

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

**PROCEEDINGS OF A
KEY STAKEHOLDERS WORKSHOP**

**HELD ON
WEDNESDAY 20 FEBRUARY 2002
AT 10:00
AT
KEDAR COUNTRY LODGE & HOTEL
BOSCHHOEK**



ENQUIRIES

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YOUR COMMENTS

Your comments on this document would be greatly appreciated. In particular, we request you to verify that your comments during the meeting have been minuted correctly. Please address your comments to Nicolene Venter at the address given above by not later than **Monday, 25 March 2002** on the attached form.

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1. WELCOME AND INTRODUCTION

Mr Joggie van Staden: Bohlweki Environmental

Mr van Staden welcomed all delegates present and thanked them for their attendance and apologised for the delay in starting the meeting. Permission was requested of the delegates to record the meeting proceedings electronically so as to ensure that comments or issues that are raised at the meeting, are accurately reflected in the record of the proceeding. No objection was made.

The following members of the project team, and their responsibilities, were introduced:

- Mr Joggie van Staden, Bohlweki Environmental: Flora and Fauna Specialist;
- Ms Jo-Anne Thomas, Bohlweki Environmental: Environmental Specialist;
- Ms Nicolene Venter, Bohlweki Environmental: Public Participation Consultant;
- Ms Carol Streaton, Eskom - Transmission Environmental Affairs: To monitor the activities of the appointed independent consultants, and to also ensure that the processes followed by the consultants are up to Eskom's standard and that the public participation process runs smoothly;
- Mr John Geeringh, Eskom Transmission - Senior Environmental Advisor: Responsible for Environmental Impact Assessment (EIA) studies, manage the EIA process and to ensure that Eskom obtains a corridor within which a power line route can be identified; and
- Mr Bobby Richardson, Eskom - Land and Rights Negotiator: Responsible for negotiations and obtaining servitude rights on behalf of Eskom.

The delegates approved the preliminary programme and the purpose of the meeting was presented as follows:

- To provide a brief overview of the EIA process followed for the project;
- Present the findings of the Draft Scoping Report;
- Receive feedback on the Draft Scoping Report and any further comments, concerns or issues; and
- Provide details regarding the way forward.

The presentation material is attached as Appendices (*see Table of Contents*)

2. DISCUSSION SESSION

2.1. Corridor Issues

Mr Rudi Bingle, Electrical Operations Manager – Impala Platinum enquired whether the need exists to establish two corridors. He mentioned that Impala Platinum had already raised their concern regarding the northern corridor.

Ms Jo-Anne Thomas replied that Bohlweki Environmental is aware of the concerns raised by Impala Platinum, and informed the delegate that, in terms of the environmental process, it is required that alternatives are investigated and, should there be any problems with the southern corridor, then the northern corridor would need to be widened or variations thereof looked at.

Mr Mike Goosen, Divisional Environmental Manager – Lonmin Platinum enquired, in terms of the new proposed Ikaros - Bighorn substation & Transmission line, whether cognisance was taken regarding the future shafts planned by the mining industry in the area.

Mr John Geeringh replied that Eskom looked at all the information that was made available to Eskom's local survey office regarding future shafts, and that this information has been taken into consideration in Eskom's planning. He informed the delegates that Eskom's local representative, Mr Koos Roestoff, is in contact with the local mining authorities to determine future requirements. Mr Geeringh said that it is anticipated that 16, 275 kV lines would

supply power to mining shafts from the proposed new Ikaros Substation. Meetings and a fly-over had taken place with various representatives from the mining industry to determine a feasible route..

Mr Koos Roestoff, Eskom - North West informed the delegates that the proposed 400 kV Transmission line between the proposed new Ikaros Substation and Bighorn Substation would run parallel on the southern side of the existing Trident – Bighorn 275 kV power line.

Mr Coenie Pretorius, Chief Surveyor - Impala Platinum Ltd informed the project team that Impala Platinum's future shafts might be located within the proposed northern corridor. Impala Platinum is currently busy with extensive exploration work and does not yet know the exact position of the proposed shafts. He reiterated that this might present a problem for Impala Platinum. Looking at the proposed southern corridor, there is only a small portion that would be located on the property where Impala Platinum has the mining rights. He informed the project team that, from Impala Platinum's perspective, the proposed southern corridor would be a preferred corridor.

Mr John Geeringh replied that Eskom has taken cognisance of Impala Platinum's survey of the proposed northern corridor. He informed the delegates that the proposed southern corridor is the most feasible with regard to Eskom's future planning. There is the possibility of the proposed line being turned into the Ararat Substation in the future, to upgrade it to a 400 kV substation. He mentioned that this option is only a long-term plan, and that the current demand does not make this option a feasible one. Mr Geeringh said that the Trident Substation might also be supplied or upgraded to a 400 kV substation, but due to the Trident Substation's position and its topographical locality it would be difficult to expand this substation and to bring in further power lines. He also mentioned that, should a developer, such as Eskom need to construct a tower higher than 2m over the Magaliesberg, a special permit would be required to cross the Magaliesburg PNE.

Mr Johan Schoeman, Acting Surface Electrical Engineer – Bafokeng Rasimone Platinum Mine enquired whether the blue route as indicated on the map is being considered as an alternative and if so, indicated that the BRPM is situated within the corridor. He also pointed out that the proposed corridor might affect developments that are being planned in Boschhoek.

Mr John Geeringh replied that the corridor mentioned by the delegate would be investigated. He also informed the delegates that the exact co-ordinate of the newly proposed corridor has not yet been incorporated in detail on any of the project maps. Once the information is available of who would be affected, contact would be made with the affected parties. He also mentioned that all factors, such as open cast mining, etc. would be taken into consideration.

Mr Rudi Bingle, Electrical Operations Manager – Impala Platinum mentioned that he personally would prefer that the two proposed 400 kV Transmission lines run parallel with the existing 275 kV Transmission lines. Due to the many developments that are taking place in the area, extra load was being placed on the system **Gatimbe**, He enquired whether it would be necessary to isolate 275 kV circuits to prevent power failure. Mr Kruger also mentioned that recently Impala Platinum had received equipment that required a 6m-height clearance.

Mr John Geeringh replied that Eskom's 400 kV Transmission lines need to have a normal ground clearance of 9.5m. Over roads Eskom allows for an extra 3m. He said that should the 400 kV Transmission line be 10m above the ground, there would still a 3m electrical clearance. Mr Geeringh said that, regarding the 6m-height clearance, should any mining house or developer need to transport equipment that requires a specific height clearance, Eskom's power line could be interrupted for a short period of e.g. 2 – 3 minutes.

2.2. Route Alignment

Dr Hermanus Prinsloo, Resource Manager: Environmental, Bafokeng Rasimone Platinum Mine enquired whether, in-line with the EIA process, the project team approached the mine personally, informed them regarding the proposed route alignment, and discussed any issues of concern.

Mr John Geeringh replied that when the Draft Environmental Impact Report becomes available around the 15 April for public review, it is envisaged that a preferred final corridor would be indicated. It is also envisaged that current and proposed developments of which the project team has been informed are indicated on the map e.g. the various mineshafts. This public review period of the Draft Environmental Impact Report offers a further opportunity for stakeholders to comment. Should a stakeholder be concerned that the proposed, preferred corridor might negatively influence his/her business, they could contact the consultants and discuss the issues. For this discussion a 1:50 000 map would be used to identify the exact location of the stakeholder's development and compare it with the position of the proposed corridor.

2.3. Substation Issues

Dr Hermanus Prinsloo, Resource Manager: Environmental, Bafokeng Rasimone Platinum Mine said that it is noted that there are alternative corridors indicated for the proposed Transmission line but that there is no alternative for the proposed Ikaros substation site.

Mr John Geeringh replied that the area identified by Eskom for the proposed Ikaros Substation is 500ha, and within that 500ha area, Eskom identified possible sites of 36ha. Detailed geotechnical studies will be undertaken to determine the soil structure and type beneath the proposed substation site, which can accommodate the weight of a 400 kV substation.

Mr Vis Kruger, Manager: Survey, Anglo Platinum enquired whether Anglo Platinum's comments regarding the position of the proposed Ikaros Substation had been received and would they be incorporated into the final route alignment.

Mr John Geeringh replied the EIA is currently in it's scoping phase which provides stakeholders the opportunity to communicate any issues or concerns with the EIA consultants. He mentioned that during this consultation process an I&AP already indicated to the project team a proposed alternative, and this alternative would be investigated. The purpose of an EIA is to find the route that is most feasible for all.

Mr Mike Goosen, Divisional Environmental Manager – Lonmin Platinum commented that the Mining Act allows for a minimum ground level weight for surface developments / constructions in areas where underground mining activities are taking place.

2.4. Visual / Aesthetic Issues

Dr Hermanus Prinsloo, Resource Manager: Environmental, Bafokeng Rasimone Platinum Mine commented that delegates could assume that Eskom would construct state of the art power lines to minimise the negative visual impact of Transmission lines.

2.5. Archaeological Issues

Mr Ntsizi November, Provincial Manager: SAHRA – North West: Requested information regarding the specialist used by Bohlweki Environmental to identify the archaeological significance of the study areas.

Ms Jo-Anne Thomas provided the following list of specialist involved with specialist studies for this project:

- Climate and atmospheric conditions: Mr Pete Illgner, Rhodes University: Dept Geography;
- Topography: Ms Karen Kück, Bohlweki Environmental;
- Geology and soil: Mr Pete Illgner, Rhodes University: Dept Geography;
- Agricultural potential: Mr Garry Paterson, Agricultural Research Council;
- Flora and Fauna: Mr Joggie van Staden, Bohlweki Environmental;
- Avifauna: Mr Chris van Rooyen, Environmental Wildlife Trust;
- Surface water: Ms Karen Kück, Bohlweki Environmental;
- Land use: Mr Gawie Makkink, Plan Practise
- Visual and aesthetics: Mr Henry Holland, Rhodes University – Department of Geography; and
- Archaeological & historical sites: Prof Tom Huffman, Wits University – Department of Archaeology

Mr Ntsizi November, Provincial Manager: South African Heritage Research Association (SAHRA)– North West said that the comment raised regarding the appointment of local expertise, he would like to point out that SAHRA, with relation to the heritage component within the EIA, prefer to use registered archaeologist. He reiterates that there might be a local specialist, but that these specialists may not be registered and due to that fact, their comments would not be legal. He mentioned that SAHRA does not have a registered archaeologist recorded in the North West Province.

Mr November mentioned that the heritage sites that were identified during the scoping studies were only mentioned in the Draft Scoping Report and were not mapped. He said that, in terms of the Act, those archaeological sites needed to be mapped. Should the proposed development adversely affect a heritage site and it had to be moved, all alternatives would have to be reflected in the report, as well as all the future mitigation needed to be in place.

Mr John Geeringh replied that Eskom would ensure that, should any heritage or archaeological site be identified that is not yet mapped, that it would be mapped. He mentioned that information regarding heritage / archaeological sites in the Rustenburg area had already been obtained from Dr Julius Pistorius. He is an extremely knowledgeable person of the area due to the fact that he does work for the various mining houses. Prof. Huffman is also a knowledgeable scientist of the area and whatever information can be obtained, that has not yet been mapped, Eskom would ensure that the correct co-ordinates are obtained and captured. The process that Eskom follows regarding archaeological / heritage sites was explained in Carol Streaton's presentation that once a final route has been negotiated, Eskom would undertake a detailed profile of the route. Once the various tower positions are known then Eskom would contact the archaeologist, flora and fauna and the bird specialist and inform them to investigate the area around final tower positions. Should an archaeological site be identified, the specialist would follow the due process of the Heritage Resources Act. Mr Geeringh informed the delegates that should it not be possible for Eskom to move a tower, the specialist would apply for the necessary permit for destruction / partial destruction / non-destruction of the specific site. He said that after the specialist gathered their information of the tower position areas, all information would be incorporated into an Environmental Management Programme (EMP). The EMP would also be given to the appointed contractor. To prevent people / animals traversing the identified site, Eskom could fence the area with the appropriate signage. Mr Geeringh emphasised that the significance of identified archaeological / heritage sites would be determined by archaeologists in association with SAHRA.

2.6. EIA Process

Mr Deon du Preez, Property owner of Rhenosterfontein 390 JP, portion 13, enquired as to when the EIA process would be completed.

Ms Jo-Anne Thomas replied that it is envisaged that the Draft EIA Report would be made available for public review on 15 April 2002 for a 30-day review period. After the 30-day public review period, all comments received on the draft report will be included in the EIA Report, which would then be forward to the Department of Environmental Affairs and Tourism for their decision.

Mr Vincent Matabane, National Department of Environmental Affairs and Tourism (DEAT) commented that DEAT's attendance at the key stakeholder workshop was totally independent and objective. It would be DEAT's responsibility to give the final Record of Decision in terms of the project. He would, therefore, like to take the opportunity to appeal to I&APs, especially affected landowners, to raise their concerns now, within this public participation process. DEAT would be scrutinising all minutes of meetings held with I&APs to verify whether the concerns raised by I&APs have been recorded and addressed. He also mentioned that after DEAT's Record of Decision, there would be an appeal process, but it is important to notice that an appeal can only be lodged if there is proof that the person has been involved in the process. Mr Matabane urged the delegates to communicate with the project team and to forward all the information regarding future development plans they foresee within their organisation.

2.7. Negotiation process (land-use)

Mr Deon du Preez, Property owner of Rhenosterfontein 390 JP, portion 13, enquired as to the rights of landowners, should they not permit a power line to traverse their property although the environmental studies indicate that there are no biophysical flaws. *Ms Jo-Anne Thomas* replied that Eskom would follow a negotiation process with the specific landowner and from that negotiation process a final alignment of the Transmission line will be determined.

Mr John Geeringh added that in terms of Government Legislation, and EIA needs to be undertaken with every power line proposed by Eskom. This assessment is to ensure that the best environmental solution is found for the corridor. Should a major issue arise during the assessment phase, whether it is environmental or social, and a new route needs to be identified outside the chosen corridor, then Eskom would need to involve all the specialists and re-assess the new route. This new route would also be discussed with the newly identified landowners, and after their comments have been received, a decision would be taken as to which route would be the most feasible. Should a new Transmission line route fall outside the corridors that have been identified and assessed, Eskom would need to undertake another EIA process for that route.

A delegate enquired whether it is standard practice that a landowner and Eskom can discuss the type of clearance that Eskom intends to do on certain portions of their property. He also mentioned that should there be construction infrastructure on a property, could the landowner negotiate to keep the infrastructure and choose not to have the cleared areas rehabilitated? The delegate also requested whether any costs would be involved for the landowner, should the contractor's construction infrastructure on a property be left behind.

Mr John Geeringh replied that in terms of the infrastructure it is assumed that the delegate referred to construction camps. He said that should Eskom obtain the right to construct a powerline, Mr Bobby Richardson will negotiate with all the affected landowners and between them, they would come to an amicable agreement as to where the power line would be positioned within the identified corridor. During the construction phase, the appointed contractor who also has a scope of work to fulfil, will negotiate with the affected landowner regarding the site identified for the erection of a temporary construction camp. The proposed new 400 kV Transmission line is estimated to cover a distance of ±60km and only one construction camp would be required. The appointed contractor would also need to negotiate with the affected landowner regarding the supply of water, electricity, etc. Once the construction of the power line is completed, the contractor would leave the area. Mr Geeringh informed the delegates that, as a standard practice, the Eskom contractor would

rehabilitate the whole servitude on completion of construction (e.g. fixing the roads). To oversee these activities, Eskom appoints a Farmer Liaison Officer, who would be the link between Eskom, the appointed contractor and the affected landowner. The Liaison Officer would be a knowledgeable person of rehabilitation within the environmental field.

Mr Geeringh also informed the delegates that, whatever agreement has been reached between the appointed contractor and the landowner, would be between these two parties. The servitude negotiations will take place between the landowner and Eskom. He informed the delegates that should a landowner have certain conditions and it has been agreed upon between the landowner and Eskom, that those conditions would also be included in Eskom's EMP. He said that, should an affected landowner experience any problems with the appointed contractor or require information regarding the progress of the project, they could contact the appointed Liaison Officer. Should an affected landowner experience a severe problem, it would then be suggested that they contact the Eskom Negotiator, the person who initially negotiated the servitude rights on behalf of Eskom.

2.8. Avifauna

Dr Hermanus Prinsloo, Resource Manager: Environmental, Bafokeng Rasimone Platinum Mine commented that he assumes that Eskom would assess the issue regarding the danger power lines hold for birds, their breeding grounds, etc.

Mr John Geeringh replied that Eskom has a working partnership with Environmental Wildlife Trust (EWT), and that EWT have field workers who investigate animal interaction incidents with Eskom's Transmission lines. If EWT identify a pattern in these incidents, they inform and advise Eskom as to how these problems can be mitigated. He informed the delegates that Eskom has a *National Bird Guard Project* where all Eskom towers are being made bird-unfriendly in certain places on the tower to protect the power lines. The proposed new 400 kV Transmission line associated with the proposed new Ikaros Substation will be fitted with bird guards and where there are potential flight paths, those are identified by the EWT and Eskom then fit special markers on the earth wires to make the power lines more visible. He said that Eskom does not currently experience major problems regarding electrocutions on the Transmission lines due to the fact that the phases are too far apart. The major concern is the issue around collision; this is where the birds actually see the conductor and lift to fly over the conductor and then the birds fly into the earth wire. Mr Geeringh informed the delegates that Eskom has, to date, been successful with this process in certain areas.

2.9. General

Mr Vis Kruger, Manager: Survey, Anglo Platinum commented that the outcome of projects of this nature cannot be decided by an individual, or in isolation, but are subject to the decision taken by the majority of affected parties.

Ms Corné Theunissen, Greater Rustenburg Community Forum enquired whether the project team considered using local experts in the various fields, as there are local experts. She said that this was an issue that was affecting them as a community and she feels that it is something that should involve the whole community in more ways than just a meeting.

Ms Jo-Anne Thomas replied that Bohlweki Environmental put together an accredited specialists team that is well acquainted with the area, but do not necessarily who live there for e.g. Prof Tom Huffman who has done extensive work in the Rustenburg area. She requested of the delegate, that, should she be aware of any local accredited experts in the Rustenburg area, to please forward these peoples details to Bohlweki Environmental.

Ms Corné Theunissen, Greater Rustenburg Community Forum reiterated that it is important that a project such as this should make use local experts.

Mr Joggie van Staden replied that comment is noted.

A delegate enquired regarding the typical cost for constructing a powerline.

Ms Carol Streaton replied that depending on the terrain and various other influences, the cost of constructing a powerline varies between R500 000 and R1m per km.

Mr Mike Goosen, Divisional Environmental Manager – Lonmin Platinum requested that the contact information of the Lonmin Platinum representative with whom Mr Koos Roestoff from Eskom is negotiating, be provided. He would like to ensure that the right people at Lonmin Platinum are communicated with.

Ms Nicolene Venter informed Mr Goosen that she would forward the information to him. *Mr Koos Roestoff* requested the mining representatives at the meeting to please forward information to Nicolene Venter if they are aware of smaller mining operations / businesses in their vicinity,

Mr Vis Kruger, Manager: Survey, Anglo Platinum commented that it is the mining houses responsibility to ensure that the correct people are informed regarding projects such as this.

Mr John Geeringh, Eskom, enquired from the delegates whether they are satisfied with the EIA and public participation process followed to date and did they agree that enough opportunities for comment was given. He also enquired whether the delegates feel comfortable with specialist appointed as presented by Ms Jo-Anne Thomas

The Delegates indicated that they are satisfied.

Mr Mike Goosen, Divisional Environmental Manager – Lonmin Platinum commented that there are various specialists working in the area doing EIAs, and he enquired whether there is a central information system / place where organisations or mining houses can obtain information regarding proposed projects in the area. He commented that such an information system might limit the expense for developers and could also ensure that work is not duplicated.

Mr Joggie van Staden replied that as far as he is aware the Department of Environmental Affairs Tourism is working on a framework system to determine which developments are proposed provincially. He is not certain whether this framework has been completed yet. *Mr John Geeringh* informed the delegates that specialists draw on each other's knowledge and where possible obtain information material from each other. *Ms Jo-Anne Thomas* informed the delegates that all EIAs are public documents and should be available to the public.

Mr Rudi Bingle, Electrical Operations Manager – Impala Platinum enquired whether special permission would be needed by Eskom should the power lines need to be constructed close to an area where blasting would take place.

Mr John Geeringh replied that Eskom would not construct any power lines in an area closer than 500m from open cast mining where blasting activities take place.

Mr Mike Goosen, Divisional Environmental Manager – Lonmin Platinum commented that the Department of Mineral and Energy Affairs does not allow any structures or developments close to areas where blasting takes place.

Mr Vis Kruger, Manager: Survey, Anglo Platinum commented that a forum in the greater Rustenburg area was established in which the Royal Bafokeng Administration, Lonmin Platinum, Impala Platinum, etc are represented. This forum meets on a monthly and bi-monthly basis and during these meetings discussions take place regarding the various projects that are taking place in the area. He mentioned that some representatives, e.g. the Rustenburg City Council, who is a key stakeholder, do not attend the meetings. He also said that Metroplan is responsible for co-ordinating the Forum's aerial maps and that Eskom, the

Department of Water Affairs and Forestry, the Department of Environmental Affairs and Tourism, etc. are all represented at the Forum. Mr Kruger mentioned that a *status quo* has recently been reached by the forum and is currently in the process of looking at problems experienced by informal settlements and how to address such issues.

Mr Joggie van Staden enquired as to whether the Forum contact details are captured on the project's database and said that as far as Bohlweki Environmental was aware, members of the Forum are represented on this project. *Mr Kruger* replied that three members of the Forum were present and that Mr George Khunou is Chairperson of the Forum. *Ms Nicolene Venter* confirmed that Mr George Khunou's contact details were captured on the project's database.

Mr John Geering, Eskom requested that if the delegates were aware of any person or organisation that might have information relating to the project, to please inform Eskom accordingly. It is imperative for Eskom to have all relevant information, which may have an impact on the proposed project, be supplied to assist Eskom to make an informed decision regarding the preferred corridor and the final route alignment.

Mr Joggie van Staden, Bohlweki Environmental reiterated that there was still an opportunity for I&APs to become involved in the public participation process for the proposed project.

APPENDIX A

APPENDIX B

APPENDIX C

- **Access roads and contractors camps**
- **Tower types**
- **Bush clearing and stringing**
- **Agricultural and plantation**
- **Archaeology and landscaping**
- **Substation construction**

APPENDIX D

APPENDIX E