9.2 Employee Training

SCE/Beta FM or designee will ensure that all construction personnel are trained in fire safety measures relevant to their responsibilities. This will include a PowerPoint Training prepared by the FM. Construction personnel will be trained on situational awareness, basic fire safety training, emergency reporting, evacuation procedures, housekeeping measures, fire extinguishers, fire tools, hot work policies and procedures, Red Flag warnings, and procedures/protocols required to extinguish incipient fires. A training and safety attendance roster will be completed (Appendix J), and a training and safety log will be completed for all training (Appendix G).

9.3 Fire Tools

Fire suppression equipment will be selected according to SCE standards. Equipment will include:

- Type O shovel with a minimum 48-inch handle
- Ax (or Pulaski) - shall have 2- 1/2 pound or larger head and be not less than 28” in overall length.
- Fully charged fire extinguisher - U.L. rated at 2-A:10- B:C

- 5-gallon backpack pump-type fire extinguisher filled with water.
- First aid kit

A set of fire tools will include one of each of the above tools. A set of fire tools will be required for each crew working outside of active fenced substations, during red flag warning events. In addition, a set of fire tools will also be on hand and available for use while work is conducted at each series capacitor site and optical repeater site. The Beta FM and Beta fire patrol vehicle will also travel with a set of fire tools.

9.3.1. Fire Extinguishers

Fire extinguishers used on the project shall be in compliance with the International Fire Code Section 906. The type and size of extinguishers will vary by the construction activity being performed. Fire extinguishers will be utilized as stated below for each of the following construction activities:

- One pressurized chemical fire extinguisher for each gasoline-powered tool being operated, including but not restricted to compressors, hydraulic accumulators, gardening tools (such as chain saws and weed trimmers), soil augers, rock drills, etc., unless otherwise permitted by the FM.
- Fire extinguishers unless otherwise noted shall be a 2A:10B:C (5 pounds or larger).
- Portable fire extinguishers shall be installed in special hazard areas and be placed within 30 feet of gasoline operated equipment.
- A fire extinguisher is required on all equipment used for project construction on the ROW, outside of the active substations cleared of flammable vegetation. Additional requirements may be identified which increase the number of fire tools required on the equipment, as the FM determines necessary based on field conditions.

Once an extinguisher is selected, purchased, and installed, it is the responsibility of the FM to oversee the inspection, maintenance, and testing of fire extinguishers to ensure that they are in proper working condition and have not been tampered with or physically damaged.

9.4 Fire Patrol Vehicles and Equipment

Beta will have a fully outfitted fire patrol vehicle(s) operated by fire personnel with the sole responsibility of fire prevention monitoring and suppression between active tower and series capacitor construction sites along the ROW, outside of active substations cleared of flammable vegetation. Crews that are working in areas that are remote from the other project components will have a designated fire person that will be responsible for monitoring for fires and will coordinate with the FM. The fire patrol vehicle will be equipped with a full 150-gallon water or foam tank and a set of fire tools. The fire patrol vehicle will maintain fire suppression equipment and Advance First Aid AED/CPR and/or Emergency Medical Technicians and de-fibs on each unit. The full list of fire suppression equipment that will be included on the fire patrol vehicle is provided in Appendix K.

SCE/Beta will be required to use water reservoirs for construction (dust control) that can also be used to assist in the prevention and suppression of incipient fires in work areas located outside of active fenced substations. The water tenders will be trained for basic fire preventative measures. All fire resources will be overseen by the Beta FM to assure proper placement for the project work site.

10 Communication and Coordination with Agencies

The following measures will be implemented by SCE/Beta in coordination with the Fire Agencies:

- SCE/Beta and its Contractors will abide by all restrictions to construction activity that may be enforced by the FM and Fire Agencies during RFW days.
- Beta will provide project-wide notification of RFW events on the TOD calls, TOD emails, and via text message to foremen when the National Weather Forecast issues an RFW mid-day. In addition, all personnel will be notified at daily tailboard briefings. Personnel will follow protocols as addressed in Appendix H.
- SCE/Beta and its Contractors will cease any and all work activities, including helicopter use, as directed by FM or Fire Agency representatives in response to fire incidents. See Section 10.3 for associated restrictions.

10.1 Communication Protocols

All construction crews, FMs, Foremen, Construction Site Managers, and Safety Managers shall be provided with radio and/or cellular telephone access that is operational along the entire length of the approved route to allow for immediate reporting of fires. Communication pathways and equipment shall be tested and confirmed operational each day prior to initiating construction activities at each construction site. All fires shall be reported to the fire agencies (911) with jurisdiction in the Project area immediately upon ignition.

Each crew member in work areas located outside of existing facilities cleared of flammable vegetation shall carry a laminated card listing pertinent telephone numbers for reporting fires and defining immediate steps to take if a fire starts. Information on contact cards shall be updated and redistributed to all construction crew-members, as needed, prior to the initiation of construction activities and on the day the information change goes into effect (see Appendix C). Outdated cards shall be destroyed.

10.2 Critical Protection Sites (CPUC Tier 2 and Tier 3)

A Critical Protection Site (CPS) is an area associated with dry habitats, chaparral vegetation and a considerable history of wildfires. These sites will be monitored by the FM which includes monitoring new fires in the area, daily fire weather and red flag warnings. The Fire-Threat Map in Appendix L illustrates the boundaries of a High Fire-Threat District where stricter fire-safety regulations apply to investor-owned utilities. These districts were developed by CPUC in collaboration with CAL FIRE and will be identified by the FM and described to all crew workers at the morning tailboard in these areas.

The FM will assure that all crews working in these areas are fully aware of the potential for fire hazards for the construction activities being performed. The crews will be equipped with a set of fire tools appropriate for their construction activities. The presence of the FM or designee with staged fire tools and suppression equipment is required while working in the high threat fire zone. These requirements will be noted at each tailboard briefing and logged. Additionally, no smoking will be allowed within these areas.

Tier 2 of the CPUC Fire-Threat Map is where there is an elevated risk for utility-associated wildfires. Tier 3 of the CPUC Fire-Threat Map is where there is an extreme risk for utility associated wildfires.

The Eldorado-Lugo and Lugo-Mohave 500 kV Transmission Lines cross approximately 8 miles of Very High FHSZ in State and Local/Federal Responsibility Areas and 11 miles of High FHSZ in State Responsibility Areas east of the Lugo Substation (CAL FIRE 2007). The remainder of the Project is located in lands classified as moderate fire hazard severity zones.

In Nevada, wildland fire threat is mapped in the state by the Nevada Division of Forestry (NDF) and is presented on the Nevada Natural Resources and Fire Information Portal (NDF 2018). Based on NDF mapping, most of the Nevada portion of the Project is in very low fire threat areas, with small portions of low to moderate fire threat near the community of Searchlight.

The area near the Mohave Substation is mapped as ranging from moderate to high fire threat based on historical fire occurrence, landscape characteristics, surface fuels, canopy fuels, weather, and terrain conditions (NDF 2018). However, substations cleared of flammable vegetation are not considered critical protection sites.

10.3 Red Flag Warning Special Provisions

The following special provisions will be carried out on days when an RFW is issued by the National Weather Service for the project area, as monitored by the FM daily: (See Appendix I for additional provisions)

- In the event of an RFW, the Beta FM will notify SCE, BETA and all project personnel through the fire designee with each crew, and record the notifications. The notification will be issued on the Task of the Day call and via text message to foremen if the National Weather Forecast issues an RFW mid-day. For an RFW that is issued in the forecast, all personnel will be notified at daily tailboard briefings.
- Non-essential work located outside of fenced substations cleared of vegetation, within known wildland fire hazard areas shown in Fire Zone Map (Appendix L) will be suspended. Essential work shall be determined by SCE/Beta, approved by the FM on a case-by- case basis, and communicated to CPUC/BLM Monitors.
- If work must proceed during RFW days, crews should be especially careful during the progress of work and fire tools must be kept readily available for the construction activities being performed. Additional fire suppression equipment may include fire extinguishers, a set of fire tools, additional water reservoirs, a possible secondary fire patrol, or other measures to accompany the crews during construction, as approved by the Fire Marshal.
- Additional Fire Patrol Vehicles may be deployed, if determined necessary by the FM or Fire Agencies.
- Crews will be alert for fires or possible fires while working in or passing through fire hazard areas.
- Equipment service areas, parking areas, and fuel and oil storage areas will be cleared of all flammable material for a radius of at least 20 feet. Small mobile or stationary engine sites will be cleared of flammable material for a radius of at least 15 feet from the engine.
- The Beta FM will coordinate with the Fire Agencies and communicate to the Safety Manager and the Construction Site Managers during any road closures implemented during RFW days. Project work site discussions will address preferred evacuation routes per specific site, to be included on the Daily Briefing. Means of evacuation may include vehicle, walking, or helicopter removal.

- The Beta FM and Safety Manager will coordinate with project personnel including CPUC/BLM Monitors for any special measures to be taken during an RFW day, including those described herein and described in Appendix I.
- As part of required employee training, training will be provided on procedures to implement during RFW Days, such as those described herein and described in Appendix I.
- Portable fire extinguishers must be available at all work sites, on construction equipment, and vehicles within the Project area outside of active fenced substations, regardless of other firefighting measures. The successful performance of a fire extinguisher in a fire situation largely depends on its proper selection, inspection, maintenance, and distribution.

11 Fire Emergency Response

11.1 Communication Protocols

In the event of a fire/incident, the following protocol will be followed by the FM and Safety Manager for their respective personnel.

- During a fire/emergency, the FM and Safety Manager will communicate with the Foreman for each crew that an emergency evacuation has been declared.
- The Foreman at each work site will communicate the head count to the FM.
- The FM, in coordination with the Safety Manager, will communicate personnel locations and head count to the appropriate fire department if needed to assist with rescue operations.
- The FM will communicate directions to the Foreman to proceed with their crew to an Evacuation Assembly Area that will be designated for each portion of the project prior to construction. The Evacuation Assembly Area will be selected daily based on available evacuation routes from the work area, current weather conditions (e.g., wind direction that could affect the direction of fire spread), and other pertinent conditions as identified by the FM. The Evacuation Assembly Area will be discussed daily during the morning tailboard meetings. For individuals who are not directly associated with a crew or work location (e.g., monitors surveying, nesting bird biologists, land surveying, inspecting or installing Environmentally Sensitive Area staking, installation of storm water Best Management Practices, weed abatement teams, cultural resource assessment, and/or mitigation teams), the FM will communicate directly with those individuals, via cell phone, satellite phone, or radio.
- The Foreman at each work site will communicate the direction they will be traveling to escape the fire. Environmental Inspectors will be equipped with handheld GPS units.

All evacuated personnel will be required to check in with their Foreman and/or the FM upon arrival and check out before leaving.

11.2 Evacuation Routes and Plans

Evacuation routes and plans will vary for each construction site and will vary dependent upon daily activities at and in the vicinity of each construction site. Evacuation routes will therefore change on a daily basis and will be communicated to workers in daily tailboard meetings by the FM or Foreman.

11.3 Emergency Response Coordinators/Supervisors

The FM and Safety Manager will be responsible for verifying that personnel have evacuated from their assigned areas. A map indicating the location of hospitals in the project area will be provided in the emergency medical plan located in the Contractor's Emergency Response Safety Plan.

11.4 Support Services

The San Bernardino County Fire Department, CAL FIRE, BLM and effected agencies would respond to fire emergencies within the SCE/ELM project location.

A complete list of emergency contact information (Appendix M) and emergency medical locations (Appendix N) will be provided, as well as a laminated cards (Appendix C) to each crew member working outside of the active substations.

Helicopter support services may be provided by construction helicopters in the event of an emergency. They can be equipped with "water bags" to provide incipient fire extinguishing services.

11.5 Fire and Emergency Reporting Procedures

If a Fire/Emergency Incident is discovered:

- Alert the appropriate fire agency by calling 9-1-1
- Notify the FM
- Report all incidents to the Construction Site Foreman who will inform the FM
- Remain calm and speak clearly
- Provide accurate location, size, and type of Incident/fire/medical
- Notify supervisors and other personnel
- Establish communications to any necessary support services
- Communicate what action is currently taking place
- Job site or private/public incident
- Take a site-specific employee head count immediately.
- ALL incidents are to be reported.

The fire will be suppressed by SCE/Beta project personnel ONLY if:

- The fire agency (911) has been notified of the fire, AND
- The fire is incipient and confined to its area of origin, AND
- There is an escape route, AND
- Personnel can safely suppress the fire, AND
- The proper PPE, extinguisher/tools, are readily available in good working order, AND
- The personnel are fully trained and /or certified firefighters. If employees are unsure of their ability or the fire extinguishers capacity to contain the fire, they will leave the area.

12 Plan Approval

This Plan has been prepared to address the requirements of mitigation measures WF-1 and H-M-7. SCE/Beta has submitted this Plan to CPUC, BLM, San Bernardino County Fire Department and CAL FIRE. Final approval of this Plan rests with the CPUC.

Appendix A. Fire Management Definitions

Fire Management Definitions

1. **Fire Management Plan** standard practice or procedure outlining fire suppression tools and equipment required for SCE, BETA employees and contractors, fire prevention requirements, and fire related training required for the project.
2. **Reporting Fire Emergencies and Communication Plan**: Internal Communication Plan based on the ICS System to include SCE, BETA, subcontractors and agencies to organize the SCE ELM Project contact list. Emergency reporting procedures and medical facility locations. All crews will have the ability for communications with radio and/or cellular phone access.
3. **Fire Marshal (FM):** A qualified project representative who with fire training experience implements and enforces all provisions of the approved Management Plan as well as perform other duties related to fire detection, prevention, and suppression for the project. The Fire Marshal will monitor construction activities to ensure implementation and effectiveness of the plan.
4. **Fire Patrol:** Personnel with the responsibility and accountability for monitoring between active tower and series capacitor construction sites along the ROW, outside of active substations cleared of vegetation. Personnel will monitor and implement fire prevention, risk management, early detection of fires, rapid extinguishment and EMS.

   These duties may be accomplished co-laterally with other safety related work duties, however the patrol must be ready to respond with appropriate fire equipment at all times. The fire patrol vehicle will be equipped with a full 150 gallon water or foam tank and firefighting equipment (defined in Appendix K), except within active fenced substations.
5. **EMS:** Emergency Medical Service.
6. **Red Flag Warning (RFW):** An RFW is issued for a stated period of time by the National Weather Service (monitored daily by the Fire Marshal) using pre-determined criteria to identify particularly critical danger in a particular geographic area
7. **Hot Work Permit:** Metal cutting, welding, grinding, activities that require open flame and/or have a high a probability of producing sparks. These activities require a hot work permit and may have different requirements depending on land ownership or the fire agency having jurisdiction. (Beta Fire Marshal or designee will complete daily)
8. **Helicopter Landing Zones HLZ's:** Temporary helicopter landing zones , in project approved work areas, used in accordance with the project Helicopter Use Plan.
9. **Smoking Restrictions:** Smoking will be allowed in areas designated by the Fire Agencies. Smoking will not be permitted during RFWs (Appendix I). Fire Marshal, Construction Site Managers and Foremen will require and ensure compliance with these rules.
10. **Helicopter Fire Prevention** Helicopters landing and taking off within or adjacent to wildland fuels may require the following mitigation as directed by the Fire Marshal.

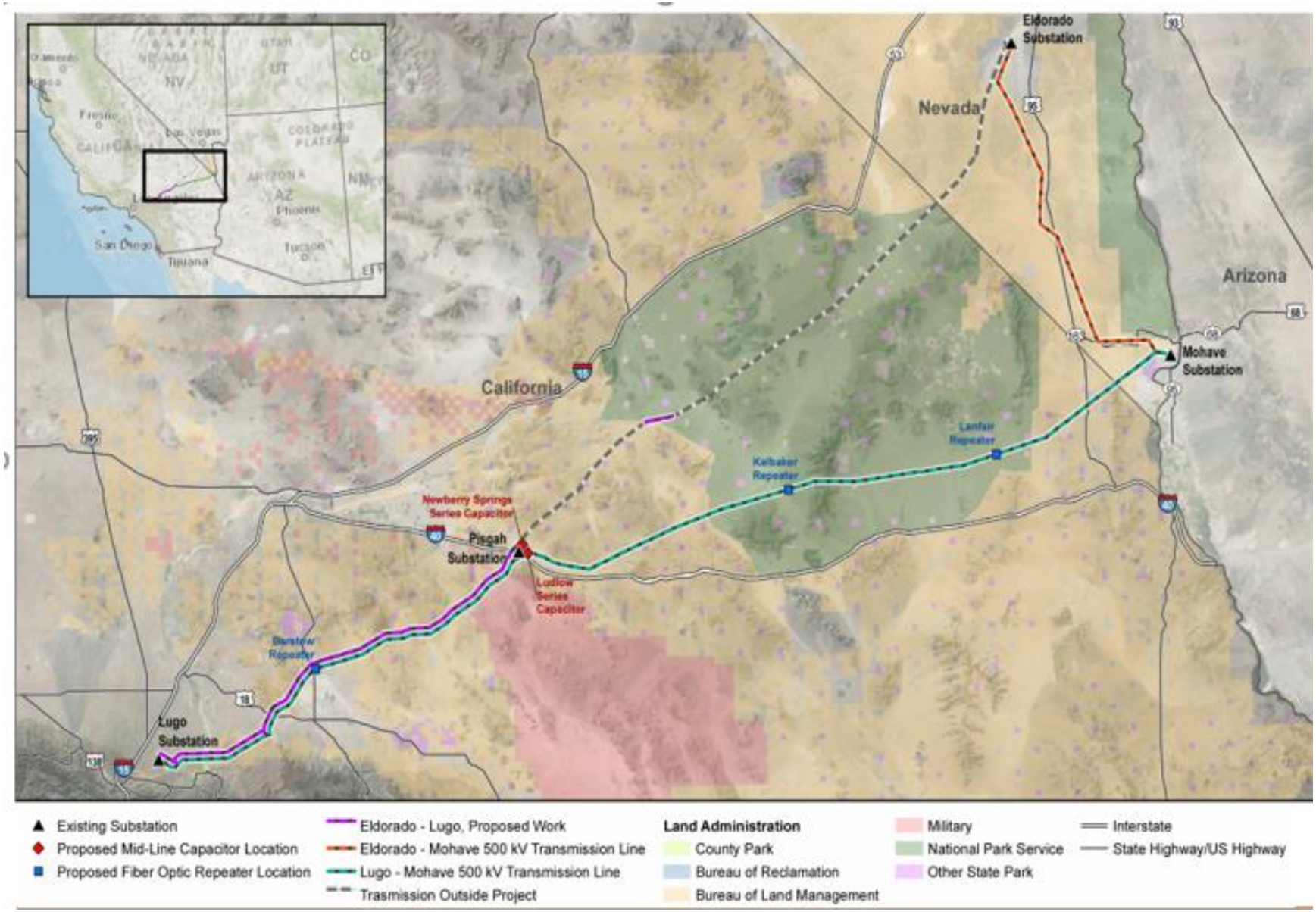
    - Helicopter staging areas with a fire patrol vehicle with a minimum 150 gallon water or foam tank and firefighting equipment outside of active substations.
    - Enough fire equipment for personnel on site available on major operations.
    - Fueling safety plan- fueling will be done in an area clear of combustible material and follow the safety procedures as per SBCFD, CAL FIRE and BLM Project Aviation Safety Plan.

- Identification of special tool and/or equipment requirements for each landing a r e a s where applicable.

For safety and other procedural information on BETA, SCE helicopter operations please refer to the project Helicopter Use Plan.

Appendix B. ELM Project Map

ELM Project Map



Appendix C. Fire Contact Card Information

Fire Contact Card Information

SAFETY FIRST

All Incidents are to be reported

- Call 911- Incident Type, Location
- Contact Fire Marshal (XXX) XXX-XXXX
- Supervisor (XXX) XXX-XXXX
- Take appropriate action
- SCE Contact – (XXX) XXX-XXXX

<u>Back Side of Card</u>

Safety Commitment

- All Personnel Promote Safety.
- Management is responsible for preventing fires and injuries.
- All injuries and fires are preventable.
- All hazards can and will be safeguarded promptly.
- Working Safety is a daily condition.
- All personnel, customers and public remain safe.

Appendix D. Fire Evacuation Plan

Fire Evacuation Plan

Eldorado-Lugo-Mohave Series Capacitor Project

Date: _____

All personnel are to review Evacuation Routes prior to beginning of the work period. Fire Evacuation Plan will be covered at all tailboard locations daily and as work sites change.

Road Entrance and Road Exits:

_____

_____

_____

Safety Zones:

_____

_____

_____

Staging, shelter and accountability:

_____

_____

_____

To be completed daily by the Fire Marshal or designee:

Name:_____Title: _____Signature: _____

Appendix E. Fire Agency Notification

Fire Agency Notification

Eldorado-Lugo-Mohave Series Capacitor Project

Project Fire Marshal In accordance with the approved Fire Management Plan, will notify agencies on updates: (i.e., road closures, contact changes etc.)

Fire Marshal has insured all compliance within the plan mitigation measures are met and notified the following agencies:

San Bernardino County Department

CAL FIRE

Bureau of Land Management

Location: _____

Description: _____

Yes	N/A	
☐	☐	San Bernardino County Fire Codes
☐	☐	Bureau of Land Management Policies and Fire Codes
☐	☐	Brush Clearance Local, State and Federal Codes
☐	☐	Fire and Emergency Safety Plans
☐	☐	Fire Safety Construction Regulations
☐	☐	Cal Fire Power Line Fire Prevention Field Guide (2008)

Agency Notification:	Sent:	Received:	Date:
San Bernardino County Fire Department	☐	☐	_____
CAL FIRE	☐	☐	_____
Bureau of Land Management	☐	☐	_____

Approved by Fire Marshal

Name:_____ Signature: _____ Date_____

Received By:

Name:_____ Signature: _____ Date_____

Southern California Edison
ELM Series Capacitor Project

Appendix F. Personnel Daily Accountability and Visitor Log

Personnel Daily Accountability and Visitor Log

Accountability Roster

Instructions to Fire Marshal or Designee: Complete this form daily and maintain documentation records for accountability.

Name:	*Date:*	*Company:*	*Location:*

NAME (Please Print) FIRST - LAST	Time In	Time Out	Company and Title	Phone#

Appendix G. Training and Safety Log

Training and Safety Log

Contractors Name:	**Today's Date:**	**Department:**
Project Name:	**Location:**	
Fire Marshal Telephone:	**Safety Telephone:**	
Contractor Supervisor's Name:	**Date of Review:**	**Supervisor's Signature:**

Instructions to Supervisor: Check all boxes that apply. Review the duty requirements and select the safety topics that the employee must be trained on.

	SAFETY TOPIC		SAFETY TOPIC
	Accident Reporting Procedures		Hazard Markings
	COVID 19		Hazard Signage
	Blood borne Pathogens Exposure		Hearing Conservation
	Burn Safety		Heat Stress Issues/
	Chemical Safety Awareness		Housekeeping Requirements
	Compressed Gas Safety		Job Hazard Analysis Awareness
	Confined Spaces Awareness		Lock Out Tag Out Awareness
	Crane and Sling Safety		Machine Guarding Awareness
	Disciplinary Actions for Unsafe Acts		New Products Safety
	Electrical Safety Awareness		OSHA Recordkeeping
	Emergency Action Plan		Personal Protective Equipment
	Eye and Face Protection		Respiratory Protection
	Fall Protection Awareness		Restricted Areas, Environmental Buffers
	Fire Extinguisher		Slips, Trips, and Falls Safety
	Fire Training and Prevention		Smoking Restrictions
	Flammable/Combustible Liquids		Spill Prevention and Control
	Food/Beverage Consumption on Duty		WEAP Training
	Forklift Safety Awareness		Waste Disposal Procedures
	Hand and Power Tool Safety		Welding Safety
	Hazard Communication, SDS, GHS, Training		Protection from Induction
☐	Protection of open excavations at the end of the day to ensure people and wildlife (including cows) do not fall into the excavation	☐	Protection from coming into contact with overhead wire as equipment is being tracked down the ROW
☐	Fall Protection for work around the excavations		Helicopter Emergency Landing Locations
☐	Check-In Check-Out Procedure	☐	Driving Speed limits/ Parking Location

Comments:

Appendix H. Fire Hazard Analysis

Fire Hazard Analysis

Fire Hazard Analysis/Hot Work Permit

Fire Hazard Analysis			
	Project Activity Fire Level		
	Date:		
	Level (if applicable):		
	Task Description:		

Job#:	
Project Name:	
Location:	
Foreman:	
Fire Watch:	
Emergency Contact Information Emergency #:	
Hospital : Medical	

Jobsite Checklist (Check all that

☐ Fire Coordinator/Fire Marshal Contacted	☐ Open flame operation required (welding)	☐ Firefighting/suppression equipment inspected
☐ Assess area for fire hazard potential	☐ Welding area prepared for use	☐ Flammable gases identified
☐ Firefighting/suppression equipment inspected	☐ Spark sources identified prior to use	☐ Chemical sources identified
☐ Discuss emergency escape plan	☐ Area prepared for use of sparking equipment	☐ Wildlife (bugs, insects, bees, etc.)
☐ Communication devices working/ in service	☐ Firefighting/suppression equipment in place	☐ Wildlife (dogs, raccoons, rodents, etc.)
☐ Identify need for additional water support	☐ Pulaski	☐ Native vegetation identified and cleared
☐ Eliminate housekeeping hazards	☐ Shovel(s)	☐ Identify physical hazards
☐ Smoking prohibited and/or smoking area	☐ Fire extinguisher (min. 2A10BC)	☐ Uneven surfaces
☐ identified	☐ Water Backpack (Min. 5 gallons)	☐ Ice, mud, snow, rain
	☐ Water Truck/Buffalo (Min. 300 gallons)	

Fire Hazard Job Analysis:

What is the fire hazard associated with this job?

What are the necessary procedures to reduce the likelihood of a spark or fire?

What special precautions shall be taken to ensure a fire doesn't occur?

What fire defenses are in place to prevent the spread of fire and protect the lives of employees on this work site?

Change (Any of the changes indicated below necessitates completing a new job briefing)

☐ Change of condition ☐ ☐ Change of person in charge

Attendees (Visitors to the job site are required to review this form when they sign the onsite tailboard)

Print Name:	Sign Name:	Date:

Appendix I. Red Flag Warning

Red Flag Warning

Fire Weather Watches and Red Flag Warnings

Fire Weather Watches and **Red Flag Warnings (RFW)** are issued by the National Weather Service to advise fire and land management agencies of the possible development, or actual occurrence of Red Flag conditions. A Red Flag event occurs when critical weather patterns develop that could lead to large, dangerous Wildland fires. Conditions that warrant a Fire Weather Watch or RFW, either alone or in combination, are the expected or actual occurrence of the following:

Fire Weather Watch – (*No Action Required – Advisory only)* – Issued in one or more counties whenever the potential for Red Flag conditions exists. A Fire Weather Watch will normally be issued 12 to 96 hours in advance of the expected onset of Red Flag conditions. If dry lightning is the only condition expected in the 0 to 12 hour time frame, a Fire Weather Watch may be issued or continued in place of an RFW.

Red Flag Warning (RFW) is a term used by fire weather forecasters and fire agencies to call attention to limited conditions of particular importance that may result in extreme burning conditions. The Warning is issued when there is an ongoing event or the fire weather forecaster has a high degree of confidence that Red Flag criteria will occur within 24 hours of issuance. For the project area, these criteria require dry fuels with the following:

- Southern California *(Excluding the Antelope Valley)*: RH ≤ 10 percent with sustained wind ≥ 15 mph or with gusts ≥ 25 mph for 6 hours or more. RH ≤ 15 percent with sustained wind ≥ 25 mph or with gusts ≥ 35 mph for 6 hours or more.
- Antelope Valley and SE Kern County Deserts: Relative Humidity ≤ 15 percent and sustained (20-foot) winds ≥ 25 mph for duration of 8 hours or more.
- Desert Areas: Relative Humidity ≤ 15 percent and wind gusts ≥ 35 mph for 6 hours or more.
- Central California Interior: Relative Humidity ≤ 15 percent with sustained winds ≥ 25 mph and/or frequent gusts ≥ 35 mph for duration of 6 hours or more. OR Relative Humidity ≤ 10 percent for a duration of 10 hours or more regardless of wind.
- Dry thunderstorm activity (i.e., considerable lightning with little or no measurable precipitation).

a. **Local Fire Rules –** All work will abide by requirements imposed by local fire agencies, monitored by the ELM Fire Marshal.

b. **Hot Work –** No hot work will be performed during red flag warnings.

c. **Smoking is prohibited on all worksites and in construction yards during red flag warnings**

d. **High Fire Threat Zone –** During active red flag warnings, when working in a High Fire Area during an RFW, (both emergency and non-emergency work) should only be performed if approved by the Fire Marshal along with

1. The crew is under direct supervision of a crew foreman or site lead, **AND**
2. The crew maintains adequate communications (900 megahertz, cellular, satellite phone, etc.), **AND**
3. The crew has required fire suppression equipment deployed in the immediate area of the work being performed (shovels, water backpack and ABC fire extinguisher), **AND**
4. Weather conditions, terrain and surrounding vegetation would permit the crew to extinguish a fire resulting from the work being performed

Exception – When work is performed within a High Fire Area but confined to an area devoid of flammable or combustible materials (e.g., parking lot, commercial area, agricultural lands, bare ground, work indoors, etc.). Work confined to the location types above that do not emit sparks or emit a flame and cannot ignite a fire may be performed within a High Fire Area.

e. **Firefighting –** Only appropriately certified, trained and approved equipped vehicles with proper fire PPE will participate in firefighting suppression operations. Work crews shall take direction from the Fire Marshal/Project Managers until operational control is turned over to the appropriate fire agencies (i.e., CALFIRE). Unequipped vehicles and/or untrained personnel shall remain well clear of the area affected by fire suppression operations.

f. **Shut Down Procedures –** During a RED FLAG event the project will be determined to be shut down based upon the recommendation of the Fire Marshal. The Fire Marshal or designee will be onsite monitoring the work operations and the daily weather conditions. The Fire Marshal will discuss his recommendation with the onsite Foreman and work operations will halt for the day. The Foreman will inform all crews to get their work site safe and secure (if work is in progress) and to demobilize back to the yard. If during discussion between the Fire Marshal and the Foreman it is determined that there is low risk work that can be performed, the crew will adjust work tasks for that day.

g. **Red Flag Posting** – RFW will be posted in the BETA Job Trailer for the duration of the project.

Appendix J. Training and Safety Attendance Roster

TRAINING AND SAFETY ATTENDANCE ROSTER

Instructions to Meeting Leader: Forward this form to the Safety Officer for inclusion in the training documentation records for the project safety program.

INSTRUCTOR:	***DATE:***	***DEPARTMENT/OFFICE:***	***LOCATION:***

NAME (Please Print)	ATTENDEES SIGNATURE	COMPANY	PHONE #
Photo-copy this form for future use	**Synopsis of training attached:** ☐ **Yes** ☐**No**		

Appendix K. Fire Patrol Inventory

Fire Patrol Inventory
October 2, 2020

Description	Contents
Vehicle/Chassis	
Unit Number	
Make/Model	2020 Ford Super Duty F-250 XL SuperCab, 6¾' box
Engine	Power Stroke® V8 Turbo Diesel Engine
Transmission and Drive	TorqShift® 10-speed Automatic Transmission, 3.31 Electronic Locking Axle Ratio, 4X4, SRW 6'or 8' Bed
Color	White
Interior	Vinyl
GVWR	10,000 pounds
Fuel	Diesel
Tires	TBD (mud and snow lug)
Back-up Alarm	Yes
110-Volt Outlet	Yes
Door Logo FPS – CRS Logo	2
FPS Red Flag Patrol Logo	3
Unit Numbering	3
Fire Slip-on Unit and Compartments	
Custom Design	Patrol slip on unit (Foam Unit) with compartments
Type	Independent Pressure Foam Tank Compartments – 2 Side and 1 Rear
Tank Capacity	1,000 gallons of foam Internal 100 gallon foam Tank 100 gallon Water Tank with filler and 1½ NH discharge and pump
Discharge **Length** **Width** **Weight**	Reel with 100' hose ¼ nozzle 125-150 psi or Conventional Unit Water 150-250 gallon water tank with pump Reel line optional
Compartments (with handles and locks)	Completed with slip on unit with 2 side compartments
In-Cab Inventory	
Cab	Engine Check Out Book/Inventory Filing Box-For forms, Information, Pens and Reports Utility Fire Safety Book Clipboard Computer tablets (1) Amber Light Bar for outside cab use
Center Console	Hand Sanitizer (2) Fuel Card Binoculars (1) Flashlight (2) Emergency Response guidebook Radio, Portable (TBD) Spare batteries Kestrel 3500 Fire Weather Meter

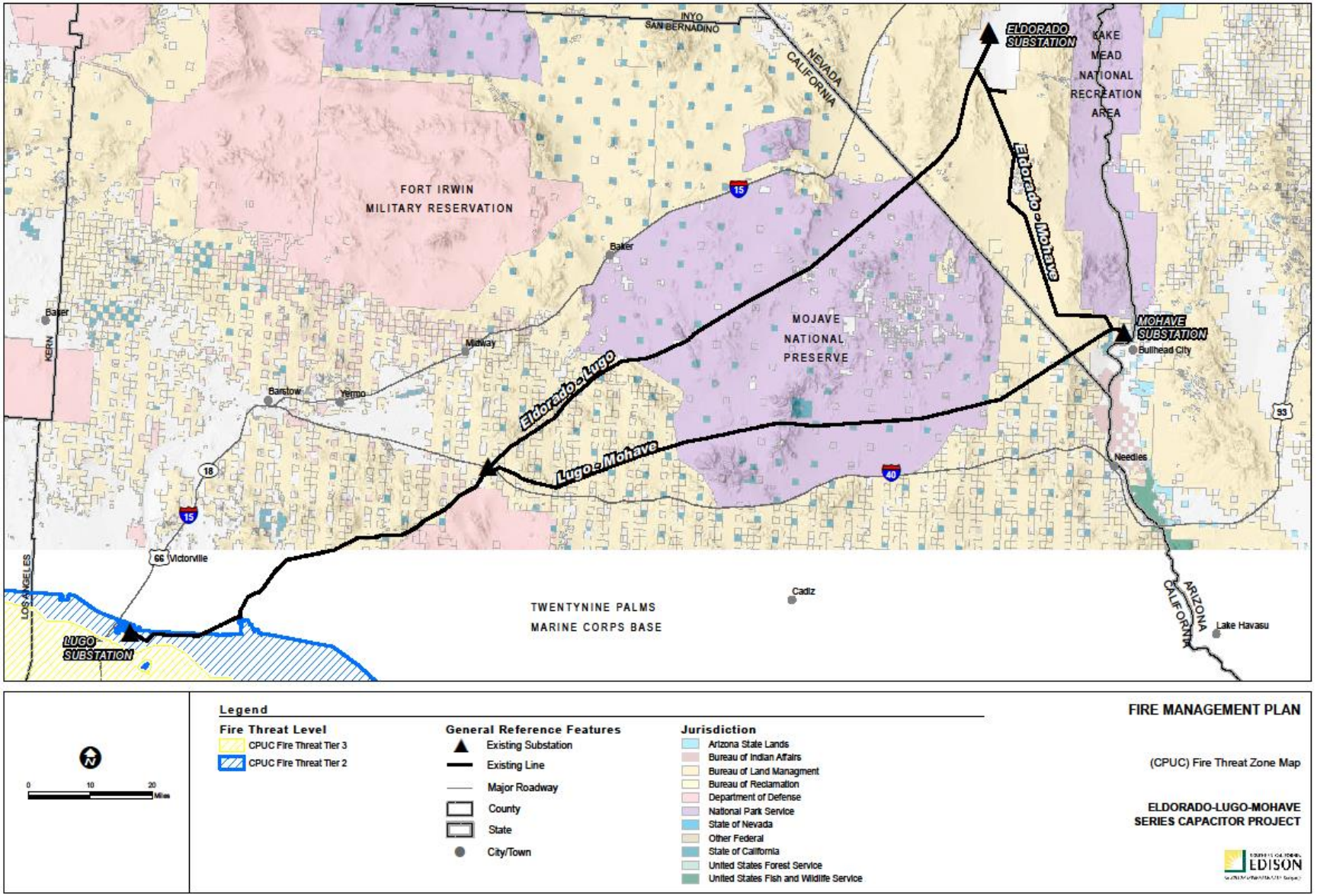
Description	Contents
Backseat Area	Heavy Duty Jack (1) (equipped with truck) Tire Iron (1) (equipped with truck) Rope 150' ½ 12.5mm poly/poly blue and Bag Web Gear (2) Fire Shelter (2) AED Unit (1) and Extra Pads First Aid Kit Trauma Kit Phos-Chek Fire Retardant (5 gal) WD881 Ice Chest (1) Water (case) DEF Trash Bags Truck Towels
	Personal Protective Equipment Nomex Coat (2) – Crew Boss Large, with zipper Helmet white (2) Shroud (2) Safety Vest (2) – Radio Harness (2) Fire Gloves (2) – Large and Extra Large Safety Goggles (2)
	First Aid Med Bag Hand Thermometer Disposal Face Mask Disposable Gloves BVM with mask Kit- Various OPA's Kit- 4x4 gauze pack Kit- Emergency Blanket, Cold compress packs BP Cuff kit with Stethoscope Writing Pen Bag of nitrile medical gloves Bag of face mask Bottle of eye wash Antiseptic hand wash 500 ml bottle of NaCL Bottle of burn gel Small Band Aids Gauze rolls x 2 Adhesive med tape x 2 Box of sting and bite swabs Box of Iodine wipes Box of Alcohol prep pads Pen light Medical tweezers Medical forceps Medical scissors

Description	Contents
Backseat Area	**Trauma Large Bag** Adjustable C Collar Trauma sheers 12 x 30 Trauma dressings Large burn sheets C-Spine straps
	Toolbox Hammer 10 inch Adjustable wrench 10 inch Slip joint pliers Spark plug wrench 4in Standard screwdriver 4in Phillips screwdriver Allen wrench set Box wrench set Tin Snips Utility knife 10” Long nose pliers Jumper Cables (1set) Tape Measure 25’ (1)
Drivers Die Bed Compartment	McCloud (1) (if head removed) Fire Shovel (2) Pulaski (1) Chock Block (1) Bolt Cutters (1) Headlamp (2)
Passengers Side Bed Compartment	1” WL Hose 100’ NPSH (2) 1 ½ Double Jacket Hose 15’ (1) 1 ½ WL Hose 100’ NH (1) 1 ½ x 1 ½ NH Double Female (2) 1” NPSH Nozzle dual flow comb Red Head (2) 1” NPSH Ball Shut off (1) 1 ½ NH Nozzle dual flow comb Red Head (2) Rear P 1 ½ “ NH Ball Shut off (1) 1 ½ NPT Female – 1 ½ NH Male adapter (2) 2 ½ NH – 1 ½ NH coupling (2) Adapter Reducer 1 ½” NH-1” NPSH (2) Adapter 1 ½ Female NPT – 1 ½ Male NH (2) WL Hose Clamp (1) Adapter 1 ½ Female NPT – 1 ½ Male NH (2) Box of Emergency Triangles (1bx) Role Flagging (3) blue, red, yellow and black (1ea) Hydrant Wrench, (1) Toilet Paper (1)

Description	Contents
Rear Area	5 Gal Backpack Pumps (1) Safety Cone 18”H x 10” base – Orange Rubber (2) 5 lb ABC Fire extinguisher (1) - (mounted)\ Fuel 1 gallon gas tank (1) 1 ½ 100’ SJ Hose with Nozzle Pre-connected 1 ½ 15’ DJ Hose with Nozzle Hard suction hose 1 ½ NH 10’ (1) Back Board (1) Optional

Appendix L. Fire Zone Threat Map

Fire Zone Threat Map



Appendix M. Emergency Contact Information

Emergency Contact Information

Completed and Updated By Fire Marshal:

Internal Use

ORGANIZATION ASSIGNMENT LIST			**Environmental**	
1. Project Name	**ELM Project**			
2. Date				
4. Project Period	**10-12-2020**	**TBD**		
SCE/Beta Engineering Lead Project Staff				
SCE Senior Project Manager Selya Arce	626-482-2478			
SCE Environmental Project Manager Sylvia Granados	626-221-5695			
SCE Safety Manager Larry Cardona	951-285-6482			
Beta Project Manager Adam Johnson	619-301-7442			
Beta Safety Manager Jacob Steelman	318-419-1318			
Beta Environmental Dane Anderson	847-494-6609			
Company Representative				
SCE Selya Arce	626-482-2478			
BETA Marco Ahumada	949-241-9544			
FPS CRS Ed McOrmond	909-226-2284			
Agency Point of Contacts			**Construction Generation**	
Beta Fire Marshal FPS CRS Andy Riley	951-452-5156		**On-site Construction Manager**	
SBCFD Curtis Markloff	760-995-8190			
CAL FIRE Matthew Franklin	909-531-3687			
BLM Joan Patrovsky	951-214-1775			
Planning				
Safety				
			Security	
Air Operations				

Appendix N. Emergency Medical Locations

Emergency Medical Locations

Emergency Plan	Project Name SCE/ELM	Date Prepared	Time Prepared	Project Period
1	Identify type of emergency. Stop work if it can be done safely.			
2	Call 9-1-1/Dispatch: Provide type of emergency, exact location and access point, number of affected personnel. Contact Fire Marsh			
3	Provide assistance as equipment and trained; follow COVID-19 protocols.			
4	Account for all personnel working in the area.			
5	Follow Evacuation Plan if required.			
6	Follow Check in-Check Out procedures.			
7	Notify supervisors following Company protocol and procedures			
8	Manage communications, radios, satellite phones, radio checks daily.			

6. Emergency Medical Providers

Agency/Company	Notification Procedure	Paramedics	
		Yes	No
SBCO Fire Department		X	
CAL FIRE		X	

7. Hospitals and Medical Care

Name	Address	Phone	Helipad		Burn Center	
			Yes	No	Yes	No
Barstow Community Center	820 E Mountain View St, Barstow, CA 92311	(760) 256-1761	X			X
Meridian Urgent Care	705 East Virginia Way, Ste N, Barstow, CA 92311	(760) 255-3200		X		X
Arrowhead Medical and Burn Center	460 N Pepper Ave, Colton CA 92324	(877) 73-2762	X		X	

ICS-206 NFES 1331	Prepared by	Reviewed by
	Fire Marshal/Safety Manager	SCE/Beta Engineering