

# BIRD COLLISIONS

## Specifications for Bird Flight Diverters installation on a Transmission line

### 1. Background:

Where it has been found during an EIA that there is a potential for bird collisions (specially rare or endangered species) with new overhead lines or there are actual collisions on existing lines it is advisable to install bird flappers or bird flight diverters on the earthwires.

It has been found in South Africa and overseas that the majority of collisions happen with the earth wires, as they are less visible than the conductors. The reason is that they are thinner than the conductors and also fewer of them on a line.

Typically big birds with less manoeuvrability, when flying horizontally to the ground, will see the conductors and when taking evasive action collide with the earthwires above.

The bird devices are installed either using “bicycles” along the earthwires or from a chair hanging from a helicopter.

### 2. Specifications - Bird Flight Diverters:

As per recommendations from Chris van Rooyen of the Endangered Wildlife Trust (EWT), Transmission should use the spiral type until all flapper types are tested by Eskom..

- Black and white spirals are of preformed 14mm diameter PVC UV stabilised rod.

Half of the spirals to be of white colour and the other half to be of black colour.

#### **Installation of the bird flight diverters to be:**

- To be installed on both earth wires (19/2,65), staggered;
- To be installed only on 60% of the span and in the middle of the span (Chris van Rooyen of the Endangered Wildlife Trust). Typical 400 kV line spans length=450m- 60%=270m.
- On the lower middle lower span, spirals be installed at 10 metre intervals on each earthwire and with alternating colours on each side (as per sketch below).

