

9/10/2003/2215

TO:

ESKOM

MENLYN

A HERITAGE IMPACT ASSESSMENT (HIA) STUDY FOR  
THE NEW PROPOSED TONGA C PUMP STATION IN THE  
NKOMAZI DISTRICT OF THE MPUMALANGA PROVINCE  
OF SOUTH AFRICA

DR JULIUS CC PISTORIUS

Archaeologist and Cultural Heritage  
Management Consultant

352 Rosemary Street

Lynnwood 0081

Pretoria

Tel/ fax 012 3485668

August 2003

## EXECUTIVE SUMMARY

Eskom intends to establish a 22kV power line from an existing power line/connecting pole to the new proposed Tonga C Pump Station to be established on the banks of the Nkomati River on the farm Naas 472JU in the Nkomazi District of the Mpumalanga Province of South Africa.

The new proposed 22kV power line corridor can be divided into four stretches that were subjected to a Heritage Impact Assessment (HIA) study. The HIA study was conducted on foot.

The HIA along the four stretches of the new proposed power line revealed the remains of an Iron Age site on the southern banks of the Nkomati River. The contractor who is building the Pump Station on the banks of the Nkomati River damaged this site. Eskom's construction of the new power line will have no effect on the remaining part of this Iron Age site.

# CONTENTS

## EXECUTIVE SUMMARY

2

## 1 INTRODUCTION.....

4

## 2 AIM OF THIS REPORT.....

4

## 3 METHODOLOGY.....

6

## 4 THE STUDY AREA.....

6

### 4.1 Location

6

### 4.2 Brief historical context

6

## 5 THE HERITAGE IMPACT ASSESSMENT (HIA).....

9

### The 1<sup>st</sup> stretch

9

### The 2<sup>nd</sup> stretch

10

### The 3<sup>rd</sup> stretch

11

### The 4<sup>th</sup> stretch

11

## 6 CONCLUSION.....

13

## **1 INTRODUCTION**

This document contains the report on the results of a Heritage Impact Assessment (HIA) study done for Eskom's proposed new 22kV power line on the farm Naas 472JU in the Nkomazi District in the Mpumalanga Province of South Africa.

## **2 AIM OF THIS REPORT**

Eskom intends to establish a single pole 22kV power line from an existing power line/connecting pole on the eastern banks of the Nkomati River to a new Pump Station to be established 1,267km further along the southern banks of the Nkomati River in the Mpumalanga Province of South Africa.

In order to comply with legislation, Eskom requires knowledge of the presence, relevance and the significance of any heritage resources that may occur near or in the proposed new power line corridor. Eskom needs this information in order to take pro-active measures with regard to any heritage remains that may be affected, damaged or destroyed when the proposed new power line is built. Eskom therefore commissioned me to undertake a Heritage Impact Assessment (HIA) of the study area to be affected by the proposed new power line corridor. The aim of the HIA study is:

- to establish whether any heritage resources do occur near or in the proposed new power line corridor and, if so, what the nature, the extent and the significance of these remains are (see Box 1);
- to determine whether such remains will be affected by the proposed development project; and
- to evaluate what appropriate actions could be taken to reduce the impact of the development activities on such remains.

**BOX 1: TYPES AND RANGES OF HERITAGE RESOURCES AS OUTLINED IN THE NATIONAL HERITAGE RESOURCES ACT (ACT NO 25 OF 1999)**

<p>The National Heritage Resources Act (Act No 25 of 1999, Art 3) outlines the following types and ranges of heritage resources that qualify as part of the national estate, namely:</p> <ul style="list-style-type: none"> <li>(a) places, buildings structures and equipment of cultural significance;</li> <li>(b) places to which oral traditions are attached or which are associated with living heritage;</li> <li>(c) historical settlements and townscapes;</li> <li>(d) landscapes and natural features of cultural significance;</li> <li>(e) geological sites of scientific or cultural importance;</li> <li>(f) archaeological and paleontological sites;</li> <li>(g) graves and burial grounds including-             <ul style="list-style-type: none"> <li>(i) ancestral graves;</li> <li>(ii) royal graves and graves of traditional leaders</li> <li>(iii) graves of victims of conflict</li> <li>(iv) graves of individuals designated by the Minister by notice in the Gazette;</li> <li>(v) historical graves and cemeteries; and</li> <li>(vi) other human remains which are not covered by in terms of the Human Tissue Act, 1983 (Act No 65 of 1983)</li> </ul> </li> <li>(h) sites of significance relating to the history of slavery in South Africa;</li> <li>(i) moveable objects, including -             <ul style="list-style-type: none"> <li>(i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;</li> <li>(ii) objects to which oral traditions are attached or which are associated with living heritage;</li> <li>(iii) ethnographic art and objects;</li> <li>(iv) military objects;</li> <li>(v) objects of decorative or fine art;</li> <li>(vi) objects of scientific or technological interest; and</li> <li>(vii) books, records, documents, photographs, positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No 43 of 1996).</li> </ul> </li> </ul> <p>The National Heritage Resources Act (Act No 25 of 1999, Art 3) also distinguishes nine criteria for places and objects to qualify as 'part of the national estate if they have cultural significance or other special value ...'. These criteria are the following:</p> <ul style="list-style-type: none"> <li>(a) its importance in the community, or pattern of South Africa's history;</li> <li>(b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;</li> <li>(c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;</li> <li>(d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;</li> <li>(e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;</li> <li>(f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;</li> <li>(g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;</li> <li>(h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa;</li> <li>(i) sites of significance relating to the history of slavery in South Africa</li> </ul>
--

### **3 METHODOLOGY**

The study area where the new proposed power line is to be established was subjected to a survey on foot.

This study does not claim to have discovered all possible heritage resources in or near the new proposed power line corridor. Heritage resources at times appear in the most unexpected places and 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 building of the power lines) commences.

## **4 THE STUDY AREA**

### **4.1 Location**

Eskom's new proposed 22kV power line is located on the farm Naas 472JU in the Nkomazi District of the Mpumalanga Province of South Africa. The study area is situated on a piece of land that is located between Moçambique (in the east) and Swaziland (in the south). The new proposed power line will be built on the eastern and the southern banks of one of the numerous windings in the Nkomati River that runs further eastwards across Moçambique into the Indian Ocean (Nelspruit 2530; 1:250 000).

### **4.2 Brief historical context**

The Nkomazi District was once one of two districts that were part of the former Kangwane Homeland. The other district is the Nsikazi District, which is located further to the north of the Nkomazi District. Both these districts are home to a predominantly Swazi people who are scattered over these districts in numerous formal and informal towns. Large numbers of Changaan speaking people as well as Tsonga speaking people (from Moçambique) live in these eastern parts

of South Africa. This area is historically also associated with old Sotho-speaking clans such as the Pai, Pulana and the Kutswe.

This author has done two previous Heritage Impact Assessment (HIA) studies in the former Kanguwane Homeland (see below). One of these studies was also done along the banks of the Nkomati River, near Sibange, further to the south of the present study area. This study revealed the presence of stone tools along the banks of the Nkomati River.

Pistorius, J.C.C. 1995. 'n Argeologiese verkenningsoopname van 'n gedeelte van die Nkomatirivierbedding ten suide van die beoogde Sibangistuwal binne die Nkomazilandboubesproeiingskema. Ongepubliseerde verslag vir Du Plessis & Burger Raadgewende Siviele en Strukturele Ingenieurs (pp12).

Pistorius, J.C.C. 2002. *A Cultural Heritage Impact Assessment for the Hoxani Water Purification Works and for the Enyongane Pump Station near Hazyview in the Mpumalanga Province of South Africa*. Unpublished report prepared for Landscape Dynamics and Hawkins, Hawkins & Osborne Consulting Engineers (pp19).

Figure 1. Eskom's study area along the banks of the Nkomati River in the Nkomazi District of the Mpumalanga Province of South Africa.



## 5 THE HERITAGE IMPACT ASSESSMENT (HIA)

The new proposed 22kV power line corridor along the eastern and southern banks of the Nkomati River was subjected to a HIA study. The new proposed power line will run from an existing power line/connecting pole (in the north) to a new Pump Station (in the south) to be established on the southern banks of the Nkomati River. The new proposed power line will be approximately 1,267km long and will run southwards and then westwards along the banks of the Nkomati River (Figure 1).

The new proposed power line corridor was divided into five stretches that were subjected to a HIA study, namely:

### The 1<sup>st</sup> stretch

The 1<sup>st</sup> stretch runs from the existing power line/connecting pole (NTB146/10/50) that is situated in agricultural fields near the eastern banks of the Nkomati River to the 1<sup>st</sup> bend in the new proposed power line 150m further to the south-east.

The 1<sup>st</sup> stretch therefore runs across agricultural fields with no evidence for any types of heritage resources (Figure 2, next page).

### The 2<sup>nd</sup> stretch

The 2<sup>nd</sup> stretch runs from the 1<sup>st</sup> bend in the new proposed power line across agricultural fields for approximately 400m before crossing a dry donga and then again running across agricultural fields for another approximately 80m before reaching the 2<sup>nd</sup> bend in the new proposed power line (Figure 2, next page).

The second stretch covers a distance of approximately 510m that did not reveal the presence of any outstanding significant heritage resources.

Figure 2 (above). The 1<sup>st</sup> and 2<sup>nd</sup> stretches of the new proposed power line runs along the eastern bank of the Nkomati River towards the south-east and then towards the south-west. No heritage resources were observed along these two stretches of the new proposed power line.

Figure 3 (below). The tributary (to the right) running into the Nkomati River (background). The Pump Station is visible in the foreground.

### The 3<sup>rd</sup> stretch

The 3<sup>rd</sup> stretch runs from the 2<sup>nd</sup> turning point (or bend) towards the west for approximately 400m to the 3<sup>rd</sup> bend in the new proposed power line. The 3<sup>rd</sup> stretch also crosses agricultural fields with no heritage resources of outstanding significance.

### The 4<sup>th</sup> stretch

The 4<sup>th</sup> stretch runs from the 3<sup>rd</sup> bend towards the southwest for approximately 50m before turning through the 4<sup>th</sup> bend towards the north-west for approximately 80 m in order to cross a tributary running into the Nkomati River. The 4<sup>th</sup> stretch stops at the Pump Station on the southern bank of the Nkomati River (Figure 3, previous page).

### Heritage resources observed

Near the Pump Station, at the junction of the Nkomati River and one of its tributaries, the remains of an Iron Age site were observed. These remains consist of potsherds, pieces of clay, bone remains of animals and mollusc shells. The Iron Age site was exposed when contractors building the Pump House cleared part of the banks of the Nkomati River (Figure 4, next page).

The Iron Age remains will not be negatively affected when the power line is built as the Iron Age site is located approximately 40m from where the last wooden pole carrying the power line will be erected.

Figure 4 (below). Potsherds, animal bones, mollusc shells and pieces of clay that are remains from a site dating from the Iron Age located near the junction of the Nkomati River and one of its tributaries. The new proposed power line will not affect these remains.

## **6 CONCLUSION**

The HIA done along the four stretches of the new proposed 22kV power line to be established along the eastern and southern banks of the Nkomati River revealed the presence of an Iron Age site near the junction of the Nkomati River and one of its tributaries. This site probably dates from the Late Iron Age (c. 1600 to 1880) and was damaged when the contractors building the Pump Station cleared part of the banks of the Nkomati River.

Eskom's proposed development will not affect this site further as the Iron Age site is located approximately 40 m to the south from where the last wooden pole carrying the power line will be erected.

**DR JULIUS CC PISTORIUS**  
Archaeologist and  
Cultural Heritage Management Consultant