

### SCIENTIFIC SERVICES

postal Private Bag X6546, GEORGE, 6530
physical 4<sup>th</sup> Floor York Park Building,

York Street, GEORGE, 6530

website www.capenature.co.za

 enquiries
 Mr. BA Walton

 tel.
 +27 44 802 5300

 fax
 +27 44 802 5313

 fax2email
 +27 86 645 2546

 email
 landusegeorge@capenature.co.za

 SSD ref. #
 14/2/6/1/6/7\_OUDT/132kV\_2012/150

date 28<sup>th</sup> of February 2013

The Head of Department
Environmental Affairs
Environmental Impact Evaluation
Private Bag X 447 Tel.: 012 310 3659
PRETORIA Fax: 012 320 7539
0001

**Attention: Ms Tebogo Mapinga** 

APPLICATION IN TERMS OF THE NEMA EIA REGULATIONS FOR THE PROPOSED CHANGE OF LAND USE BY CONSTRUCTION AND INSTALLATION OF A 132 kV TRANSMISSION LINE APPROXIMATELY 27 KM IN LENGTH BETWEEN OUTENIQUA 132 kV SUBSTATION AND OUDTSHOORN SUBSTATION, OUDTSHOORN, OUDTSHOORN MUNICIPALITY

DEA # 14/12/16/3/3/1/613 DEA&DP # 16/3/1/6/6/D7/9/0089/12

CapeNature, as custodian of biodiversity in the Western Cape, would like to thank you for the opportunity to review the proposed change of land use and development activities, and wish to make the following comment. The draft Basic Assessment Report ("BAR") pre-dated 29 October 2012 concerning the abovementioned, received from *SiVEST Environmental* by Scientific Services on the 5<sup>th</sup> of November 2012, refers.

1. The existing Oudtshoorn Substation is located at Erf 4955 (0.5582 ha) at the southern extent of Oudtshoorn whereas the Outeniqua Substation is located at Farm Zout Kloof No. 27 Portion 21 (0.7989 ha). The application for environmental authorisation for the linear development proposal for construction of an approximately 27 kilometre long 132 kV transmission line with a forty (40) metre wide servitude comprises two Alternative Routes. The Activity Alternative A (preferred alternative) is aligned along the existing servitude from the Outeniqua Substation for 8.8 kilometres then deviating in a north-westerly direction to join the Oudtshoorn Substation; versus Activity Alternative B aligned northward via a new servitude from the Outeniqua Substation to join the Activity Alternative A alignment 7.6 kilometres south of the Oudtshoorn Substation (see Appendix A, by ESKOM Distribution).

#### 2. **VEGETATION**

The mapped vegetation units<sup>1</sup> of the receiving environment wherein which the linear development is proposed are: mostly *Endangered* Eastern Little Karoo (SKv 11) a threatened ecosystem<sup>2</sup> listed i.t.o. the NEM:BA, with < 1% formally conserved containing eighteen (18) endemic species; and *Critically Endangered* Muscadel Riviere (AZi 8) containing three (3) threatened and two (2) endemic plant species, with < 1% formally conserved.

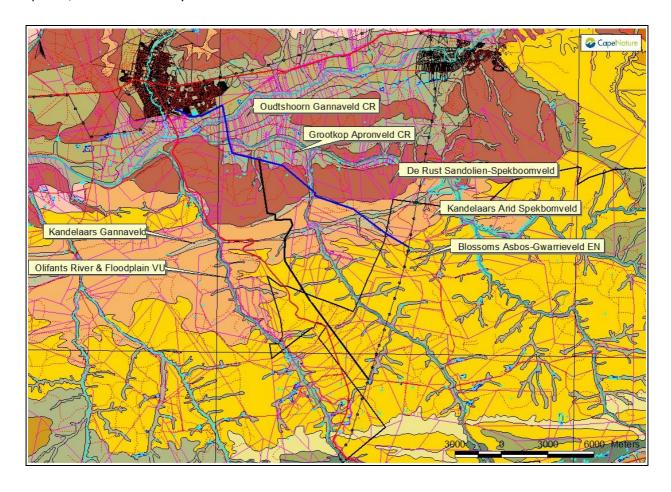


Figure 1: showing the vegetation variants surrounding Oudtshoorn with the proposed Activity Alternative A in dark blue and with Activity Alternative B in black joining the existing electrical network in the south-east.

The fine-scale Biodiversity Assessment and vegetation map of Kannaland and Oudtshoorn<sup>3</sup> for the Little Karoo domain identified seven vegetation variants here (see Fig. 1) as *Endangered Blossoms Asbos-Gwarrieveld*; *Kandelaars Arid Spekboomveld*; *Kandelaars Gannaveld*; *Vulnerable Olifants River and* 

<sup>1</sup> Mucina L & Rutherford MC (eds) (2006) Vegetation of South Africa, Lesotho and Swaziland. Strelitzia 19. South African National Biodiversity Institute, Pretoria.

**<sup>2</sup>** Government Gazette No. 34809, GN No. 1002 (2011) National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004): National List of Ecosystems that are Threatened and in need of Protection

**<sup>3</sup>** Vlok JHJ, Cowling RM, Wolf T (2005) A vegetation map for the Little Karoo. Unpublished maps and report for a SKEP project supported by Grant No 1064410304. (Cape Town, Critical Ecosystem Partnership Fund)

Floodplain; De Rust Sandolien-Spekboomveld; **Critically Endangered** Grootkop Apronveld and **Critically Endangered** Oudtshoorn Gannaveld.

Figure 2 below broadly shows the land condition with both proposed Activity Alternatives traversing large sections of natural land – mostly *Endangered Blossoms Asbos-Gwarrieveld; Kandelaars Arid Spekboomveld; De Rust Sandolien-Spekboomveld.* It appears that for the final single northern co-joined section that most of the *Critically Endangered Grootkop Apronveld* and *Critically Endangered Oudtshoorn Gannaveld* are either degraded or non-existent; as are sections of *Kandelaars Gannaveld* apparently degraded.

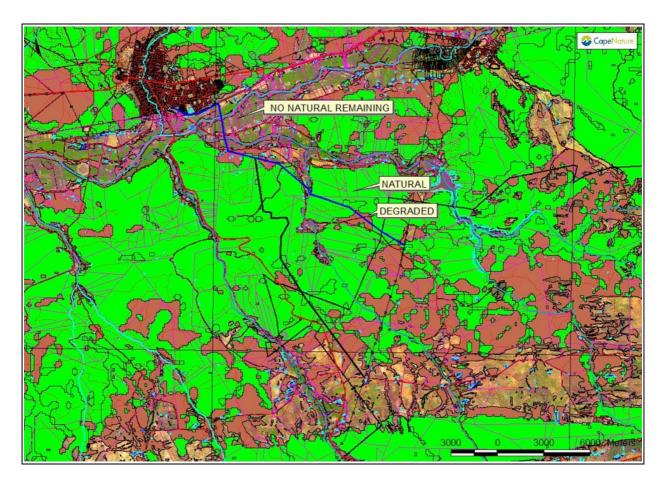


Figure 2: showing the broadly mapped land cover and assigned condition of vegetation surrounding Oudtshoorn with the proposed Activity Alternative A in dark blue and with Activity Alternative B in black joining the existing electrical network in the south-east.

3. The botanical report<sup>4</sup> acknowledged that the entire length of the alternative routes was not surveyed and vegetation patterns were extrapolated with point vegetation surveying and maps; as indicated on the partially legible figure 4.

**<sup>4</sup>** McDonald DJ. Botanical evaluation for the proposed ESKOM power-line route from Outeniqua Substation to Oudtshoorn, Western Cape Province.

#### 4. **DESIGNATED SENSITIVE AREAS**

Selected remaining areas of natural vegetation and habitat have been designated as either: declared Protected Areas; Critical Biodiversity Areas<sup>5</sup> or Ecological Support Areas, as habitat required as part of the CBA conservation network; in addition to Other Natural Areas. Figure 3 shows the proposed linear development with both Activity Alternatives traversing large sections of the Critical Biodiversity Areas network, selected for various criteria. From figure 3 it is clear that Activity Alternative B will traverse a large intact CBA parcel of land, compared with Activity Alternative A.

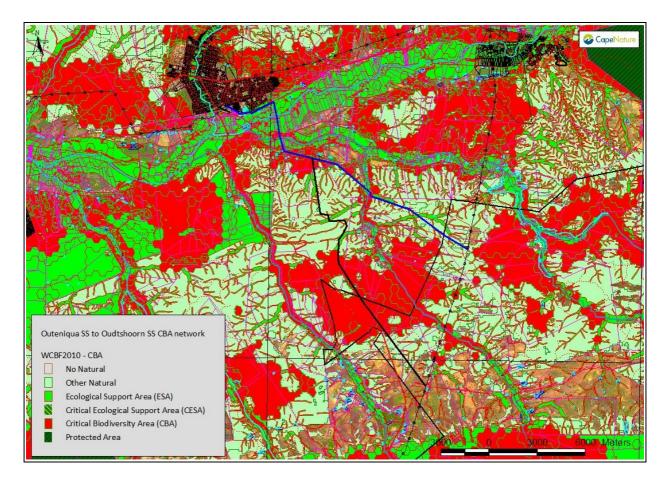


Figure 3: showing the Critical Biodiversity Area conservation network surrounding Oudtshoorn with the proposed Activity Alternative A in dark blue and with Activity Alternative B in black joining the existing electrical network in the south-east.

5. Freshwater Ecosystem Priority Areas (FEPAs) are identified strategic spatial priorities for conserving South Africa's freshwater ecosystems and supporting sustainable use of water resources. The receiving environment wherein which the linear development is proposed are within two **Upstream River FEPAs** and associated sub-quaternary catchment areas, draining towards the *Largely Modified* Doring River (PES: Class D) and *Largely Modified* Kammanassie River (PES: Class D), respectively; and a **Fish Corridor** 

<sup>5</sup> Skowno, AL, Holness SD and PG Desmet (2010) Biodiversity Assessment of the Kannaland and Oudtshoorn Local Municipalities, and Eden District Management Area (Uniondale). DEADP Report LB07/2008a, 65 pp.

**River FEPA** and **Fish Support Area FEPA** and associated sub-quaternary catchment area, draining towards the *Largely Modified* Olifants River (PES: Class D).

- 5.1. Activity Alternative A (preferred alternative) has three major river crossings, namely the *Largely Modified* Doring, Kammanassie and Olifants Rivers.
- 5.2. Alternative B has two major river crossings, namely the *Largely Modified* Kammanassie and Olifants Rivers.

These three rivers are also identified as Critical Biodiversity Areas, with associated features. As indicated in the freshwater assessment report<sup>6</sup> all ephemeral streams (and / or drainage lines) and tributaries of the abovementioned rivers have been identified as important **Ecological Support Areas**; based on being potential aquatic habitats; with habitats for threatened ecosystems; and as priorities identified by other fine-scale plans. CapeNature agrees with the findings and recommendations provided by the aquatic specialist.

- 6. CapeNature will not support the loss of any threatened ecosystems, neither the transformation of identified sensitive areas (CBA's / ESA's / NFEPA's); and nor incompatible land uses for biodiversity conservation objectives. All endangered species or protected species listed in Schedules 3 and 4 respectively, in terms of the Western Cape Nature Conservation Laws Amendment Act, 2000 (Act No. 3 of 2000) may not be picked or removed without the relevant permit, which must be obtained from CapeNature, should endangered or protected species be found to occur on site.
- 7. CapeNature requires more information based on operational experience with Eskom distribution implementing activities during refurbishment of servitudes and infrastructure, as well as the installation of new servitudes and structures such as this. It is recommended that the botanical evaluation be complemented by a detailed focused description of vegetation occurring at each tower position so that this can further inform a site and habitat specific EMP; conducted by a qualified individual familiar with the terrain. Protected or endangered plant species that may have to be moved away from a tower position can be applied for by a plant collection / removal permit. CapeNature requires in addition to spatially explicit tower positions (in the form of a shapefile) an indication of proposed access routes to each and every tower position (preferably in the form of a shapefile), so that potential impacts can be adequately scoped and assessed before commencement.

CapeNature reserves the right to revise initial comment and request further information based on any additional information that may be received.

Yours sincerely

**<sup>6</sup>** Belcher T, Grobler D, Snyman J (2012) Freshwater Assessment for the proposed 132 kV Power line between the Outeniqua and Oudtshoorn substations.



# Benjamin Walton

For: Manager: Scientific Services: Land Use Advice

CapeNature

## Copies to:

- (1) Dr A Turner (CapeNature: Knowledge Manager)
- (2) Dr A Schutte-Vlok (CapeNature: Regional Ecologist)
- (3) Mr I Donian (CapeNature: Karoo Area Manager)
- (4) Ms L Hendriks (DWA)
- (5) Mr C vd Walt (WCG: Department of Agriculture)
- (6) Ms U Rusch (SiVEST Environmental)