

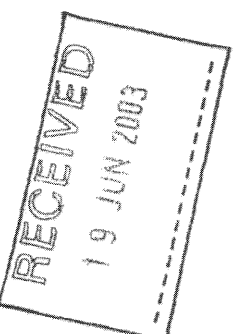
Eskom Lohair

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A HERITAGE IMPACT ASSESSMENT STUDY FOR ESKOM'S  
PROPOSED NEW POWER LINE ON THE FARMS DRIEFONTEIN  
114IT AND LETTIESKEUS 105IT NEAR CHRISSESMEER IN THE  
MPUMALANGA PROVINCE OF SOUTH AFRICA

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May 2003



## **EXECUTIVE SUMMARY**

Eskom intends to establish a 21kV power line, approximately 1,78 kilometres long between two residential houses respectively located on the farms Driefontein 114IT in the south-east and on the farm Lettieskeus 105IT in the north-west. Eskom's study area is located on the farm Lettieskeus 105IT to the south of Lake Chrissie (Chrissiesmeer) and to the east of Ermelo in the Mpumalanga Province of South Africa.

The proposed new power line corridor between the first and the second residential houses was divided into three stretches that were subjected to a Heritage Impact Assessment study (HIA).

No heritage resources of significance were observed along these stretches of the proposed new power line corridor. Subsequently, there is no reason why Eskom should not continue with the building of the power line.

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## 1 INTRODUCTION

Eskom's project area is located on the farms Lettieskeus 105IT and Driefontein 114IT near Chrissiesmeer in the Mpumalanga Province of South Africa. This region contains a culturally and historically rich and diversified range of heritage resources. The following ranges of heritage resources have been recorded in the Mpumalanga Province in the past:

- limestone caves and underground dwelling sites of the earliest hominids (ape-man creatures) who lived in Southern Africa 2 to 3 million years ago (near Mokopane or Potgietersrus, just outside the Mpumalanga Province);
- Stone Age sites which may be associated with the San people and which date back hundreds of thousands of years;
- rock engraving sites located along rocky outcrops and dating from the last 20 000 years;
- rock painting sites which date from the last 10 000 years;
- Early Iron Age sites occupied by Bantu-Negroid agriculturists and possibly cattle herders and dating back 1 500 years;
- Late Iron Age sites dating from the last 500 years;
- remains dating from the previous century, when the first Immigrant Boers settled in places such as Botšabelo, Pelgimrust, Baberton, Lydenburg, Ohrigstad and Roossenekal (from the 1840's onwards);
- block houses built on mountain ranges by British troops during the Anglo-Boer War (1899-1900);

- old mines and mining activities dating from the latter half of the 19<sup>th</sup> century and from the early 20<sup>th</sup> century when the first European mining activities commenced; and
- numerous other formal historical features (the Pelgrimrust Museum, the reconstructed historical Nederlandsch Zuid-Afrikaansche Spoorweg Maatschappij (NZASM) tunnel near Waterval-Boven, the Middelburg Museum with a Ndebele *umuzi* as one of its satellite museums, the Mapoch's Caves near Roossenekal, etc.).

Cultural resources in the Mpumalanga Province therefore constitute a rich heritage that represents a record of most groups living in South Africa today.

## 2 AIMS WITH THIS REPORT

Eskom intends to establish a 21kV power line, approximately 1,78 kilometres long between two residential houses respectively located on the farms Driefontein 114IT (in the south-east) and on the farm Lettieskeus 105IT (in the north-west) near Lake Chrissie (Chrissiesmeer) and to the east of Ermelo in the Mpumalanga Province of South Africa (1: 50 000 topographical map, 2630AC Chrissiesmeer).

In order to comply with legislation, Eskom requires knowledge of the presence, relevance and the significance of any significant heritage resources or sensitive remains (graves and graveyards) that may occur in or near a critical area (the new power line corridor). Eskom needs this information in order to take proactive measures with regard to any heritage resources or sensitive remains that may be affected, damaged or destroyed by the proposed new development. Eskom therefore commissioned me to undertake a heritage impact assessment study of the critical area (the power line corridor) with the aim:

- to establish whether any heritage resources do occur in or near the proposed new power line corridor and, if so, what the nature, the extent and the significance of these remains are;
- to determine whether such remains will be affected by the building of the new power line; and
- to evaluate what appropriate actions could be taken to reduce the impact of the development on such remains.

### **3 THE STUDY AREA, METHODOLOGY AND TERMINOLOGY**

#### **3.1 The study area**

Eskom's proposed new power line is to be established on the farms Driefontein 114IT and Lettieskeus 105IT, situated to the south of Lake Chrissie (Chrissiesmeer) and to the east of Ermelo in the Mpumalanga Province of South Africa (see Figure 1 and the 1:50 000 topographical map, 2630AC Chrissiesmeer).

#### **3.2 Brief historical context**

The Eskom study area is situated near the towns of Lake Chrissie (Chrissiesmeer) and Ermelo in the Mpumalanga Province of South Africa. Lake Chrissie is the largest natural body of water in South Africa (9km long and 3km wide) and lies in a hollow in the highveld plains surrounded by grassland.

The Reverend Frans Lion Cachet founded the town of Ermelo in the Eastern Transvaal in 1871. It was named after Ermelo, a town in Holland, in honour of a friend who lived there. The parish developed as a centre for farming and communication in the fertile area at the headwaters of the Vaal River. Maize, cattle, potatoes, beans, wool, pigs, sunflowers seeds, lucern and sorghum are major industries in this high rainfall area. There is also much afforestation. Coal mines work huge deposits and South Africa's principal sources of anthracite and torbanite are found in this area.

#### **3.3 Method**

The cultural heritage impact assessment study was limited to a brief scoping of appropriate literature to provide the historical context outlined above (see Bibliography Part 6).

The heritage impact assessment was conducted on foot.

As no heritage resources were discovered, no locations for sites, graves, structures or any other features have been given.

### 3.4 Assumptions and limitations

It must be kept in mind that cultural heritage surveys may not detect all heritage resources in any given study area. While certain remains may simply be missed during surveys (observations), others may occur below the surface of the earth and may only be exposed once development (such as the digging of holes for pylons) commences.

### 3.5 Terminology

The cultural heritage assessment referred to in the title of this report includes a survey of heritage resources as outlined in the National Heritage Resources Act (Act No 25 of 1999).

Cultural heritage (or cultural resources) includes all human-made phenomena and intangible products that are the result of the human mind. Natural, technological or industrial features may also be part of heritage resources, as places that have made an outstanding contribution to the cultures, traditions and lifestyles of the people or groups of people of South Africa.

The term 'pre-historic' generally refers to the time before any historical documents were written or any written language developed in a particular area or region of the world. The historical period and historical remains refer, for the study area, to the first appearance or use of 'modern' Western writing brought to Ermelo by the first Colonists who settled in this area c. 1870. The historical period for Ermelo therefore dates from c. 1870.

The term 'relatively recent past' refers to the 20<sup>th</sup> century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains, however, may



be close to sixty years of age and may, in the near future, qualify as heritage resources.

It is not always possible, based on observations alone, to distinguish clearly between archaeological remains and historical remains, or between historical remains and remains from the relatively recent past. Although certain criteria may help to make this distinction possible, these criteria are not always present, or, when they are present, they are not always clear enough to interpret with great accuracy. Criteria such as square floor plans (a historical feature) may serve as a guideline. However, circular and square floors may occur together on the same site.

The term 'sensitive remains' is sometimes used to distinguish graves and cemeteries as well as ideologically significant features such as holy mountains, initiation sites or other sacred places. Graves in particular are not necessarily heritage resources if they date from the recent past and do not have tombstones that are older than sixty years.

The term 'Stone Age' refers to the prehistoric past, although Late Stone Age peoples lived in the area well into the historical period. The Stone Age is divided into an Earlier Stone Age (3 million years to 150 000 thousand years ago) the Middle Stone Age (150 000 years to 40 000 years ago) and the Late Stone Age (40 000 years to 200 years ago).

The term 'Late Iron Age' refers to the period between the 17<sup>th</sup> century and the 19<sup>th</sup> century and can therefore include the historical period.

The term 'study area' or 'project area' refers to the area where Eskom wants to focus its development activities.

The 'critical areas' refer to the areas (or corridors) that will be affected by Eskom's proposed development project.

The 'peripheral area' refers to the area where Eskom does not intend to focus its development activities, but which are in close proximity to the critical areas (or corridors).

Phase I studies refer to surveys using various sources of data in order to establish the presence of all possible types of heritage resources in any given area.

Phase II studies include in-depth cultural heritage studies such as archaeological mapping and excavating work, the documenting of rock art sites, engraving sites or historical dwellings and other architectural features and structures, the sampling of archaeological sites or shipwrecks, etc. Phase II work requires the co-operation and approval of SAHRA.

Figure 1: The Eskom study area is situated on the farms Lettieskeus 105IT and Driefontein 114IT near the towns of Chrissiesmeer and Ermelo in the Mpumalanga Province of South Africa.

A B C D E F G H I J K L M N O P

A B C D E F G H I J K L M N O P

#### **4 THE HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED NEW POWER LINE CORRIDOR**

The proposed new power line corridor between the first and the second residential houses of Mr B.T.L. Beukes on the farms Driefontein 114IT and Lettieskeus 105IT was divided into the following stretches that were subjected to a heritage impact assessment. The proposed new power line corridor is only 1,78km long and has only two turning points. The proposed new power line corridor was divided into the following parts (Figure 1):

- Part AB runs from the connection pole at the first residential house on the farm Driefontein 114IT to the 1<sup>st</sup> turning point on the same farm, approximately 750m further to the north-west.
- Part BC runs from the 1<sup>st</sup> turning point between two agricultural fields to a 2<sup>nd</sup> turning point near a dirt road, approximately 330m further to the north-west on the farm Driefontein 114IT.
- Part CD runs for approximately 650m to the north-west, first along the western shoulder of a two-track dirt road and then, after crossing the dirt road, along the eastern shoulder of this dirt road to the second residential house of Mr B.T.L. Beukes on the farm Lettieskeus 105IT.

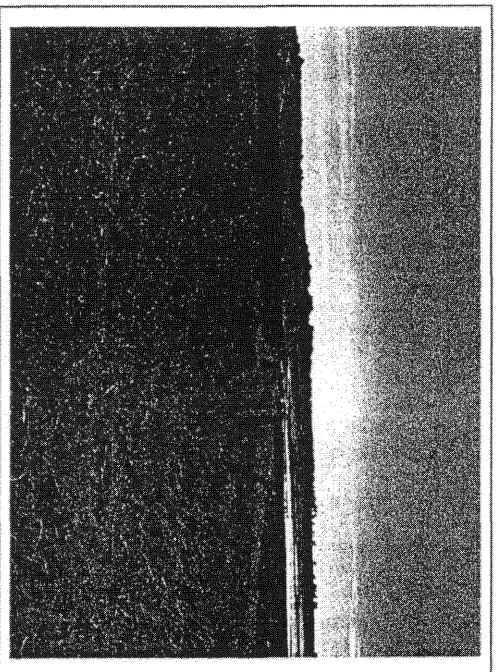
The heritage impact assessment of these various parts of the proposed new power line revealed no heritage resources. The following natural features marked these various parts, namely:

#### 4.1 Part AB

Part AB runs from the connecting pole at the first residential home of Mr B.T.L. Beukes across open veld where it crosses a bob wire fence followed by a small dry pan until it reaches the 2<sup>nd</sup> turning point, approximately 750m further to the north-west.

No heritage resources of significance were observed in Part AB.

Figure 2. Part BC runs between agricultural fields to the north-west. This part of the proposed new power line corridor will not affect any heritage resources of outstanding significance (below).



#### 4.2 Part BC

Part BC runs from the 1<sup>st</sup> turning point to the north-west between two agricultural fields, crosses a bob wire fence and turns to the north-west at the 2<sup>nd</sup> turning point located next to a two-track dirt road (Figure 2).

No heritage resources of significance were observed in Part BC.

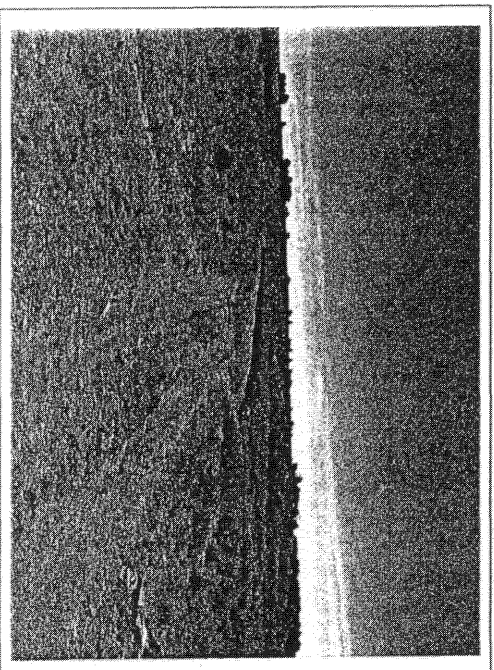


Figure 3. Part CD runs along a two-track road to the second residential house of Mr Beukes. This part of the proposed new power line corridor will also not affect any heritage resources of outstanding significance (above).

#### 4.3 Part CD

Part CD runs along a two-track dirt road for a short distance before crossing the dirt road in order to run parallel with the dirt road to the second residential house of Mr B.T.L. Beukes on Lettieskeus 1051T (Figure 3).

No heritage resources of significance were observed along Part CD.

**5 CONCLUSION**

As no heritage resources of significance were observed along the corridor of the proposed new power line, there is no reason why Eskom should not continue with the building of the power line.



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