

MAY 2008

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

MOKOPANE INTEGRATION PROJECT  
LIMPOPO PROVINCE

BACKGROUND INFORMATION  
DOCUMENT

AN ESKOM INITIATIVE



In order to evacuate the power generated at the new Medupi Power Station, support the upsurge in demand for the platinum group metals in the Mokopane area, and to improve the reliability of electricity supply to the Polokwane area, Eskom Transmission is proposing the introduction of the Mokopane Integration project, which includes the construction of a new substation in the Mokopane area and associated transmission line infrastructure to integrate this substation into the transmission network. The nature and extent of this project is explored in more detail in this document.

### Aim of this background information document

This document aims to provide you, as an interested and/or affected party (I&AP), with:

- » an overview of the proposed Mokopane Integration project proposed by Eskom.
- » an overview of the Environmental Impact Assessment (EIA) process and studies being undertaken to assess the project.
- » details of how you can become involved in the EIA process, receive information, or raise issues, which may concern and/or interest you.

### Overview of the Proposed Project

The existing transmission power lines from the Lephalale area cannot evacuate the additional 4 500MW of power from the new Medupi Power Station (under construction near Lephalale) without compromising network reliability and integrity during both operation and maintenance activities. Eskom have investigated various options for optimisation of the transmission system and plan the construction of new alternating current (AC) transmission power lines as an effective and efficient way to transport electricity from the Medupi Power Station to transmission substations in the Limpopo Province.

Witkop Substation is the only nodal point in the Polokwane area that is supporting platinum group metals load growth. The load forecast shows a shift of load towards the Mokopane area with several customer applications. The proposed load cannot be supplied from the Witkop Substation alone as there are thermal, voltage stability and space constraints.

Therefore, Eskom Transmission propose the introduction of the Medupi-Mokopane Integration project. This project includes the following components:

- » Construction of a new 400/132kV substation near Mokopane;
- » Integration of the new substation into the transmission system by looping in and out of one of the existing Matimba-Witkop 400kV transmission lines (i.e. two lines in parallel for a distance of approximately 10 km);
- » Construction of a new 400kV transmission power line between the Delta Substation (a new substation to be located near the Medupi Power Station) and the new Mokopane Substation, a distance of approximately 150 km;
- » Construction of a new 400kV transmission power line between the new Mokopane Substation and the existing Witkop Substation, a distance of approximately 60 km;
- » Construction of a new 400kV transmission power line between Delta Substation and the existing Witkop Substation, a distance of approximately 200 km; and
- » Associated works to integrate the new substation into the Transmission grid (such as access roads, communication tower, etc) and accommodate the new lines at existing substations (such as the construction of new feeder bays within the existing substation site).

In total, an estimated 410 km of new power lines are proposed.

Technically feasible alternative substation sites and transmission power line alignment corridors have been identified for investigation within a broader study area during the EIA process. These are reflected on the attached map. Towns/villages which are located within this study area include Lephalale, Seleka, Shongoane, Bakenburg, Lekalakala, Bakoni Ba Matlala, Mokopane, Matlala, Vaaltyn, Mashashane and Maraba.

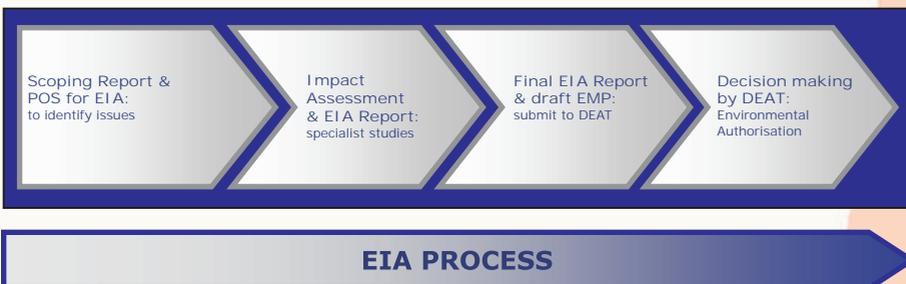
## ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

In terms of the EIA Regulations published in terms of Section 24(5) of the National Environmental Management Act (NEMA, No 107 of 1998), Eskom requires authorisation from the National Department of Environmental Affairs and Tourism (DEAT) (in consultation with the Limpopo DEDET) for the undertaking of the proposed project. In order to obtain authorisation for this project, comprehensive, independent environmental studies must be undertaken in accordance with the EIA Regulations. This project has been registered with National DEAT under Application Reference numbers 12/12/20/1187 (substation and turn-in lines) and 12/12/20/1140 (transmission lines).

An EIA is an effective planning and decision-making tool. It allows the environmental consequences resulting from a technical facility during its establishment and its operation to be identified and appropriately managed. It provides the opportunity for the developer to be fore-warned of potential environmental issues, and allows for resolution of the issue(s) reported on in the EIA report as well as dialogue with affected parties.

Eskom has appointed Savannah Environmental, as independent consultants, to undertake a Scoping and Environmental Impact Assessment to identify and assess all potential environmental impacts associated with the proposed project for the area as identified, and propose appropriate mitigation measures in an Environmental Management Plan (EMP). As part of these environmental studies, I&APs will be actively involved through the public involvement process being undertaken by I L I S O Consulting.

The phases of an EIA are:



## What are the potential environmental impacts associated with the proposed project?

A number of potential environmental impacts associated with the proposed project have been identified. These potential impacts will be assessed through the following specialist studies:

- » Impacts on ecology, fauna & flora
- » Impacts on avifauna
- » Impacts on soils and agricultural potential
- » Impacts on heritage sites
- » Impacts on visual quality and aesthetics
- » Impacts on topography, hydrology, groundwater, climate and pollution
- » Impacts on the social environment, including land use and tourism potential

These specialist studies will be undertaken in two phases:

1. A desk-top Scoping Study, wherein potential issues associated with all alternatives identified will be evaluated and a preferred alternative nominated for consideration in the EIA phase.
2. A detailed assessment of potentially significant impacts associated with the nominated preferred alternative identified in the Scoping Phase. Practical and achievable mitigation measures will be recommended in order to minimise potentially significant impacts identified. These recommendations will be included within a draft Environmental Management Plan (EMP).

Specialist studies will be informed by existing information, field observations and input from the public participation process. As an I&AP, your input is considered an important part of this process, and we urge you to become involved.

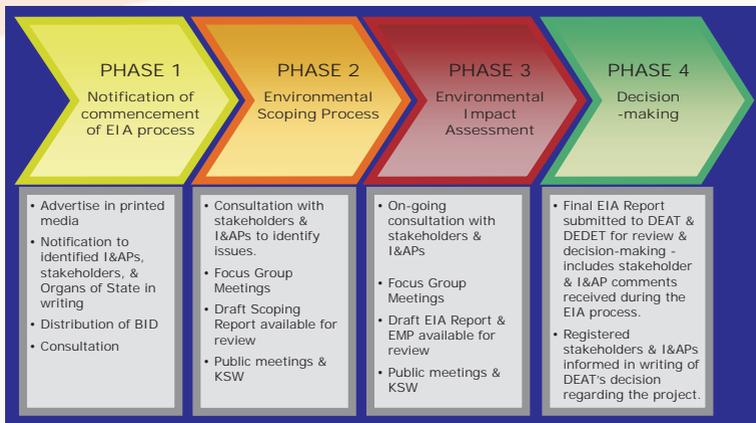
## Public Involvement Process

The sharing of information forms the basis of the public involvement process and offers you the opportunity to become actively involved in the EIA from the outset. Comments and inputs from I&APs during the EIA process are encouraged in order to ensure that potential impacts are considered within the ambit of the study.

The public involvement process aims to ensure that:

- » Information containing all relevant facts in respect of the application is made available to I&APs for review.
- » Participation by potential I&APs is facilitated in such a manner that I&APs are provided with a reasonable opportunity to comment on the application.
- » Adequate review periods are provided for I&APs to comment on the findings of the draft Scoping and EIA reports.

In order to ensure effective participation, the public involvement process includes the following steps:



### Your responsibilities as an I & AP

In terms of the EIA Regulations, your attention is drawn to your responsibilities as an I&AP:

- » In order to participate in this EIA process, you must register yourself on the project database.
- » You must ensure that any comments regarding the proposed project are submitted within the stipulated timeframes.
- » You are required to disclose any direct business, financial, personal or other interest which that you may have in the approval or refusal of the application for the proposed project.

### How to become involved

1. By responding (by phone, fax or e-mail) to our invitation for your involvement which has been advertised in local and national newspapers.
2. By returning the attached Reply Form to the relevant contact person.
3. By attending the meetings to be held during the course of the project. As a registered I&AP you will automatically be invited to attend these meetings. Dates for public meetings will also be advertised in local and regional newspapers.
4. By contacting the consultants with queries or comments.
5. By reviewing and commenting on the draft Scoping and EIA Reports within the stipulated 30-day review periods.

If you consider yourself an I&AP for this proposed project, we urge you to make use of the opportunities created by the public involvement process to provide comment, or raise those issues and concerns which affect and/or interest you, and about which you would like more information. Your input into this process forms a key element of the EIA process.

By completing and submitting the accompanying Reply Form, you automatically register yourself as an I&AP for this project, and are ensured that your comments, concerns or queries raised regarding the project will be noted.

### Comments and queries

Direct all comments, queries or responses to:

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Fax: (012) 665 1886  
E-mail: bhavani@iliso.com

To view project documentation, visit

[www.savannahsa.com](http://www.savannahsa.com)

or

[www.eskom.co.za/eia](http://www.eskom.co.za/eia)