

Preliminary Helicopter Use Plan
South of Palermo 115 kV Power Line Reinforcement
Project

The following preliminary plan describes the anticipated helicopter operations for the South of Palermo 115 kV Power Line Reinforcement Project.

FEDERAL AVIATION ADMINISTRATION

At a minimum, all helicopter operations will comply with applicable FAA regulations and requirements. This includes, but is not necessarily limited to:

- Pilot qualifications
- Aircraft worthiness
- Use of FAA-approved practices and equipment, where applicable

GENERAL HELICOPTER USAGE

Helicopters are anticipated to be used extensively on the project in order to reduce impacts on sensitive resources on the ground and facilitate construction during the wet season when line clearances are available. At this stage of the project, Pacific Gas and Electric Company (PG&E) has not selected a construction contractor and, therefore, can only make assumptions on construction means and methods. Helicopters that could be used include:

- Light Helicopter
- Heavy-lift Helicopter

It is anticipated that helicopter operations and refueling of helicopters may be necessary at all landing zones (LZs) proposed for the project. Each staging area may be used for helicopter activities at certain times depending on the construction sequencing and other project restrictions.

DURATION OF HELICOPTER USE

The project is expected to use up to three helicopters (2 light, 1 heavy) at a time throughout the 36-month duration of the project to support structure modification, structure removal, structure installation, and reconductoring. Multiple helicopters will be used if activities requiring helicopters occur simultaneously at multiple locations. No more than three helicopters will be in operation at any one time.

HELICOPTER-BASED CONSTRUCTION

Helicopter operations will support the following four phases of work:

- Structure modification
- Structure removal
- Structure installation
- Reconductoring

Each phase of work may require the use of a different mix of helicopters. The following paragraphs briefly describe the types of helicopters that could be employed and how they would be used in support of each phase of work.

- Light lift helicopters can be used for transporting of personnel, materials and equipment weighing up to 5,000 pounds.
- Heavy lift helicopters can be used for new installation of structures and equipment with weights exceeding 5,000 pounds but normally less than 20,000 pounds.

RIGGING AND HAULING

The pilot is responsible for the integrity of the rigging used for any external load and safe delivery of the cargo by continuously inspecting and monitoring the rigging throughout the operation. Prior to commencing operations, the following tasks will be completed:

- Determination of rigging requirements
 - Review materials being transported
 - Dimensions
 - Weight
 - Slings and taglines
 - Length
 - Hooks
 - Spreader bars
 - Load rating
 - Netting
- Inspect the condition and application of all rigging to ensure serviceability.
- Inspect electrically operated remote hooks or other such items

In addition to these items, several other factors need to be considered during flight planning including, but not limited to, geography, overhead utilities, weather, environmental restrictions, and public exposure at each work location.

FLIGHT MANAGEMENT

PG&E requires a two tier system of operational control of aircraft operations. The first tier consists of the Aviation Contractor's management, including those in management and leadership positions listed in the Contractor's Operations Specifications. This management structure will be responsible for ensuring 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 Operations Specifications. All crew members must be approved by PG&E's Helicopter Operations Department (HOD) prior to the commencement of any aviation operations.

The second tier consists of the operational control the pilot exercises as the final authority over the operation of the aircraft. The pilot determines whether a flight can be accepted, initiated, and conducted or whether it must be terminated. The pilot is expected to operate in compliance with Title 14, C.F.R. and all other relevant regulations. If the pilot has any doubts that a flight can be

safely completed in accordance with applicable rules and regulations, the flight will not commence or will be terminated immediately and the pilot will contact his company's management for additional guidance.

HOD reserves the right to conduct a safety audit of any aviation operator contracted to work in PG&E service territory. PG&E also reserves the right to exclude any aviation operator from operating on any PG&E projects, work or property.

OTHER CONDITIONS

Prior to any helicopter operations, the pilot will look at each anticipated helicopter landing site, or incidental landing area (ILA), to ensure there is adequate clearance for planned operations.

In each LZ where helicopters may be used, there will be a designated area for helicopter landing and associated activities required for construction. All required spill prevention measures will be in place. When the helicopter is at a LZ/staging yard there may be a fuel truck to support the helicopter, with a minimum of five hundred (500) gallons of fuel.

FLIGHT PATH AND USE ASSUMPTIONS

Helicopters will travel to the site from a nearby airport and associated flight paths will be dependent on the location where each helicopter will be hangered overnight. It is currently assumed that, once at the project site, all helicopters will fly along the route of the existing utility line from each respective LZ in a linear fashion, unless prohibit by FAA rules, environmental considerations, or other rules governing such flight.

The anticipated daily flight time for light helicopters is approximately 4.5 hours per day per helicopter. The anticipated daily flight time for heavy helicopters is approximately 5 hours per day.