



*eThembeni
Cultural
Heritage*

Eastern Cape Heritage Resources Agency
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20 November 2012

Attention Sello Mokhanya

Dear Sello

**ECPHRA response to Phase 1 Heritage Impact Assessment of
132kV power lines from Patensie to Melkhout to Dieprivier to Kareedouw SSs,
Eastern Cape Province**

In response to your review comments on the above, dated 03 October 2012, we wish to provide clarity to the following:

1.

eThembeni produced a single report for the entire route alignment. At the request of our Client (GIBB), who are answerable to their client, ESKOM, we were asked to provide three separate reports relating to the three sections of the route alignment as per the referenced (J29223- 225) submissions to the relevant DEA - see email below.

Re: Patensie Kareedouw Phase 1 HIA report (email dated 30 May 2012)

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ethembeni<thembeni@iafrica.com>; Mathys Vosloo<mvosloo@gibb.co.za>; 'Len' <vanschalkwyks@tiscali.co.za>;

Dear All

Please disregard this report. The client has requested us to prepare three separate reports, which we have done, and will email these to you tomorrow.

Kind regards

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**Perforce, the three individual reports comprise the same general information as
the original single report.**

2. – 4.

eThembeni was appointed to undertake the aforementioned **Heritage Impact Assessments** (HIAs) as required by the National Environmental Management Act 107 of 1998 as amended (NEMA), in compliance with Section 38 of the National Heritage Resources Act 25 of 1999 as amended (NHRA).

Further to your assertions in 4. that: ... “there is nothing in this case that makes us believe that fieldwork has been done. It sounds more of a basic desktop”, we stated in our reports that: **“eThembeni staff undertook a field inspection of the proposed route alignment from 07-09 March 2012”**.

The methodology employed for Phase 1 HIAs of transmission lines is unlike that for projects where impacts primarily involve physical landscape disturbance. The greatest change invoked by transmission lines is typically above the ground surface; therefore the emphasis of the HIA is on resources that are sensitive to visual change. Such resources are usually places, structures and landscapes that are or could be publicly celebrated as heritage.

During the assessment the following factors were taken into consideration:

- **The constraints of fieldwork and a desktop study of a 500 metre wide servitude over various potential corridors and deviations over a distance of 90 kilometres.**
- The constraints of using maps and Google Earth imagery, without coordinates defining exact corridor boundaries.
- Electronic databases of visually sensitive heritage resources do not exist for the study area, and print versions are extremely limited.
- In open landscape during daylight hours, transmission lines on self-supporting towers are visible (but not necessarily intrusive) from a distance of 2 to 5km. (Guidelines for the development of wind energy facilities in the Western Cape¹ have suggested that a buffer zone of 1km be established around significant visually sensitive heritage resources to minimise the change to the ‘sense of place’. The point at which a transmission line may be perceived as intrusive or offensive is subjective).
- **The presence of an existing transmission line in an area serves as a mitigating factor rather than a cumulative negative impact, in terms of establishing new transmission lines in the same area (within a distance of 1km of the existing line).** Electrical infrastructure is therefore best confined to an existing area or corridor of vertical visual disturbance, rather than introducing new infrastructure to an undisturbed landscape.
- Transmission power line routes should be chosen to minimise the requirements for new infrastructure such as access roads, which have the greatest permanent direct and indirect impact on the landscape².

¹ Developed by Department of Environmental Affairs and Development Planning, 2006.

² Guideline on the application of the EIA Regulations to structures associated with communication networks. Developed by the Western Cape Department of Environment and Cultural Affairs and Sport, September 2001

- This factor supports the previous observation in that new transmission lines located close to existing lines can share access and maintenance roads.
- The linear nature of the project where tower positions can be altered (within limits) to avoid direct impacts on heritage resources such as archaeological and paleontological sites that may have high heritage significance due to their spiritual and scientific values, but are generally not publicly celebrated as resources sensitive to visual change.

Accordingly, **the purpose of these Phase 1 HIA's was to identify a preferred transmission line corridor based on the occurrence of, and potential impact on visually sensitive categories of heritage resources.**

Within the Gamtoos River valley the route alignment is constrained significantly by valuable agricultural land and centre pivot farming. Consequently, the route alignment here is a compromise between the imperative of improving electrical supply to farmers and local communities, and possible visual impacts on the scenic route.

Further, for the major part of the remaining route alignment, it was apparent that most of the power line alongside scenic routes between Melkhout and Kareedouw has been routed sensitively, in a landscape with a high absorption capacity.

eThembeni thus endorsed the new 132KV alignment within the existing power line servitude, where possible.

This further has bearing on limiting the establishment of new access roads for construction and maintenance. Such not only scarify the visual landscape but pose a potential threat to discrete heritage resources viz. archaeological and paleontological sites and graves.

The aforementioned guideline issued by the Western Cape Department of Environment and Cultural Affairs and Sport (2001) on the application of the EIA Regulations to structures associated with communication networks explicitly recognises that:

- The power supply services as well as access routes can have greater impacts on biophysical elements than the communication structure itself (**noted above**); and
- Masts and access routes can have significant visual impacts which can be out of character with the surrounding area.

This guideline document supports the following **decision-making principles that are relevant to these HIA's:**

- Structures associated with communication networks that are proposed where they will be out of character or disruptive of the sense of place will be discouraged or completely avoided.
- Structures associated with communication networks, which are proposed where they will break the skyline on a scenic landscape, will be discouraged or completely avoided.

- Structures associated with communication networks, which are proposed along scenic tourist routes will be discouraged or completely avoided.

Despite a lack of clarity from either the Eastern Cape provincial government structures (PHRA) or SAHRA as to whether they support this guideline we have employed it in the pursuit of current best-practice.

5. – 6.

Discrete archaeological resources were not reported on. The bibliography to the eThembeni reports cites the wide ranging research conducted by Dr. J. Binneman in the greater Gamtoos / Langkloof / Humansdorp / Ttsikamma area over the last three decades and the pioneering work of Prof. H.J and Dr. J. Deacon in the region from the 1960's to date. One of us (LvS) was a student of the late Prof. Deacon and had the privilege of visiting archaeological sites in the study area with Prof. and Dr. Deacon as a post-graduate. Collectively, this has informed eThembeni staff as to the archaeological sensitivity of the study area. **However, the significant sites reported in the literature tend to be rock-shelter sites which are unlikely to be impacted upon by transmission line infrastructure** (J. Binneman pers.comm.).

Notwithstanding this, eThembeni's HIA reports have recommended that an archaeologist and palaeontologist should **complete a 'walk-down' of the final selected power line corridor and all other activity areas (access roads, construction camps, materials' storage areas, etc.) prior to the start of any construction activities.** This will provide the opportunity to assess any direct impacts on discrete archaeological and paleontological resources and traditional burial places.

7.

Refer to 1. above.

8.

eThembeni's HIA reports endorse a route alignment largely within an existing servitude and one that minimises impacts on the visual landscape.

9.

As recommended by eThembeni in the HIA reports, **a 'walk-down'** of the final selected power line corridor and all other activity areas (access roads, construction camps, materials' storage areas, etc.) prior to the start of any construction activities, **has been endorsed** in 5. and 6. of your review comments.

Yours sincerely



Len van Schalkwyk and Elizabeth Wahl