



environment & tourism

Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

Private Bag X447, Pretoria, 0001 • Federe Building, 315 Pretorius Street, Pretoria, 0002. Tel: (+27 12) 310 3911 Fax: (+27 12) 322 2682

Ref: 12/12/20/1187

Enquiries: Mr. P. Ngidi

Tel: 012 310 3182 Fax: 012 320 7539 E-mail: pngidi@deat.gov.za

Ms. M. Seabe
Eskom Holding Ltd
P. O. Box 1091
JOHANNESBURG
2000

Fax No: (011) 800-3917

Dear Ms Seabe

ACCEPTANCE OF SCOPING REPORT AND PLAN OF STUDY FOR EIA: PROPOSED CONSTRUCTION OF THE MAKOPANE INTEGRATION PROJECT IN THE LIMPOPO PROVINCE

The Scoping Report and Plan of Study for EIR for the proposed project submitted and received in March 2009, have been accepted by this Department in respect of the above mentioned application.

You are hereby advised that the Environmental Impact Assessment Report must contain all the information outlined in regulation 32 (2) of the EIA regulations, omission of information may result in the EIA report being rejected.

You may accordingly proceed with the environmental impact assessment process in accordance with the tasks outlined in the plan of study for environmental impact assessment.

Yours Sincerely

Ms Lize McCourt

Chief Director: Environmental Impact Management

Department of Environmental Affairs and Tourism

Letter signed by: Mr Dumisane Mthembu

Designation: Director: Environmental Impact Evaluation

Date: 27/05/2009

Cc: Jo-Anne Thomas

Savannah Environmental

Fax: 086 684-0547

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS
PLAN OF STUDY FOR EIA

MOKOPANE INTEGRATION PROJECT, LIMPOPO PROVINCE

(DEAT Ref No 12/12/20/1187)

MARCH 2009

Prepared for

Eskom Holdings Limited
PO Box 1091
Johannesburg
2000



Prepared by

Savannah

ENVIRONMENTAL (PTY) LTD

Unit G8 Pinewood Square, Pinewood Office Park
33 Riley Road, Woodmead, Gauteng
Tel: +27 (0)11 234 6621 • Fax: +27 (0)86 684 0547
E-mail: joanne@savannahsa.com
www.savannahsa.com



PLAN OF STUDY FOR ENVIRONMENTAL IMPACT ASSESSMENT

CHAPTER 9

A detailed description of the proposed Mokopane Integration Project, the Scoping process, as well as the issues identified and evaluated through the Scoping phase (to date) have been included in the Final Environmental Scoping Report and provide the context for this Plan of Study for Environmental Impact Assessment (EIA).

This Plan of Study describes how the EIA will proceed during the EIA phase. The EIA phase of the study includes detailed specialist studies for those potential impacts evaluated to be of significance. The major findings of the Scoping process (which includes inputs from authorities, the public, the proponent and the EIA specialist team) are used to inform this Plan of Study for EIA, together with the requirements of the NEMA EIA Regulations and associated guidelines.

It should be noted that no specific information requirements for the Scoping Report have been specified by DEAT in terms of Regulation 29(1)(j) of the EIA Regulations, besides the general requirement to meet Regulations 29 and 30 of Government Notice No. R385 of 21 April 2006.

9.1. Aims of the EIA

The EIA will aim to achieve the following:

- » Provide an overall assessment of the social and biophysical environments affected by the proposed project
- » Assess potentially significant impacts associated with the nominated preferred transmission line corridors and the nominated preferred alternative substation sites
- » Identify and recommend appropriate mitigation measures for potentially significant environmental impacts and
- » Undertake a fully inclusive public involvement process to ensure that I&AP are afforded the opportunity to participate, and that their issues and concerns are recorded.

The EIA will address potential environmental impacts and benefits (direct, indirect and cumulative impacts) associated with all phases of the project including design, construction and operation, and will aim to provide the environmental authorities with sufficient information in order to make an informed decision regarding the project.

9.2. Authority Consultation

Consultation with the regulating authorities has been undertaken throughout the Scoping process and will continue throughout the EIA process. On-going consultation will include the following:

- » Invitation to attend a site inspection and consultation meeting during the review period of the draft Scoping Report
- » Submission of a final scoping report following the 30-day public review period
- » Submission of a final EIA report following the 30-day public review period
- » A consultation meeting with DEAT and DEDET in order to discuss the findings and conclusions of the EIA.

9.3. Alternatives to be assessed during the EIA process

9.3.1. *The “Do Nothing” Option*

The do nothing option would be the option of not constructing any new transmission power lines or the substation. By not taking any action, Eskom may end with a situation of not being able to ensure firm supply into some parts of the country in the very near future. This would eventually lead to load shedding which can cause major disruptions of power supply to different areas at different times. This can have a significant impact on the economy of the country, as no real economic growth would be able to take place without additional electricity supply. This option will however, be evaluated and assessed in detail during the EIA phase of the study as it is a mandatory requirement in terms of the EIA Regulations.

9.3.2. *Substation and Turn-in Lines*

No environmental fatal flaws were identified to be associated with any of the substation options, although a number of issues (associated with the substation and associated infrastructure) requiring further study have been highlighted. From a technical perspective, substation site Option 2 is not considered as a preferred site due to a watercourse partly traversing the site, as well as the presence of a rock outcrop. This option is therefore excluded as an option for further investigation on the basis of technical feasibility. Therefore, Site Option 1 (Doornfontein 721 LS), Site Option 3 (Zuid Holland), and Site Option 4 (Noord Brabant) will be investigated in further detailed within the EIA phase of the EIA process.

9.3.3. Transmission Power Line Corridors

The transmission power line alternatives proposed for the Delta - Mokopane 765kV transmission power lines cross various habitats sensitivity classes and potentially impact on numerous land uses and communities. From the specialist studies undertaken no environmental fatal flaws have been identified to be associated with any of the revised alternative corridors at this stage of the investigation. However, there are varying conclusions with regards to the alternative corridor which would pose the lowest impact to the environment. The nomination of a preferred alternative from an environmental perspective will, therefore, be required to be confirmed in the EIA phase of the process through a comparative assessment of the revised alternatives identified.

9.4. Assessment of Potential Impacts and Recommendations regarding Mitigation Measures

In order to make clear recommendations regarding the preferred alternative for the establishment of the proposed transmission power lines, more detailed studies are required to be undertaken within the EIA phase. Based on the findings of the Draft Environmental Scoping Report, the following studies are required to be undertaken as part of the EIA phase of the process:

- » A detailed ecological survey of the substation sites and transmission power line alternatives in order to establish the likelihood of any flora and/or fauna species of concern occurring in the study area. The detailed survey must concentrate on habitats classified as having High or Very High sensitivity
- » A detailed survey of the proposed substation site alternatives and transmission power line corridors in order to assess the potential impacts of the proposed project on avifauna and to recommend appropriate mitigation measures for significant impacts, where required
- » A visual impact assessment in order to determine the specific visual impact within identified exposed areas. The visual impact assessment within the EIA will address other crucial issues related to the visibility of the substation and transmission power lines in order to quantify the actual visual impact and to identify areas of perceived impact
- » Phase 1 and Phase 2 archaeological surveys in accordance with the requirements of Section 38(3) of the National Heritage resources Act (Act No 25 of 1999)
- » A Socio-Economic Impact Assessment (including land use and tourism potential) in order to address identified information gaps and assess the significance of potential impacts on the social environment as a result of the construction and operation of the proposed substation and transmission power lines

- » Development of appropriate and practical mitigation and management measures for potentially significant environmental impacts for inclusion in the project EMP.
- » A detailed consultation process in accordance with the requirements of Regulation 56 of Government Notice No R385 of 2006.

A summary of the issues which require further investigation within the EIA phase, as well as the proposed activities to be undertaken in order to assess the significance of these potential impacts is provided within Table 9.1. The specialists involved in the EIA Phase are also reflected in Table 9.1. A Peer Review of the EIA process will be undertaken by Jaana Ball of Arcus Gibb.

Table 9.1: Summary of the issues which require further investigation within the EIA phase and activities to be undertaken in order to assess the significance of these potential impacts

Issue	Activities to be undertaken in order to assess significance of impacts	Specialist
Biodiversity	<p>In order to determine the impact of the proposed development on the biological environment, it is necessary to compiled baseline information of the area in the EIA phase of the project as follows:</p> <ul style="list-style-type: none"> » Survey environmentally sensitive areas in order to verify results of the GIS modelling and scoping assessment » Survey representative areas in order to obtain a clear understanding of the nature of sensitivity in specific sites » Survey the area for general floristic and faunal diversity (common species, Red Data flora and fauna species, alien and invasive plant species) » Assess the potential presence of Red List flora and fauna species » Describe the status and importance of any primary vegetation » Provide descriptions of ecological habitat types, plant communities and faunal assemblages » Compile an ecological impact evaluation, taking the following aspects into consideration: <ul style="list-style-type: none"> * the relationship of potential impacts to temporal scales; * the relationship of potential impacts to spatial scales; * the severity of potential impacts; * the risk or likelihood of potential impacts occurring; and * the degree of confidence placed in the assessment of potential impacts. » Map all relevant aspects » Recommend preferred route variants based on results of the ecological impact evaluation 	Riaan Robbeson of Bathusi Environmental Consulting
Avifauna	<ul style="list-style-type: none"> » During the EIA Phase, the identified impacts will be assessed in more detail for all identified feasible alternatives. Particular emphasis will be placed on the impact of collision of birds with the earth wire, as this has been identified as potentially being of high significance and on habitat destruction and disturbance associated with the construction of Mokopane Integration Project. » Measures for the mitigation of identified significant impacts will also be recommended and detailed. » In addition to this the potential for negative impacts on the bird's habitats through the construction of the proposed 765kV power lines will be investigated as well as the likelihood of disturbance of breeding pairs of Red-Data birds during the construction period. » Once the final corridor for the proposed 400kV loop-in and loop-out power lines has been 	Megan Diamond of EWT

Issue	Activities to be undertaken in order to assess significance of impacts	Specialist
	<p>determined, the collision impacts associated with the power lines will be discussed in detail. In this respect special attention will given to Red Data species, particularly the White-bellied Korhaan, Southern Bald Ibis, Secretarybird and the various stork species. Potential high risk areas will be identified and suitable mitigation measures to reduce the collision risk will be proposed.</p>	
Agricultural Potential	<ul style="list-style-type: none"> » Desk-top determination of agricultural potential of the proposed substation site through access to existing soils information for South Africa » Evaluation of the proposed substation sites through field investigations in order to determine soil type and agricultural potential 	Garry Paterson of the ISCW: ARC
Visual impacts	<p>The visual impact assessment within the EIA will address crucial issues related to the visibility of the proposed Mokopane Integration Project. These issues or criteria will aim to quantify the actual visual impact and to identify areas of perceived visual impact. Specific areas of focus for the visual impact assessment should be on the visual exposure to and potential visual impact on individual residences, lodges (both private and commercial) and communities within close proximity of the proposed infrastructure.</p> <p>Other issues/criteria to be addressed by the visual impact assessment:</p> <ul style="list-style-type: none"> » Visual distance/observer proximity to the proposed infrastructure (apply the principle of reduced impact over distance) » Viewer incidence/viewer perception (identify areas with high viewer incidence and negative viewer perception) » Landscape character/land use character (identify conflict areas in terms of existing and proposed land use) » Visually sensitive features (scenic features or attractions) » General visual quality of the affected area » Visual absorption capacity of the natural vegetation » Potential visual impact of lighting (after hours operations and security) of the proposed substation » Potential mitigation measures and/or suggested deviations from the proposed transmission line alignment <p>The visual impact study must also take cognisance of the results and information generated by the social impact assessment study and the public participation process of this project.</p>	Lourens du Plessis of MetroGIS

Issue	Activities to be undertaken in order to assess significance of impacts	Specialist
Heritage sites	<ul style="list-style-type: none"> » A Phase I Heritage Impact Assessment study will provide a synthesis of the results achieved by the scoping study and the Phase I survey and will describe the <i>status quo</i> of the study area with regard to its pre-historical (archaeological), historical and cultural context. Depending on the types and ranges of heritage resources that may be discovered and the level of significance of these remains certain mitigation and management measures have to be applied to these resources, particularly if they are to be affected (destroyed, altered, removed) during the construction, operation or maintenance of the Mokopane Integration Project. » Phase II studies include in-depth heritage studies and vary according to the types and ranges of heritage resources that may be affected. These studies include the documentation of sites dating from the Stone Age, Iron Age and the Historical Period by means of mapping, excavating, photographing and describing archaeological sites. Excavations of archaeological sites could be followed by laboratory work when archaeological collections have to be studied and analysed. Phase II work may also include the documenting of rock art, engravings or historical sites and dwellings; the sampling of archaeological sites or shipwrecks; extended excavations of archaeological sites; the exhumation and relocation of graves and graveyards; the collection or excavation of paleontological samples, etc. and may require the input of different types of specialists. 	Julius Pistorius
Socio-economic Impacts (including impacts on land use and tourism potential)	<p>In order to fully assess the impact of the proposed development on the social environment, it is necessary to undertake the following:</p> <ul style="list-style-type: none"> » <i>Potential demographic impacts as a result of socio-cultural change processes</i> <ul style="list-style-type: none"> * Conduct a comparative desktop study between Census 2001 and Community Survey 2007 data; * Request construction and maintenance information from the project proponent; * Interview the public participation consultants; * Interview the project proponent, other companies and the municipality; * Conduct interviews/focus group discussions during Participant Rural Appraisal. * Access crime statistics and interview members of the SAPS if necessary. » <i>Potential impacts as a result of economic change processes</i> <ul style="list-style-type: none"> * Conduct a choice modelling study among hunters and/or tourists and/or potential buyers of 	MasterQ Research

Issue	Activities to be undertaken in order to assess significance of impacts	Specialist
	<p>property in the area;</p> <ul style="list-style-type: none"> * Use an input-output model to quantify economic impacts; * Execute an economic dependency model; * Participant Rural Appraisal including interviews and/or focus group discussions with land owners and vulnerable people in the study area (poor, low skilled, poorly educated people, access to services below RDP standard); * Interview estate agents in the area. <p>» <i>Potential impacts as a result of institutional and empowerment change processes</i></p> <ul style="list-style-type: none"> * Review the issues register or issues report from the public participation consultants to determine the recurrent issues raised from the public's side and how these issues were addressed throughout the process. An analysis of these issues would indicate the risk for social mobilisation; * Obtain information from the local municipality on the existing capacity to deliver municipal services and to determine the capacity for an additional demand on municipal services; * Discuss issues and concerns regarding the negotiation process and how these issues should be addressed with the project proponent; and * Obtain and analyse information on any existing disaster management plans at similar installations. Also obtain information from the local municipality on any existing emergency and health care services (both governmental as well as private) and determine their capacity to handle potential disasters. <p>» <i>Potential impacts as a result of socio-cultural change processes</i></p> <ul style="list-style-type: none"> * Assess the visual assessment report; * Participant Rural Appraisal including interviews and/or focus group discussions with land owners and communities in the study area; * Conduct a desk top study to determine the health profile of the area; and * Interviews with municipal officials and other authority figures (such as the South African Police Service). 	

Issue	Activities to be undertaken in order to assess significance of impacts	Specialist
	<ul style="list-style-type: none"> » <i>Potential impacts as a result of land use change processes</i> <ul style="list-style-type: none"> * Request information from the project proponent, and obtain information from the relevant specialist conducting the traffic impact assessment, if any; * Scrutinise the IDP and SDF of the affected district and local municipalities. If additional information is required other than that contained in the IDP/SDF, conduct interview(s) with relevant town planners and tourism bodies. * Ground truth information on landing strips, dwellings, etc. by conducting participant rural appraisal, including one on one interviews and/or focus group discussions with affected land owners. * Identify and assess other relevant studies. 	

Studies and/or specialist processes which are required to be undertaken outside of the EIA process include:

- » An assessment of the potential impacts of climate and atmospheric conditions (e.g. potential impacts associated with lightening, precipitation and pollution levels) on the proposed transmission infrastructure, in order to provide an indication of what conditions are required to be accounted for by the design team to extend the life and reliability of the new infrastructure
- » A detailed geotechnical survey of the proposed substation site and power line tower positions (once determined) in order to fully understand the soils in terms of founding conditions and erosion potential. This information is required to be used as within the EIA phase of the process (where available), as well as form part of the planning and design phase of the Mokopane Integration Project.

9.5. Methodology for the Assessment of Potential Impacts

Direct, indirect and cumulative impacts of the above issues, as well as all other issues identified will be assessed in terms of the following criteria:

- » The **nature**, which shall include a description of what causes the effect, what will be affected and how it will be affected.
- » The **extent**, wherein it will be indicated whether the impact will be local (limited to the immediate area or site of development) or regional
- » The **duration**, wherein it will be indicated whether:
 - * the lifetime of the impact will be of a very short duration
 - * the lifetime of the impact will be of a short duration (2-5 years)
 - * medium-term (5–15 years);
 - * long term (> 15 years); or
 - * permanent;
- » The **magnitude**, quantified as small (will have no effect on the environment), minor (will not result in an impact on processes), low (will cause a slight impact on processes), moderate (will result in processes continuing but in a modified way), high (processes are altered to the extent that they temporarily cease), and very high (results in complete destruction of patterns and permanent cessation of processes).
- » The **probability of occurrence**, which shall describe the likelihood of the impact actually occurring and will be rated very improbable (probably will not happen), improbable (some possibility, but low likelihood), probable (distinct possibility), highly probable (most likely) and definite (impact will occur regardless of any prevention measures).
- » the **significance**, which shall be determined through a synthesis of the characteristics described above and can be assessed as low, medium or high; and

- » the **status**, which will be described as either positive, negative or neutral.
- » the degree to which the impact can be reversed (**reversibility**).
- » the degree to which the impact may cause irreplaceable loss of resources.
- » the *degree* to which the impact can be *mitigated*.

The potential **significance** of identified impacts will be determined using the significance rating system described below.

Significance of environmental impact = Consequence x Probability

The consequence of an impact can be derived from the following factors:

- » Extent of impact
- » Duration of impact
- » Magnitude
- » Reversibility

The above criteria will be rated using the criteria indicated in the table below.

Table 9.2: Significance ranking

Magnitude	Reversibility	Duration	Spatial extent	Probability
5 – Very high / don't know	1 – Reversible (regenerates naturally)	5 – Permanent	5 – International	5 – Definite / don't know
4 – High		4 – Long term (impact ceases after operational life)	4 – National	4 – High probability
3 – Moderate	3 – Recoverable (needs human input)	3 – Medium term (5 – 15 years)	3 – Regional	3 – Medium probability
2 – Low		2 – Short term (0 – 5 years)	2 – Local	2 – Low probability
1 – Minor	5 – Irreversible	1 - Immediate	1 – Site only	1 – Improbable
0 – None				0 - None

The overall consequence of an impact will be determined by the sum of the individual scores for magnitude, reversibility, duration and extent of an impact, multiplied by the probability of the impact occurring.

Consequence (severity + reversibility + duration + spatial scale) X Probability = Significance

The significance is then characterised as follows:

- » **More than 60 significance points** indicate **High** environmental significance
- » **Between 30 and 60 significance points** indicate **Moderate** environmental significance
- » **Less than 30 significance points** indicate **Low** environmental significance.

The impacts will be ranked according to the significance rating results obtained. The relevant mitigation measures recommended by the project specialists will then be considered and the significance of the impacts after mitigation will be determined. The impacts will then be ranked again according to the significance results after mitigation.

9.6. Integration and Preparation of the EIA Report

The results of the specialist studies and other available information will be integrated and synthesised by the Savannah Environmental project team. An EIA report will be compiled, and will include:

- » detailed description of the proposed activity
- » a description of the property(ies) on which the activity is to be undertaken and the location of the activity on the property(ies)
- » a description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity
- » details of the public participation process conducted, including:
 - * steps undertaken in accordance with the plan of study for EIA;
 - * a list of persons, organisations and organs of state that were registered as interested and affected parties;
 - * a summary of comments received from, and a summary of issues raised by registered I&APs, the date of receipt of these comments and the response to those comments; and
 - * copies of any representations, objections and comments received from registered I&APs
- » a description of the need and desirability of the proposed project and identified potential alternatives to the proposed activity, including advantages and disadvantages that the proposed activity or alternatives may have on the environment and the community that may be affected by the activity
- » an indication of the methodology used in determining the significance of potential environmental impacts
- » a description and comparative assessment of all alternatives identified during the environmental impact assessment process
- » a summary of the findings and recommendations of specialist reports

- » a description of all environmental issues that were identified during the environmental impact assessment process, an assessment of the significance of each issue and an indication of the extent to which the issue could be addressed by the adoption of mitigation measures
- » an assessment of each identified potentially significant impact
- » a description of any assumptions, uncertainties and gaps in knowledge
- » an environmental impact statement which contains:
 - * a summary of the key findings of the environmental impact assessment; and
 - * a comparative assessment of the positive and negative implications of the proposed activity and identified alternatives
- » a draft environmental management plan
- » copies of specialist reports

The draft EIA Report will be released for a 30-day public review period. The comments received from I&APs will be captured within a Comments and Response Report, which will be included within the final EIA Report, for submission to the authorities for decision-making.

9.7. Public Participation Process

A public participation process will be undertaken by **ILISO Consulting**, public participation specialist consultants. The key objective of public participation during an EIA is to assist I&APs to identify issues of concern or highlight positive aspects of the project and to comment on the findings of the EIA process.

Through experience in social development facilitation and community education and organising, as well as from feedback obtained during the Scoping Phase a range of methods have been identified which will be used during the EIA phase to enable consultation, awareness raising, collaboration and empowerment. These are detailed in Table 9.3.

Table 9.3: Summary of the strategy on how the various groupings of I&APs would be engaged and communicated to:

Stakeholder Grouping	Communication and Involvement Strategy
Landowners / residents	<ul style="list-style-type: none"> • Advertisements • One-on-one consultation (where necessary) • Focused consultation sessions • Public meetings • Written reports
Governmental departments (National, Provincial, District and Local authorities)	<ul style="list-style-type: none"> • Focused consultation sessions • Stakeholder workshop • Written reports
General public (interested parties)	<ul style="list-style-type: none"> • Advertisements

Stakeholder Grouping	Communication and Involvement Strategy
	<ul style="list-style-type: none"> Public meetings Written reports
Organisations (e.g. SAHRA, NGOs, Agricultural Unions, etc.)	<ul style="list-style-type: none"> Advertisements Focused consultation sessions Stakeholder workshop Written reports

» *Focused communication and consultation sessions*

Focused consultation sessions will include telephonic interviews, one-on-one interviews, focus group meetings, stakeholder workshops and public meetings. The following provides a broad outline of what is envisaged with each focused consultation session during the EIA phase.

Table 9.4: Focused communication and consultation sessions to be undertaken in the EIA Phase of the process

Sessions	Aim of Communication	I&APs Involved
One-on-one consultations	<ul style="list-style-type: none"> Interaction on a one-on-one basis Provide detailed technical information and to discuss issues in detail Clarify any misunderstandings Assist I&APs to formulate their comments in a manner that will ensure that they can be afforded due attention in the EIA process Follow up on issues raised Obtain information as part of the research and assessment process 	<ul style="list-style-type: none"> Affected landowners Targeted I&APs
Focus group meetings	<ul style="list-style-type: none"> Assist I&APs to submit additional comments regarding the proposed project for consideration within the EIA Follow up on additional issues raised Obtain information as part of the assessment process 	<ul style="list-style-type: none"> Affected landowners Groupings of I&APs with similar interests in project Organised groupings e.g. NGOs
Stakeholder workshops	<ul style="list-style-type: none"> Provide detailed information regarding the EIA Clarify any misunderstandings Provide I&APs the opportunity to comment further on the EIA 	<ul style="list-style-type: none"> Key stakeholders, e.g. government department, NGOs
Public meeting	<ul style="list-style-type: none"> Provide detailed information of the findings of the EIA Provide I&APs the opportunity to comment 	<ul style="list-style-type: none"> All I&APs

Sessions	Aim of Communication	I&APs Involved
	on the findings of the EIA Report	

The draft EIA report will be made available for public review for a 30-day period prior to finalisation and submission to DEAT for review and decision-making. In order to provide an overview of the findings of the EIA process and facilitate comments, a public meeting and key stakeholder workshop will be held during this public review period.

9.7 Key Milestones of the programme for the EIA

The envisaged key milestones of the programme for the Environmental Impact Assessment (EIA) phase of the project are outlined in the Table 9.5 below.

Table 9.5: Key milestones for EIA phase

Key Milestone Activities	Proposed completion date ¹
Authority acceptance of the Scoping Report and Plan of Study to undertake the EIA	April 2009
Undertake detailed specialist studies and public participation process	April 2009 – August 2009
Public review of draft EIA Report and draft EMP	September 2009
Submit final EIA Report to authorities	Mid-October 2009

¹ Indicative dates only



4 June 2009

Your Reference: 12/12/20/1187

Mr Percy Ngidi
Principal Environmental Officer
Department of Environmental Affairs and Tourism
Private Bag X447
Pretoria
0001

Dear Percy,

ENVIRONMENTAL IMPACT ASSESSMENT FOR THREE PROPOSED TRANSMISSION POWER LINES IN THE LIMPOPO PROVINCE

REVISION OF APPLICATION FOR AUTHORISATION

The Application for Authorisation submitted to DEAT and Limpopo DEDET on 5 March 2008 has reference. This project was provided the following reference number by your Department: 12/12/20/1187.

Eskom would like to inform the Department of Environmental Affairs and Tourism that the proposed 765kV lines by Eskom have been altered to 400kV as initially planned. Eskom was at the early stages of developing Strategic Grid Plans for the whole country when the decision to proposed building 765kV lines was taken in March 2008. The inter-area transmission plans were not at a stage where they aligned with the longterm Strategic Grid Plans. The Strategic Grid Plans have since been completed and they resulted in a strongly meshed 400kV network that links the Polokwane, Steelpoort and Mpumalanga areas. The revised meshed 400kV network results in the following:

- » The 765kV network does not merge well with the 400kV one; the 400kV network becomes the stronger network to distribute power to the load centres through 400/132kV transformation. The 765kV network requires 765/400kV then 400/132kV transformation to distribute power. The two stage transformation results in a network with a path of higher resistance for power flow than the 400/132kV one.
- » The 400kV network can support the forecast load with no need for further line reinforcements with higher voltages beyond 400kV with no bigger line structures towards the Polokwane area.

UNIT G8, PINWOOD SQUARE, PINWOOD OFFICE PARK, 33 RILEY ROAD, WOODMEAD, GAUTENG
PO BOX 148, SUNNINGHILL, 2157, GAUTENG
TEL: +27 (0)11 234 6621 • FAX: +27 (0)86 684 0547 • E-MAIL: JOANNE@SAVANNAHSA.COM
WWW.SAVANNAHSA.COM

DIRECTORS: M MATSABU • KM JODAS • J THOMAS
COMPANY REGISTRATION NO.: 2006/000127/07
VAT REGISTRATION NO.: 4780226736

- » Thicker 400kV line conductors will be used for the proposed 400kV lines.
- » The 2 x existing 400kV line conductors are planned to be recycled to thicker conductors with line capacities that are more than 50% of the existing lines - with no further lines required towards Polokwane.
- » There are possibilities of Independent Power Producers (IPP) in the area north of Polokwane. The IPPs could be integrated at 400kV and this will further strengthen the Polokwane 400kV network.

The implications of the change in scope of the project from 765kV to 400kV are that a narrower servitude would be required for the lines (i.e. 55 m for each of the lines and not 80 m as would be the case for a 765 kV line), and that shorter towers would be required (i.e. in the region of 35 m and not 50 m as would be the case for a 765kV line).

The revised scope of work shall be as follows:

- » A new 400kV between the Delta Substation (near the Medupi Power Station) and the new Mokopane Substation, a distance of approximately 150 km
- » A new 400kV between the new Mokopane Substation and the existing Witkop Substation, a distance of approximately 60 km
- » A new 400kV line between Delta Substation and the existing Witkop Substation, a distance of approximately 200 km

Eskom Holdings Limited, therefore, requests for the Application for Authorisation to be amended accordingly.

Please contact me with any queries in this regard.

Kind regards

Jo-Anne Thomas

cc. Henry Nawa – Eskom



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Fedsure Building · 315 Pretorius Street · PRETORIA
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

Ref: 12/12/20/1187

Enquiries: Mr. P. Ngidi

Tel: 012 310 3182 Fax: 012 320 7539 E-mail: pngidi@deat.gov.za

Ms. M. Seabe
Eskom Holding Ltd
P. O. Box 1091
JOHANNESBURG
2000

Fax No: (011) 800-3917

Dear Ms Seabe

THE PROPOSED CONSTRUCTION OF THE MAKOPANE INTEGRATION PROJECT IN THE LIMPOPO PROVINCE

The above-mentioned application and your letters dated 4 June, 25 June and 16 October 2009 and received by this Department on 16 October 2009 refer.

With regard to compliance with Regulation 56(2)(b)(i)(ii), please note that the EIA Regulations make provisions for exemption from compliance with certain provisions of Regulation 56, provided the proposed project is a linear or ocean based activity. Therefore; since this project is a linear project, you do not have to comply with Regulation 56(2)(b)(i)(ii) nor apply for exemption, as stipulated in the regulations. Please refer to Regulation 56(5).

The amendment of the application from the construction of 765KV to 400KV power line is noted. It is further noted that the registered IA&P's have been notified of these changes, no further actions are required in this regard and the EIA process will continue as prescribed in the regulations.

The selection and investigation of environmental impacts associated with the proposed alternatives is an integral part of the EIA process. Outcomes of the comparative assessments of the proposed alternatives must be detailed in the EIR. You are hereby reminded that you are not limited to investigate only route alternative, but you can also use other types of alternatives during your EIA process, e.g. technology, activity alternative, etc.

You are hereby advised that the Environmental Impact Assessment Report must contain all the information outlined in regulation 32 (2) of the EIA regulations, omission of information may result in the EIA report being rejected.

You may accordingly proceed with the environmental impact assessment process in accordance with the tasks outlined in the plan of study for environmental impact assessment.

Yours sincerely



Ms Lize McCourt

Chief Director: Environmental Impact Management

Department of Environmental Affairs

Letter signed by: Ms Lene Grobbelaar

Designation: Assistant Director: Environmental Impact Evaluation

Date: 30/10/09

Cc: Zama Dlamini

Savannah Environmental

Fax: 086 684-0547

16 September 2008

Limpopo Department of Economic Development,
Environment and Tourism
Private Bag x9484
Polokwane
0700

Attention: Mr Selamolela Oscar

Dear Mr Selamolela Oscar,

**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED MOKOPANE
INTEGRATION PROJECT, LIMPOPO PROVINCE:
DRAFT SCOPING REPORTS**

Please find herewith copies of the draft Environmental Scoping Report for the proposed Mokopane integration Project: Transmission Lines (DEAT Reference number: 12/12/20/1140) and Mokopane integration Project: Substation and Turn-in Lines (DEAT reference number 12/12/20/1187) for your review and comment.

This draft report has been made available for public review from 15 September to 15 October 2008 at the following locations:

A Draft Scoping Report has been prepared by Savannah Environmental and is now available for public review. You are invited to review the report at one of the following locations:

Lephalale Library – corner of Joe Slovo and Douwater Street	Agri Lephalale Offices – 6A Jacobus Street
Marken Farmers Hall	Vaalwater Agric Association – NTK Building, Meule Street
Waterberg District Municipality Offices, Modimolle	Potgietersrus DLU, Mokopane
Polokwane Municipality – Environmental Management Office	Polokwane Library – Hans van Rensburg Street
www.eskom.co.za/eia	www.savannahSA.com

Please forward any comments on this draft report to Savannah Environmental, with a copy to Percy Ngidi at the National Department of Environmental Affairs and Tourism (DEAT).

Please contact me with any queries regarding the above.

Kind regards

Jo-Anne Thomas