

**Attachment C**  
**Template for Preliminary Helicopter Use Plan**

The following preliminary plan describes the anticipated helicopter operations for the Sycamore-Peñasquitos 230-kV Transmission Line Project.

### **FEDERAL AVIATION ADMINISTRATION**

At a minimum all helicopter operations will comply with applicable FAA regulations and requirements. This includes:

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

### **GENERAL HELICOPTER USAGE**

At this stage of the project, SDG&E has not selected a construction contractor and therefore, can only make assumptions on construction means and methods. The majority of helicopter operations will be completed during wire stringing operations and transporting of materials, equipment, or personnel. Helicopters that could be used include:

- Light/Medium Helicopter
- Sikorsky S61
- Sikorsky Skycrane S64

Sikorsky S61 and S64 (heavy lift) helicopters are not currently anticipated to be used on the Proposed Project. Although it is not anticipated, heavy lift helicopters could be used to transport steel poles to the right-of-way if the proposed access roads cannot be used by vehicles that would normally deliver this material. Detailed information regarding the type of helicopter to be used and the applicable flight plans are not available, as helicopter work could potentially occur at any point along the line, depending on conditions in the field during construction.

It is anticipated that helicopter operations and refueling of helicopters may be necessary at all staging yards 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**

Based on the current anticipated construction schedule of approximately one year, the project could potentially use multiple helicopters. At a minimum, one helicopter would be used for approximately seven to 10 months during the construction period. Additional helicopter(s), could be used for up to approximately four months during the construction period depending upon the final sequencing of construction. Multiple helicopters will be used if multiple types of activities requiring helicopter operation (such as conductor stringing and material transport) occur simultaneously or if one type of activity requiring helicopter operation occur at two separate locations along the project alignment and one helicopter is not sufficient.

The general flight times for helicopters during wire stringing and structure installation are as follows:

- Transport of structure material, hardware installation and wire stringing will typically require ten (10) trips per structure at five (5) to ten (10) minutes each. This includes fly time between the structure and the staging yard nearest the section of the project being constructed.
- Installation or removal of a pole or tubular steel structure will require two (2) to three (3) trips of approximately eight (8) to ten (10) minutes each.
- During a 10-hour work day, a helicopter would typically be in operation approximately six (6) to eight (8) hours.

## **HELICOPTER-BASED CONSTRUCTION**

In general, helicopter operations will support the following four phases of work:

- Removal of existing lines.
- Foundation installation for the new transmission line.
- Erection of the new structures including installation of hardware.
- Stringing of conductors, fiber optic and ground wire for the new transmission line.

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. Depending on construction access and other factors, the Contractor could use a mix of light, medium and heavy helicopters.

- Light lift helicopters can be used for the daily transport of personnel to work areas. These helicopters may also be used for long lining of material, wire stringing operations and staging personnel on and off of transmission towers.
- Medium lift helicopters can be used for the transporting of materials and equipment weighing up to 5,000 pounds. This may include the following:
  - Wood/Steel Poles
  - Arms
  - Insulators
  - Tools
  - Portable Equipment
- Heavy lift helicopters can be used for new installation of poles 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**

### Operational Control

SDG&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 that is 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 SDG&E's Aviation Services Department (ASD) prior to the commencement of any aviation operations.

The second tier consists of the operational control the Pilot in Command (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, C.F.R. and all other relevant regulations. If the PIC 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.

In addition, all Aviation operators shall provide to ASD a written aviation operations plan, to include air lift plan if relevant, prior to operating in SDG&E service territory (preferably 2 weeks in advance of any planned operation). All aviation operators must be fully briefed by the Flight Operations Base (FOB) prior to work in SDG&E territory. As part of such 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 will not be allowed to operate. Aviation operators shall notify FOB prior to the first flight of each day of when and where they will be operating, who will be onboard the aircraft and what the expected mission details include.

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

## **FLIGHT DATA MANAGEMENT**

### *Flight Release/Flight Following*

All Contractors flying for or in support of SDG&E or on an SDG&E project or operation will, prior to any flight, obtain a flight release number from the FOB. All PICs will receive an ASD flight release number from the FOB prior to lifting. This flight release number requirement is in addition to, and does not replace, any regulatory requirement a Contractor may have regarding operational control of its aircraft.

The FOB will issue a flight release upon notification by the PIC of the following:

- a. The full names of all passengers, and a confirmation that all passengers have required PPE.
- b. The risk level as assessed by the PIC
- c. The specific nature of the work to be conducted by the PIC, including intended areas of operation and intended landing zones
- d. Fuel load

Should the pilot receive a request from ground personnel or a passenger that differs significantly from the information above, the PIC will contact the FOB to update the original information and flight data provided. Updated information should include:

- a. Passengers or crewmembers not on the original manifest
- b. Requests to perform a different mission
- c. Requests to operate in different areas

Additionally, a pilot who is experiencing a delay arriving to the work site of more than 10 minutes, for whatever reason, should contact the FOB.

All Contractors flying for SDG&E will have established flight following procedures in place to track VFR flights, including training, maintenance and ferry flights. In addition, all Contractors will participate in FOB flight following, which will include GPS and tracking devices (such as TracPlus) carried onboard the aircraft. The FOB may require pilots to submit data files from those devices (usually daily), and may require pilots to periodically load files into the devices (usually daily, although more frequent uploads may be required).

## **OTHER CONDITIONS**

Helicopter operation could occur as close as approximately 100 feet to any residence.

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

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In each staging yard 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 staging yard there may be a fuel truck to support the helicopter, with a minimum of five hundred (500) gallons of fuel.