

DRAFT

TLRR: Control-Silver Peak Project

**Fire Prevention and
Emergency Response Plan**

Prepared for
Southern California Edison

September 2022

Prepared by
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Applicable agencies:

Bureau of Land Management
United States Forest Service
California Public Utilities Commission

**Applicant Proposed Measure, Draft Environmental Measure, and/or
Conservation and Management Action Addressed:**

HAZ-3 Prepare and Implement a Project-Specific Fire Management Plan
CPUC Draft Environmental Measure 5.20, Wildfire: Construction Fire Prevention Plan
The table below correlates the requirements contained in APM HAZ-3 with the headings contained in this Plan.

APM Requirement	Relevant Plan Section Header
The purpose and applicability of the plan	1.1, 5.1
Responsibilities and duties	6.0
Project areas where the plan applies	5.1
Procedures for incorporating Red Flag Warnings, Fire Potential Index (FPI), Project Activity Level (PAL), and equivalent indicators in determining fire weather related work restrictions	10.3
Procedures for fire reporting, response, prevention, and evacuation routes	1.5, 11.0, 7.0, 11.2
Coordination procedures with federal and local fire officials	10.0
Crew training, including fire safety practices and restrictions	9.2
Fire suppression and communication equipment required to be on hand during construction	10.1
Method for verification that Plan protocols and requirements are being followed	6.0
Post-construction fire prevention and response measures	5.2

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Acronyms and Abbreviations

APM	Applicant Proposed Measure
BLM	Bureau of Land Management
CALFIRE	California Department of Forestry and Fire
CEQA	California Environmental Quality Act
CPS	Critical Protection Sites
CPUC	California Public Utilities Commission
CSP	Control-Silver Peak
DI	Ductile iron
FPI	Fire Potential Index
FTA	Fire Threat Area
O&M	Operation and Maintenance
PAL	Project Activity Level
PEA	Proponent's Environmental Assessment
POD	Plan of Development
SCE	Southern California Edison
TOD	Task of the Day
TSP	Tubular Steel Pole
USFS	United States Forest Service

1.0 Introduction

The Proponent's Environmental Assessment (PEA) and Plan of Development (POD) for the Control-Silver Peak Project (CSP Project) include Applicant Proposed Measure (APM) HAZ-3, which identifies that a Fire Prevention and Emergency Response Plan will be developed to ensure the health and safety of construction workers, Southern California Edison (SCE) personnel, and the public during construction.

1.1 Purpose of the Plan

The purposes of this Fire Prevention and Emergency Response Plan (Plan) are as follows:

- This Plan has been developed to support the impact analyses presented in the Control-Silver Peak (CSP) Project PEA and POD documents.
- This Plan has been developed to meet the requirements of the California Public Utilities Commission (CPUC) *Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments*; a 'Construction Fire Prevention Plan' is listed as a 'Required' appendix in the *Guidelines*.

The construction contractor, acting on behalf of SCE (or its designee), will adopt this Plan. This Plan does not determine or dictate fire and emergency measures to be implemented during construction of the CSP Project; specific measures and means will be developed by the construction contractor(s). This Plan will be incorporated by reference into any and all separate plans to be developed and implemented by the construction contractor(s). Any and all elements of this Plan may be superseded by elements in separate plans to be developed by the construction contractor(s). Implementation of this Plan, and plan(s) developed by the construction contractor(s), will ensure compliance with state and federal regulations.

This Plan has been developed to work in conjunction with contractor-developed emergency plans and other safety programs. This includes reviewing all planned construction activities to ensure compliance with applicable state, local, and national fire and life safety standards. Fire prevention measures reduce the incidence of fires by eliminating opportunities for ignition of flammable materials.

2.0 Project Overview

The CSP Project is located in Inyo County and Mono Kern County. The Project is located on or spans private and public lands, including lands owned or managed by the Los Angeles Department of Water and Power, the Bureau of Land Management, and the United States Forest Service.

The CSP Project will provide the following:

- Ensure compliance with standards contained in CPUC General Order 95 and North American Electric Reliability Corporation Facility Ratings for this project.

3.0 Lead and Consulting Agencies

3.1 Lead Agencies

Lead agencies have discretionary approval over the CSP Project and are responsible for reviewing aspects of the measures documented in this Plan. The CPUC is the state lead agency responsible for compliance with the California Environmental Quality Act (CEQA) for the CSP Project. The Bureau of Land Management is the federal lead agency responsible for compliance with the National Environmental Protection Act for the CSP Project. Identified materials or documentation will be provided to the CPUC and the Bureau per the requirements of APM HAZ-3.

3.2 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 APM addressed in this Plan. Consulting agencies include the United States Forest Service, and the California Department of Forestry and Fire Protection (CALFIRE).

4.0 Applicant Proposed Measure and CPUC Draft Environmental Measure

The measures addressed in this Plan are as follows.

4.1 Applicant Proposed Measure

APM HAZ-3. Prepare and Implement a Project-Specific Fire Prevention and Emergency Response Plan. A Fire Prevention and Emergency Response Plan will be developed to ensure the health and safety of construction workers, SCE personnel, and the public during Project construction. The Plan shall cover:

- The purpose and applicability of the plan
- Responsibilities and duties
- Project areas where the plan applies
- Procedures for incorporating Red Flag Warnings, Fire Potential Index (FPI), Project Activity Level (PAL), and equivalent indicators in determining fire weather related work restrictions
- Procedures for fire reporting, response, prevention, and evacuation routes
- Coordination procedures with federal and local fire officials
- Crew training, including fire safety practices and restrictions
- Fire suppression and communication equipment required to be on hand during construction
- Method for verification that Plan protocols and requirements are being followed
- Post-construction fire prevention and response measures

The Project-specific Fire Prevention and Emergency Response Plan for construction of the project will be prepared by SCE and submitted to the CPUC, BLM USFS, and federal and county fire agencies for review at least 30-days prior to the initiation of construction. SCE shall address all comments received from reviewing agencies and provide the final Fire Prevention and Emergency Response Plan to reviewing agencies for approval prior to initiating construction activities.

4.2 CPUC Draft Environmental Measure

5.20 Wildfire: Construction Fire Prevention Plan

A project-specific Construction Fire Prevention Plan for both construction and operation of the project shall be submitted for review prior to initiation of construction. A draft copy of the Plan shall be provided to the CPUC and state and local fire agencies at least 90 days before the start of any construction activities in areas designated as Very High or High Fire Hazard Severity Zones. Plan reviewers shall also include federal, state, or local agencies with jurisdiction over areas where the project is located. The final Plan shall be approved by the CPUC at least 30 days prior to the initiation of construction activities. The Plan shall be fully implemented throughout the construction period and include the following at a minimum:

- 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 tools and equipment needed on vehicles and to be on hand at sites
 - Reiteration of fire prevention and safety considerations during tailboard meetings
 - Daily monitoring of the red-flag warning system with appropriate restrictions on types and levels of permissible activity
- Coordination procedures with federal and local fire officials
- Crew training, including fire safety practices and restrictions
- Method(s) for verifying that all Plan protocols and requirements are being followed

A project Fire Marshal or similar qualified position shall be established to enforce all provisions of the Construction Fire Prevention Plan as well as perform other duties related to fire detection, prevention, and suppression for the project. Construction activities shall be monitored to ensure implementation and effectiveness of the Plan.

5.0 Applicable Activities, Project Areas, and Timing

5.1 Activities and Project Areas

Through the CSP Project, SCE proposes to remediate physical clearance discrepancies on two existing 55 kV subtransmission circuits. The CSP Project includes the following components to remediate the identified discrepancies.

5.1.1 Subtransmission

Remediate discrepancies along approximately 60 miles of existing 55 kV subtransmission circuits by:

- In Segment 2, removing existing subtransmission poles and replacing them with ductile iron (DI) poles (or equivalents) and tubular steel poles (TSPs).
- In Segment 3, removing existing subtransmission poles and wood pole H-frames and replacing them with DI poles, TSPs, and H-frames constructed from TSPs.
- In Segment 4, removing existing subtransmission poles and replacing them with DI poles.
- In Segment 5, removing existing subtransmission poles and replacing them with DI poles.
- Removing existing conductor and installing new Aluminum Conductor Composite Core or Aluminum Conductor Steel Reinforced subtransmission conductor on replacement structures.

5.1.2 Telecommunications/System Protection

- Installing optical groundwire, all-dielectric self-supporting fiber optic cable, and overhead groundwire on replacement structures for system protection.
- Install approximately 1,005 feet of fiber optic cable underground within and adjacent to existing substations.
- Install system protection and telecommunications-associated equipment at existing substations

5.1.3 Substations

- Disconnect existing conductor from existing positions at the White Mountain Substation and connect new conductor to existing positions.
- Install new optical groundwire and overhead groundwire and make minor modifications to the existing terminal racks at White Mountain Substation to accommodate the new optical groundwire and overhead groundwire.
- Install telecommunication equipment on existing rack structures, install cable in new or existing underground cable raceways, and install new or replacement telecommunications infrastructure within existing cabinets, control buildings, or Mechanical and Electrical Equipment Rooms within the Control Substation and at the Fish Lake Valley Metering Station.
- Update relay settings at Control, Deep Springs, White Mountain, and Zack substations.

- Install a capacitor bank and circuit breaker at Fish Lake Valley Metering Station.

This Plan is applicable to all components of the Project, including subtransmission, substation, telecommunications, civil engineering, and pre-construction and post-construction restoration work.

5.2 Timing

The measures and activities described in this Plan are to be followed and implemented during the duration of CSP Project construction and restoration activities.

Post-construction fire prevention and response measures to be performed during operations and maintenance (O&M) activities are not addressed in this Plan. SCE is currently performing O&M activities, including inspections, along the subtransmission lines included under the CSP Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the CSP Project and will continue to be conducted in accordance with all applicable rules and regulations.

6.0 Fire Prevention Personnel and Responsibilities

All SCE and contractor personnel are empowered and authorized to stop construction activities to prevent fire hazards.

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/Coordinator

- Oversees the entire project for fire and emergencies, and is responsible for fire prevention, fire safety, and identification of fire hazards
- Ensures compliance with the applicable Applicant Proposed Measure
- Develops Emergency Fire and Evacuation Plans
- Coordinates with local fire departments and fire agencies as needed
- Designates, oversees, and delegates responsibilities to additional fire personnel
- Oversees assigned fire personnel, engines, trucks, patrols, water tenders, etc.
- Be responsible for preventing, detecting, controlling, and extinguishing fires set accidentally as a result of construction activity
- Review the Fire Control and Emergency Response Measures with the Safety Manager, Construction Site Managers and construction employees prior to starting work at each project area, and provide daily update regarding fire danger level in the project area
- Ensure that all construction personnel are trained in situational awareness in fire safety measures relevant to their responsibilities. At a minimum, construction personnel will be able and equipped to extinguish small fires

- Be equipped with communication devices such as radio, satellite, or cell phone communication capability
- Maintain an updated key personnel and emergency services contact (telephone and email) list, kept onsite and made available as needed to construction personnel
- Issue hot work permits and observe welding activities
- Ensure employees evacuate from assigned areas
- Ensure proper patrol of the Project to prevent and detect fires
- Make sure all state, county, and federal fire regulations and Project Fire Plan conditions are met
- Patrol all work areas after the close of work before finishing for the day
- Monitor the fire prevention activities of construction crews in SCE-designated Critical Protection Sites (CPS)

6.2 Safety Manager

- Assists the Fire Marshal/Coordinator with implementation of the Fire Management Plan
- Coordinates with the Fire Marshal/Coordinator to address potential fire hazards and implement fire hazard controls
- Conducts safety orientation and training
- Assures all required personnel complete the Fire Marshal/Coordinator'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
- 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 construction work areas along the project alignment, 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 project alignment
- Detects and suppresses incipient fires
- Provide emergency management services

6.4 Construction Site Managers

- Ensure that equipment is kept at least a minimum of 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
- Train assigned employees in the safe storage, use, and handling of flammable materials, and the use of firefighting equipment, and the requirements of this fire plan
- Ensure flammable material storage areas are properly maintained
- Ensure that employees follow smoking rules and postings
- Ensure employees evacuate from assigned areas

6.5 Construction Site Foreman

- Complete the Fire Hazard Analysis form in Attachment B and ensure compliance with the form
- Conduct daily tailboard briefings
- Provide a head count to Construction Site Manager in the event of an emergency evacuation
- Communicate evacuation procedures with crew members

6.6 All Construction Personnel

- Use approved spark arrestors on all gasoline and diesel equipment
- Report violations of the Plan to Fire Marshal/Coordinator or 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

7.0 Fire Prevention Methods

7.1 Potential Fire 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 (Attachment B) will be completed prior to the start of any construction activity that requires the use of open flames, sparking tools, or other direct ignition sources. The assessment form will be used to assess the work site, develop an emergency plan, identify known hazards, and ensure that employees are working in the safest possible environment. It is the responsibility of the individual Construction Site Foreman 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 Fire Marshal/Coordinator, or Construction Site Manager. It is the responsibility of the Fire Marshal/Coordinator, Safety Manager, or Construction Site Manager to implement corrective action of a fire hazard.

7.3 Coordination with Fire Department and Other Agencies

The Fire Marshal/Coordinator is the single point of contact who will coordinate with the fire agencies and will provide documentation of notifications.

The Fire Marshal/Coordinator will coordinate with BLM, USFS, and CALFIRE according to the location of project components and will provide documentation of this coordination prior to construction.

This Plan will be submitted to CPUC, the BLM, USFS, and CALFIRE prior to construction.

The following measures will be implemented by SCE in coordination with CALFIRE, USFS, and the BLM:

- SCE and its contractors will abide by all restrictions to construction activity that may be enforced by CALFIRE, USFS, and/or BLM during Red Flag Warning days.
- SCE and its contractors will cease any and all work activities, including helicopter use, as directed by the BLM, USFS, and CALFIRE representatives in response to fire incidents.

This Plan will be submitted to CPUC, BLM, USFS, and CALFIRE for approval prior to construction.

8.0 Potential Fire Hazards

8.1 Smoking and Fire Rules

Smoking will not be permitted during Red Flag Warnings (Attachment C). Permitted smoking areas will be located at one or more Staging Areas, if such a Staging Area is not located in a CPS. These permitted smoking areas will be sited at least 100 feet away from combustible materials, gasoline and oil storage areas, and equipment servicing locations. The Fire Marshal/Coordinator and Safety Manager will post signs at staging yards to designate approved smoking areas. The Fire Marshal/Coordinator and Safety Manager will post signs in conspicuous places in the work area regarding smoking and fire rules. Construction Site

Managers and Foreman will require and ensure compliance with these rules. Smoking will be prohibited under the following circumstances:

- No smoking along the subtransmission lines
- 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 construction areas during a Red Flag Warning that applies to the CSP Project area
- No smoking will be permitted in areas within a CPS, and no designated approved smoking areas will be established in a CPS

An approved smoking materials disposal container shall be provided in designated smoking areas and shall be at least 25 feet from vegetation. The container shall be resistant to high wind gusts either by design or an adequate form of securing. Smoking must be done within 5 feet of the container. The container will be removed from the construction area and cleaned by the contractor 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.) 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 Fire Marshal/Coordinator or the Fire Marshal/Coordinator'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.
- A welding site will be selected that is free of native combustible material and/or the site will be cleared 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 Fire Marshal/Coordinator or the Fire Marshal/Coordinator's designee shall observe the operation, regardless of the location of the welding activity. SCE 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 active construction work areas along the project alignment, 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 (see Section 9.3).
- 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 are required to be in Occupational Safety and Health Administration/American National Standards Institute approved containers, stored out of the sun and away from other heat sources, and stored in accordance with applicable 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 at and around construction sites as described in the CSP Project PEA and POD documents, thus resulting in fire breaks. Vegetation clearance/fire breaks at each construction site will be limited to the extent necessary to ensure safe construction while minimizing impacts.

8.5 Electric Grounding

Grounding of overhead circuits will be done in accordance with SCE standards, Institute of Electrical and Electronics Engineers standards, and California Division of Occupational Safety and Health requirements. For towers, tubular steel poles, and lightweight steel poles, 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. All welding activities will be observed by the Fire Marshal/Coordinator or that person's designated fire monitor/fire patrol individual, regardless of the location of the welding activity. In the event native habitat is beyond the 25-foot clear zone, welding screens will be used to prevent sparks from affecting native habitat.

Contractor 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, Fire Marshal/Coordinator or that person's designated fire monitor/fire patrol individual shall observe the operation, regardless of the location of the welding activity. Contractor shall confine welding activity to cleared areas having a minimum radius of 25 feet measured from place of welding or employ a welding screen.

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 (see Section 9.3).

8.7 Helicopter Use

Helicopters will be used during operation of the CSP 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.

9.0 Fire Hazard Controls

9.1 Fire Safety Inspections and Housekeeping

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

SCE 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 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 Fire Marshal/Coordinator. 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, and a training and safety log will be completed for all training.

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 during Red Flag Warning events for each crew working outside of active fenced substations. The Fire Marshal/Coordinator vehicle and fire patrol vehicle(s) will also travel with a set of fire tools.

9.4 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 Fire Marshal/Coordinator
- 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 project alignment, 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 Fire Marshal/Coordinator determines necessary based on field conditions

Once an extinguisher is selected, purchased, and installed, it is the responsibility of the Fire Marshal/Coordinator 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.

9.5 Fire Box

Contractor and or SCE shall equip centrally designated mobilization areas or concentrated short term project work areas with one sealed box of firefighting tools as per the direction of the Fire Marshal/Coordinator. The box shall be sealed but capable of being opened in the event of an emergency. The box shall be unlocked during subtransmission line project construction activities. Box shall be secured and locked at night. The Fire Box will contain the following equipment.

- Three (3) backpack pump-type fire extinguishers filled with water
- Five (5) type O shovels with a minimum 48 inch handle
- Five (5) axes (Pulaski) with a 2 ½ pound head or larger and not be less than 28 inches in overall length
- Five (5) McLeod fire tools
- One (1) serviceable chain saw of 3 ½ or more horsepower with a cutting bar 20 inches in length or longer
- Shall have communication capability to summon assistance in the case of fire or emergencies

9.6 Fire Patrol Vehicles and Equipment

The SCE fire prevention contractor 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 construction work areas along the project alignment, 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 Fire Marshal/Coordinator. 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/ automated external defibrillator/cardiopulmonary resuscitation and/or Emergency Medical Technicians and defibrillators on each unit.

SCE 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 Fire Marshal/Coordinator to assure proper placement for the project work site.

10.0 Communication and Coordination with Agencies

The following measures will be implemented by SCE in coordination with the fire agencies:

- SCE and its contractors will abide by all restrictions to construction activity that may be enforced by the Fire Marshal/Coordinator and fire agencies during Red Flag Warning days
- SCE will provide project-wide notification of Red Flag Warning events on the task of the day (TOD) calls, TOD emails, and via text message to foremen when the National Weather Forecast issues a Red Flag Warning mid-day. In addition, all personnel will be notified at daily tailboard briefings. Personnel will follow protocols as addressed in Attachment C
- SCE and its contractors will cease any and all work activities, including helicopter use, as directed by the Fire Marshal/Coordinator or fire agency representatives in response to fire incidents

10.1 Communication Protocols

All construction crews, Fire Marshal/Coordinator(s), Foreman, Construction Site Manager, and Safety Manager shall be provided with radio and 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 with jurisdiction in the Project area immediately upon ignition.

Each crew member shall carry at all times 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. Outdated cards shall be destroyed.

10.2 Critical Protection Sites

CPS are areas associated with dry habitats, chaparral vegetation, inhabited property, and a considerable history of wildfires. CPS are defined as those areas that are

- Located in a CPUC-designated “Tier 2—Elevated” or “Tier 3—Extreme” fire threat area (FTA)

A Tier 2 FTA is where there is an elevated risk for utility-associated wildfires. A Tier 3 FTA is where there is an extreme risk for utility associated wildfires. The Fire-Threat Map in Attachment D illustrates the location of CPS along the CSP Project alignment.

The Fire Marshal/Coordinator 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 Fire Marshal/Coordinator or designee with staged fire tools and suppression equipment is required while working in the CPS. These requirements will be noted at each tailboard briefing and logged. Additionally, no smoking will be allowed within these areas.

10.3 Red Flag Warning Special Provisions

The following special provisions will be carried out for days when notified of a Red Flag Warning by the National Weather Service:

- Suspend all non-essential work within CPS area. All non-essential work shall be determined by SCE and approved by the Fire Marshal/Coordinator on a case-by-case basis.
- If work must be done within fire hazard areas, crews should be especially careful during the progress of work and adequate firefighting equipment must be kept readily available.
- Type VI engines, Back pumps, shovels, fire extinguishers, etc. will be available.
- 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 contractor shall furnish one type O shovel (with a minimum 48-inch handle) and one 2A:10-B:C (at minimum) pressurized chemical fire extinguisher for each gasoline-powered tool, including but not restricted to compressors, hydraulic accumulators, gardening tools (chain saws and weed trimmers), soil augers, rock drills, etc. Fire extinguishers will be of the type and size necessary to provide assurance of controlling fire caused by use of portable power tools under various climatic and fuel conditions. The type O shovel (with a minimum 48-inch handle) must be kept within 100 feet from each chain saw when used off cleared landing areas.
- The Fire Marshal/Coordinator will coordinate with the BLM, USFS, and CALFIRE and communicate to the Safety Manager and the Construction Site Managers any road closures implemented during Red Flag Warning days. Project work site discussions will address preferred evacuation routes per specific site, to be included on the Daily Job Briefing. Means of evacuation may include vehicle, walking, or helicopter removal.

- The Fire Marshal/Coordinator and Safety Manager will coordinate with project personnel for any special measures to be taken during a Red Flag Warning day, including those described herein and described in Attachment C.
- As part of required employee training, training will be provided on procedures to implement during Red Flag Warning Days, such as those described herein and described in Attachment C.
- Portable fire extinguishers must be available at all work sites, on construction equipment, and vehicles within the Project area, 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.

11.0 Fire Emergency Response

11.1 Communication Protocols

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

- During a fire/incident, the Fire Marshal/Coordinator 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 Fire Marshal/Coordinator
- The Fire Marshal/Coordinator, in coordination with the Safety Manager, will communicate personnel locations and head count to the appropriate fire department to assist with rescue operations
- The Fire Marshal/Coordinator 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 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 Fire Marshal/Coordinator. 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, lands 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 Fire Marshal/Coordinator 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 travelling to escape the fire using a global positioning system unit, compass, or map

All evacuated personnel will be required to check in with their Foreman and/or the Fire Marshal/Coordinator upon arrival and check out before leaving. A project Communication Plan will be prepared to address SCE organizational notification procedures.

11.2 Evacuation Routes and Plans

Evacuation routes and plans will vary for each construction work area and will be dependent upon daily activities at and in the vicinity of each construction work area. Evacuation routes will therefore change on daily basis and will be communicated to workers in daily tailboard meetings by the Foreman or Fire Marshal/Coordinator.

11.3 Emergency Response Coordinators/Supervisors

The Fire Marshal/Coordinator 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

BLM would lead the response to fire emergencies along those portions of all Segments that are within a Federal Responsibility Area and that are not on lands managed by the USFS.

USFS would lead the response to fire emergencies along those portions of Segment 3 that are within a Federal Responsibility Area and that are on lands not administered by the BLM.

CALFIRE would respond to fire emergencies along those portions of all Segments within a State Responsibility Area.

A complete list of emergency contact information will be provided on laminated cards to each crew member.

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/incident is discovered

- Alert the appropriate fire agency by calling 9-1-1
- Notify the Fire Marshal/Coordinator
- Report all incidents to the Construction Site Foreman who will inform the Fire Marshal/Coordinator
- Remain calm and speak clearly
- Provide accurate location, size, and type of Incident / fire
- Notify supervisors and other personnel
- Establish communications to any necessary support services
- Assess and 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 fought by SCE and its contractors ONLY if

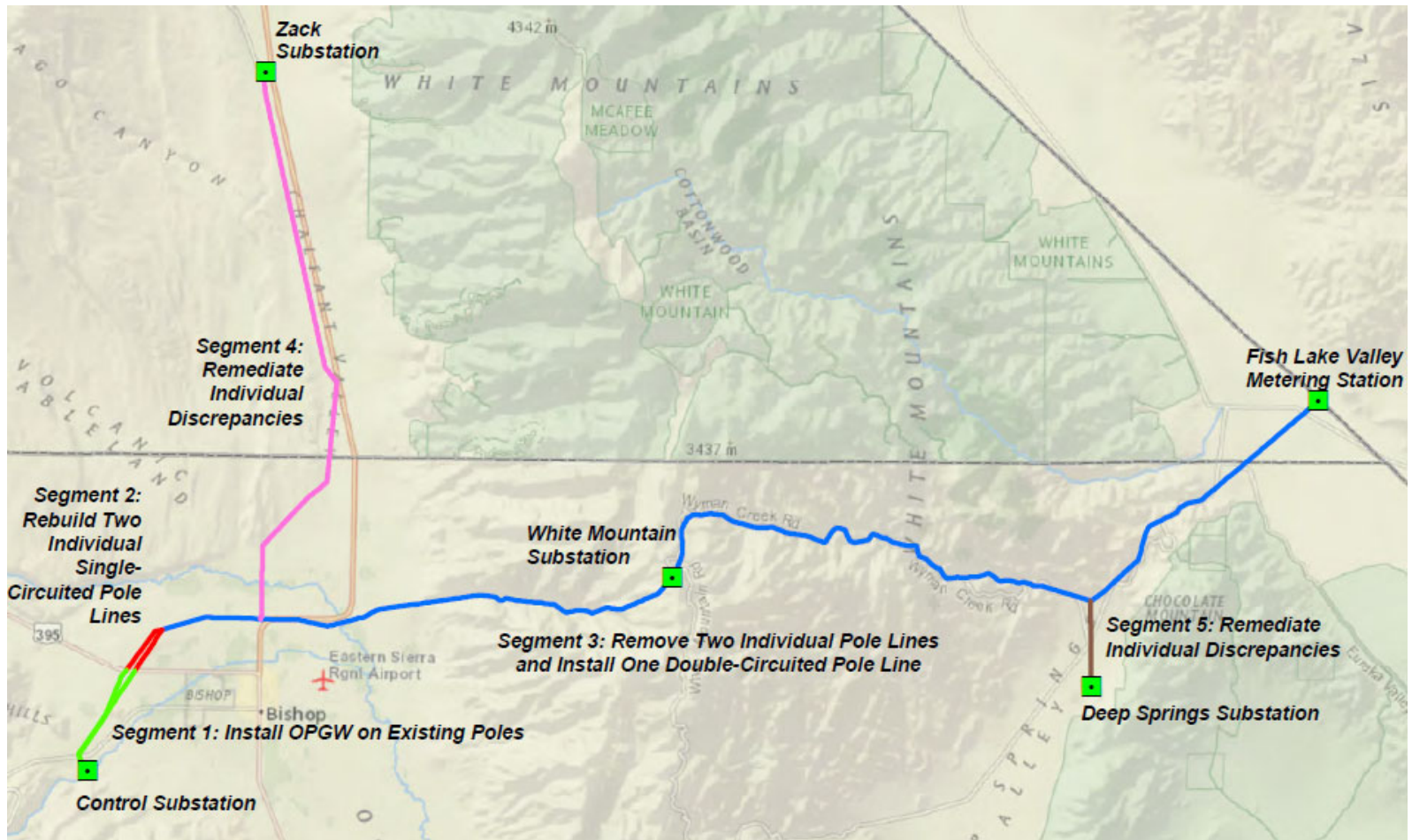
- The fire department has been notified of the fire, AND
- The fire is incipient and confined to its area of origin, AND
- There is an escape route and employees can fight the fire with their backs to the escape route, AND
- The proper PPE and extinguisher/tools are available, AND are in good working order, AND their proper use is known, AND
- The personnel are fully trained and certified firefighters. If employees are unsure of their ability or the fire extinguisher's capacity to contain the fire, they will leave the area.

12.0 Plan Approval

As mandated in the CPUC *Guidelines*, this Plan "will be provided to federal, state, and local fire agencies for review and comment as applicable to where components of the proposed project would be located. CPUC will approve the final Construction Fire Prevention Plan. Record of the request for review and comment and any comments received from these agencies will be provided to CPUC CEQA Unit Staff."

Per the *Guidelines*, this Plan will be provided to the following: BLM, USFS, and CALFIRE.

Attachment A
CSP Project Map



Attachment B
Fire Hazard Analysis

Attachment C
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 of 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:

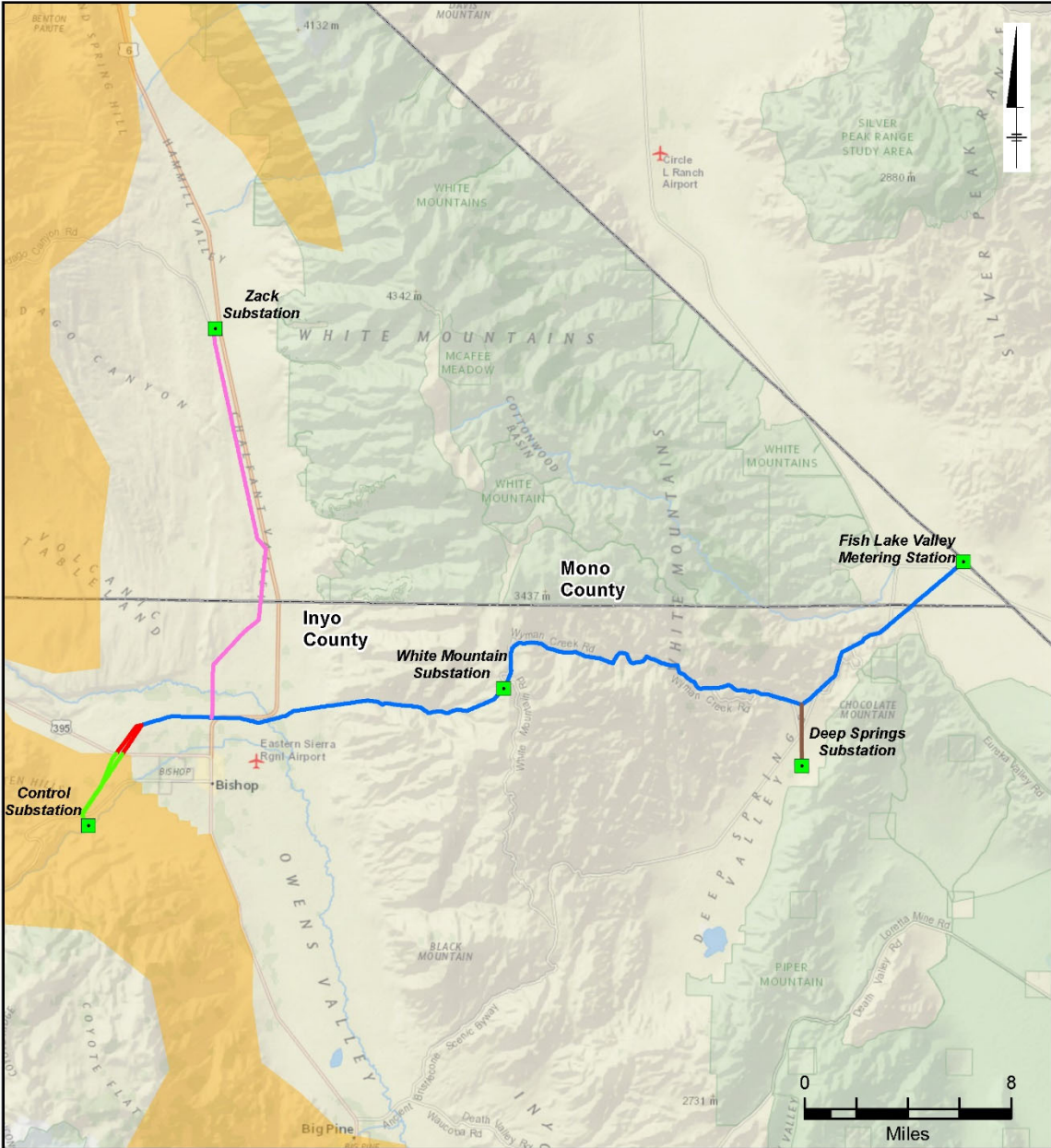
- Southern California (Excluding the Antelope Valley): RH \leq 10 percent with sustained wind \geq 15 mph or with gusts \geq 25 mph for 6 hours or more. RH \leq 15 percent with sustained wind \geq 25 mph or with gusts \geq 35 mph for 6 hours or more.
- Antelope Valley and SE Kern County Deserts: Relative Humidity \leq 15 percent and sustained (20-foot) winds \geq 25 mph for duration of 8 hours or more.
- Desert Areas: Relative Humidity \leq 15 percent and wind gusts \geq 35 mph for 6 hours or more.
- Central California Interior: Relative Humidity \leq 15 percent with sustained winds \geq 25 mph and/or frequent gusts \geq 35 mph for duration of 6 hours or more. OR Relative Humidity \leq 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 CSP Project 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 Fired 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 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 Job Trailer for the duration of the project.

Attachment D
CPS Map



Legend

- Segment 1
- Segment 2
- Segment 3
- Segment 4 (Zack Tap)
- Segment 5 (Deep Springs Tap)
- Substation
- Counties
- CPUC Fire-Threat**
- Tier 2

CONTROL-SILVER PEAK PROJECT

CPUC FIRE THREAT



FIGURE