

1. TECHNICAL SPECIFICATIONS OF THE LINE

1.1. LENGTH:

The length of the line will be approximately 250 km.

1.2. SERVITUDE WIDTH:

The building restriction is 55 m. Construction is limited to the 55 m servitude in which the line will be constructed. A 6m strip shall be cleared flush with the ground to facilitate access and construction, except where tower erection and stringing requires more space. Any extra space outside the servitude shall be negotiated with the relevant Landowner and approved by Eskom. All areas marked as no go areas inside the servitude shall be treated with the utmost care and responsibility.

1.3. TOWER PARAMETERS:

1.3.1. Tower spacing	: 420 m. (Average)
1.3.2. Tower height	: 25- 50 m. (Average)
1.3.3. Conductor attachment height	: 18-33 m. Average)
1.3.4. Conductor type	: Not finalised – Typically 3 Tern to 3 Bersfort.
1.3.5. Minimum ground clearance	: 8.1 m.

1.4. TOWER DESIGN:

The following types of towers may be used on this project:

- Cross rope suspension tower.
- Compact cross rope suspension tower.
- Guyed-V suspension tower.
- Self-supporting suspension tower.
- Self-supporting strain tower.
- Guyed strain structures.

1.5. MAJOR ACTIVITIES OF THE PROJECT

The project involves 21 major activities. The following activities are pre-construction and takes approximately 2 years:

1. Environmental Impact Study to determine best corridor option– ROD with conditions obtained.

2. Negotiations for the servitude to determine final route–Special conditions from landowners obtained.
3. Land survey to obtain information for exact placement of the line towers.
4. Drawing work to produce the profiles for construction – profiles obtained.
5. Develop EMP for construction process.
6. Tender procedure to award construction contract.

The following activities are be performed as part of the construction process and will take approximately 24 months to complete:

1. Erection of camp sites for the Contractors' workforce.
2. Negotiations for access roads to the servitude.
3. Servitude gate installation to facilitate access to the servitude.
4. Bush clearing to facilitate access, construction and the safe operation of the line.
5. Establishing of access roads on the servitude.
6. Transportation of equipment, materials and personnel.
7. Installation of foundations for the towers.
8. Tower assembly and erection.
9. Conductor stringing and regulation.
10. Site de-establishment and clean up.
11. Final inspection of the line and taking over from Contractor – Anti-climb and above.
12. Rehabilitation of disturbed areas.
13. Signing off Landowners after all rehabilitation is complete.
14. Release Contractor from site.
15. Handing and taking over of the servitude from Tx Services to the Region.

The final inspection for the release of the Contractors' guarantee takes place one year after completion of the project. The line will be in operation immediately after completion of the project and will stay operational for the lifetime of the plant. Subsequent maintenance and refurbishment can extend the operational lifetime of the plant substantially.

After handover to the region:

1. Operation and maintenance of the line by the region for the lifetime of the plant.