

**ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR
ESKOM'S NORTHERN KZN STRENGTHENING PROJECT
MINUTES OF FOCUS GROUP MEETING WITH LANDOWNERS POTENTIALLY AFFECTED BY
IPHIVA SUBSTATION SITES**

Venue	Ghost Mountain Inn	Date	25 October 2016	Time	09H00
Chairperson	Bongi Shinga		Minutes prepared by	Elelwani Ramagadza	

Item	Description
1	<p>Welcome</p> <p>Ms Shinga welcomed everyone to the meeting and this was followed by a round of introduction.</p> <p>The attendance register was circulated and is attached as Appendix A.</p>
2	<p>Purpose of the meeting and Acceptance of Agenda</p> <p>Ms Shinga explained that the purpose of the Focus Group meeting is:</p> <ul style="list-style-type: none"> • To present the proposed project including the Iphiva Substation sites to landowners who are potentially affected by sites 3 to 7; • To outline the Environmental Authorisation (EA) process that will be followed in undertaking the EIA process; and • To provide an opportunity for landowners to provide inputs in the EIA process. <p>The agenda was accepted without any changes.</p>
3	<p>Background, need, motivation and description of the proposed project</p> <p>Mr Burger gave a technical presentation of the project and this included the following key points:</p> <ul style="list-style-type: none"> • Planning Requirements; • Examples of a 400kV/132kV Major Transmission Substation; • Alternative locations for the Iphiva Substation; and • Power lines across properties for the various locations of the Iphiva Substation. <p>The Presentation is attached as Appendix B.</p>
4	<p>Discussion & Question Session</p> <p>The following questions were raised during this session:</p> <p>Mr Lee asked whether the double circuit power lines would come from and leave the substation, and how far apart these lines would be.</p>

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	<p>Mr Burger indicated that Eskom may use a double circuit power line to take two 132 kV power lines for a short distance where there is a space constraint. A double circuit configuration will have has six conductors (three phases for each circuit) on one tower.</p> <p>Ms Holmes asked if Isimanga Game Reserve, Impala Ridge, Zululand Rhino Reserve and Sibuyelekhaya Trust are affected by lphiva 2, 3 and 4.</p> <p>Mr Burger indicated that the above properties are affected. He asked if there was anyone representing Sibuyelekhaya Trust present.</p> <p>Ms Bongzi indicated there is no one representing Sibuyelekhaya Trust present. She also mentioned that they knew about the meeting.</p> <p>Ms Calmeyer added that Lucky (Sibuyelekhaya Trust) attended the previous key stakeholder meeting.</p> <p>Mr van Rooyen asked whether it would be possible to avoid the Mkhuze area altogether by taking the power from somewhere else to Makhathini and not from the lphiva Substation.</p> <p>Mr Burger indicated that it would not be possible and that there is already an existing line to Makhathini.</p> <p>Mr Lee requested clarity on the height of the towers.</p> <p>Mr Ntshutsha mentioned that for 400kV line towers, the conductor must be a minimum of 18m and a maximum of 33m above the ground.</p> <p>Ms Holmes raised a concern about the aesthetic impact on Zululand Rhino Reserve (R 1/2 billion asset), the impact of power lines on vulture species and socio-economic impacts. She indicated that 10 commercial lodges and 250 jobs will be affected. She requested that available data on the impact of the existing power lines on vultures should be included in the Environmental Impact Assessment (EIA) and reported to the Endangered Wildlife Trust (EWT). She further suggested that the team finds other alternatives on the western boundary outside their properties.</p> <p>In support to Ms Holmes statement, Mr Lee added that the team should take into consideration that the proposed area is one of the sections reserved for conservation in the country.</p> <p>Ms Calmeyer indicated that the EIA process will address the biophysical, social, economic heritage and cultural issues.</p>
5	<p>Environmental Impact Assessment (EIA)</p> <p>Ms Calmeyer gave a presentation on the EIA process. She indicated that the following key</p>

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	<p>issues have been identified to date:</p> <ul style="list-style-type: none"> • Conservation areas <ul style="list-style-type: none"> ○ Visual impacting on tourism ○ Biophysical (vegetation clearing) • Birds (collision with power lines) • Sugar cane farming • Forestry • Relocation of households • Heritage (graves, heritage sites) • Access and Erosion • Health (EMFs) • Economic development of the region <p>The Presentation is attached as Appendix C.</p>
6	<p>Discussion & Question Session</p> <p>The following points were raised during this session:</p> <p>Mr Senekal requested a copy of the EIA presentation. Ms Calmeyer indicated that a copy of the presentations from the previous meeting was attached to previous minutes and the presentation from today will be sent out again with the minutes.</p> <p>Ms Calmeyer explained that 4 applications will be submitted for the project. The will be for:</p> <ul style="list-style-type: none"> • The Iphiva Substation site; • The Normandie – Iphiva 400 kV power line; • The Iphiva – Duma 400 kV power line; and • 65 km of 132 kV power lines. <p>Ms Holmes mentioned that the potential loss for the landowners should be clearly explained in the scoping report. All the aspects should be detailed, for example: visual impacts, economic impacts, tourism, wildlife areas, land value, jobs and the community.</p> <p>Ms Calmeyer stated that the issue has been captured in detail in the scoping report. The information will also be passed on to the specialists Mr Greffrath (Fauna and Flora), Mr Goosen (Visual Impact Assessment) and Ms Aucamp (Social Impact Assessment) to make</p>

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	<p>sure their terms of reference covers all those aspects.</p> <p>Mr Senekal raised a concern regarding physical destruction of birds' nests. Ms Calmeyer will check the information with the Department of Environmental Affairs.</p> <p>Mr Lee indicated that the following five endangered species occur in the area:</p> <ul style="list-style-type: none"> • White Back Vulture; • Lapect Faced Vulture; • White Faced Vulture; • Hooded Vulture; and • Cape Vulture. <p>He will also send a list of bird species to the team by e-mail.</p> <p>Ms Holmes suggested that relocation of lodges should be included in the list of key issues (relocation of households). To avoid confusion, it was agreed that "households" will be changed to "structures and associated aspects". She added that Game Reserves are governed by the National Environmental Management: Protected Areas Act (57 of 2003) which should be considered in the assessment in addition to the National Environmental Management Act, specifically relating to the construction of access roads. Ms Calmeyer will confirm how the construction of access roads in protected areas is affected by this Act.</p> <p>Mr van Rooyen asked if Electric and Magnetic Fields (EMFs) from power lines have an impact on human health and animals.</p> <p>Mr Ntshutsha explained that Eskom designs are according to the International Standards. There are two acceptable limits that are adhered to; within the servitude and outside of the servitude. A lot of literature on the matter is available to share with the public. Because these standards are adhered to, EMFs do not have an impact on the human health, even if you live underneath the power line. Structures are, however, not permitted underneath the power lines because there is a risk of structures or power lines falling onto them.</p> <p>Ms Calmeyer added that the voltage of a power line determines the size of the servitude. The higher the voltage, the wider the servitude.</p>

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	<p>Mr van Rooyen mentioned that there was a butterfly species at Isimanga and Impala Ridge that only occurs in a hectare of the area.</p> <p>Ms Calmeyer will pass the information to the Fauna and Flora Specialist.</p> <p>Ms Holmes added that the team can contact the Lepidoptera South Africa, they will have records of that and she can also share the report with the team.</p> <p>Mr Lee stated that there is a list of butterfly species which he promised to send through email. The Round Horn Bull is one of the endangered species.</p> <p>Ms Holmes requested that Eskom come up with designs or other alternatives that do not impact on their properties because the game reserves will be irretrievably impacted if 4 power lines traverse them.</p> <p>Mr Burger indicated that corridors for the distribution lines are in the process of being finalised and will be shared with I&APs as soon as they are available.</p> <p>Mr Ngcobo stated that he has invested R 70 million in building a lodge (Hlekani) and he is interested to know how his property will be affected.</p> <p>Mr Burger explained for substation sites Iphiva 2 to 7 some powerlines will have to traverse to the east. The shortest and least impact corridor for this is along the P234. The area is incredibly sensitive with many game farms. Minimizing the impact of these lines is important to Eskom.</p> <p>Mr Senekal indicated that from Iphiva 3 to Iphiva 4 is the shortest route and that underground cables would be ideal and is possible.</p> <p>Mr Burger explained that the 132kV lines from the new substation will have to break into the existing 132kV lines. Two lines are required; one going north and another going south. These can be accommodated on one structure as a double circuit line where the corridor is common.</p>

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	<p>Ms Holmes requested clarity about the existing power line going from north to south through the Zululand Rhino Reserve, and whether there will be an additional structure next to it in the same servitude.</p> <p>Mr Burger indicated that only structural modification will take place at the point that the new lines link into the existing line.</p> <p>Ms Holmes asked whether the 65km of 132kV lines is part of the current application.</p> <p>Ms Calmeyer indicated that Environmental Authorisation of the 65 km of 132 kV lines corridor will be applied for, although Eskom still has to confirm where will the corridors will be.</p>
7	<p>Discussion on underground power lines as an alternative</p> <p>Mr Lee asked how they will be impacted if underground power lines are considered as an alternative from Iphiva 4 to Iphiva 3.</p> <p>Mr Burger explained that putting power lines underground is costly and has huge negative impact.</p> <p>Mr Ntshutsha explained that many factors, including terrain, need to be considered for underground power lines. Underground cabling costs R 20-25 million per km compared to R 3 - 4 million per kilometre for overhead double circuit lines, and R 2 million per kilometre for single circuit lines.</p> <p>Ms Holmes stated that Eskom should assess the economic and conservation impact and find an alternative.</p> <p>Mr Nabbie suggested that another meeting should be held with specialists in conjunction with the affected landowners in order to quantify the impacts.</p> <p>Ms Holmes again explained all the causes, aspects and impacts that the project could have on the Zululand Rhino Reserve. This information has been transcribed into an impacts map that is attached as Appendix D: Impacts of construction and operations of a substation and power lines on private game farms in the Northern KZN.</p>

Item	Description
	<p>The impacted game lodges in the Zululand Rhino Reserve are:</p> <ul style="list-style-type: none"> • Zenzulu game lodge (sp); • Leopard game lodge; • African spirit game lodge; • Manela game lodge (sp); • Mkuze game lodge; • Chaos game lodge; • Hlekani game lodge; • Bayete Zulu game lodge; • Manyoni game lodge; • Fever tree game lodge; • Zebra hill game lodge (sp); • Ebubezi game lodge; and • Rhino river game lodge. <p>Mr Ntshutsha made a follow up on the issue that power lines should go west of the properties.</p> <p>Ms Holmes stated that the main problem is financial compensation for economic loss.</p> <p>Mr Burger mentioned that there are currently 55 thousand homesteads in Makhathini area that need electricity.</p> <p>Ms Holmes indicated that although they acknowledge the need for electricity in the Makhathini flats area, it cannot be at the cost of the Game Reserve owners. Mr Nabbie requested that the team look at the pros and cons of underground lines including dealing with faults in the operational phase.</p> <p>Mr Ntshutsha explained that each phase of each power line has to be buried separately with a gap between them. A single powerline will therefore have at least three parallel trenches. The number of lines in a corridor therefor needs to be multiplied by 3 resulting in a very wide servitude that will be directly impacted. The impact during construction is significant.</p>

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	<p>Mr Lee asked if it is allowed to have vegetation below the above-ground lines.</p> <p>Mr Ntshutsha indicated that it is allowed but to a certain height.</p> <p>Mr Ntshutsha gave an explanation on vegetation management in servitudes.</p> <p>Ms Holmes asked Eskom to circulate their vegetation control policy.</p>
8	<p>The Way Forward and Closure</p> <p>Ms Calmeyer confirmed that the EIA will consider underground power lines as alternative to above ground.</p> <p>Copies of the presentations from the meeting are available to I&APs and will be distributed with the minutes.</p> <p>Available information on EMF's is available on the Eskom website and will be made available to I&APs on request.</p> <p>The minutes will be distributed to Ms Holmes for her to confirm that her issues have been adequately captured before being made public.</p> <p>All relevant information to be forwarded to the specialists.</p> <p>All attendees were invited to accompany the project team on site visits to Iphiva 3 to 7 and Iphiva 13. All attendees declined the invitation.</p> <p>Ms Shinga thanked everyone for attendance, contributions made and closed the meeting at 12:00</p>