

Eskom Holdings Limited

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

Information Sharing Meeting

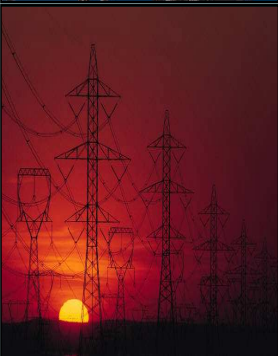
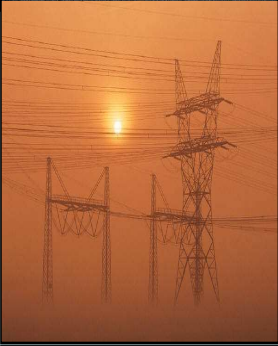
15 January 2009

DEAT Ref: 12/12/20/1016



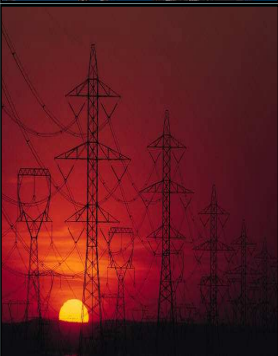
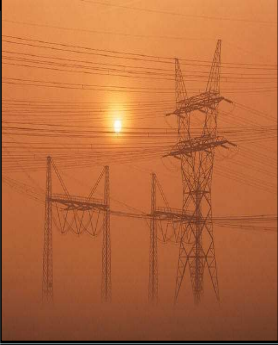
Agenda

- Welcome and introduction
- Conduct during the meeting
- Purpose of the meeting
- Brief overview of project
- Eskom Presentations
- Public participation process
- Findings of the scoping phase
- Specialist Terms of Reference
- Way forward
- Discussion



Conduct During The Meeting

- Focus on EIA related issues
- Wait for the discussion session to ask questions
- Introduce yourselves prior to asking a question and indicate your specific interest
- Please switch off all cell phones

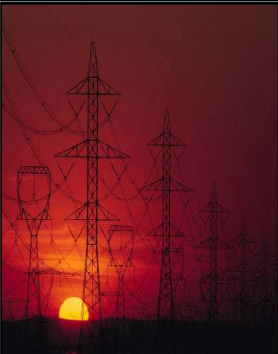
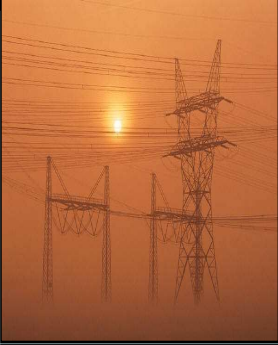


Purpose Of The Meeting

- Inform and update I&APs of the proposed development
- Present the findings of the Scoping Phase
- Provide an opportunity for I&APs to seek further clarity on the project
- To record issues
- Allow for interaction with the project team

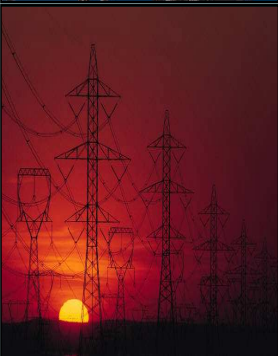
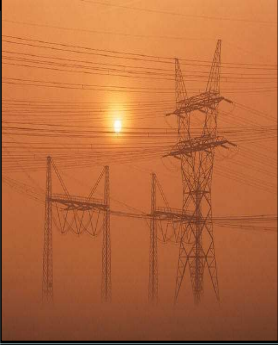
Project Description

- 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



Project Background

- The study area is located in Western Gauteng within the West Rand District Municipality
- Six (6) alternative power line corridors were initially identified
- Two (2) additional power line corridors were subsequently identified at the request of I&APs
- The locations (initially two) of the proposed new Kromdraai Substation were based on assessments undertaken by Eskom's Land Rights and Planning Department



Scoping Phase Review

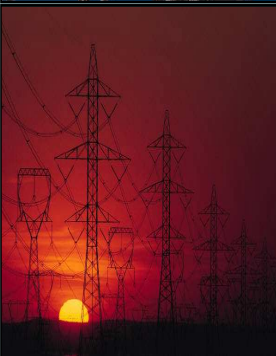
Two additional route alternatives for the power line have been identified by Eskom resulting in the following tasks to be undertaken once again:

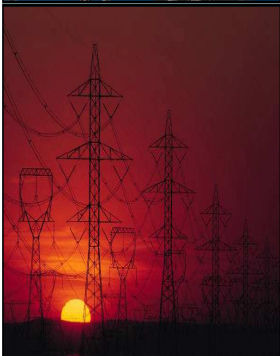
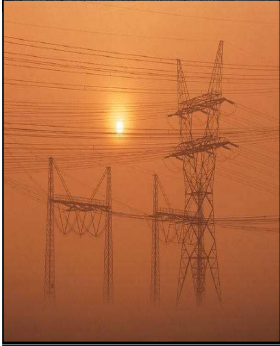
- Undertake specialist studies for the new route alternatives
- Conduct an additional public meeting, to obtain I&AP input on the new alternatives
- Incorporate specialist and I&AP input into the DSR
- Submission to key stakeholders and I&APs for comments (30 day commenting period)
- Updating of Issues and Response Report and I&AP Database

Construction Considerations

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

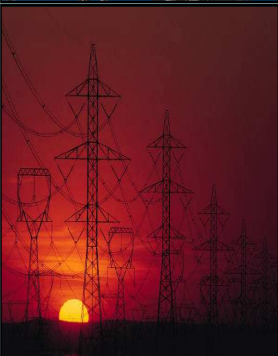
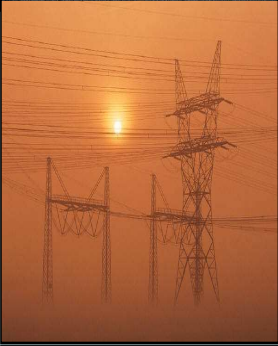
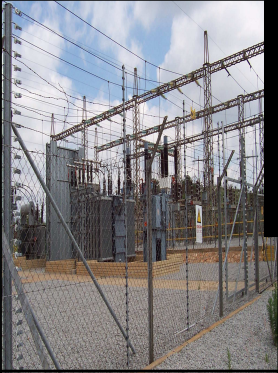
- Servitude acquisition (required width of 40m)
- Distribution power line (line clearance required)
- Tower specifications and location
- Access roads
- Construction camps





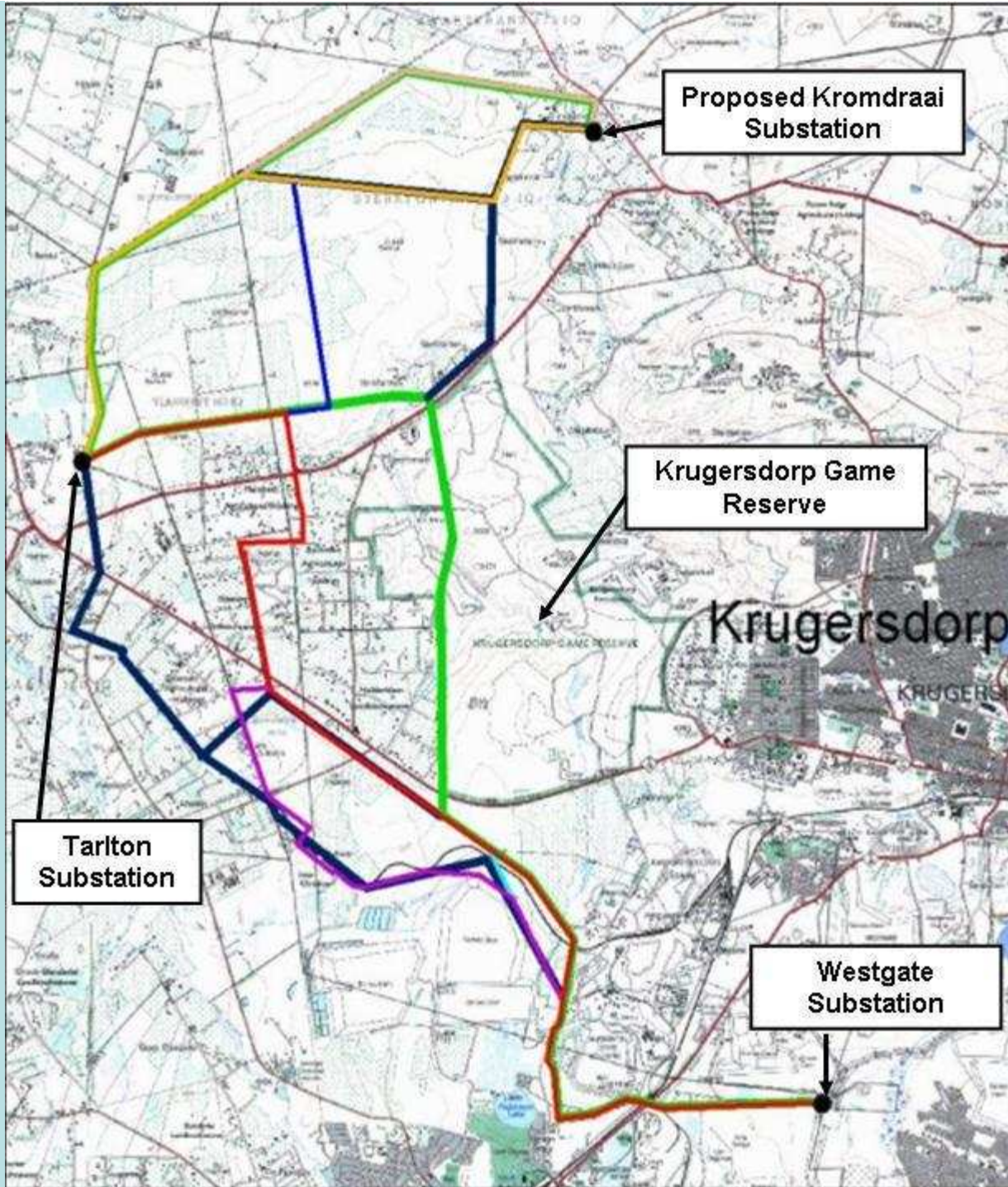
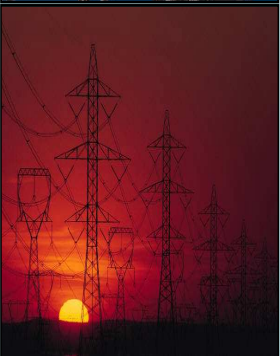
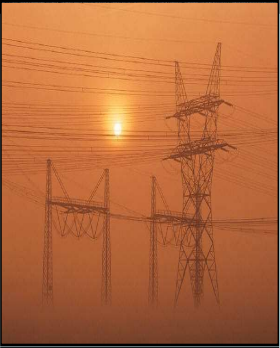
Eskom Presentation

Planning



Eskom Presentation

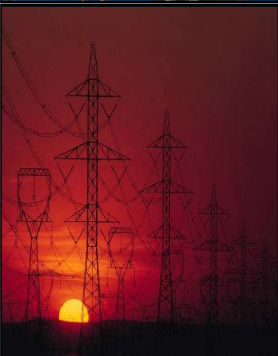
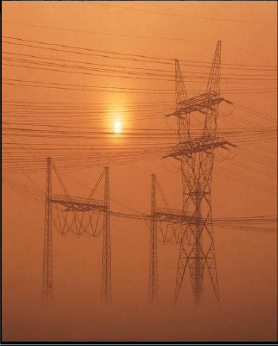
Land and Rights



Project Alternatives

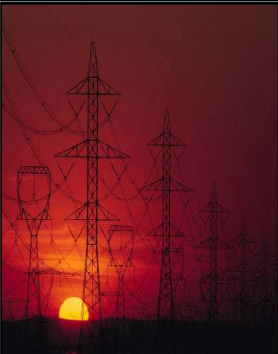
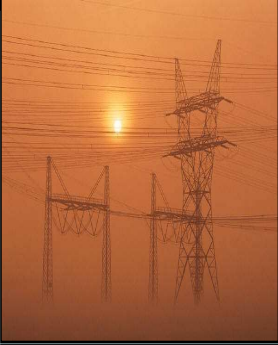
The selection of the most suitable corridor alternative will be based on the following:

- 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



Project Alternatives

- Technology Alternatives
 - Improve efficiency of existing transmission power lines
 - Use of underground cables
- No- Go Alternative
 - Implies that the power line and new substation are not constructed



Legal Requirements

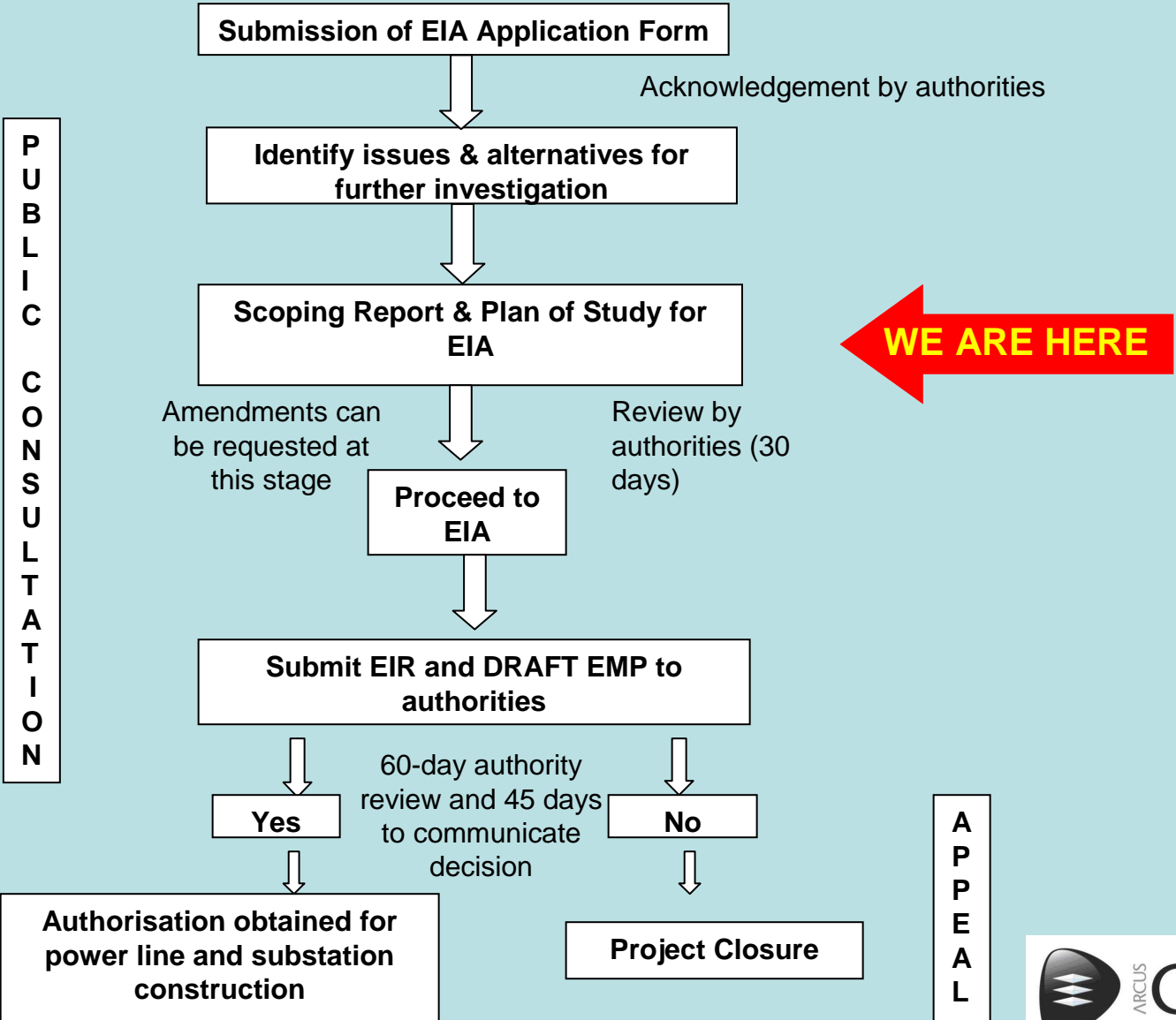
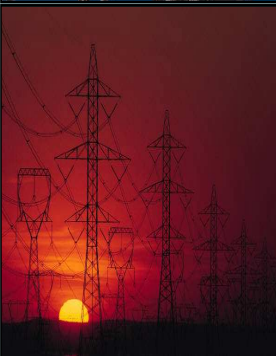
National Environmental Management Act (NEMA)

- The EIA was undertaken under NEMA and the New EIA Regulations (published July 2006)
- Main listed activity is identified as activity number 1 (I) in Government Notice R. 387 as follows:

“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 History

EIA for the Proposed Westgate Tarlton Kromdraai Powerline and Substation

Application for Authorisation

27 August 2007

Scoping Phase

Draft Scoping Report

07 February 2008

Public Meeting

04 March 2008

Public Review Period

11 February 2008- 11 March 2008

Revised Draft Scoping Report

28 November 2008

Second Scoping Phase Public Meeting

15 January 2009

Public Review Period for Revised Report

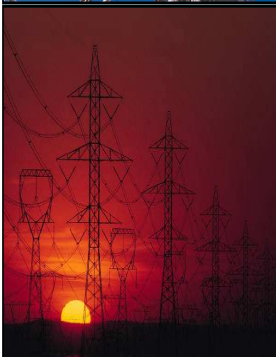
28 November 2008 – 02 February 2009



Public Participation Process (PPP)

- What **is** Public Participation?
 - A tool to inform I&APs of a proposed project
 - A tool to help integrate the comments of the I&APs into the relevant phases of a proposed project
- What Public Participation **is not**?
 - Not a public relations exercise
 - Not a means to satisfy personnel grievances – rather to record issues related to the EIA and to respond to these

Public Participation Process



SCOPING

**Progress Feedback &
Announce Public Review of
Draft Scoping Report**

Complete DSR
Personal letter
Advertisement
Briefings
Public places
Public review of DSR
Comment Period (30 days)

WE ARE HERE

Final Scoping Report

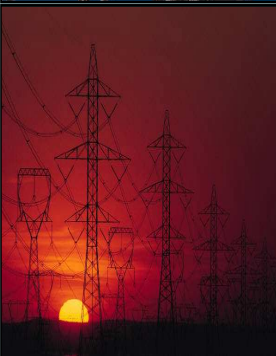
Progress Feedback

Personalised letter & advertisements

**Environmental Impact
Assessment**

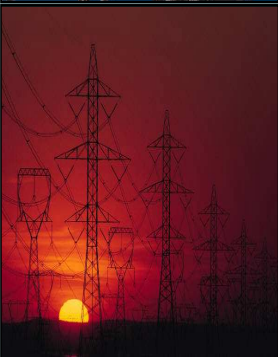
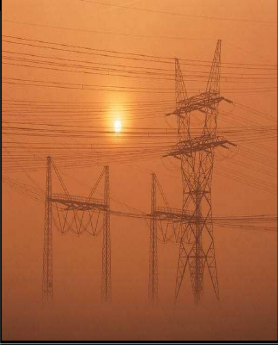
I&AP Issues and Concerns

- 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



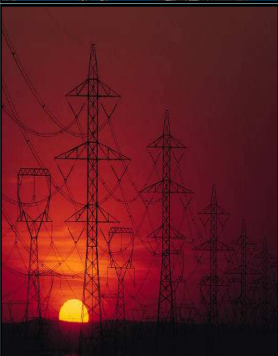
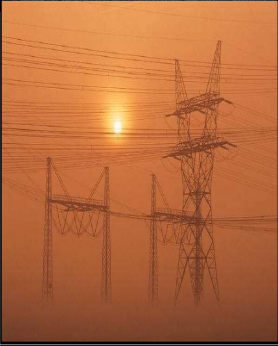
Key Potential Impacts

- 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



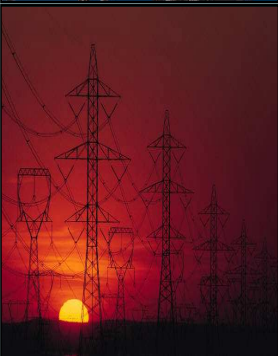
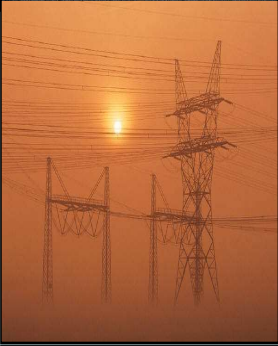
Key Potential Impacts

- 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



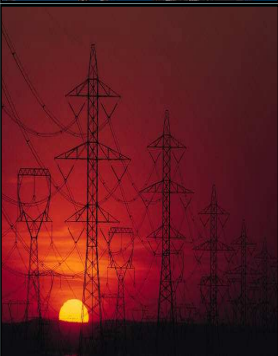
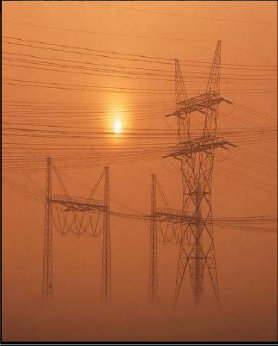
Scoping Phase Findings

- The two additional route alternatives identified by Eskom are considered feasible and shall be considered further in the EIA Phase
- One substation location was 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



Technical Studies

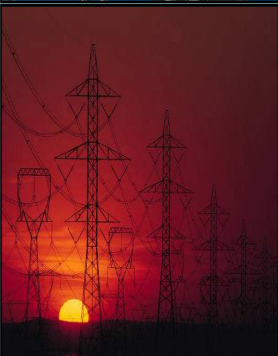
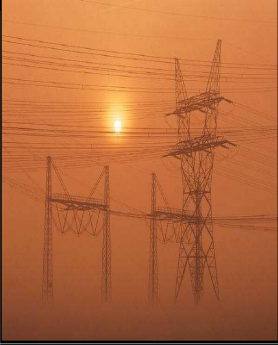
- **Ecology** – David Hoare Consulting cc
- **Agricultural Potential and Land Capability** – Agricultural Research Council – Institute for Soil, Climate and Water
- **Geology and Soils** – Moore Spence Jones (Pty) Ltd
- **Heritage** – Mr Johnny Van Schalkwyk
- **Avi-fauna** – Endangered Wildlife Trust
- **Visual** – I –Scape
- **GIS** – GIS Corporation



Ecology: Terms of Reference

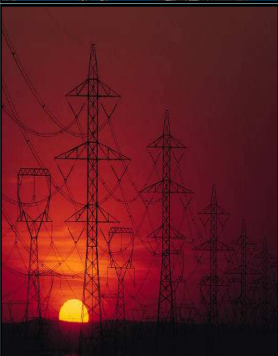
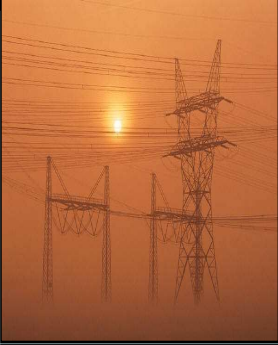
Provide technical advice on:

- The vegetation types in which the broader region is situated
- The vegetation and land cover of the proposed alignments
- The dominant and characteristic species within the broad-scale plant communities comprising each of these units
- Red List plant and animal species previously recorded within the quarter degree grids
- Identification of sensitive habitats and plant communities
- Sensitive areas along the proposed alignments



Agricultural Potential: Terms of Reference

- Assessment of the impacts of the proposed substation on the soil and agricultural resources
- Desktop assessment of soils and agricultural potential of the proposed alternative power line corridors





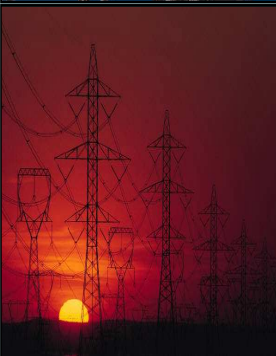
Geology And Soils: Terms of Reference

Provide technical input on:

- The expected bedrock geology and soil cover beneath the proposed corridor alternatives
- Information regarding excavatability and the possible presence of a shallow water table, together with the presence of active soil layers and any slope stability problems
- Preliminary information regarding the *in situ* material backfilling/layerworks purposes

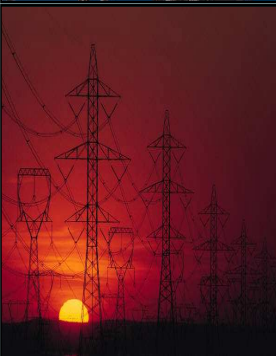
Heritage: Terms of Reference

- Broad scale determination of heritage and cultural resources located within the broader region



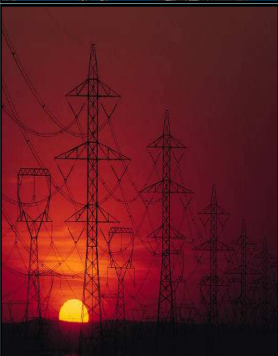
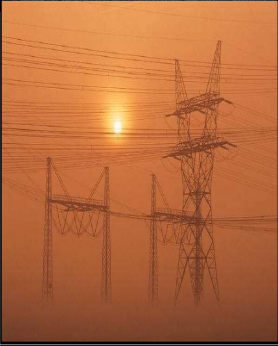
Avi-fauna: Terms of Reference

- Mapping of the sensitive bird sections of the broader region
- A description of the existing environment and the bird communities most likely to be impacted
- Typical impacts that could be expected from the development shall be listed as well as the expected impact on the bird communities
- Gaps in baseline data shall be highlighted and discussed



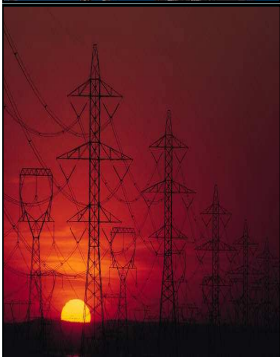
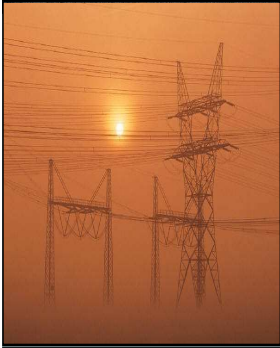
Visual: Terms of Reference

- Determine the impact on the visual resource
- Determine the impact on the observers in the broader region
- Finalise a comparative analysis in which alternative alignments and locations for the 132 kV power line are assessed and interpreted



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 Revised Draft Scoping Report ends on 02 February 2009
- 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



DISCUSSION