



## KZN Agriculture and Environmental Affairs

*Mnyango:  
eZolimo neZemvelo*

### SIFUNDAZWE SAKWAZULU-NATALI

Directorate: Environmental Services

Enquiries: Sarah Allan

Reference No: EIA/6752

Private Bag X 9059  
PIETERMARITZBURG  
3200

Tel: 033-343 8300

Fax: 033-343 8470

Date: 12/4/2007

#### Eskom Transmission Service

P.O. Box 1091  
Johannesburg  
2000

ATTENTION: Mr. John Geeringh  
Fax No: (011) 800 3917  
Tel No: (011) 800 2465

Dear Sir

Re: EIA/6752 – AMENDMENTS TO THE RECORD OF DECISION FOR THE PROPOSED UPGRADE OF EROS DISTRIBUTION SUBSTATION TO A 400kV TRANSMISSION SUBSTATION INCLUDING 88Kv POWERLINE DEVIATION AT MISTY HEIGHTS, HARDING, UMUZIWABANTU MUNICIPALITY ISSUED ON 12 OCTOBER 2006

Eskom Distribution (Eastern Region) has requested that the Record of Decision (ROD) issued for the above-mentioned project be amended. Correspondence submitted to the KZN Department of Agriculture and Environmental Affairs (hereafter referred to as "this Department") by SiVEST Environmental Division on 30 January 2007 and 13 December 2006 refers.

The following amendment is hereby made to the Record of Decision authorized on 12 October 2006 in terms of the provisions of section 22 (3) of the Environment Conservation Act, Act No. 73 of 1989:

**Section 1 Description of activity (page 1)** is amended to read:

*"The applicant, Eskom Transmission Services, proposes the extension of the existing Eros Distribution substation at Misty Heights in Harding, uMuziwabantu Municipality, to include a 400 kV yard. The substation will thus be upgraded to a 400 kV Transmission substation. The upgrade includes the construction of a new control*

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building, microwave radio mast, steel and cable works, 88 kV power line deviation and the installation of two major transformers. As a result of this upgrading the existing power lines that access the sub station will require a re-alignment of the existing 132 kV power line from Kokstad and the 132 kV power line from Oribi (currently energized at 88 kV) into four proposed feeder bays. This is to be done as indicated in Figure 1 submitted by SiVEST Environmental Division to the Department of Agriculture and Environmental Affairs on 13 December 2006.

The Construction access is via the existing road and the substation fence will be moved to include the new extensions. All construction work will take place on existing Eskom owned property. The existing 400 kV Ariedne-Eros Transmission line, currently operated at 132 kV, will be upgraded to 400 kV operation as well. The height of the proposed new infrastructure will be approximately 35 to 40 metres, which is the same height as the existing structures. The purpose of the upgrade is to increase the security of supply to southern KwaZulu-Natal and the Eastern Cape."

The original text under **Section 1 Description of activity (page 1)**, therefore no longer holds reference.

Key decision factors for authorizing the amendment include:

1. The alterations to the power lines will involve minimal impact with a limited number of towers need to be moved, in order for re-alignment to take place.
2. All structures to be moved will be on Eskom Holdings Limited owned land, with the exception of a single tower on Municipal land.
3. uMuziwabantu Local Municipality has authorized the movement of the tower situated on municipal land in their correspondence dated 30 March 2007.
4. An Environmental Management Plan and Environmental Impact Report have been compiled for the upgrading of the Eros Substation.
5. Construction and alteration will be undertaken during the same construction period as the previously approved upgrade, thus avoiding elongated disturbance and impact on agricultural practices.

This amendment has affect only on the above-mentioned changes. Please contact this Department should there be any queries regarding this amendment to the ROD.

Yours faithfully



**for Head of Department:**  
**Department of Agriculture & Environmental Affairs**

<b>DEPARTMENT OF AGRICULTURE &amp; ENVIRONMENTAL AFFAIRS</b>
2007-09-12
SOUTH REGION PRIVATE BAG 2015 NILONI 3240

cc: Richard Kinvig      SiVEST

Fax No: (039) 682 4694  
 Tel No: (039) 682 2735

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**KwaZulu-Natal Department of Agriculture and Environmental Affairs**

*uMnyango:*  
*Zolimo neZemvelo*

**ISIFUNDAZWE SAKWAZULU-NATALI**

Enquiries : S.J. Allan  
Tel : 033 - 343 8300

Fax : 033 - 343 8470

Ref : EIA/6752

Date : 12/10/2006

Eskom Transmission Service  
P. O. Box 1091  
Johannesburg  
2000

ATTENTION: Mr John Geeringh  
Tel: 011 800 2465  
Fax : 011 800 3917

**Re: Authorisation and Record of Decision**

The KwaZulu-Natal Department of Agriculture and Environmental Affairs hereby **authorises**, by virtue of powers delegated by the National Minister of Environmental Affairs and Tourism and in terms of Section 22 of the Environment Conservation Act, Act No. 73 of 1989, the project:

**The proposed upgrade of Eros Distribution substation to a 400kV Transmission substation including the 88kV Powerline deviation at Misty Heights, Harding, Umuziwabantu Municipality.**

This authorisation is subject to the conditions contained in the Record of Decision.

The following validity periods shall apply:

1. The activity / project must commence within **36 months** of the date of authorisation, or this authorisation is deemed to have lapsed and is no longer valid.
2. Conditions pertaining to the operation of the development remain valid for the lifetime of the development.

An appeal against the authorisation or condition(s) of authorisation can be directed to the

MEC of Agriculture and Environmental Affairs,  
PROF. L.B.G. NDABANDABA  
Ministry of Agriculture & Environmental Affairs  
P.O. Box 2132  
Durban 4000  
Tel: 031 366 2223  
Fax: 031 368 1601

setting out the grounds of appeal and including all the relevant documentation and certified copies, within **30 calendar days** of the date of authorisation in accordance with the provisions of Section 35 of the Environment Conservation Act, Act No. 73 of 1989, and Regulation 11 of GN R1183 of 5 September 1997, as amended.

Yours faithfully

  
Head of Department

Cc : Sharon Boast, Eyethu Engineers cc. Fax: 031 312 9930

Record of Decision Cover Letter EIA 6752



## KZN Agriculture and Environmental Affairs

*uMnyango:*  
*weZolimo neZemvelo*

**ISIFUNDAZWE SAKWAZULU-NATALI**

Chief Directorate/ Directorate  
South Region  
Address:  
Private Bag X6005  
Hilton  
3245  
Enquiries: Ms S.J. Allan  
Tel: 033 – 392 8224  
Fax: 033 – 343 8423  
Ref: EIA /6752  
Date: 12/10/2006

## RECORD OF DECISION

Herewith the Record of Decision in terms of Regulation 10 of Government Notice No. R. 1183 of 5 September 1997 as amended by GN R672 of 10 May 2002 and as required by Section 22(3) of the Environment Conservation Act, Act No. 73 of 1989, with regard to the undertaking of the activity described below. This Record of Decision must be made available by the applicant or appointed consultant to interested and affected parties on request.

### 1. Description of activity:

The applicant, Eskom Transmission Services, proposes the extension of the existing Eros Distribution substation to include a 400kV yard, thus upgrading it to a 400kV Transmission substation at Misty Heights in Harding, uMuziwabantu Municipality. The upgrade includes the construction of a new control building, microwave radio mast, steel and cable works, 88kV powerline deviation and the installation of two major transformers. The construction access is via the existing roads and the substation fence will be moved to include the new extensions. All construction work will take place on existing Eskom owned property. The existing 400kV Ariedne-Eros Transmission line, currently operated at 132 kV, will be upgraded to 400kV operation as well. The height of the proposed new infrastructure will be approximately 35 – 40 metres, which is the same height as the existing structures. The purpose of the upgrade is to increase the security of supply to southern KwaZulu-Natal and the Eastern Cape.

### 2. Location:

Province : KwaZulu-Natal  
Magisterial District : uMuziwabantu  
Name of property : Misty Heights  
Extent of property : 49,27ha  
Extent of development : 2,72ha  
1:50 000 map : 3029 DB  
Co-ordinates : 30° 36' 05" S and 29° 53' 54" E

**3. Applicant:**

**Name** : Eskom Transmission  
**Address** : P.O. Box 1091  
Johannesburg  
2000  
**Contact person** : John Geeringh  
**Tel** : 011 – 800 2465  
**Fax** : 011 – 800 3917  
**Cell phone** : 083 632 7663  
**E-mail** : geeringhJH@eskom.co.za

**4. Consultant:**

**Name** : Eyethu Engineers cc  
**Address** : P.O. Box 100418  
Scottsville  
3209  
**Contact person** : Sharon Boast  
**Tel** : (033) 342 6891  
**Fax** : (033) 394 7218  
**Cell phone** : 082.804 3730  
**E-mail** : sbeyethu@telkomsa.net

**5. Site visit:**

**Date**

24 January 2006

**Persons present**

Nombulelo Zungu : DAEA

Sharon Boast : Eyethu Engineers cc

**6. Documentation assessed:**

Document	Compiled by	Date
Application form for Environmental authorisation	Eskom Transmission & Eyethu Engineers cc	02 Nov. 2005
Brief Information Document	Eyethu Engineers	Undated
Plan of Study for Scoping	Eyethu Engineers cc	January 2006
Comments	Civil Aviation Authority	23 February 2006
Draft Scoping Report	Eyethu Engineers cc	March 2006
Comments	Ezemvelo KZN Wildlife	01 June 2006
Environmental Management Programme	Eskom Transmission Services	Undated

## 7. Report

### 7.1. Receiving Environment

The area within the substation fence is gravelled and kept clear of vegetation for fire and security reason. The area where the proposed extension is to take place currently contains maize fields. Very little fauna is supported, and the ecological sensitivity of the site can be classified as low.

### 7.2 Surrounding land use

The surrounding land use is commercial agriculture on privately owned land. Maize is grown immediately adjacent to the site to the north and west, with forestry to the south and east. The area around the proposed site is rural in nature.

### 7.3 Alternative:

The alternatives considered to the proposed upgrade of the Eros substation include alternative designs for the proposed 400kv and associated infrastructure and strategic alternatives. The current design for the 400kV yard and associated infrastructure at Eros substation is regarded as the most cost effective whilst operationally sound for the project. The strategic alternatives to the proposed upgrade of the Eros substation include the "Do Nothing" option, demand – side management, the upgrade of the Eros substation to 400kV capacity, or the construction of additional 132 kV. Upgrading the Eros substation to a 400kV primary voltage is the preferred alternative.

### 7.4 Geotechnical Investigation

The specialist geotechnical reports were undertaken by Terreco for the Eros-Neptune-Grassridge Transmission line. The geology for the section around Harding is overlain with a thin veneer of colluvium comprising mostly clayey silts. The soils in this area would be classified as the Mispah Form as per Unified Soils Classification System. The area surrounding the substation is expected at times to be underlain by deep, highly compressible, very soft organic-rich clays.

### 7.5 Public participation process

The proposed development was advertised in the East Griqualand Herald on 17 January 2006 and on The Natal Mercury on 20 January 2006. The Background Information Document was circulated to all the interested and affected parties on 30 January 2006. The copy of the scoping report was lodged at the Municipal buildings and at library in Harding. No objections were received during scoping with regards to the proposed development.

## 8. Decision:

Authorisation is granted for the:

**The proposed upgrade of Eros Distribution substation to a 400kV Transmission substation at Misty Heights, Harding, uMuziwabantu Municipality; as described in Section 1 above and subject to the conditions stipulated in Section 10 of this Record of Decision (ROD).**

Directorate Environmental Management, Department of Agriculture & Environmental Affairs, KwaZulu-Natal	Record of Decision: EIA/6752	Page 3 of 7
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**9. Key decision factors:**

- 9.1 The area where the proposed extension is to take place currently contains maize fields, thus very little fauna is supported and the ecological sensitivity of the site is low.
- 9.2 The proposed transmission substation has been described in the report as having low environmental sensitivity from a botanical, archaeological and avi-fauna perspective.
- 9.3 The visual and or aesthetic impacts are expected to be minimal due to the existing infrastructure and small visual evidence due to the rural nature of the site.
- 9.4 The benefits of the proposed upgrade of the Eros substation are seen to substantially outweigh its impacts.
- 9.5 The Civil Aviation Authority has no objection to the proposed upgrade of Eros substation as per their correspondence dated 23 February 2006.
- 9.6 Ezermvelo KZN Wildlife has indicated in their letter dated 01 June 2006, that the proposed development is not expected to result in acceptable biodiversity related impacts.

**10. Conditions of authorisation:**

Authorisation is granted on condition that:

**Standard Conditions:**

- 10.1 This authorisation refers only to the activity as specified and described in Section 1 above and as constrained by these conditions. Any other development associated with this project and listed under Section 21 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) is not covered by this authorisation, and must therefore comply with the requirements of the Act and Government Notice R. 1183.
- 10.2 Authorisation is granted in terms of Section 22 of the Environment Conservation Act, 1989 (Act No 73 of 1989). This authorisation does not exempt the holder from compliance with any other applicable legislation.
- 10.3 All registered interested and affected parties must be made aware, in writing, of the issuing of this Record of Decision, within 10 days of the date of this authorisation, and their right to lodge an appeal within 30 calendar days of the date of issue.
- 10.4 This Department reserves its right in terms of sub-regulation 9(3) of GN No. R1183 of 5 September 1997 as amended by GN No. R672 of 10 May 2002, to review any condition contained in this authorisation, and if deemed necessary, delete or amend such condition, or at its discretion, determine new conditions, in such a manner that is lawful and procedurally fair.
- 10.5 In all relevant contracts entered into by the applicant, the contractor/s shall be

compelled to comply with the terms of authorisation.

- 10.6 Records relating to the compliance/non-compliance with the conditions of authorisation must be kept in good order. Such records shall be made available to this Department within seven (7) days of receipt of a written request by this Department for such records.
- 10.7 This Department must be notified within thirty (30) days thereof, of any change of ownership and /or project manager of the entire property, or of the intermediate and general residential subdivisions. Conditions imposed in this record of decision must be made known to the new owner/s and/or developer/s and are binding on the new owner/s and or developer/s.
- 10.8 The applicant is responsible for compliance with the provisions of *Duty of Care and Remediation of Damage* in accordance with Section 28 of the National Environmental Management Act, Act 107 of 1998, where the determination of environmental degradation and the need for remediation will be decided by this Department.
- 10.9 This Department retains the right to inspect the proposed project during both construction and operational phases.
- 10.10 In the event of non-compliance by any contractor implicated in this activity, the applicant and/or his successor/s in title will be held liable.
- 10.11 If any condition imposed in terms of this authorisation is not complied with, the authorisation may be withdrawn after thirty (30) days written notice to the applicant in terms of Section 22(4).
- 10.12 Failure to comply with any of these conditions shall also be regarded as an offence and may be dealt with in terms of Section 29, 30 and 31 of the Environment Conservation Act, 1989 (Act No.73 of 1989), as well as any other appropriate legal mechanisms.

### Specific Conditions

The following restrictions are imposed on the proposed development:

- 10.13 The applicant must comply with Generic Environmental Management Programme prepared by Eskom Transmission Services for substation construction and or refurbishment work attached as Appendix C of the Scoping Report for the proposed upgrade of Eros substation in Harding.
- 10.14 All waste material generated during the construction phase of the proposed project must be disposed off at a permitted landfill site that is authorised to accept such waste. Safe disposal certificate must be kept for record purposes.
- 10.15 Disturbance during construction must be kept to as small an area as possible.
- 10.16 All the areas disturbed during the construction phase of the project must be



rehabilitated with indigenous vegetation.

- 10.17 The bund wall around the transformer must be able to contain 110% volume of oil should a spill occur.
- 10.18 Should sites of archaeological significance be uncovered during construction, Amafa aKwaZulu-Natali must be notified immediately and all development must be discontinued.
- 10.19 Monthly audit reports i.e for the construction of the development must be submitted to this Department. The details for the submission of the audit reports are as follows:  
**Assistant Director: Compliance, Monitoring and Enforcement**  
~~Private Bag X 1862~~ Po Box 1862  
Port Shepstone  
4240

GA

**Validity:**

**The following validity periods shall apply:**

1. Construction work on site must commence within **thirty six (36) months** of the date of authorisation, or this authorisation is deemed to have lapsed and is no longer valid.
2. Conditions pertaining to the operation of the development remain valid for the lifetime of the development.

**Appeal:**

An appeal against this authorisation or conditions of authorisation may be directed to; Professor Gabriel Ndabandaba, the MEC for Agriculture and Environmental Affairs, Ministry of Agriculture & Environmental Affairs, P.O. Box 2132, Durban, 4000, telephone : 031 – 368 2223, fax : 031 – 368 1601, setting out the grounds of appeal and including any relevant documentation and certified copies, within **30 calendar days** of the date of authorisation in accordance with the provisions of Section 35 of the Environment Conservation Act, Act No. 73 of 1989 and Regulation 11 of GN R1183 of 5 September 1997 as amended.

**Assessing Officer:**

I hereby declare that this application was assessed to the best of my ability, based on the information provided to me by the applicant or the independent consultant.

  
Signature

C.B Khwani  
Name

05/10/2006  
Date

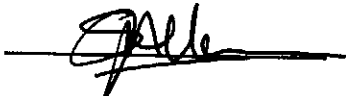
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Authorising Officer:

Comments:

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AUTHORISED / ~~REFUSED~~



12/16/2006  
Date

^ Head of Department:  
Department of Agriculture and Environmental Affairs

<b>DEPARTMENT OF AGRICULTURE &amp; ENVIRONMENTAL AFFAIRS</b>	
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SOUTH REGION PRIVATE BAG X6005 HILTON 3245	