2. PROJECT DESCRIPTION

In terms of the Environmental Impact Assessment (EIA) Regulations, Eskom Holdings Limited require authorisation from the National Department of Environmental Affairs and Tourism (DEAT) for the undertaking of the proposed extension of Hydra Substation and additional 765 kV Transmission power line. In order to obtain authorisation for all aspects of this project, comprehensive updated and current, independent environmental studies are required to be undertaken in accordance with the new EIA Regulations.

Eskom Holdings Limited has appointed Bohlweki Environmental, as independent consultants, to undertake the environmental studies to identify and assess all potential environmental impacts associated with the proposed new project. An environmental impact assessment is an effective planning and decision-making tool. It allows the potential environmental consequences of a proposed project to be identified up-front and managed through the planning process. As part of these environmental studies, all I&APs will be actively involved through a public participation process.

The Environmental Scoping Study will identify and evaluate potential environmental impacts associated with all aspects of the proposed project. Comments from I&APs during the EIA process are encouraged in order to ensure that all potential impacts are being considered within the ambit of the study.

2.1 Location and extent of the study area

The proposed 130 km Hydra Gamma 2 Transmission power line extends between the Hydra Substation, near De Aar and the Gamma Substation, near Hutchinson south of Victoria West, Northern Cape Province.

The proposed extension of the Hydra Substation in order to accommodate the increase of the Transmission load in the area will take place on the farm Hydra No. 144, which is owned by Eskom (refer to Figure 1.3, Chapter 1). The proposed extension will be adjacent to the existing Hydra Substation on the western side and 5 km east of De Aar. The proposed extent of the Hydra Substation will be approximately 250 m x 200 m (5 hectares).

2.2 Key Information regarding the Proposed 765 kV Transmission line

- The proposed additional 765 kV Transmission power line to be constructed parallel to the existing 765 kV Hydra-Gamma1 power line, at a distance of approximately 130 km.

- An additional 80 m wide servitude has been negotiated with the relevant landowners to accommodate the towers upon which the 765 kV voltage line is to be strung for the Hydra Gamma2 power line.
- Currently it is proposed that either the compact cross-rope (refer Figure 2.1) or the Guyed-V suspension tower (refer Figure 2.2) will be used. The total footprint area required for each tower is 80 m x 50 m.
- Self-supporting strain towers will be utilised at bend points along the line (Refer to Figure 2.3)

The land beneath the overhead lines can be continued to be used, as normal, by the landowners. Eskom, however, require that no dwellings or vegetation/crops higher than 4 m be established within the servitude.

Key Information regarding the proposed extension of the Hydra Substation

- The proposed extension of the 765 kV Hydra Substation will take place adjacent to the existing Hydra Substation, approximately 5 km east of De Aar, on Eskom owned property. (Refer to Figure 2.3)
- The proposed extension of the Hydra Substation would be approximately 250m x 200m in size, approximately 200 m west of the existing yard (Refer to Figure 1.3, Chapter 1)
- Access road relocated approximately 250 m west such that the substation extension can be accessed.

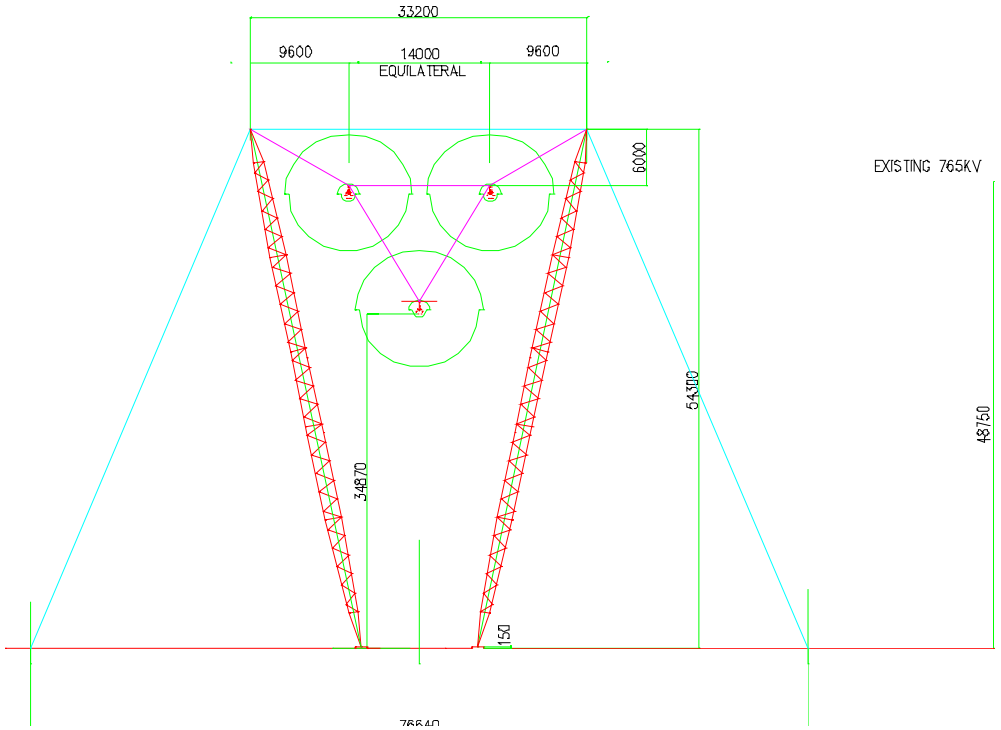

Figure 2.1: Compact Suspension Tower

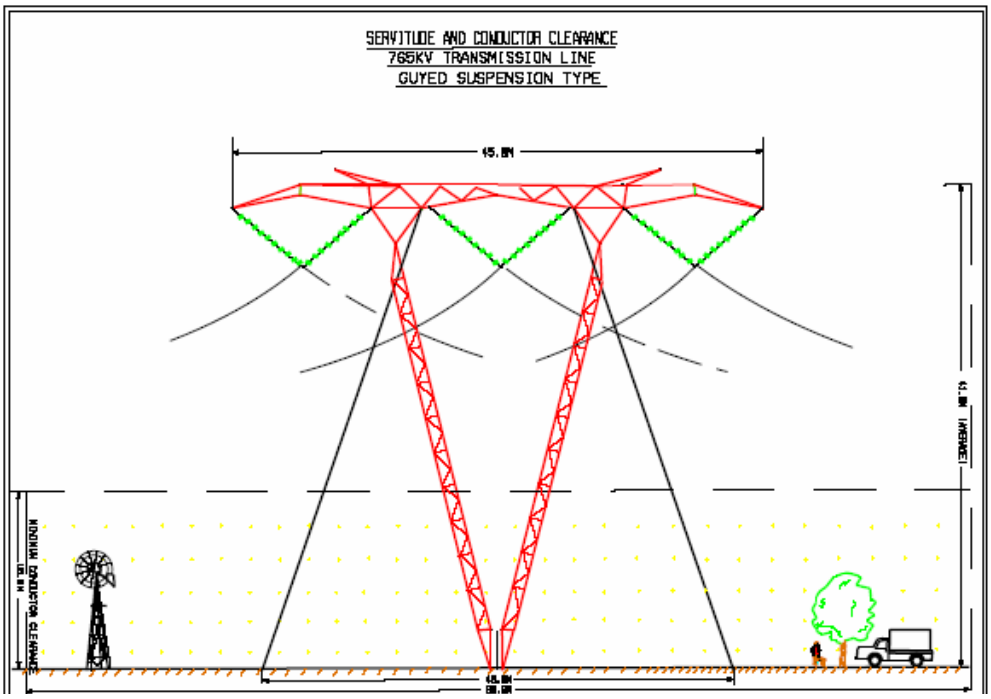

Figure 2.2: Guyed V Suspension Tower

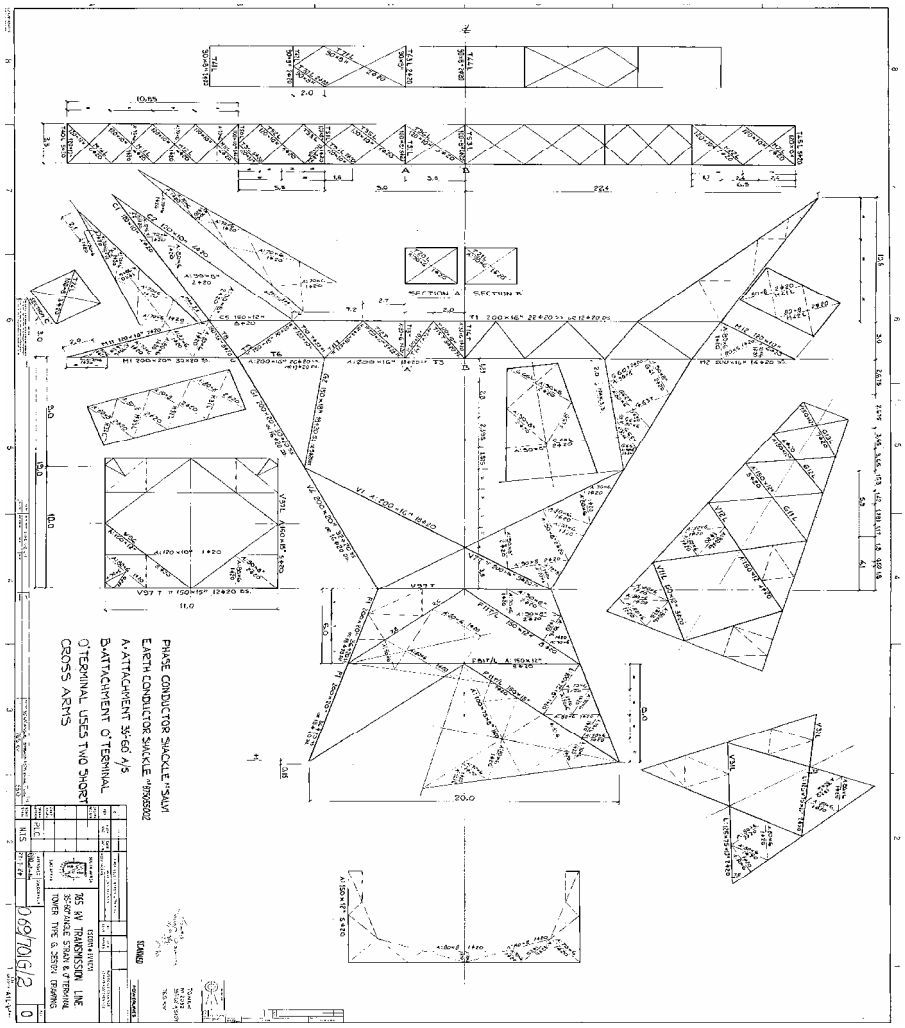

Figure 2.3: Self Supporting Tower

Particular information pertaining to the technical details and requirements for the proposed Hydra Gamma 2 Transmission power line are discussed further in Chapter 3 of this draft Environmental Scoping Report. In addition, generic impacts associated with the construction of substation infrastructure and transmission lines are also addressed within Chapter 3.