

# ***ESP – 113.1 (Revised)***

## **Electric Standard Practice – 113.1 'SDG&E Operations & Maintenance Wildland Fire Prevention Plan'**

Electric Distribution Engineering has revised this standard under the direction of the Fire Program Manager

☞ Maps and charts updated to conform with the 2014 requirements.



**If you have any questions regarding this Standard Practice, please contact:**

◆ SDG&E Fire Program Manager

**PROJECT CHECKLIST**

Use 'Tab Key' to navigate form

Date: June 25, 2014

Originator: Hal Mortier

**Project Title:**

SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN

**The attached document pertains to:** (Select one of the following from the drop-down menu)

Standard Practice Number: 113.1

**Synopsis of change** (for distribution cover sheet)



See attached '**NEW / REVISED**' cover sheet.

**Sponsoring Department:**

**Other** (Select one of the following from the drop-down menu)

If Other, Describe: SDG&E Fire Program Manager

**Individuals Involved in Development and/or Revision:**

\_\_\_\_\_

**Training Requirements:** (Describe how the training will be conducted)

**All C&O Managers and O&E Managers review this revised standard with your personnel at your next Safety Meeting.**

**To be completed within 30 days of "Effective Date".**

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Reviewed By: \_\_\_\_\_

Approved By: 



DEPARTMENT TRANS. & DISTRIB. ENGINEERING	DIVISION DISTRIBUTION ENGINEERING	EFFECTIVE DATE JUNE 25, 2014
SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p><b><u>REVISION HISTORY</u></b></p> <p>This Electric Standard Practice has been revised by the SDG&amp;E Fire Program Manager.</p> <p><b>1.0 <u>PURPOSE</u></b></p> <p>1.1 Southern California presents a dangerous natural wildland fuel scenario and explosive fire weather potential. The period for active fire conditions can exist all year long depending on rainfall totals and other dynamic weather factors. The fall months and at times extending into early winter historically host the region's largest fires. Extended dry periods can bring us into or back into critical fire conditions essentially any time of the year. SDG&amp;E facilities, equipment, and activities can present a potential wildland fire ignition risk which must be minimized to the extent reasonably possible. In the event a fire occurs, we must also be equipped to suppress small fires, thus potentially preventing a major fire. Most importantly, we must provide the resources and training necessary to keep our employees safe while working in the wildland areas. This plan is for all system Operations &amp; Maintenance work and can be used for low complexity Construction projects when additional mitigation is not required (see 4.7 SDG&amp;E PROJECT SPECIFIC FIRE PLANS). The intent of this document is to formalize procedures and routine practices that will:</p> <p>1.1.1 Assist SDG&amp;E employees in their understanding of fire prevention and to improve their ability to prevent the start of any fire. The emphasis will be on wildland fires, especially during the critical times of the year when the fire risk is high.</p> <p>1.1.2 Set standards for certain tools and equipment to be present in our vehicles and on our work sites, when performing identified high risk work activities. This will assist with rapid response to small fires in the event one should occur.</p> <p>1.1.3 Incorporate State, Federal, and local requirements into our standard way of doing business to provide compliance with rules and regulations on a daily basis no matter where our work is taking place. This would include, but not be limited to: pertinent laws, Forest Standard Practice Regulations, and "Special Use Permit" or "Right of Way" fire related requirements.</p> <p>1.1.4 Define or reference restrictions mandated by "Red Flag Warnings", "Project Activity Levels", or other unique fire danger scenarios. Provide the means for determining when these restrictions are in effect, what activities they prohibit, the precise locations to which they apply; and identify the notification procedures for all affected employees and contractors. (See TMC-1320)</p> <p>1.1.5 Establish communication requirements when working in the wildland areas. Insure that our employees and contractors have positive communication for reporting fires and initiating assistance.</p> <p>1.1.6 Discuss procedure to identify when a Construction project specific "Fire Plan" is required and the process for developing the document.</p>		
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DEPARTMENT TRANS. & DISTRIB. ENGINEERING	DIVISION DISTRIBUTION ENGINEERING	EFFECTIVE DATE JUNE 25, 2014
SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p>1.1.7 Share some common sense practices, with regards to fire safety, that should be used in all activities to reduce the risk of fires and to prevent injury to employees as a result of fire.</p> <p>1.1.8 Introduce and require the use of the "Fire Potential Index" to determine when additional fire risk mitigation measures are advised or required.</p> <p><b>2.0 APPLICABILITY</b></p> <p>2.1 This applies to SDG&amp;E field personnel who will work in the wildland areas of the service territory during the periods described that are conducive to wildland fire occurrence. This also includes Distribution and Transmission operating personnel who will be involved with field personnel in regards to safety, system reliability and/or restoration. Contractors performing work for SDG&amp;E will be expected to comply with this Standard Practice as it relates to their activities.</p> <p><b>3.0 DEFINITIONS</b></p> <p>3.1 <b>Wildland Areas:</b> This term refers to any area within the SDG&amp;E service territory that has wildland fuels available for ignition.</p> <p>3.2 <b>Fire Threat Zone (FTZ):</b> This is a CALFIRE developed rating of wildland threat based on a combination of potential fire behavior (fuel rank) and expected fire frequency. SDG&amp;E has established practices within the FTZ on how SDG&amp;E constructs facilities and also determines certain construction practices to be used within the FTZ. See attachment 1.</p> <p>3.3 <b>SDG&amp;E High Risk Fire Areas (HRFA):</b> This area will be an assortment of GIS polygons that represent the zones of greatest concern within the SDG&amp;E service territory, blending fuels, topography, wind, and system information. (The areas can change annually and the map will be labeled with the appropriate year, "SDG&amp;E 20XX Highest Risk Fire Area" and is always a subset of the Fire Threat Zone). The HRFA helps to determine how SDG&amp;E operates the electric system, as a function of weather conditions. See attachment 1.</p> <p>3.4 <b>Fire Season:</b> Fire season is no longer officially designated by the wildland fire agencies. California is considered to be in fire season on a yearlong basis. CAL FIRE adjusts its staffing patterns as fire conditions moderate or escalate and this can be used as an indicator of potential fire activity.</p> <p>3.5 <b>Fire Potential Index (FPI):</b> This is a comprehensive assessment of fire risk, used as a tool for making operation &amp; maintenance decisions related to fire prevention. The tool converts environmental, statistical, and scientific data into an easily understood forecast of short-term fire threat. The index is generated for a seven day forecast period for an assortment of geographic areas within the service territory. The 7-day forecast is used for planning purposes while the daily FPI is used for work activities. The FPI is used to determine the fire potential range for each day (Normal, Elevated, or Extreme), definitions of each to follow.</p> <p>3.6 <b>Normal Fire Potential:</b> It is considered "Normal" when the FPI is green. All O&amp;M activities can take place in the wildland areas of the service territory without additional risk mitigation, as long as baseline fire equipment is available as prescribed in this plan. Note: the baseline fire equipment requirements meet or exceed all local, state, &amp; federal requirements for working in the wildland areas.</p>		
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DEPARTMENT TRANS. & DISTRIB. ENGINEERING	DIVISION DISTRIBUTION ENGINEERING	EFFECTIVE DATE JUNE 25, 2014
SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p>3.7 <b>Elevated Fire Potential:</b> It is considered “Elevated” when the FPI is either yellow or orange. Certain “at risk” O&amp;M activities (as identified in the matrix, attachment 2) will require additional risk mitigation (as prescribed in the matrix, see attachment 2) to perform those work activities.</p> <p>3.8 <b>Extreme Fire Potential:</b> It is considered “Extreme” when the FPI is red. No “at risk” activities should be conducted except for those activities which if, left undone present a greater risk than that involved with their accomplishment. Consultation with the On-duty Fire Coordinator is suggested to help make that determination and identify additional mitigation required to reduce risk.</p> <p>3.9 <b>Red Flag Warning (RFW):</b> The National Weather Service will declare a RFW when conditions are expected to meet either of the following criteria:</p> <p>3.9.1 Relative humidity is 15% or less with sustained winds equal to or greater than 25 mph, or frequent gusts equal to or greater than 35 mph for a period of 6 hrs. or more. This RFW (based on wind/relative humidity) will be considered “Extreme” operating condition regardless of the FPI for that time period and have the same restrictions described for “Extreme”.</p> <p>3.9.2 Dry lightning is for a lightning event that is not accompanied by enough precipitation to significantly wet fuels that have been identified as critically dry. This is common within the inland and mountain zones. This RFW (based only on dry lightning) will be assessed by Meteorology and Fire Coordination to determine the appropriate operating condition related to actual weather conditions, and Grid and Dist. Ops. will notify field personnel.</p> <p>3.10 <b>Project Activity Level (PAL):</b> This term is specific to the Cleveland National Forest (CNF) and only applies to work within the boundaries of the CNF. When conducting work on the CNF it is each crew member’s responsibility to know the PAL level and adhere to any additional work restrictions or mitigation measures.</p> <p>3.11 <b>Fire Tools:</b></p> <p>3.11.1 <b>Shovel:</b> standard round point shovel with overall length of at least 46”.</p> <p>3.11.2 <b>Pulaski:</b> an axe-like fire hand tool used for cutting, chopping or grubbing.</p> <p>3.11.3 <b>McLeod:</b> a fire hand tool used for raking and scraping.</p> <p>3.11.4 <b>Backpack pump:</b> is a portable 5 gallon water pack with hose and nozzle used for extinguishing Class A (common combustibles) fires and primarily wildland fires. They can be rubber collapsible packs or stainless steel canisters.</p> <p>3.11.5 <b>Fire box:</b> can be placed in a staging area or worksite to supplement available fire suppression equipment when necessary due to excessive work activity. It generally contains additional hand tools and/or backpack pumps as deemed appropriate.</p>		
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SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p>3.12 <b>Major Operations Work Area:</b> It will be considered a major operations work area when work activities or staging of resources will be concentrated in and out of a staging facility. These work sites are typically large in size and include but are not limited to construction yards, fly yards, substation pads and any other area where construction work will be concentrated.</p> <p>3.13 <b>Fire Patrol:</b></p> <p>3.13.1 A <i>designated</i> "Fire Patrol" is a member of a work crew assigned the responsibility and accountability for fire prevention, risk mitigation, early detection of fires, and rapid extinguishment should one occur. This can be accomplished co-laterally with other work duties.</p> <p>3.13.2 A <i>dedicated</i> "Fire Patrol" is a person assigned the duties associated with fire prevention and fire safety for a specific job or location, with appropriate training and equipment equivalent to the risk presented. This would be their sole duty while serving as a dedicated Fire Patrol.</p> <p>3.14 <b>SDG&amp;E Fire Coordinator (FC):</b> The SDG&amp;E Fire Coordinator serves as a conduit or liaison to the emergency service agencies for the utilities for everyday operations as well as emergency incidents. The FC will help the emergency service agencies obtain their needs related to the utility and represent the utility needs to the emergency service agencies.</p> <p>3.15 <b>SDG&amp;E Incident Commander (IC):</b> SDG&amp;E will follow Incident Command System protocols on all emergency incidents. SDG&amp;E will positively identify a single point of contact for all SDG&amp;E resources (people and equipment) on any emergency incident. The appropriate line authority will identify who the SDG&amp;E IC will be on moderate or complex incidents. "First- in" supervisor will generally be the IC on low complexity incidents. The IC will coordinate SDG&amp;E activities with the overall Incident Commander, usually a jurisdictional fire chief.</p> <p>3.16 <b>Operations &amp; Maintenance (O&amp;M):</b> O&amp;M refers to post construction care and maintenance of SDG&amp;E facilities.</p> <p><b>4.0 PROCEDURE</b></p> <p>4.1 <b>General:</b> SDG&amp;E personnel will be committed to the following three step process for reducing the fire risk and exposure involved with potential wildland fires related to our work activities or equipment;</p> <p>4.1.1 <i>Fire Prevention:</i> all work activities taking place in the wildland areas of our service territory will be assessed with regard to fire risk during standard safety tailboard sessions. Those activities that pose risk and can be excluded will be. Those that cannot be eliminated will incorporate appropriate mitigation measures to reduce the risk where possible, and in those cases where all risk cannot be eliminated the following steps will be in place.</p> <p>4.1.2 <i>Immediate or Early Fire Detection:</i> SDG&amp;E enhances the ability of its crews to detect fire at its earliest stages by assigning designated (co-lateral duty) and dedicated Fire Patrols (sole duty) as well as training all personnel to establish good situational awareness during "Normal", "Elevated", and "Extreme" operating conditions.</p>		
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SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p>4.1.3 <i>Rapid Extinguishment:</i> prescribed fire tools and equipment will be available within 50' of worksite and immediately available for rapid extinguishment of any ignition.</p> <p>4.2 <b>Tools &amp; Equipment:</b> When working in the FTZ identified on attachment 1; the following tools and equipment are required as a minimum and will be carried on the vehicles as described. If your work project is in a wildland area outside the FTZ it is recommended you use these same standards. This does not apply to transient traffic driving on primary road beds through the wildland areas. These items will meet the California Forest Practice Rules; Public Resource Code Division 4, Chapter 6. Making this equipment available at your work sites will also meet the majority of the requirements mandated by the wildland fire agencies within the company service territory. Some additional project specific or weather specific requirements may be necessary and will be discussed in the following section of this plan. <b>Please note that if your work project is over 50' from the vehicle location, the mandated equipment should be removed from the vehicle and staged at the work site.</b></p> <p>4.2.1 Passenger Vehicles (performing work in the wildland areas):</p> <p>4.2.1.1 1 round point shovel with overall length of at least 46" (D handle acceptable)</p> <p>4.2.1.2 1 serviceable fire extinguisher, minimum U.L. rated "2 BC"; rating found on fire extinguisher label (a "2" rated extinguisher will put out approx. 2 sq. ft. of combustible material and BC indicates it will work on flammable liquids and is non-conductive for electrical fires)</p> <p>4.2.2 Trucks &amp; 4 Wheel Drive Vehicles;</p> <p>4.2.2.1 1 round point shovel with overall length of at least 46" (D handle acceptable)</p> <p>4.2.2.2 1 Pulaski</p> <p>4.2.2.3 1 (5) gallon backpack pump</p> <p>4.2.3 Heavy Machinery or Equipment (including tub grinders, whole tree chippers, drilling rigs, tractors, etc.);</p> <p>4.2.3.1 1 round point shovel with overall length of at least 46" (D handle acceptable)</p> <p>4.2.3.2 1 Pulaski</p> <p>4.2.3.3 1 (5) gallon backpack pump</p> <p>4.2.4 Chain Saw Use;</p> <p>4.2.4.1 1 shovel within 25 feet of the chainsaw operation with unrestricted access to the tool.</p> <p>4.2.4.2 1 serviceable UL rated 2BC fire extinguisher in their immediate possession.</p>		
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SECTION GENERAL PRACTICES
------------------------------

SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN
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- 4.2.5 Major Operations Work Area (When vehicle equipment does not meet the needs of the work area a Fire Box or equivalent should be located on site and be accessible to all personnel and there should be enough total tools to outfit number of personnel on scene);
  - 4.2.5.1 1 (5) gallon backpack pump
  - 4.2.5.2 2 Pulaskis
  - 4.2.5.3 2 McLeod fire tools
  - 4.2.5.4 Round point shovels 46" (enough to outfit remaining personnel)

4.3 **Fire Risk & Mitigation Matrix:** The following matrix is designed to blend the fire risk associated with a specific work activity with the fire potential index for the day to establish the proper fire prevention measures required in each scenario. Most of the work activities can be done daily simply by having the required equipment from section 4.2 available, serviceable, and proximate to work site. Some activities involve more risk and may require additional mitigation measures. The fire potential is determined by the daily Fire Potential Index. Green on the FPI is considered **Normal Fire Potential**. Under **Normal** the baseline tool & equipment requirements from section 4.2 suffice, except for specifically noted exceptions. **Elevated Fire Potential** is when the FPI is in the yellow/orange range and certain work activities may require additional mitigation measures in order to proceed with the work; again refer to matrix. **Extreme Fire Potential** is the red on the FPI and most work activities will cease, except where not performing the work creates a greater risk than doing so. In those cases where work will be done, consult with On-duty Fire Coordinator and check matrix to see if additional mitigation is required.

Normal	Elevated	Extreme
<b>&lt; 12</b>	<b>12-14</b>	<b>15-17</b>

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DEPARTMENT <b>TRANS. &amp; DISTRIB. ENGINEERING</b>	DIVISION <b>DISTRIBUTION ENGINEERING</b>	EFFECTIVE DATE <b>JUNE 25, 2014</b>
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SECTION <b>GENERAL PRACTICES</b>
-------------------------------------

SUBJECT TITLE <b>SDG&amp;E OPERATIONS &amp; MAINTENANCE WILDLAND FIRE PREVENTION PLAN</b>
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**FIRE RISK & MITIGATION MATRIX**

The work activity described can be performed to the operating level indicated unless specifically noted that it cannot, or by meeting the minimum additional mitigation requirements indicated for that level. This assumes the baseline tool requirements from section 4.2 are available, serviceable, and proximate to work site. *Note; a "designated" Fire Patrol can have co-lateral duties, whereas a "dedicated" Fire Patrol is committed to fire prevention duties and responsibilities.* The criterion for EXTREME is to do only the work where not performing the work creates a greater risk than doing so. Consult Fire Coordination for special mitigation requirements.

Work Activity	Work Activity Description	NORMAL Operating Conditions	ELEVATED Operating Conditions	EXTREME Operating Conditions
<i>Vehicle, Roads, Inspections</i>				
Vehicle travel	On paved roads or improved roads with no vegetation on roadbed	X	X	X
Vehicle travel	Off road vehicle travel and un-maintained roadbeds	X	Must designate a Fire Patrol (Document)	Permitted only for work that meets the extreme criteria and must have a dedicated Fire Patrol
Inspections	Ground, aerial, security, climbing, vegetation, and weed control inspections	X	X	Must follow vehicle travel rules above.
Access Road Maintenance	Vegetation removal, water bars, culvert cleaning/repair, grading	X	Must designate a Fire Patrol (document) and 150 gal. of water and equipment for its use	Not Permitted

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SECTION <b>GENERAL PRACTICES</b>				
SUBJECT TITLE <b>SDG&amp;E OPERATIONS &amp; MAINTENANCE WILDLAND FIRE PREVENTION PLAN</b>				
<i>Equipment Maintenance</i>				
Insulator Washing	Conducted on existing access roads with Insulator Wash Rig (1,000 gal.)	X	X	Not Permitted
Equipment Replacement	Mechanical replacement of system equipment; i.e. insulators, fuses, etc. ON paved roads or improved roads with no vegetation on roadbed	X	Must designate a Fire Patrol (Document)	Permitted only for work that meets the extreme criteria and must have a dedicated Fire Patrol
Equipment Replacement	Mechanical replacement of system equipment; i.e. insulators, fuses, etc. Off road vehicle travel and on unmaintained roadbeds	X	Must designate a Fire Patrol (Document)	Permitted only for work that meets the extreme criteria and must have a dedicated Fire Patrol
Conductor Replacement	Replacement of conductor with all activities conducted ON paved roads or improved roads with no vegetation on roadbed	X	Must designate a Fire Patrol (Document)	Not Permitted
Conductor Replacement	Replacement of conductor with all activities conducted Off road vehicle travel and on unmaintained roadbeds	X	Must have dedicated Fire Patrol and 150 gal. of water and equipment for its use	Not Permitted
Pole Replacement	Replacement of existing power pole ON paved roads or improved roads with no vegetation on roadbed	X	Must designate a Fire Patrol (Document)	Not Permitted
Pole Replacement	Replacement of existing power pole Off road vehicle travel and on unmaintained roadbeds	X	Must designate a Fire Patrol (document) and 150 gal. of water and equipment for its use	Not Permitted
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DEPARTMENT <b>TRANS. &amp; DISTRIB. ENGINEERING</b>		DIVISION <b>DISTRIBUTION ENGINEERING</b>		EFFECTIVE DATE <b>JUNE 25, 2014</b>
SECTION <b>GENERAL PRACTICES</b>				
SUBJECT TITLE <b>SDG&amp;E OPERATIONS &amp; MAINTENANCE WILDLAND FIRE PREVENTION PLAN</b>				
<i>Vegetation Management</i>				
Pole/Tower Ground Clearance (PRC 4292)	10' clearance around poles and tower structures weedeaters/handtools only	X	X	Not Permitted
Pole/Tower Ground Clearance (PRC 4292)	10' clearance around poles and tower structures weedeaters/handtools and chain saws	X	Must designate a Fire Patrol (Document)	Not Permitted
Conductor Vegetation Clearance (PRC 4293)	Tree trimming and occasional removal to maintain required clearances mandated by code	X	Must designate a Fire Patrol (Document)	Allowed when trees making contact or intermittent contact. Must have a dedicated Fire Patrol.
Noxious Weed Control	Controlling or abating weeds in permitted access roads & worksites	X	Must designate a Fire Patrol (Document)	Not Permitted
<i>Other Activities</i>				
Welding or Grinding	Welding or grinding will always require that it be done in an area 10' minimum clearance to mineral soil or equivalent	Must designate a Fire Patrol (Document)	Must have a dedicated Fire Patrol	Not Permitted
Blasting	Any work using explosives must have permit with restrictions identified	Must designate a Fire Patrol (Document)	Must designate a Fire Patrol (document) and 150 gal. of water and equipment for its use	Not Permitted
Combustion Engines	Compressors, generators, etc. must have 10' minimum clearance or equivalent from the heat source	X	Must designate a Fire Patrol (Document)	Permitted only for work that meets the extreme criteria and must have a dedicated Fire Patrol
<p>Activities not covered by the <i>Matrix</i> that do not fit with an identified work activity require consultation with the On-duty Fire Coordinator for approval and/or additional mitigation requirements.</p>				
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SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p>4.3.1 Optional considerations for particularly hazardous or high risk areas where additional mitigation measures are warranted (<i>discuss with On-duty Fire Coordinator</i>)</p> <ul style="list-style-type: none"> <li>4.3.1.1 Small fire engine or patrol unit with minimum 150 gallons of water</li> <li>4.3.1.2 Cache of fire hose and related accessories</li> <li>4.3.1.3 Water supply; water tender, truck, or hydrant (1500 gal. recommended)</li> <li>4.3.1.4 Dozer or tractor, capable of producing fire line</li> </ul> <p>4.3.2 Helicopter Operations: Helicopter staging areas will be treated similar to other staging areas with enough fire equipment for personnel on site or fire box available on major operations. On Temporary Staging Access Pads (TSAP) adequate firefighting equipment shall be carried on the helicopter for the number of personnel working on the ground at those sites.</p> <p>4.4 General Fire Prevention Considerations:</p> <ul style="list-style-type: none"> <li>4.4.1 It is required on projects in the SDG&amp;E FTZ (and recommended in any wildland area) to conduct and document in the formal "tailboard" safety sessions all fire concerns, identify designated or dedicated fire patrol, mitigation, and extinguishment plans for any at risk work for the day.</li> <li>4.4.2 Smoke only in designated smoking areas or in a 10' clearing void of all grass or other vegetation.</li> <li>4.4.3 Idling your vehicle in areas of brush, grass, or other vegetation is prohibited. When parking in these areas; shut off vehicle and check vehicle undercarriage for any threat of fire ignition.</li> <li>4.4.4 When driving over grass meadows or areas of low vegetation, have a designated Fire Patrol follow along with fire tools available to extinguish an inadvertent fire start. If traveling alone, you become the designated fire patrol, frequent observations of the ground behind you should be made with fire tools ready and available and this should not be done in elevated or extreme conditions.</li> <li>4.4.5 At work sites have all required tools available and within 50' of the work activity. Tools should be serviceable and ready for use.</li> <li>4.4.6 When using any piece of equipment capable of producing sparks and/or which has an exposed exhaust system, provide an area with 10' clearance or equivalent from the heat source and at a minimum assign a designated Fire Patrol during elevated and extreme conditions.</li> <li>4.4.7 All internal combustion engines shall have approved spark arresters. <ul style="list-style-type: none"> <li>4.4.7.1 Engines used to provide motive power for trucks, tractors, buses, and passenger vehicles, except motorcycles, are exempt if the exhaust system is equipped with a muffler.</li> <li>4.4.7.2 Turbocharged engines are exempt.</li> </ul> </li> </ul>		
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SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p>4.4.8 When it is possible, wet down adjacent vegetation when performing at risk work in the wildland areas.</p> <p>4.4.9 Consider work hour restrictions in the wildland areas avoiding particularly hazardous work during the hottest portions of the day.</p> <p>4.4.10 Use available stand-by engines and/or patrols when performing at risk work in the wildland areas during elevated and extreme conditions as available.</p> <p><b>CAUTION: DO NOT UNDER ESTIMATE THE ABILITY OF A WILDFIRE TO QUICKLY SPREAD TO AN UNMANAGEABLE SIZE...</b></p> <p>4.5 <b>General Fire Safety Considerations:</b> As previously indicated, fire prevention is the primary focus of all of our efforts. We do carry the proper equipment to rapidly extinguish a witnessed ignition or very small fire that is within our capabilities to take action on. If at any time the fire becomes unmanageable or unsafe for you to continue your suppression actions, you should stop and retreat to a safe area. If work activities require personnel to perform utility related work adjacent to or near an uncontrolled wildfire the following considerations become important for your safety (See below).</p> <p>4.5.1 Use proper Personal Protective Equipment (P.P.E.), standard SDG&amp;E requirements apply. When working within or adjacent to uncontrolled fire perimeter company issued fire resistant clothing should be worn. Respiratory protection (painter's mask or bandana) is recommended.</p> <p>4.5.2 When working on or adjacent to a wildland fire, positive communications must be maintained internally using SDG&amp;E work protocols. It is critical that employees have the ability to communicate with fire agencies for reporting fires and for the exchange of critical information for the duration of an incident. Cross communication with the fire agencies is the responsibility of the SDG&amp;E Incident Commander (single point of contact assigned to manage all SDG&amp;E resources), the Fire Coordinator (FC), or the On- Site (pre-designated work supervisor for affected area) Supervisor in the absence of a Fire Coordinator or SDG&amp;E Incident Commander.</p> <p>4.5.3 Know what the fire is doing at all times, observe personally or be in direct communication with a competent person (IC, FC, or On-Site Supervisor) who is monitoring fire activity.</p> <p>4.5.4 Work within the Incident Command System (ICS) while assigned to a fire incident. Understand the chain of command for the incident and who you are accountable to. Check in and check out when entering an uncontrolled fire perimeter after it is determined to be safe by the IC, FC, or on-site SDG&amp;E Single Point of Contact.</p> <p>4.5.5 Pre-evaluate and designate safety zones (areas large enough to provide a safe retreat) and escape routes (safe access to these safety zones) when working in the wildland areas during high fire danger days.</p>		
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DEPARTMENT TRANS. & DISTRIB. ENGINEERING	DIVISION DISTRIBUTION ENGINEERING	EFFECTIVE DATE JUNE 25, 2014
SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p>4.5.6 Get proper rest and adequate water during extended fire activity to avoid fatigue and help prevent accidents and/or injuries.</p> <p>4.5.7 Exercise extreme caution when driving within a fire area and/or smoky conditions. Be aware of falling rocks, trees, and other debris as well as road obstructions and other traffic. Keep driving speeds down when visibility is limited.</p> <p>4.6 <b>Red Flag Warnings:</b> Red Flag Warnings (RFW) are issued by the National Weather Service. Its intent is to pass along critical fire weather information to users and occupants in the wildland areas to bring about more prudent actions in all of their wildland related activities. There are currently two basic criteria (see definitions under RFW) for establishing a RFW. One is wind related, along with extreme dryness, and this RFW will be considered “Extreme” operating condition automatically... and all work activity will cease except for such work that without performing it would create a greater risk. The second RFW criterion is lightning related and is issued when areas of “dry” lightning are imminent. During this type of RFW, Fire Coordination and Meteorology will confer to determine the operating condition for the duration of the RFW. RFW are generally issued for various weather zones that transect the SDG&amp;E service territory. The wind/relative humidity RFW will apply to all identified weather zones within SDG&amp;E service territory and can be expanded to excluded weather zones if necessary after consultation between Fire Coordination and Meteorology.</p> <p>4.7 <b>Project Activity Levels:</b> The United States Forest Service has a program it utilizes to reduce the risk of fire on National Forest land, particularly in the timber or mountain areas. It is referred to as Project Activity Levels (PALS). Each day at 4:00 p.m. the PAL will be announced for the following day. It may be different for different geographical areas in the county. IT ONLY APPLIES TO THE CLEVELAND NATIONAL FOREST. This information is available by calling (619) 557-5262. The PAL index will determine what activities can be done on the forest the following day and what risk mitigation can be done to be allowed to do additional work activities. The CNF O&amp;M Fire Prevention plan must be followed when working on USFS lands.</p> <p>4.8 <b>SDG&amp;E Project Specific Fire Plans:</b> This O&amp;M Fire Prevention plan will be sufficient for most routine day to day work activities performed in the wildland by all SDG&amp;E employees and contractors. For projects outside of normal O&amp;M work activities or for an O&amp;M activity that seems to be especially hazardous the Fire Coordination group should be consulted. The FC will make a determination whether this O&amp;M Fire Prevention plan is sufficient for the prescribed work, this plan with some minor additional mitigation will suffice, or if a project specific Fire Prevention Plan is required. If required the FC will work with the Project Manager or representative to develop the required plan, follow it through to approval, and monitor compliance with the plan as appropriate. The Fire Plan template (attachment #2) will be used to assist in development of the project specific Fire Plan. On major projects there may be additional requirements assessed by the CPUC or a jurisdictional fire agency that will be incorporated as required into the project specific Fire Prevention Plan.</p>		
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DEPARTMENT TRANS. & DISTRIB. ENGINEERING	DIVISION DISTRIBUTION ENGINEERING	EFFECTIVE DATE JUNE 25, 2014
SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p>4.9 <b>Other Critical Fire Danger Proclamations:</b> The Fire Chiefs with jurisdictional responsibility for a given area have the authority to proclaim certain restrictions in extreme fire conditions or when they are experiencing a critical shortage of resources. These cases will be very rare and it will be incumbent on them to insure we are informed of any temporary changes in fire restrictions for a particular area. Upon notification we would be required to comply as appropriate.</p> <p>4.10 <b>Recommended Fire Related Training:</b> It is recommended that all field employees have basic fire prevention and fire safety training on an annual basis. Managers should assess individually whether an employee's work activities would cause this training to be mandatory using the existing ESCMP training tracking system to monitor compliance. This can be accomplished in one hour at a routine safety meeting just prior to fire season. For those employees who are likely to be asked to work within or immediately adjacent to an uncontrolled fire area, the following additional training is recommended: Two hours total consisting of Fire Safety, Incident Command System, and basic fire behavior training. For supervisors, managers, and company officers, who could be assigned as the SDG&amp;E Incident Commander or EOC "Officer in Charge" on a major incident, additional advanced ICS training is recommended. The Fire Coordinator group will provide this training or assist with arranging qualified instruction. The FC may bring in additional qualified instructors, or qualify additional SDG&amp;E employees as instructors, using the "train the trainer" approach to assist with this effort. Documentation of this training shall be done by the work supervisors and recorded in the employee's training records.</p> <p>4.11 <b>EOC and Control Centers:</b></p> <p>4.11.1 Service Dispatch, Electric Distribution Operations, Electric Grid Operations, and the EOC play a vital role in any fire emergency. Communications with these groups, when applicable, is critical. Provide information updates and feedback to each of these groups as their areas of responsibility becomes affected. This should continue through the duration of the incident. As this standard practice governs the fire prevention aspects of an event, Distribution Operations and Grid Operations manage the System Operation and all protocols in TSP-1320, DOP3013, &amp; ESP109 must be complied with.</p> <p>4.11.2 Early notification to the EOC of potential activation is recommended when appropriate. Notification procedures are identified in ESP 113 FIRE COORDINATION and should be followed as prescribed.</p> <p>4.12 <b>Fire Coordination:</b> SDG&amp;E has (4) full-time Fire Coordinators and additional qualified assistance within the company. They are essentially the liaison for the company to the Emergency Response agencies. Questions related to this plan or request assistance on any emergency should be made through the FC group.</p>		
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DEPARTMENT TRANS. & DISTRIB. ENGINEERING	DIVISION DISTRIBUTION ENGINEERING	EFFECTIVE DATE JUNE 25, 2014
SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p><b>5.0 REFERENCES</b></p> <p>5.1 State Forest Standard Practice Act: <a href="http://calfire.ca.gov/resource_mgt/downloads/2014_FP_Rulebook_w_TRA_No.1.pdf">http://calfire.ca.gov/resource_mgt/downloads/2014_FP_Rulebook_w_TRA_No.1.pdf</a></p> <p>5.2 TMC 1320 (aka DOP3013, ESP109 – SDG&amp;E Fire Conditions)</p> <p>5.3 ESP 113 – FIRE COORDINATION</p> <p>5.4 Power Line Fire Prevention Field Guide – 2008 edition <a href="http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fppguidepdf126.pdf">http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fppguidepdf126.pdf</a></p> <p><b>6.0 ATTACHMENTS</b></p> <p>6.1 Attachment 1: Service Territory with SDG&amp;E 2012 Highest Fire Risk Areas &amp; FTZ</p> <p>6.2 Attachment 2: Project Specific FIRE PLAN template</p>		
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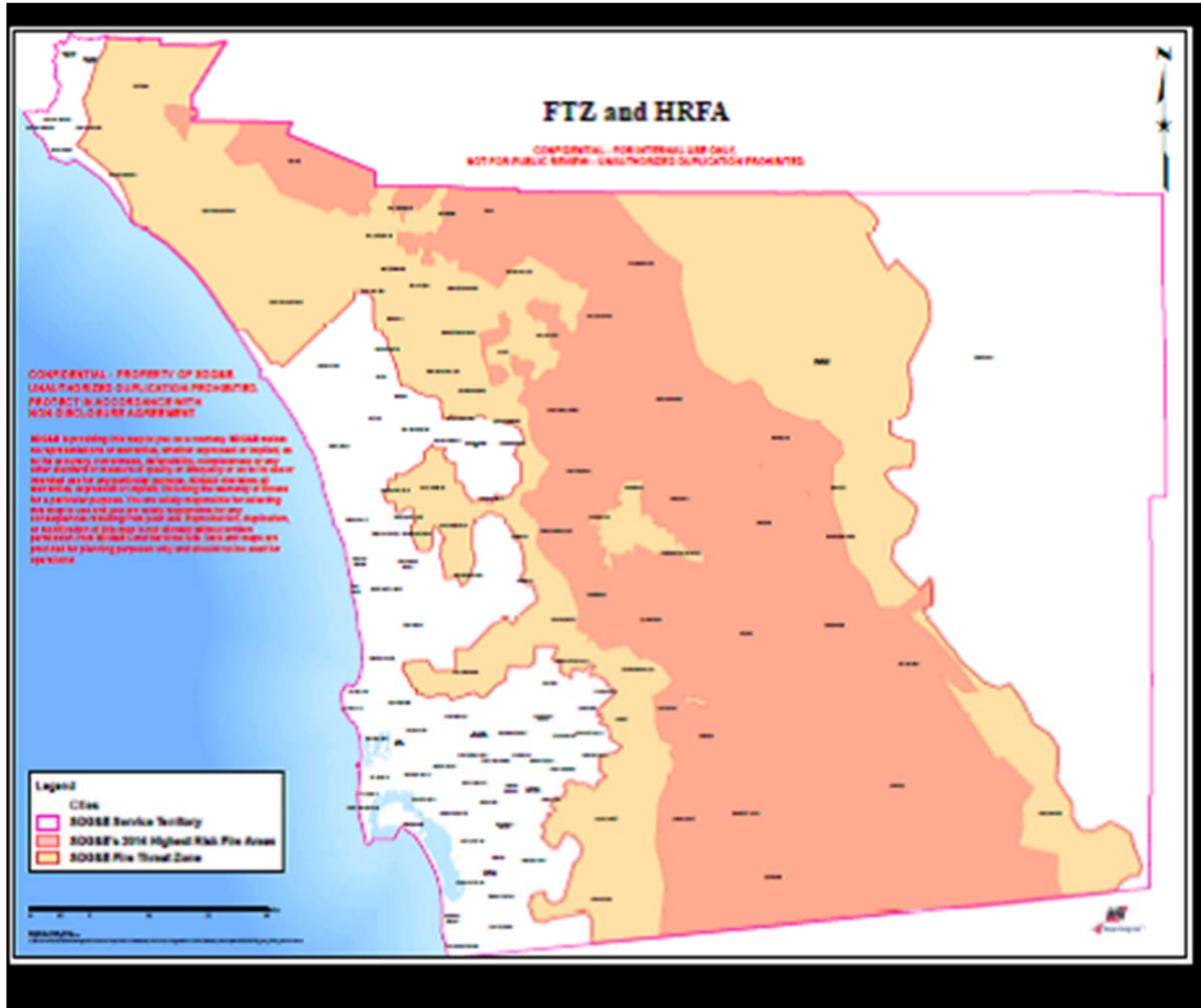


DEPARTMENT <b>TRANS. &amp; DISTRIB. ENGINEERING</b>	DIVISION <b>DISTRIBUTION ENGINEERING</b>	EFFECTIVE DATE <b>JUNE 25, 2014</b>
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SECTION <b>GENERAL PRACTICES</b>
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SUBJECT TITLE <b>SDG&amp;E OPERATIONS &amp; MAINTENANCE WILDLAND FIRE PREVENTION PLAN</b>
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Attachment 1: Service Territory with SDG&E 2014 Highest Fire Risk Areas & FTZ



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DEPARTMENT TRANS. & DISTRIB. ENGINEERING	DIVISION DISTRIBUTION ENGINEERING	EFFECTIVE DATE JUNE 25, 2014
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SECTION GENERAL PRACTICES
------------------------------

SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN
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Attachment 2: Project Specific FIRE PLAN template

**Instructions:**

ESP-113.1 is intended to cover normal day to day operations and O&M activities. Some projects may have additional fire risks and/or activities not anticipated in ESP-113.1. Utilize ESP-113.1 and the following outline to review your project for fire risks and mitigations. This outline is to help you with the development of a project specific fire prevention plan and not all of the sections will apply to every project. Before writing a project specific fire prevention plan please contact a member of the SDGE Fire Coordination Team. They will be able to provide guidance and lead you through the process.

**POSSIBLE SECTIONS OF A PROJECT FIRE PREVENTION PLAN**

**1. CONSTRUCTION FIRE PREVENTION PLAN DEFINITIONS**

- a. List any project specific definitions not listed in ESP 113.1. Also define the project name.

**2. PROJECT DESCRIPTION:**

- a. **General location:** Identify the right of way, work sites, and major operation work site
- b. **Scope and Intent of Proposed Project:** A general description of activities
- c. **Project Timeframes:** General estimate of start date and completion time
- d. **Description of work activities that will take place in or adjacent to wildland areas.**

**3. PROJECT FIRE RISKS AND MITIGATION MEASURES:**

- a. Use ESP 113.1 as a baseline to determine fire risk activities and mitigation requirements with project specific mitigation requirements.
- b. List all activities associated with the project that may pose a fire risk.
- c. List fire prevention measures you propose to mitigate these risks.

**4. MAJOR OPERATION WORKSITES**

- a. List all major operations work sites within Project right of way
- b. List fire prevention measures that will be used at each major operations work area.

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DEPARTMENT TRANS. & DISTRIB. ENGINEERING	DIVISION DISTRIBUTION ENGINEERING	EFFECTIVE DATE JUNE 25, 2014
---	--------------------------------------	---------------------------------

SECTION GENERAL PRACTICES
------------------------------

SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN
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**5. OTHER PROJECT TOOLS & EQUIPMENT REQUIREMENTS**

- a. Describe any special tool and/or equipment requirements that may be needed when weather, dry vegetation or other factors increase fire risk

**6. AGENCY SPECIFIC REQUIREMENTS: (Examples)**

- a. CALFIRE: Title 14 of California Code of Regulations, etc.
- b. USFS: Project Activity Levels (PAL), etc.

**7. RED FLAG WARNINGS (RFW) AND OTHER CRITICAL FIRE DECLARATIONS:**

- a. Describe what activities can still be done during a RFW
- b. Describe what activities can be done during other critical fire declarations.
  - i. What mitigations will be in place?
- c. What authority do the local fire jurisdictions have to restrict or stop work?

**8. HELICOPTER OPERATIONS FIRE PREVENTION PLAN:**

- a. A plan specific to fire prevention related to helicopter operations will be completed and serve as a supplement to this document.
  - i. Consult Aviation Services for their standard operating procedures
- b. List helicopter activities associated with the project
- c. Identify the mitigation measure to minimize the fire risks

**9. FIRE PREVENTION TRAINING REQUIREMENTS**

- a. Indicate project specific training requirements including timeframes, content and target audience

**10. TAILBOARDS, INSPECTIONS & COMPLIANCE**

- a. List fire prevention tailboard topics, inspection criteria, compliance expectations, and documentation

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DEPARTMENT TRANS. & DISTRIB. ENGINEERING	DIVISION DISTRIBUTION ENGINEERING	EFFECTIVE DATE JUNE 25, 2014
SECTION GENERAL PRACTICES		
SUBJECT TITLE SDG&E OPERATIONS & MAINTENANCE WILDLAND FIRE PREVENTION PLAN		
<p><b>11. <u>COMMUNICATIONS PLAN</u></b></p> <ul style="list-style-type: none"> <li>a. List methods of establishing communication with appropriate local fire authority for all personnel working on the project</li> <li>b. Establish a protocol for a means of notification during an emergency for the efficient evacuation of project personnel</li> </ul> <p><b>12. <u>REFERENCES:</u></b></p> <ul style="list-style-type: none"> <li>a. List references applicable to the project <ul style="list-style-type: none"> <li>i. Example: ESP 113.1, State Forest Standard Practice Act...</li> </ul> </li> </ul> <p><b>13. <u>ATTACHMENTS:</u> (Optional Examples)</b></p> <ul style="list-style-type: none"> <li>a. Some projects will have specific requirements <ul style="list-style-type: none"> <li>i. Fire Prevention Matrix</li> <li>ii. Maps</li> <li>iii. Diagrams</li> </ul> </li> </ul> <p><b>14. <u>PLAN REVIEW AND APPROVAL:</u></b></p> <ul style="list-style-type: none"> <li>a. Build a signature page <ul style="list-style-type: none"> <li>i. Reviewed by: CALFIRE CHIEF; SDCFA; CPUC...</li> <li>ii. Approved by: SDGE Fire Marshal; SDGE Project manager..</li> </ul> </li> </ul>		
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