

02 April 2002

Dear I&AP,

**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED IKAROS SUBSTATION  
AND ASSOCIATED 400 kV TRANSMISSION LINE INFRASTRUCTURE, NORTH WEST  
PROVINCE**

As a registered Interested and Affected Party (I&AP) for the proposed Ikaros Substation and associated 400 kV Transmission line infrastructure project in the North West Province, this newsletter aims to further facilitate your understanding of the proposed project and the Environmental Impact Assessment (EIA) process being followed. The first phase of the EIA process (i.e. the Environmental Scoping Study) has been completed, and detailed studies are currently being undertaken within Phase 2 of the process (i.e. the EIA). The public participation process has been on-going throughout this process and will continue until the final EIA Report is submitted to the environmental authorities for decision-making.

**1. REFRESHER: BRIEF OVERVIEW OF THE PROPOSED PROJECT**

Eskom Transmission propose the construction of a new 400/132 kV substation (to be known as Ikaros Substation) on the eastern side of Rustenburg. This new substation will receive power from a 400 kV Transmission line looped in from the existing Matimba-Midas 400 kV line between Ellisras and Fochville. The primary purpose of the proposed project is to improve the reliability of the electrical supply to the towns of Brits, Marikana, Kroondal, Mooinooi and Rustenburg, as well as surrounding communities, farms, businesses, and the increasing number of platinum and chrome mines and smelters in the Rustenburg area. Electricity loads required by platinum and chrome mining and smelting in the Rustenburg area is expected to reach the combined firm capacities of the existing substations in the area (i.e. Bighorn, Trident and Ararat Substations) within the next two years. In addition, the existing Ararat-Spitskop 275 kV Transmission line and the Spitskop Substation 400/275 kV transformers are anticipated to reach their firm capacities within approximately the same period. Therefore, the Ikaros Substation will feed the future supply requirements in excess of the existing Transmission network's capabilities.

**2. ENVIRONMENTAL STUDIES UNDERTAKEN TO DATE**

An Environmental Scoping Study for this proposed project, was completed in March 2002. A summary of the Environmental Scoping Report, as well as a map indicating the study area is available on the project website: [www.eskom.co.za/ikaros.htm](http://www.eskom.co.za/ikaros.htm).

This Environmental Scoping Study (ESS) considered the following:

- A corridor between the existing Bighorn Substation and the proposed Ikaros Substation considering the construction of a new Transmission lines parallel to the existing Trident-Bighorn 275 kV Transmission line (indicated in green on the website map).
- An identified broader area for the establishment of the Ikaros Substation, approximately 4 km south of the Bospoort Dam, straddling the farms Elandsheuwel 282 JQ, Klipgat 281 JQ and Turffontein 302 JQ (indicated in red on the website map).
- Two potential corridors between the new Ikaros Substation and the Matimba-Midas No.2 400kV Transmission line, i.e.:
  - \* A northern corridor (indicated in orange on the website map), approximately 50 km in length, mainly traversing land mined by Impala Platinum Mines; and
  - \* A southern corridor (indicated in purple on the website map), approximately 43 km in length crossing the northern tip of the Magaliesberg range.

A variation of the southern corridor was identified from the specialist studies undertaken within the ESS, as well as from the public participation process (indicated in blue on the website map) and avoids crossing the high ground associated with the Magaliesberg range. This proposed sub-corridor loops out of the Matimba-Midas line north of the proposed northern corridor, and follows a south-easterly direction to follow the R565 for a portion of its length. The sub-corridor then joins with the proposed southern corridor east of the Magaliesberg ridge.

It was determined that this proposed sub-corridor would provide an alternative alignment which would avoid two of the identified “hot spot” areas (i.e. the Magaliesberg Mountain area identified within the southern corridor, and the mining land identified within the northern corridor).

It was, therefore, recommended that the detailed studies to be undertaken within the Environmental Impact Assessment (EIA) should investigate this new alternate sub-corridor as the preferred corridor for the Eskom infrastructure. The original northern and southern corridor alignments should be considered as alternatives to this preferred corridor should fatal flaws be identified. In addition, the detailed studies will assess the identified Ikaros Substation site.

### **3. SPECIALIST STUDIES TO BE UNDERTAKEN WITHIN THE EIA**

Bohlweki Environmental will be assisted by a number of specialists in order to comprehensively identify potentially significant issues, and determine which studies will be required within an EIA.

<b>Specialist</b>	<b>Organisation</b>	<b>Area of Expertise</b>
Chris van Rooyen	Endangered Wildlife Trust	Avifauna specialist with extensive experience regarding the impact of Transmission lines on birds
Joggie van Staden	Bohlweki Environmental	Flora and fauna specialist with extensive experience regarding potential impacts on fauna & flora
Garry Paterson	Agricultural Research Council	Agricultural potential specialist with a good knowledge of the area

<b>Specialist</b>	<b>Organisation</b>	<b>Area of Expertise</b>
Tom Huffman	Archaeological Department of the University of the Witwatersrand	Archaeologist with extensive experience in the study area
Peter Dacomb and Gawie Makkink	PlanPractice	Land use and local planning specialists with good knowledge of the study area
Gillian McGregor	Rhodes University	GIS specialist (ArcView)
Henry Holland	Rhodes University	GIS Specialist/Programmer specialising in the generation of digital terrain models to be used in visual impact analysis

#### **4. PUBLIC CONSULTATION**

Public consultation 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 main objectives of this public consultation process are to:

- inform I&APs about the proposed development of the Ikaros Substation and associated 400 kV Transmission line infrastructure, as well as the EIA process being followed;
- provide ample 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.

Key stakeholders (such as surrounding communities, authorities, landowners, etc.) have been identified and categorised within their respective sectors of society. Numerous briefing sessions have been conducted with I&APs to introduce them to, and inform them about the proposed project, as well as to identify and gather issues and concerns early on in the project planning process. These briefing sessions have provided I&APs with an opportunity to communicate and interact with the public participation and environmental team (see attached public participation diagram), as well as Eskom representatives.

Throughout the consultation process, I&APs were provided with ample opportunity to raise their issues and concerns (see public participation diagram). Identified environmental issues and concerns relating to the proposed project have been integrated into the Draft Environmental Scoping Report and the Plan of Study for EIA, which has been submitted to the relevant environmental authorities.

#### ***What has happened to the issues raised during the Scoping Phase?***

Issues identified through the Scoping process by I&APs, registration forms sent out with the Briefing Paper, one-on-one discussions, the key stakeholder workshop, the public meeting and the media advertisement have been recorded, and processed into an issues trail, which will ultimately feed into the EIA Report. All issues

raised which are not directly relevant to the environmental process for the proposed project have been noted and forwarded to Eskom. In this way, the process remains meaningful and transparent.

*Any person, landowner or organisation is welcome to contribute to the process. We request that should you know of any person, landowner or organisation that should be informed regarding this project, that you notify the public participation consultant listed below. This may be done in writing, by phone, fax, e-mail, or on the project web site at [www.eskom.co.za/ikaros.htm](http://www.eskom.co.za/ikaros.htm).*

## 5. ENVIRONMENTAL IMPACT ASSESSMENT REPORT

An EIA Report will be compiled once the detailed environmental studies have been completed. This report is to be made available for public review from **Tuesday 23 April to Friday 24 May 2002** at the following places:

- Rustenburg Public Library
- Tlahbane Community Library
- Boitekong Library
- Phokeng Community Library
- Boschhoek Mills, Boschhoek
- Offices of Bohlweki Environmental, Midrand

Please submit your written comments on this draft report no later than **Friday 24 May 2002** to the relevant contact person/s below.

## 6. MORE INFORMATION

Should you require more information about the proposed project or the public participation process, please contact:

Nicolene Venter or Bryan Tladi  
Bohlweki Environmental  
PO Box 11784, Vorna Valley  
Midrand, 1686  
Phone: (011) 805 0250  
Fax: (011) 805 0226  
E-mail: [bohlweki@pixie.co.za](mailto:bohlweki@pixie.co.za)  
[www.eskom.co.za/ikaros.htm](http://www.eskom.co.za/ikaros.htm)

*Technical Information:*

Mr John Geeringh  
Eskom Transmission