



Dynamic Integrated Geohydro
Environmental Services cc

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BACKGROUND INFORMATION DOCUMENT

PROPOSED CONSTRUCTION OF 400/132KV MARANG B SUBSTATION AND ± 2 KM,
400kv POWER LINE LOOPING IN AND OUT FROM THE BIGHORN-MARANG OR
MEDUPI MARANG 400KV POWERLINES WITHIN RUSTENBURG LOCAL
MUNICIPALITY OF BOJANALA DISTRICT MUNICIPALITY, NORTH WEST
PROVINCE

DEA REF: 14/12/16/3/3/2/611



PURPOSE OF THIS DOCUMENT

The aim of this document is to inform Interested and Affected Parties (I&APs) about the Environmental Impact Assessment Process to be undertaken for the proposed Rustenburg Strengthening Project. It also provides the I&APs with the opportunity to register as stakeholders in the Public Participation Process and comment on the project.

BACKGROUND

Marang 400/88kV substation is one of the four Main Transmission Substations (MTS), which are currently supplying Rustenburg's platinum mining, smelting operations and commercial operations. The substation is supplied via the 3x 400kV power lines, i.e., Matimba-Marang, Bighorn-Marang and Midas-Marang. It comprises of 4 x 315 MVA, 400/88kV transformers and has a capacity of 945 MVA. The recorded peak load was 776MVA in years 2010/11 and 694MVA in years 2011/12. As a result, the Marang 400/88kV will exceed the 400/88kV firm capacity limit by 2015/16. To address these transformation capacity constraints and to align with the 20 year load forecast, Eskom will require a new substation site since the existing substation has space limitations for an extension.

Eskom therefore intends to construct and maintain a new substation, Marang B 400/132kV and \pm 2 km ,400kV power line from the existing Bighorn-Marang or Medupi-Marang 400 kV power line.

PROPOSED PROJECT

The proposed project entails the construction and maintenance of the following:

- A new 3x 500MVA 400/132kV Main Transmission Substation (MTS), Marang B on approximately \pm 30 hectares; and
- \pm 2km 400kV loop-in-loop-out power line from the existing Bighorn-Marang/Medupi-Marang 400 kV power lines.

Location: The proposed project will be in close proximity to the existing 400/88kV Marang Main Transmission substation on Farm Klipgat 281 JQ and Portion 2 of the Farm Elandsheuel 282 JQ, located approximately 14 km North East of Rustenburg. Refer to Appendix A for the Locality Map.

EIA PROCESS

An Environmental Impact Assessment is a proactive and systematic process where both positive and negative potential environmental impacts associated with certain activities are assessed. Every Environmental Impact Assessment project has two objectives namely, process and content objectives. The process objectives are to ensure that the process is open, transparent and inclusive, supplies stakeholders with sufficient information, affords them ample opportunity to contribute and makes them feel that their contributions are valued. The content objectives of the project are in the form of “hard” information: facts based on scientific and technical study, statistics or technical data. Figure 1 below presents the EIA process to be adopted for this study.

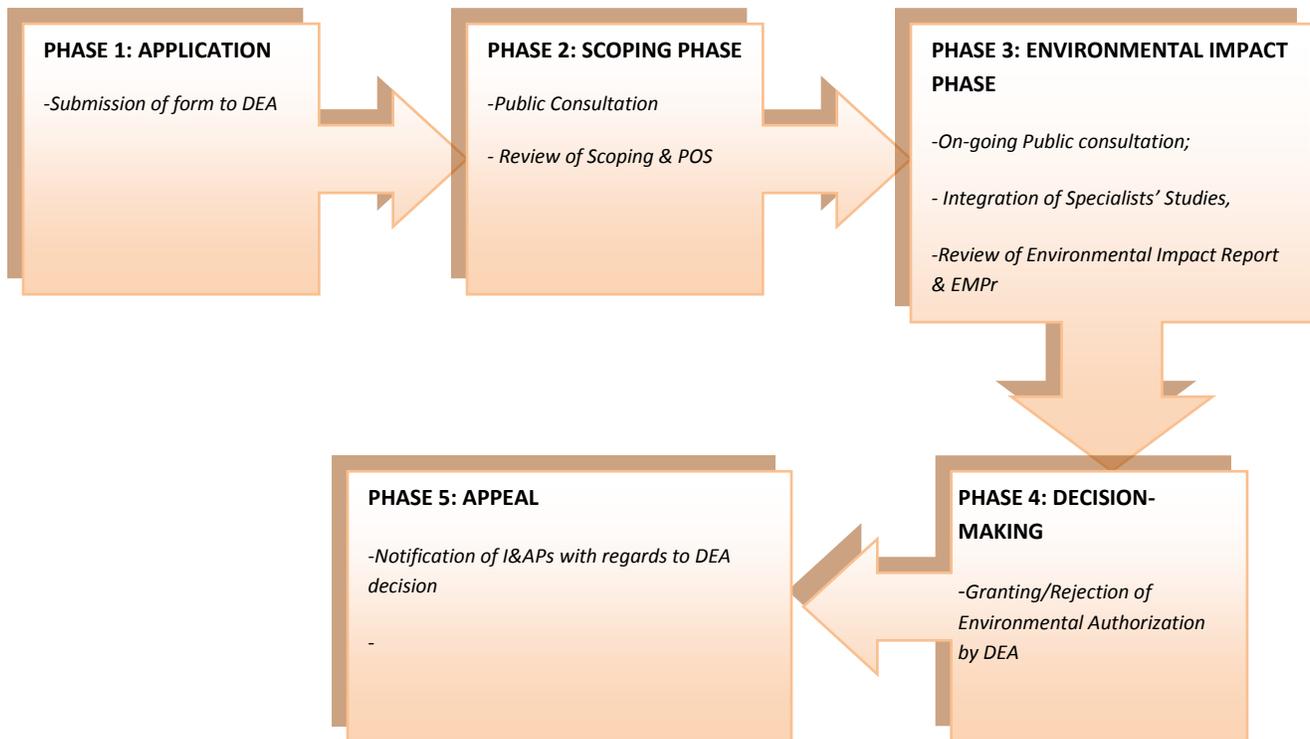


Figure 1: Environmental Impact Assessment Process Flow Diagram

ACTIVITIES APPLIED FOR

Before the project can commence, an authorization is needed from the Department of Environment Affairs, in compliance with the Environmental Impact Assessment Regulations of 2010. The development is listed in terms of Government Notice R545 and R546 under Chapter 5 of the National Environment Management Act (Act No. 107 of 1998), and therefore requires that an Environmental Impact Assessment be undertaken. The project will trigger listed activities No. 8 and 15 of Government Notice R545 and activity 4c i(ee) of Government R546 which state that:

- **GN R.545 Activity 8:** The construction of infrastructure for the transmission and distribution of electricity with a capacity of 275 kilovolts or more, outside an urban area or industrial complex;
- **GN R545 Activity 15:** Physical alteration of undeveloped, vacant or derelict land or residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more; and
- **GN R546 Activity 4c i (ee):** The construction of a road wider than 4 metres with a reserve less than 13.5metres in North West in critical biodiversity areas (Terrestrial Type 1 and 2 and Aquatic Type 1) as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans

The following legislation will guide this assessment process:

- i. The South African Constitution (Act 108 of 1996);
- ii. National Environmental Management Act (Act 107 of 1998);
- iii. The Principles of Integrated Environmental Management;
- iv. National Environmental Management: Biodiversity Act (Act No. 10 of 2004);
- v. National Water Act (Act 36 of 1998);
- vi. Water Services Act 7 (Act 108 of 1997);
- vii. The National Heritage Resources Act (Act No. 25 of 1999);
- viii. Conservation of Agricultural Resources Act (Act No. 43 of 1983);
- ix. National Road Traffic Act (Act No. 83 of 1996);
- x. National Environmental Management: Waste Act (Act No. 59 of 2008);
- xi. Occupational Health and Safety Act (Act No. 85 of 1993);
- xii. Electricity Regulation Act (Act 4 of 2006);
- xiii. Rustenburg Municipality By-Laws;
- xiv. National Forest Act (Act 84 of 1998);
- xv. SANS 10103.

POTENTIAL IMPACTS

Potential negative impacts and positive benefits associated with the project may include:

Negative Impacts

1. *Soil Erosion;*
2. *Loss of Natural Vegetation*
3. *Loss of Land*
4. *Visual Impact*
5. *Cultural and Heritage;*
6. *Increased Noise Levels*
7. *Water Pollution;*
8. *Air pollution: odor and dust*
9. *Increased health and safety risks;*
10. *Traffic Congestion*

Positive Benefits

11. *Improvement in Basic Services*
12. *Economic Development*
13. *Long term solution to electricity growth;*
14. *Additional Employment Opportunities.*

SPECIALISTS' STUDIES

The proposed project will require various specialists to assist with the environmental context of the area.

Specialized studies which will be carried include:

- Air Quality Assessment;
- Avi-fauna Assessment;
- Ecological Assessment;
- Heritage and Paleontology Impact Assessment;
- Social Impact Assessment;
- Soil and Land Capability Assessment;
- Tourism Impact Assessment;
- Visual Impact Assessment; and
- Wetland Delineation.

PUBLIC PARTICIPATION

An important aspect of the impact assessment process is the Public Participation Process whereby DIGES will engage all the interested and affected parties and these will include the local community, those with interests in the farms where the line will pass, and the relevant Government Departments.

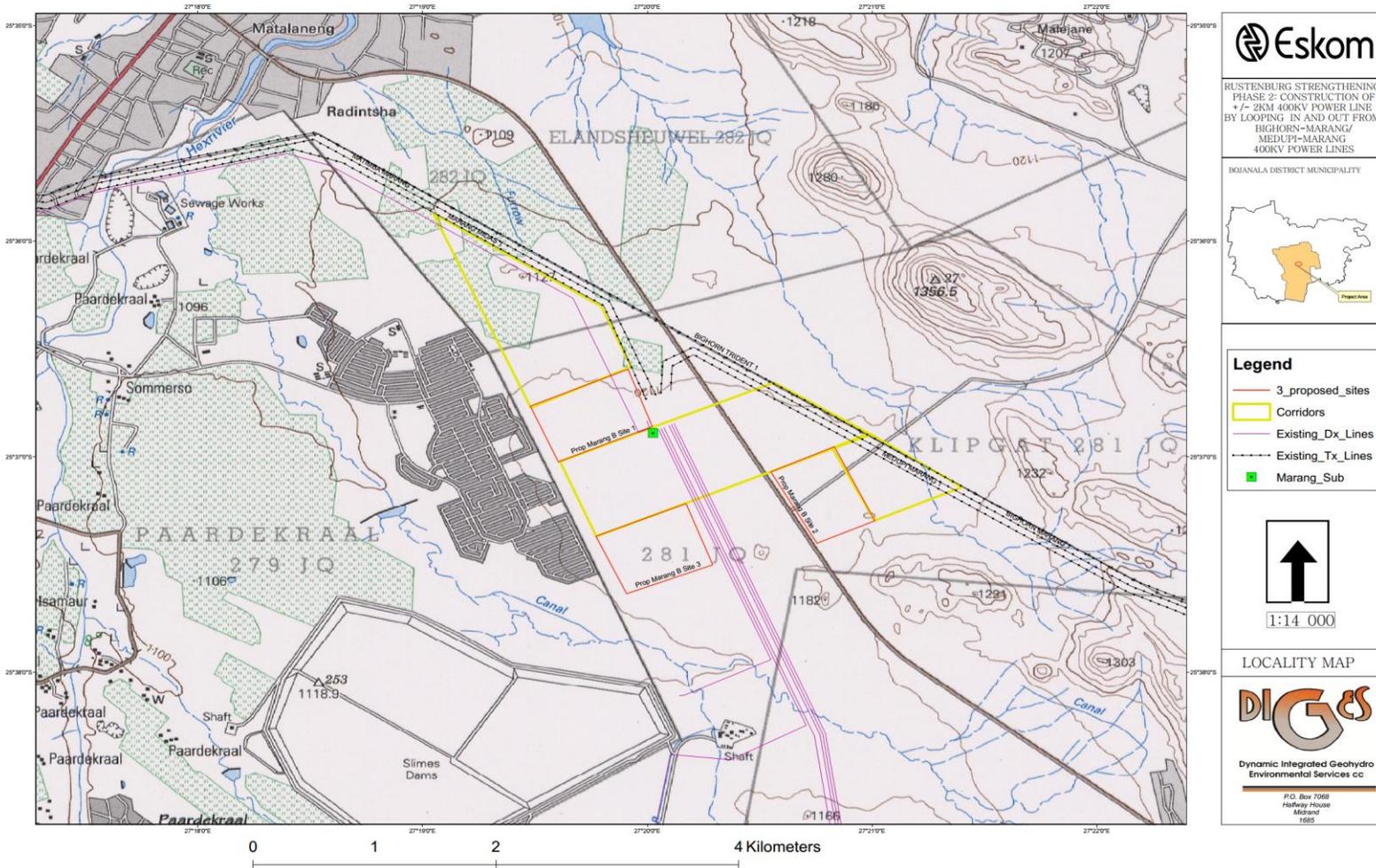
The Process will include:

- i. **Written Notification:** Written notification will be posted to key stakeholders including affected landowners and local authorities.
- ii. **Adverts and Site Notices:** To be released in the Sowetan and Rustenburg Herald and notices will be placed at various public spots within the municipalities.
- iii. **Meetings:** stakeholder meetings will be held, dates and venues will be publicized in the media.
- iv. **Commenting Period:** The registered Interested and Affected Parties will be given an opportunity to comment on the draft Scoping and Environmental Impact Report and Final Scoping and Environmental Impact Report for 40 and 21 days respectively.

We kindly request that you complete the attached registration form and return it to DIGES at the contact details below. Regular updates on all meetings and report releases will be communicated to registered Interested and Affected Parties throughout the entire EIA process. Should you have any comments or questions please do not hesitate to contact us.

Contact Person: Brenda Makanza
Fax: 011 312 7824
Tel: 011 312 2878
Cell: 082 075 6685
Email: brendam@diges.co.za
Contact Address: P.O.Box 7068
Halfway House
1685

APPENDIX A: LOCALITY MAP



Eskom

RUSTENBURG STRENGTHENING
PHASE 2: CONSTRUCTION OF
+/- 2KM 400KV POWER LINE
BY LOOPING IN AND OUT FROM
HIGHORN-MARANG/
MIDLUP-MARANG
400KV POWER LINES

BOJANALA DISTRICT MUNICIPALITY

Legend

- 3 proposed sites
- Corridors
- Existing Dx Lines
- Existing Tx Lines
- Marang Sub

↑

1:14 000

LOCALITY MAP

DIGES

Dynamic Integrated Geohydro
Environmental Services cc

P.O. Box 7068
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Midrand
1685

COMMENTS AND REGISTRATION FORM (INTERESTED & AFFECTED PARTY)

RUSTENBURG STRENGTHENING (MARANG B PROJECT)

Please complete this form and return it to our offices

TITLE (Prof/Mr/Mrs)		FIRST NAME	
SURNAME			
CAPACITY (e.g. Secretary/Director)			
ORGANISATION			
POSTAL ADDRESS		POSTAL CODE	
TEL. NO.: ()		CELL NO.:	
FAX NO.: ()		E-MAIL ADDRESS:	
PROJECT CORRESPONDENCE			
I would like to continue to receive project information (please tick appropriate box)			
By Mail (PDF-CD)	YES	NO	
By E-mail(PDF_Zipped)	YES	NO	
Via Dropbox	YES	NO	
By Mail (Hard Copy)	YES	NO	
FOCUS GROUP MEETINGS			
Please indicate if you would be interested in attending Focus Group Meetings	YES	NO	

COMMENTS/ISSUES/CONCERNS (Please use separate sheet, if required)

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Please add the following particulars of my colleagues/friends/neighbours on your mailing list.

Name:		Organization:	
Address:			
Tel.:	Fax:	Cell:	
E-mail:			