

Document title

Aerial Patrols

Document number

MNT-TRMX-00052

Applies to: **Transmission Department – Carolinas and Florida**

Keywords: **maintenance; transmission line maintenance**

1.0 Introduction

Due to the vast territory that the CP&L and Florida Power transmission system covers, a routine aerial patrol is needed twice per year to ensure the integrity of the system and to ensure that any abnormalities are promptly identified and documented so that corrective or preventive maintenance actions can be planned and scheduled.

2.0 Scope

The aerial patrol will utilize helicopter surveys of the transmission system twice per year to identify potential problems and needed corrective actions to be taken in the coming months. This patrol is to be used to aid the Transmission Line Maintenance Crew in scheduling and planning preventive/corrective maintenance work. This procedure shall be followed in accordance with the Transmission Maintenance Procedures Policy (MNT-TRMX-00000).

3.0 Equipment

The aerial patrol is conducted to inspect the condition of 69 - 500 kV voltage class energized transmission lines and associated hardware/equipment and also the condition of de-energized, abandoned transmission lines of the same voltage class construction as listed above that are being used to maintain existing right-of-way easements.

4.0 Frequency

All transmission lines will have aerial patrols conducted at intervals identified in procedure MNT-TRMX-00051 (Transmission Line Equipment and Right of Way Maintenance Schedules). Non-routine aerial patrols are scheduled on an as need/emergency basis.

5.0 Description of Work

Aerial patrols will be conducted in accordance with all applicable Company safety rules; OSHA regulations; work practices; and federal, state, and local regulations and ordinances.

Patrols will be conducted with qualified CP&L personnel to look for and document conditions of the following using the Aerial Patrol Inspection Form (FRM-TRMX-00289):

Guys	Braces	Conductors	Substation Equipment
Aerial Markers	Poles	Crossarms	Line Traps
Arresters	OHGW & OPGW	Encroachments	ROW Condition
Insulators	Splices/Dampers	Line Sect. Switches	

6.0 Reporting Requirements

The original Aerial Patrol Inspection form will be kept by the Transmission Line Maintenance Supervisor. One copy of the completed form will be forwarded to the Transmission Area Senior Analyst.

7.0 Estimated Minimum Manpower Requirements per Patrol

CP&L Estimate:

Central Transmission Area:	40 man-hours
Eastern Transmission Area:	80 man-hours
Northern Transmission Area:	60 man-hours
Southern Transmission Area:	40 man-hours
Western Transmission Area:	40 man-hours

Total CP&L System: 260 man-hours per patrol

Florida Power Estimate:

North Florida Transmission Area	60 man-hours
North Central Transmission Area	40 man-hours
South Central Transmission Area	40 man-hours
Suncoast Transmission Area	30 man-hours

Total Florida Power System 170 man-hours per patrol