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**SAN DIEGO GAS & ELECTRIC COMPANY**

**CLEVELAND NATIONAL FOREST  
POWER LINE REPLACEMENT PROJECTS**

**DRAFT  
AVIATION SAFETY PLAN**

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**JUNE 2016**





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## 1 – INTRODUCTION

This Aviation Safety Plan (Plan) describes San Diego Gas & Electric Company's (SDG&E's) procedures used during the Cleveland National Forest Power Line Replacement Projects (Project) to ensure safe transportation of Project personnel and external loads, and to define coordination requirements with United States (U.S.) Forest Service (USFS) aviation resources when operating on USFS lands. The Project includes the following components:

- Replacement of approximately 2,100 existing wood poles with fire-resistant, weathered steel poles;
- undergrounding of approximately 26 miles of existing 12 kilovolt (kV) distribution lines;
- removal of approximately 30 miles of existing 12 kV and 19 miles of existing 69 kV overhead facilities; and
- closure of up to 23 miles of access roads.

This Plan was prepared in accordance with Mitigation Measure (MM) PHS-5, as described in the Project's Final Environmental Impact Report/Environmental Impact Statement's Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) and the USFS Record of Decision (ROD), and is subject to review and approval by the USFS.

## 2 – OBJECTIVES

The purpose of this Plan is to provide the SDG&E construction management team with a description of measures that will be implemented to ensure safe transportation of Project personnel and external loads and will identify coordination procedures with USFS aviation resources operating within the Project area. The management practices and activities in this Plan are intended to accomplish the following objectives:

- to avoid interference with air traffic patterns due to the Project's helicopter use to support construction activities, and
- to identify coordination procedures with USFS aviation resources.

## 3 – MITIGATION MEASURES

The MM included in the MMCRP and ROD for the Project and pertaining to the implementation of this Plan are listed in the following subsection.

### 3.0 MITIGATION MEASURE PHS-5

“Prior to flight operations for helicopter use during construction as well as operations, San Diego Gas & Electric (SDG&E) will coordinate with local air traffic control and comply with all Federal Aviation Administration (FAA) regulations regarding helicopter use to prevent conflicts with air traffic generated by local airstrips. Documentation verifying SDG&E has coordinated with local air traffic control will be provided to California Public Utilities Commission prior to use of helicopters for construction and operations and maintenance activities. SDG&E will prepare an Aviation Safety Plan for Forest Service approval prior to

any use of helicopters in support of activities on the Cleveland National Forest. The Aviation Safety Plan will outline the procedures used to ensure safe transportation of external loads, and will identify coordination requirements with Forest Service aviation resources operating in the area.”

## **4 – PLAN IMPLEMENTATION**

### **4.0 UNITED STATES FOREST SERVICE AVIATION SAFETY PLAN**

#### **4.0.0 Safety Plan**

Due to the nature of the terrain and the inaccessible pole locations throughout the Project area; helicopters will be utilized as an important tool to accomplish the wood to steel initiative. Helicopter support will be ongoing throughout the entire duration of the Project, as all Project components will have areas of inaccessibility.

All SDG&E employees and Contractors are expected to make safety their first priority for all operations and to maintain a safe work environment through adherence to approved procedures, training, and communications. They should, therefore, familiarize themselves and comply with all relevant safety, health, and environmental policies and regulations and should also work in a manner that safeguards themselves, their coworkers, and other Project personnel.

Prior to each work day, all personnel involved in the operations for the day must participate in the morning job briefing. In the event that the scope of work changes; all personnel involved will be re-briefed on the relevant changes prior to work commencing. All personnel who regularly interact with helicopters during the course of their work, either on the ground or as a passenger, will complete a basic helicopter safety training class. Alternatively, on a case-by-case basis, the Pilot in Charge (PIC) or his designee can provide on-site safety training prior to any helicopter operation(s). Any worker engaging in external load work must be competent in safe rigging practices and rigging inspections. All rigging must be checked prior to use each day. If the rigging is suspect, it will be removed from service.

Personal protective equipment (PPE) consists of clothing and equipment that provide protection to an individual in a hazardous environment. If any flight crew member, air crew member, or passenger refuses to adhere to PPE requirements, the PIC or work site supervisor will terminate the flight and report the non-compliance.

Employees and contractors are expected to question any unsafe condition or activity in and around the helicopter, and will not board a helicopter if they have any question about the safety of the helicopter, its pilot, or the planned operation. If safety is compromised at any time during any helicopter operation, the mission will be shut down immediately.

#### **4.0.1 United States Forest Service Aviation Resources Coordination**

As helicopters will be used on a regular basis during Project construction, SDG&E will provide a One Week Look Ahead schedule to the USFS aviation resources. This schedule will provide a high-level view of which Project components are in construction and which activities are anticipated for the following week, include helicopter activities. In addition, at the

commencement of each Project component that will cross USFS-owned lands, SDG&E and its contractors will provide a one-time notification to the USFS point of contact (POC). A notification form will be completed and sent via e-mail or fax to the Cleveland National Forest (CNF) Emergency Communication Center and the Forest Aviation Officer. The notification will include the following information:

- the location and general timeframes of aviation use over CNF lands;
- a description of the aircraft, including make, model, and N-number; and
- contact information for SDG&E's Flight Operations Base (FOB), as well as the frequency the aircraft will be monitoring.

In the event of an emergency (e.g., fires, rescues, or any other event that will take priority over construction activities), SDG&E and its contractors will suspend operations in the vicinity of the emergency until the controlling agency and/or Incident Commander (IC) gives approval to commence operations in the area. During any fire activity, SDG&E will remain clear of any active temporary flight restrictions (TFRs) and coordination will take place between the USFS, SDG&E fire coordinators, and the agency requesting the TFR (if other than the USFS) for any activity that may require attention with regards to fire support or suppression. In the event that SDG&E and its contractors need to evacuate employees from threatened areas, aviation assets will do so while monitoring for the initial attack aircraft. Once the firefighting aircraft arrives on scene, communication will take place between the air boss, IC, and SDG&E fire coordinators to give an update on the status of threatened employees and to facilitate the flow of air traffic.

During operation and maintenance activities, coordination with USFS aviation resources will remain consistent with current practices and as defined in the SDG&E Operating Plan for the Cleveland National Forest. Ground-disturbing activities (e.g., pole replacement activities) will go through the outlined approval process with USFS staff and include a project description that will identify anticipated helicopter activities. Routine line patrols or emergency work utilizing helicopter operations will not require advance notice, but SDG&E will coordinate as necessary to maintain safe operations.

#### **4.0.2 Operational Control**

SDG&E requires a two-tier system of operational control. The first tier consists of the contractor's management, including those in leadership positions listed in the contractor's operations specifications. This management structure will be responsible for ensuring that the contractor's pilots are appropriately trained and qualified; that they are assigned to an aircraft that is airworthy and capable of completing the assigned mission; and that the risk associated with the flight is identified, assessed, and mitigated. The contractor's management structure has the authority to initiate, divert, or terminate any flight conducted by its own pilots. All aircraft flown by a contractor will be listed on that contractor's flight notification form provided to the SDG&E Aviation Services Department (ASD). For example, a contractor may not utilize another company's helicopter, for any reason, without placing that helicopter on the notification form. Additionally, contractors will not use another company's pilots without prior notification to the SDG&E ASD.

The second tier consists of the operational control the PIC exercises as the final authority over the operation of the aircraft. The PIC determines whether a flight can be accepted, initiated, and conducted or whether it must be terminated. The PIC is expected to operate in compliance with Title 14 of the Code of Federal Regulations. If the PIC has any doubts that a flight can be safely completed in accordance with the applicable rules and regulations, he will contact his company's management for additional guidance. In addition, all aviation operators will provide a written aviation operations plan—including an air lift plan, if relevant—to SDG&E's ASD prior to operating in SDG&E's service territory and preferably two weeks prior to any planned operation. All aviation operators must be fully briefed by the SDG&E FOB prior to work in SDG&E's territory. As part of this briefing process, aviation operators must acknowledge receipt of and be prepared to utilize TracPlus (or other approved and compatible flight following) devices and approved radios, or they will not be allowed to operate. Prior to the first flight of each day, aviation operators will notify SDG&E's FOB of when and where they will be operating, who will be onboard the aircraft, and any details on the expected mission.

#### **4.0.3 Project Staging Yards and Incidental Landing Areas**

Approved Project staging yards are primarily used for storing Project equipment and materials, and could also be used for refueling and minor maintenance of Project aircraft. Staging yards, stringing sites, and access roads will also be used for short-term helicopter operations, such as picking up conductor, poles, foundation equipment, or other relevant construction material in support of the Project. In each staging yard where helicopters may be used, there will be a designated area for landing the aircraft safely. During helicopter operations at each incidental landing area, a ground crew member will monitor the area to ensure the safety of all personnel. A fuel truck will be available for helicopter fueling at staging yards. All required spill prevention measures will be in place at the time and location of fueling. Water trucks will be utilized for dust abatement throughout any operations conducted in any staging yards and where necessary on the right-of-way.

#### **4.0.4 SDG&E Internal Accident/Incident Response Plan**

The primary purpose of SDG&E's Accident/Incident Response (AIR) Plan is to ensure the safety and well-being of air and ground crews and the public following an aviation incident or accident. The secondary purpose is to facilitate the orderly, accurate flow of communication subsequent to an incident or accident. In support of this purpose, SDG&E's ASD staff (and other SDG&E employees and departments who might respond to an aviation-related event) will be properly trained and equipped to respond as needed.

The AIR Plan process flow involves the following three primary phases:

- confirming an incident or accident has occurred;
- dispatching and monitoring rescue, medical, and recovery assets; and
- dissemination of accident/incident information.

Parallel with and beyond the completion of the AIR Plan steps, the SDG&E FOB will continue to perform as the central command and control center for oversight of the accident/incident scene, until SDG&E transfers control to another agency or to an on-scene SDG&E representative. The ASD Manager will determine when it is appropriate to transfer control to



another responsible entity. The AIR Plan will be executed in most situations by the FOB, although additional designated persons may also be assigned the responsibility in certain situations, or may be involved in a number of ways. The designated persons and the FOB will have both an electronic and hard copy of the AIR Plan immediately available, and they should be well-versed on its content and process flow prior to an accident or incident occurring.

Once the AIR Plan has been finalized internally, SDG&E will submit to the USFS and the California Public Utilities Commission (CPUC) a memorandum or report summarizing the incident and any corrective actions taken to resolve it.

#### 4.1 EXTERNAL LOAD OPERATIONS

External load operations will be conducted throughout this Project. External load operations will include missions such as installing and removing structures, wire stringing, moving materials, transporting equipment, and human external cargo (HEC) work as necessary. In the event that helicopters are operating in congested areas, congested area plans will be prepared and submitted to the FAA for approval, and all relevant documentation will be sent to the CPUC as required per MMs. During such operations, all rigging practices will be completed in accordance with all applicable standards and will be done by competent personnel. All external loads will be flown using rated and certified rigging and secured in such a manner to prevent accidental release from the aircraft. All helicopter long lines and any other associated rigging will be inspected prior to use each day and removed from service if the condition is suspect. All HEC operations will be flown utilizing an approved secondary restraint system and long lines that are used for HEC-only operations. Any person engaging in HEC work will be trained and competent in those operations. HEC operations will include installing marker balls, transporting workers to otherwise inaccessible areas, and other various missions as needed. All helicopters conducting external load operations will operate within the weight and balance limitations described in the Rotorcraft Flight Manual. Depending on the mission requirements, different categories of helicopter may be utilized for certain missions. These categories can be described as light, medium, and heavy lift aircraft, and are described as follows:

- **Light lift:** MD500/530 or AS350 Eurocopter. These aircraft can lift weights up to 2,000 pounds and will be utilized for light lift work, wire stringing, and HEC operations.
- **Medium lift:** Bell 205 Huey or Kmax. These aircraft will typically be used to lift weights between 2,000 and 6,000 pounds, and may be utilized for HEC operations.
- **Heavy lift:** S64 Skycrane. This aircraft will be utilized to lift any loads weighing 6,000 pounds or more.

All flight paths, staging yards, and work areas that will be used for picking up material will be screened by SDG&E's ASD for public safety, accessibility, and feasibility for lift work. All flight paths will be designed to create the least impact possible on the public, businesses, and any other agencies that may be impacted. Prior to operations within 1000 feet of public schools, coordination will take place between the relevant school officials, as well as the FAA and U.S. Department of Transportation, to obtain approvals. Documentation of such coordination and approvals will be sent to the CPUC as required.