



**Eskom Holdings Limited**

**Environmental Impact Assessment (EIA)  
for the Proposed Westgate Tarlton  
Kromdraai 132 kV Power Line,  
Kromdraai Substation and Associated  
Infrastructure**

**Public Stakeholder Meeting  
4 March 2008**

DEAT Ref: 12/12/20/1016

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## MEETING AGENDA

- Welcome & Introduction
- Objectives of Meeting
- Project Background
- Overview of the EIA Process
- Findings of the Scoping Phase of the EIA
- Overview of the Public Participation Process (PPP)
- Discussion
- Conclusion and Way Forward

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## MEETING OBJECTIVES

To advise Key Stakeholders of the:

- Project Description
- Environmental Impact Assessment Process
- Findings of the Draft Scoping Report
- Project alternatives to be evaluated in the Assessment Phase
- Specialist Studies undertaken
- Ongoing Public Participation Process

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## PROJECT DESCRIPTION

- Eskom Distribution proposes the construction of :
  - A new 132 kV sub-transmission power line between the Westgate and Tarlton Substations and from the Tarlton substation to the proposed new Kromdraai Substation
  - A new Substation in Kromdraai
- The extent of the proposed project is as follows:
  - The power line will be approximately 50km, depending on the final alignment of the proposed corridor
  - The new Substation in Kromdraai requires an area of 0.64 ha

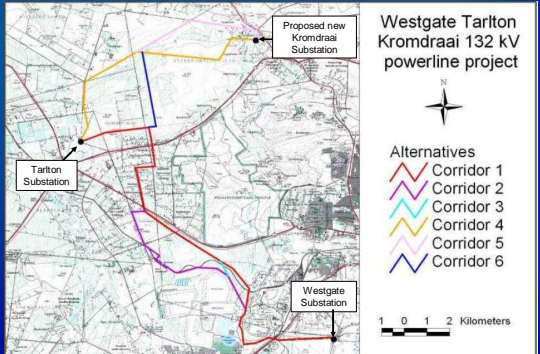
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## PROJECT BACKGROUND

- The study area is located in Western Gauteng within the West Rand District Municipality
- Six alternative power line corridors were identified
- The locations (initially two) of the proposed new Kromdraai Substation was based on assessments undertaken by Eskom's Land Rights and Planning Department

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## PROPOSED STUDY AREA



**Westgate Tarlton  
Kromdraai 132 kV  
powerline project**

N

Alternatives

- Corridor 1
- Corridor 2
- Corridor 3
- Corridor 4
- Corridor 5
- Corridor 6

1 0 1 2 Kilometers

## PROJECT BACKGROUND



Should the proposed project be authorised, the following issues shall be considered prior to construction:

- Servitude acquisition (required width of 40m)
- Distribution power line (line clearance required)
- Tower specifications and location
- Access roads
- Construction camps

## PROJECT MOTIVATION



- Additional electricity capacity required within the area to meet both current and future needs
- Existing 11kV lines are experiencing load growth, thus the system must be strengthened
- Based on Eskom's load forecast for the area, existing lines are approaching their thermal limits
- Voltage profiles of the existing MV lines are deteriorating
- Substation loads are approaching their limits to installed capacity and load density
- To improve performance with respect to the existing network by obtaining rights in close proximity to the load centre thus reducing losses

## PURPOSE OF THE EIA



An Environmental Impact Assessment serves to :

- Assess positive & negative, social, economic & biophysical impact of the proposed project
- Ensure I&AP's knowledge & concerns are taken into account;
- Identify feasible alternatives
- Recommend ways to:
  - Mitigate negative impacts
  - Enhance positive aspects
- Ensure relevant & objective information is provided to decision-makers

## FRAMEWORK FOR THE EIA



- SA Constitution, Act No 108 of 1996
- National Environmental Management, Act No 107 of 1998
- EIA Regulations 385, 386 & 387, promulgated on 21 April 2006, effective as of July 2006
- Guidelines & manuals issued by the Provincial and National Governments

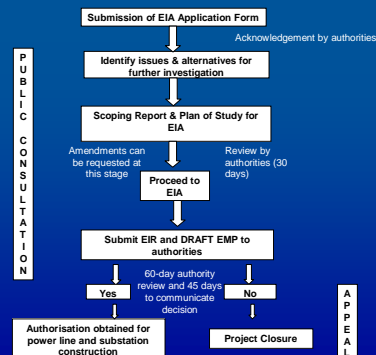
## EIA PROCESS



In terms of the EIA Regulations, 2006:

- The main listed activity for this project is identified as activity number 5 in Government Notice R. 387:
  - 5. "The construction of facilities or infrastructure, including associated structures or infrastructure, for the transmission and distribution of above ground electricity with a capacity of 120kV or more"
- Various listed activities identified in Government Notice R.386, is relevant to the construction of the associated infrastructure for the proposed project (i.e. canals, roads, channels, dams etc)

## EIA PROCESS



## EIA PROCESS



### Application Phase

- An application for environmental authorization was submitted to the Department of Environment Affairs & Tourism (DEAT) on the 27<sup>th</sup> of August 2007

### Scoping Phase (September 2007 – April 2008)

- Record suggestions, concerns & objections of the public
- Identify key issues associated with the project
- Evaluate alternatives (i.e. sites and technology types)
- Identify & develop terms of reference for specialist studies required in the EIA phase

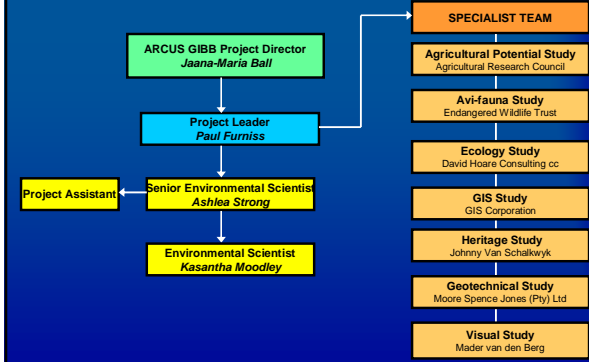
## EIA PROCESS



### Impact Assessment Phase (April 2008 – June 2008)

- Specialist studies and a detailed EIA will be undertaken
- Incorporation of comments from the PPP conducted during this phase
- Specialist reports, the draft Environmental Impact Report (EIR) and the Draft Environmental Management Plan (EMP) will be available for public review
- A final EIR will be submitted to the environmental authorities for their decision

## EIA TEAM



## KEY POTENTIAL IMPACTS



Based on baseline investigations, professional judgement of the EIA Team and comments from the PPP, the following key potential impacts were identified:

- Habitat destruction of faunal and floral communities
- Erosion of banks along drainage lines
- Disturbance to riparian vegetation
- Contamination of surface and groundwater systems
- Servitude registration, limiting land-use
- Power line may alter flight patterns of local aircraft
- Visual disturbance

## KEY POTENTIAL IMPACTS



- Disturbance to areas of historical, cultural or archaeological importance
- Disturbance in the form of noise during the construction phase
- Disruption of social relations due to influx of workers
- Alteration of landscape character and sense of place
- Exposure of flora, fauna and humans to electromagnetic fields
- Terrestrial bird collisions with the earth wires of the proposed power line

## SCOPING PHASE FINDINGS



- One substation location and power line corridor were eliminated from further consideration
- All other technological alternatives are not considered feasible
- Ongoing development without an adequate supply of electricity would result in power interruptions with the associated negative impacts, thus the No- Go Alternative is not considered feasible

## ALTERNATIVES



The following site alternatives will be assessed in further detail:

- Three alternative power line corridors from the existing Westgate Substation to Tarlton Substation
- Three alternative power line corridors from the existing Tarlton Substation to the proposed Kromdraai Substation
- One substation location (Portion 35 of Sterkfontein 173 IQ)

## ALTERNATIVES



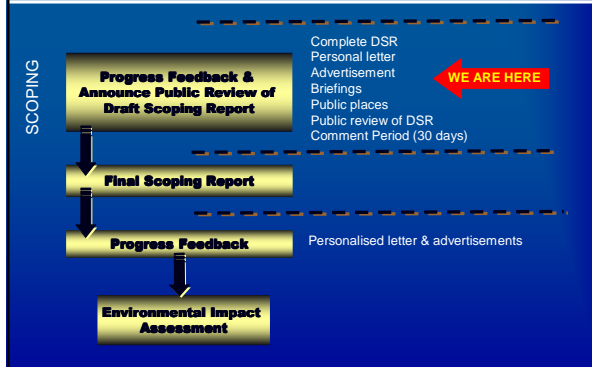
The selection of the most suitable corridor alternative will be based on the following:

- Public input, ascertained through the PPP
- Specialists' recommendations
- Environmental constraints
- Minimal environmental impacts
- Optimisation of existing infrastructure, such as access roads
- Load forecasting projections
- Economic cost-benefit analysis

## PPP SCOPING PHASE



## PPP SCOPING PHASE



## I&AP ISSUES & CONCERNS



- Main issues that were identified during the PPP thus far include:
  - Enquiry on which landowners were consulted with by Eskom
  - A number of landowners raised strong objections to the proposed power line
- Other queries pertained to the following:
  - Location of the pylons and the substation
  - Security and safety of the substation
  - Impacts on aircrafts
  - Aesthetic impacts
  - Access routes

The issues and concerns listed above were incorporated into the Draft Scoping Report dated 11 February 2008

## PPP & WAY FORWARD



- Register as an Interested and Affected Party (I&AP)
- All stakeholders will be provided opportunities to interact with the project team and comment on the proposed project
- Review period for Draft Scoping Report ends on 11 March 2008
- Issues raised at this meeting will be addressed in the Impact Phase of the EIA Process
- The Final Scoping Report and the Environmental Impact Report will be made available for public review

## CONTACT DETAILS



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