

APPENDIX 4.8-B: TL 6975 CONSTRUCTION FIRE PREVENTION PLAN



TL6975
Construction Fire Prevention Plan

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Table of Contents

Contents

1. CONSTRUCTION FIRE PREVENTION PLAN DEFINITIONS.....	4
2 PROJECT DESCRIPTION.....	7
3. PROJECT FIRE RISKS AND MITIGATION MEASURES.....	8
4. MAJOR OPERATION WORK SITES (MOW)	8
5. OTHER PROJECT TOOLS & EQUIPMENT REQUIREMENTS	8
6. SPECIFIC REQUIREMENTS.....	9
7. RED FLAG WARNINGS (RFW) AND OTHER CRITICAL FIRE DECLARATIONS.....	9
8. TRAINING REQUIREMENTS FOR SDG&E & CONTRACT PERSONNEL.....	9
9. TAILBOARDS, INSPECTIONS, REVIEW & COMPLIANCE	10
10. EMERGENCY RESPONSE	10
11. REFERENCES:	10
12. ATTACHMENTS	10
Attachment 1: Fire Prevention Matrix.....	12
Attachment 2: Fire Threat Zone	13

1. CONSTRUCTION FIRE PREVENTION PLAN DEFINITIONS

- 1. ESP 113.1 SDG&E Wildland Fire Prevention & Fire Safety Plan (SDG&E ESP 113.1):** This is an internal San Diego Gas & Electric (SDG&E) standard practice or procedure outlining fire suppression tools and equipment required for its employees and contractors, fire prevention requirements, and fire related training.
- 2. Fire Coordinator (FC):** An SDG&E employee who serves as liaison or agency representative to the fire agencies and other emergency services during an emergency and with other fire related activities in non-emergency situations.
- 3. Fire Patrol:** Fire patrol(s) are personnel who are assigned the responsibility and are accountable for fire prevention, risk management, early detection of fires, and rapid extinguishment. (The assigned Fire Patrol is documented daily).
 - A “**designated**” Fire Patrol is a member of a work crew assigned responsibility and accountability for fire prevention, risk mitigation, early detection of fires, and rapid extinguishment should a fire occur. This can be accomplished *co-laterally* with other work duties, but the designated Fire Patrol must be ready to respond to a fire with appropriate fire equipment at all times during construction.
 - A “**dedicated**” Fire Patrol is a person(s) who’s sole responsibility are the duties associated with fire prevention and fire safety. The Fire Patrol will be assigned responsibility and accountability for fire prevention, risk mitigation, early detection of fires, and rapid extinguishment should a fire occur. Dedicated Fire Patrols are typically assigned to a fire engine or water tender, but this equipment is not required.
- 4. Fire Tools:** References to “fire tools” pertains to firefighting tools which include; shovel, Pulaski, and a five gallon backpack pump. These tools are commonly required on project vehicles and work sites. Additional requirements may be identified depending on the construction activity being performed, the location and/or current conditions.
- 5. Fire Threat Zone (FTZ):** An area within the SDG&E service territory which identifies the wildland fire threat on a scale of low to extreme. This is a rating based on a combination of potential fire behavior (wildland fuel) and expected fire frequency. SDG&E has established certain wildland fire prevention practices for construction within the designated FTZ.
- 6. At Risk Activity:** Project activities that present a risk of igniting a wildfire.
- 7. Emergency Work:** Work required to resolve situations that present immediate threats to human life or property regardless of ownership (36 CFR 251.50b)

- 8. Fire Potential Index (FPI):** This is a comprehensive assessment of fire risk, used as a tool for making operation and maintenance decisions related to fire prevention. The tool converts environmental, statistical, and scientific data into an easily understood forecast of short-term fire threats. Both a daily and a seven day forecast index are generated 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 to determine the operating condition for work activities each day. There are three operating conditions determined by the FPI (Normal, Elevated, or Extreme):

Normal Operating Condition: It is considered “Normal” operating condition when the FPI is in any shade of green (*very low, low, or moderate*). All activities can take place in the wildland areas of the service territory without additional fire risk management, as long as baseline fire equipment is available as prescribed in this plan. Note, the baseline fire equipment requirements must meet or exceed all local, state, and federal requirements for working in the wildland areas.

Elevated Operating Condition: It is considered “Elevated” operating level when the FPI is either yellow or orange (high or very high). Certain “at risk” activities (as identified in Attachment 1: Fire Prevention Matrix) will require additional risk management to perform those work activities.

Extreme Operating Condition: It is considered “Extreme” operating level when the FPI is red (extreme). No “at risk” activities should be conducted except for those activities which if not performed may present a greater risk of ignition. Consultation with the Fire Coordinator is required to make the determination to perform the activity and identify additional fire prevention measures to be implemented to reduce risk.

- 9. Red Flag Warning (RFW):** A Red Flag Warning is issued for a stated period of time by the National Weather Service (NWS) using pre-determined criteria to identify critical fire danger in a particular geographic area.
- 10. Major Operation Worksite (MOW):** These work sites are typically large in size and include, but are not limited to construction yards, wire stringing sites, substations and any other area where construction work will be concentrated. The criteria for identifying a MOW is based on the number of people, type of work, and duration the site will be occupied.
- 11. Construction Fire Prevention Plan:** Commonly referred to as the Fire Plan. The Fire Plan is developed and implemented by SDG&E to provide fire prevention guidance for a specific construction project.
- 12. Project:** “Project” may be used interchangeably in place of TL6975 Project.
- 13. Hot Work:** Metal cutting, welding, grinding, activities that require open flame and/or have a high a probability of producing sparks. These activities may have different requirements

depending on land ownership or the fire agency having jurisdiction.

14. Incidental Landing Areas: Temporary helicopter landing sites used infrequently requiring minimal maintenance or upkeep.

15. Field Construction Advisor (FCA) or Contract Administrator (CA): Serves as the SDG&E Point of Contact (POC) with construction personnel and the project management team. The CA is responsible for overseeing that construction work is performed in compliance with project requirements.

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2. PROJECT DESCRIPTION

The Project includes the following components, broken out by segment:

- Segment 1 Rebuild: Rebuild of approximately 1.8 miles of an existing 69 kV circuit power line near San Marcos Substation.
- Segment 2 New Build: Addition of approximately 2.8 miles of a new single-circuit 69 kV overhead power line to the existing Meadowlark Junction.
- Segment 3 Reconductoring/Re-Energizing: Reconductoring approximately 7.4 miles of a de-energized power line segment to the existing Escondido Substation. Minor work at the existing Escondido Substation to accommodate this new circuit.

Table 1- Fire Jurisdiction & Land Ownership

Ownership	Fire Suppression Responsibility	Non Emergency Contact	Emergency Contact
	Elfin Forest/Harmony Grove Fire Dept	760-744-2186	911
	Escondido Fire Department	760-839-5401	911
	Rancho Santa Fe Fire Protection District	858-756-6001	911

(DPA, Direct Protection Area, SRA, State Responsibility Area; FRA, Federal Responsibility Area; LRA, Local Responsibility Area)

Project Timeframes:

This project's construction phase will take approximately 10 months.

Work activities that are anticipated to take place in the FTZ may include but are not limited to:

- Grading for road maintenance, site/pad contouring and structure foundations
- Hazard reduction; mowers & weed eaters
- Existing wood structure removal
- Excavation for new foundation steel pole/tower placement
- Digging & setting direct bury new steel structures
- Erection of new structures
- Operation of generators, compressors, and other internal combustion engines
- Operation of backhoes, augers, & other rock striking equipment
- Welding, grinding, & cutting of steel
- Working in and around energized lines
- Conductor stringing
- Re-conductoring
- Cable pull operations
- Helicopter operations

TL6975 Construction Fire Prevention Plan

- Trenching
- Construction meetings at staging yards
- Surveys and inspections
- Environmental monitoring and surveys

3. PROJECT FIRE RISKS AND MITIGATION MEASURES

During the construction phase of the Project, SDG&E will implement the fire prevention measures listed in the Project Fire Prevention Matrix (Attachment 1) which describes activities creating fire risks that will occur within the FTZ (Defined in ESP113.1). The Project Fire Prevention Matrix is based on the Fire Risk & Mitigation Matrix (ESP113.1) and may contain additional fire prevention measures based on project specific risks. Activity Risks identified after Project initiation shall be added to the Project Fire Prevention Matrix with appropriate fire prevention measures determined by the Contract Administrator and Fire Coordinator and/or the appropriate fire agency with jurisdictional responsibility.

4. MAJOR OPERATION WORK SITES (MOW)

The following precautions will take place at each designated major operations work area:

- The site will be assessed by the Fire Coordinator for wildland fire threat and/or risk prior to beginning operations associated with that site.
- Additional specialized tools and/or equipment will be identified during the inspection
- Heavy equipment working in a MOW clear of vegetation will **not** be required to have the fire mitigation tools within 50 ft. as long as there is an accessible fire box(s) inside the MOW containing all of the required tools (as determined by the Fire Coordinator)

5. OTHER PROJECT TOOLS & EQUIPMENT REQUIREMENTS

The following equipment may be required to be staged as proximate as possible to on-going Project activities. These items should be strategically placed to afford the best opportunity to help to prevent ignitions and expeditiously extinguish any fire resulting from Project activities. The Fire Coordinator, in consultation with the jurisdictional Fire Agency, will determine additional equipment needs or requirements. These may include, but are not limited to:

1. Wetting down sites, including vegetation, prior to and during construction/grading. This may require some application with a hose and nozzle to get areas sheltered from spray bar operations.
2. Contractor will utilize their company Hot Work Program. The program, at a minimum, will meet NFPA 51B requirements. Where feasible, hot work will be conducted in areas designated by the Fire Coordinator.
3. Designated parking areas for privately owned vehicles will be clearly marked and be clear of vegetation or other combustible materials.
4. Operations involving dispensing and/or storage of gasoline, diesel and other fuels and combustible chemicals will have the appropriate signage, and fire prevention

6. SPECIFIC REQUIREMENTS

The Project activities must comply with the following regulations:

- Title 14 of the California Code of Regulations (CCR)
- California Forest Practice Rules, in its entirety for the duration of the Project with particular attention to Chapter 4, Subchapter 4, 5, & 6 Article 8 Fire Protection.
- Public Resource Codes (PRC) Section 4427 - Operation of Fire Causing Equipment
- PRC Section 4431 - Gasoline Powered Saws and Equipment
- PRC Section 4442 - Spark Arrestors
- PRC Section 323.1 - Use of Equipment and Devices Generating Heat, Sparks or Open Flames

7. RED FLAG WARNINGS AND OTHER CRITICAL FIRE DECLARATIONS

When there is a notice of a Red Flag Warning (RFW), the FPI will usually default to “FPI – Extreme.” Note that if the FPI does not display extreme for the event, then further direction from the Fire Coordinator will be sought. The RFW will be for a specific geographic area and a specific time period. The project manager, FCA, CA, and construction supervisors will be responsible for insuring they are notified of these events. It is also the responsibility of all construction supervisors to know and communicate the details of a RFW to their crews. At the end of the RFW, confirmation should be obtained from the Fire Coordinator that work can begin again and if any restrictions are imposed on planned work activities.

At times, critical fire danger declarations may be made by any jurisdictional fire department for a specific time period. As soon as these declarations are shared with the Project Manager and CA, they will be communicated to project personnel. Restrictions and fire prevention measures will apply until the declarations are lifted. The jurisdictional fire departments may also direct SDG&E to cease any or all work activities, including helicopter use, in response to ongoing fire incidents.

During periods of FPI - Extreme, work restrictions may be imposed as identified in Attachment 1: Fire Prevention Matrix. Unfinished work, repairs, or vegetation management may be allowed to continue if they pose a greater fire risk if left in their current state. The FCA or CA will consult with the Fire Coordinator in these situations.

8. TRAINING REQUIREMENTS FOR SDG&E & CONTRACT PERSONNEL

Prior to the start of construction activities, it is required that all project construction personnel (*SDG&E & Contractors*) participate in training on Wildland Fire Prevention and Safety (*ref. SDG&E ESP113.1*). This training will be provided as part of the Project’s Worker Training Program. Training will include a discussion of:

- Fire prevention procedures
- Fire detection and reporting
- Extinguishment tools and methods
- Overview of the Construction Fire Prevention Plan

9. TAILBOARDS, INSPECTIONS, REVIEW & COMPLIANCE

Construction supervisors will be responsible for reviewing the contents of the Construction Fire Prevention Plan with construction personnel throughout the duration of the project. Daily safety tailboard session should include an assessment of the day's FPI level and discussion of the fire risk for the day.

The CA (or designee) shall perform periodic inspections of equipment and worksites to verify compliance with this plan. Compliance with the Construction Fire Prevention Plan is mandatory. Monitoring compliance with this Plan is everyone's responsibility. The Project Manager, Contract Administrators and/or Site Foreman will have authority to shut down any operation that presents an inappropriate amount of fire risk or hazard until it can be properly addressed.

Violations of the requirements of this Plan will be addressed immediately. Appropriate consequences for repeated or negligence in respect to this Plan will be forwarded to the appropriate management for action.

All project-related vegetation fires, regardless of size, shall be promptly reported to the fire agency having jurisdiction. **911** is the primary notification number for reporting an emergency. The project manager, CA, and Fire Coordinator shall also be notified when it is safe to do so.

10. EMERGENCY RESPONSE

911 is the primary first responder contact number for all incidents. Project personnel will report all fires immediately by dialing 9-1-1. After first responders have been notified and it is safe to do so, reporting parties will notify Fire Coordination [(858) 503-5152] and appropriate project management.

The Project Manager, Field Construction Advisor, Contract Administrator, Fire Coordinator and/or Site Foreman will serve as the point of contact with the fire department in the event of an emergency. They will also manage the prevention, detection, control, and extinguishing of fires started accidentally as a result of construction activity.

Site specific emergency procedures will be reviewed prior to construction beginning each day during the tailgate briefing.

11. REFERENCES:

Electric Standard Practice (ESP) – 113.1
SDG&E Operations & Maintenance Wildland Fire Prevention Plan

California Forest Standard Practice Rules;
http://www.fire.ca.gov/resource_mgt/downloads/2016_ForestPracticeRules-Act.pdf

12. ATTACHMENTS

- **Attachment 1:** Project Fire Prevention Matrix
- **Attachment 2:** FTZ Map

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Attachment 1: Fire Prevention Matrix



