2. SCOPE OF ENVIRONMENTAL INVESTIGATIONS

The potential environmental impacts associated with this proposed project are required to be considered in compliance with the Environmental Impact Assessment (EIA) Regulations published in Government Notice R1182 to R1184 of 5 September 1997 in terms of Section 21 of the Environment Conservation Act (No 73 of 1989), as well as the National Environmental Management Act (NEMA; No 107 of 1998).

In terms of Government Notice R1182 (schedule 1), "the construction of facilities for commercial electricity generation and supply", as well as a change of land use are listed activities which may have a detrimental impact on the environment.

The environmental studies for this proposed project are being undertaken in two phases, in accordance with the EIA Regulations:

2.1. Phase 1: Issues-based Environmental Scoping Study

An Environmental Scoping Study (ESS) has been undertaken for the proposed project. Existing information was used to identify potential impacts (both social and biophysical) associated with the proposed project and highlight areas which should be avoided (i.e. hot spot areas) in order to minimise these biophysical and social impacts. This phase considered possible alternate routes and substation sites within a broader study area. A public participation process was undertaken to identify issues and concerns of key stakeholders and interested and affected parties (I&APs). This study concluded that there were no environmental fatal flaws associated with the proposed project, but that a number of potentially significant issues required further investigation within an EIA.

2.1.1. Review of the Draft Environmental Scoping Report

A draft issues-based Environmental Scoping Report was made available for review at the following locations:

- Rustenburg Public Library
- Tlahbane Community Library
- Boitekong Library
- Phokeng Community Library

- Boschhoek Mills, Boschhoek
- Bohlweki Environmental offices, Midrand

Feedback received from the public during this review period was compiled into an Issues Trail and included within the final Environmental Scoping Report submitted to the environmental authorities (refer to Appendix B).

In order to facilitate the transfer of information to I&APs, as well as encourage comment on the draft Environmental Scoping Report, public feedback meetings were held during the public review period. The availability of this draft Environmental Scoping Report, and the public feedback meeting was advertised within the following regional and local newspapers: The Beeld, the Rustenburg Herald, the Star and the Sowetan (refer to Appendix D). In addition to these advertisements, 127 I&APs were invited by letter to attend the public meeting. Eleven I&APs registered their attendance at the meeting, nine I&APs submitted apologies, and a total of seventeen delegates attended the meeting.

In addition to the feedback meetings, a key stakeholder workshop was held. A total of 121 I&APs were invited to attend this workshop. Seventeen I&APs registered their attendance at this meeting, six I&APs submitted apologies, and twenty-eight delegates attended the meeting.

These meetings presented a further opportunity for consultation and participation by I&APs, and to note issues and concerns raised by I&APs for inclusion in the Environmental Scoping Process. As such, they formed part of the ongoing communication strategy between the project team and I&APs. Minutes of these meetings were distributed to the delegates (refer to Appendix E).

2.1.2. Final Environmental Scoping Report

The final stage in the ESS process entailed the capturing of responses from I&APs on the draft ESS report in order to refine the Environmental Scoping Report, and ensure all issues of significance were highlighted for further investigation in the EIA phase. This report was submitted to the National Department of Environmental Affairs and Tourism (DEAT) and the North West Department of Agriculture, Conservation and Environment (NW DACE) for review, comment and acceptance prior to proceeding to the EIA Phase of the study.

2.2. Phase 2: Environmental Impact Assessment

The ESS concluded that there were no environmental fatal flaws associated with the proposed project. Based on the findings of this study, however, a number of potentially significant issues were identified for further investigation within an EIA in order to ensure that appropriate mitigation measures are implemented to minimise potential significant impacts. The primary aims of the EIA study were:

- to undertake a fully inclusive public participation process;
- to evaluate alternatives, where relevant;
- to assess the significance of negative environmental (biophysical and social) impacts identified during the ESS;
- to identify possible appropriate mitigation measures for potentially negative environmental impacts; and
- to make recommendations regarding a preferred Transmission line corridor and substation site.

2.2.1. Specialist Studies

Specialist studies undertaken within the EIA included the assessment of potential impacts on:

- avifauna (bird life);
- vegetation;
- terrestrial fauna;
- agricultural potential;
- archaeological, cultural and historical sites;
- aesthetics and visual quality;
- land use; and
- the social environment.

2.2.2. Assessment of Impacts

In order to evaluate the significance of the identified impacts, the following characteristics of each potential impact were identified:

• the *nature*, including a description of what causes the effect, what will be affected and how it

will be affected;

- the extent, indicating whether the impact will be local (limited to the immediate area or site of development) or regional;
- the *duration*, indicating whether the lifetime of the impact will be of a short duration (0 5 years), medium-term (5 15 years), long term (> 15 years) or permanent;
- the *probability*, describing the likelihood of the impact actually occurring, indicated as improbable (low likelihood), probable (distinct possibility), highly probable (most likely), or definite (impact will occur regardless of any preventative measures);
- the *significance*, determined through a synthesis of the characteristics described above and can be assessed as low, medium or high; and
- the *status*, which will be described as either positive, negative or neutral.

2.2.3. Assumptions and Limitations of the Study

The assumptions and limitations on which this study approach has been based include:

Assumptions:

- All information provided by Eskom Transmission and I&APs to the Environmental Team was correct and valid at the time it was provided.
- The definition of a corridor is a wide strip of land up to 5 km wide, within which servitude routes can be identified.
- The alternate corridors supplied by the Eskom Planning Team are technically and economically viable.
- The Eskom Planning Team will be in a position to consider alternate corridors identified through the environmental studies.
- It is not always possible to involve all interested and affected parties individually. Rather, every effort has been made to involve as many broad base representatives of the stakeholders in the area. An assumption has, therefore, been made that those representatives with whom there has been consultation, are acting on behalf of the parties which they represent.
- The definition of a powerline route is a strip of land approximately 200 m wide, within which
 a Lands and Rights negotiator will discuss and negotiate with the property owner for a final
 centre line;
- The definition of a centre line is the final adjustment to the above negotiated route, done by land surveyors setting it out on the ground using helicopters;

 Eskom will undergo and negotiation phase with landowners to ensure affected properties will be appropriately compensated.

Limitations and concerns:

- Digital and hard copy map data (1:50 000 maps) has not been updated with the most recent
 developments in the area. The substantial development that the area has experienced such as
 mining, tourism, new settlements and the urban expansion of Rustenburg and other townships
 is not reflected in this older data, and had to be obtained from other sources.
- Up-to-date information on future mining developments was requested from all Mining Houses, however, not received. Information that was not made available to the project team has not been considered in the context of this report.

2.2.4. Overview of the Public Participation Process Undertaken within the EIA Phase

Public Participation plays an important role in the undertaking of environmental investigations, as I&AP input ensures all potential environmental issues (biophysical and social) associated with the proposed project are considered within the EIA. The aim of the public participation process was to establish efficient communication channels which would provide all I&APs with the opportunity to participate meaningfully in the process. The public participation process was on-going from the Environmental Scoping Study phase, and aimed to:

- keep I&APs fully informed about the proposed development of the Ikaros Substation and associated 400 kV Transmission line infrastructure, as well as the EIA process being followed;
- provide further opportunity to all I&APs to exchange information, and express their views and concerns;
- obtain the contributions of I&APs and to ensure that the issues and concerns raised are understood and fully documented; and
- focus the EIA on relevant issues.

In order to ensure tan effective, appropriate, transparent and legitimate public participation process, the following principles were applied:

 due consideration of alternatives (especially those raised through the public participation process).

- Meaningful and timeous participation of I&APs.
- Consideration of "due process".
- Focus on issues relevant to the project, and considered important by I&APs.
- Inclusion of the needs, interests and values expressed by I&APs in the information provided to decision-making Authorities.

• EIA Newsletter:

At the beginning of the EIA Phase of the project, a newsletter was compiled summarising the findings of the ESS, outlining the Way Forward for the EIA and providing details of the availability of the Draft Environmental Impact Report (refer to Appendix F).

• *I&AP Consultation*:

More than 370 individuals and organisations throughout the broader study area representing a broad range of sectors of society were consulted telephonically, through individual meetings/interviews, through documentation distributed via mail, a key stakeholder workshop, a public meeting and via the printed media throughout the EIA process (refer to Appendix G). These individuals represented the following main categories of role-players:

- * Government (national, provincial and local, all relevant departments).
- * Tribal authorities.
- * Royal Bafokeng Administration.
- * Conservation and environmental bodies, both as authorities and NGOs.
- * Commerce and business.
- * Mining.
- * Organised agriculture.
- * Individual landowners (whether resident on property or not as well as tenants).
- * Civil society (religious organisations, etc.).
- * Regional and local media (printed, local broadcast media).

Special attention was paid to consultation with potentially directly affected landowners (e.g. within the demarcated corridors). Although the EIA process is independent of the Eskom process, a small overlap does exist between the EIA process and the landowner negotiation process (further discussed in Appendix A). The EIA process identified and recorded landowners' details within the study area, as well as issues and concerns raised. Some inconsistencies between information received from the deeds office (in terms of farm portions, names and numbers) and that provided by I&APs were noted.

I&APs had access to a project website throughout the duration of the project (http://www.eskom.co.za/ikaros.htm). This website allowed for new I&APs to register onto the project database online. The project database was maintained and updated throughout the duration of the project.

A "landowner map" indicating the landowners identified and contacted during the public participation process for the project was compiled (refer to Figure 2.1). This map indicates the landowners identified and consulted, landowners only identified and landowners not identified. Properties shown as unidentified which are registered in the name of the August Mokhatler and Magata Tribes (in terms of records received from Deed office) are reported to be owned by the Royal Bafokeng Nation, who has been consulted regarding the proposed project. Other landowners of unidentified properties were not identified due to inaccurate or incomplete information from the Deed office. A list of landowners contacted, as well as comments received are included in Appendix H.

• Social Issues Trail:

Issues and concerns raised during the feedback meetings and the EIA Phase of the public participation process were compiled into an Issues Trail (refer to Appendix C). This information, together with issues captured during the Environmental Scoping Study, is incorporated as the core of the scoping of social issues within this Environmental Impact Assessment Report.

2.2.5. Public Review of Draft Environmental Impact Assessment Report

The draft Environmental Impact Assessment Report is available for public review at the following locations:

- Rustenburg Public Library
- Tlhabane Community Library
- Boitekong Library
- Magaliesberg Graan Ko-Op, Brits
- Phokeng Community Library
- Boschhoek Mills, Boschhoek
- Bakubung Tribal Authority Offices, Ledig
- Bohlweki Environmental's offices, Midrand

This report will be available for review and comment until Friday 24 May 2002.

Figure 2.1: Landowner map

2.2.6. Final Environmental Impact Assessment Report

The final stage in the EIA process will entail the capturing of responses from I&APs on the draft EIA report in order to refine this report, and make final recommendations regarding the proposed project. It is this report upon which the relevant Environmental Authorities provide comment, recommendations and authorisation.