

SCIENTIFIC SERVICES

postal Private Bag X5014, Stellenbosch, 7599
physical Assegaaibosch Nature Reserve, Jonkershoek
website www.capenature.co.za
enquiries Rhett Smart
telephone +27 21 866 8017 **fax** +27 21 866 1523
email rsmart@capenature.co.za
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Nsovo Environmental Consulting
Postnet Suite 697
Private Bag X29
Gallo Manor
2052

Attention: Beatrice Matekenya
By email: ppp@nsovo.co.za

Dear Beatrice

Draft Scoping Report for the Proposed Agulhas 400/132 kV Transmission Substation and Loop-in Loop-out Powerlines, Swellendam District

CapeNature would like to thank you for the opportunity to comment on the proposed development and would like to make the following comments. Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the proposed development.

The application is for the strengthening of the electricity transmission network in the vicinity of the Vryheid 132/66 kV substation. The project consists of a new 400/132 kV substation that will link in to the existing 400 kV Bacchus – Proteus Transmission Line. In Section 3.2 (pg 18) of the report the scope of work includes a double circuit powerline linking between the Vryheid Substation and the new substation and extension of the Vryheid substation busbar and additional feeder bays. However the latter two components have not been included or assessed in the remainder of the Scoping Report. This requires clarity, as it is likely that the linking powerline would trigger listed activities and would also influence the impacts associated with the choice of location for the substation.

A total of seven alternative locations have been identified for assessment for the proposed substation. The substation will be 600m x 600m in extent which would be 360 000 m² (this should be corrected in the Introduction on pg 12) or 36 ha. It should be clarified that the polygons indicated on the various layout maps will be the full extent of the substation, or if the substation would only occupy a portion of the polygons as indicated.

A fauna and flora specialist scoping study was undertaken to screen the potential alternatives. The vegetation type across most of the study area consists of Eastern Rûens Shale Renosterveld, which has been transformed across most of its former extent and is hence listed as Critically Endangered and all remnants would be Critical Biodiversity Areas (CBAs) according to the Overberg Conservation Plan. The only CBA within the seven alternative substation locations is in the southern section of Alternative D. The vegetation type which constitutes this remnant is Rûens Silcrete Renosterveld which occurs on silcrete outcrops surrounded by shale renosterveld (normally transformed), and is also Critically Endangered.

There does not appear to be any watercourses or wetlands located on any of the seven location alternatives, although some of them are adjacent to watercourses. Some of the riparian areas of the watercourses are classified as Ecological Support Area. These do not appear to be significant constraints on the development proposal at the Scoping Phase, but require further investigation in the EIA Phase.

The fauna and flora scoping study was only undertaken as a desktop study and as such, has used the CBA and other desktop maps and the Google Earth imagery for the assessment, which is the same information referred to above (the reference to the Namakwa District Biodiversity Sector Plan on pg 7 of the report must be an error).

The conclusions are that the only alternative where fatal flaws were identified was Alternative D, as there is a fragment of intact Critically Endangered vegetation located on the site. CapeNature agrees with these findings for a Scoping level assessment. The specialist study has additionally rated all seven alternatives in terms of preference.

An avifaunal scoping level impact assessment was undertaken. The avifaunal assessment has provided an overview of the bird species that are likely to be affected by the proposed linking powerlines based on existing evidence from powerlines in the Overberg and was supplemented by a site visit.

Blue cranes (*Anthropoides paradiseus*) and Denham's bustards (*Neotis denhami*) are two species that have been identified as collision prone (blue crane the highest number of records in South Africa) and do occur in the study area as verified by sightings on the site visit. Both species occur in transformed agricultural lands and are therefore widespread within the study area and avoiding natural habitat will not assist with mitigating the impact for these species as it would for others e.g. black harrier (*Circus maurus*). There are however mitigation measures which have been developed through the years to minimize the impacts on the birds.

In terms of the various location alternatives for the substation, four are located close to the existing 400 kV line and the loop-in loop-out powerlines will be very short in length, whereas the other three are located further away. By minimizing the length of the powerlines, the impact of collisions and electrocutions on avifauna is minimized and these are the preferred alternatives from an avifaunal perspective. As stated in the avifaunal report, the impact of the substations on avifauna would only relate to the loss of habitat, which would not be highly significant. Alternative A has been selected as the preferred alternative, however all four that are located adjacent to the powerline could be considered acceptable for further investigation.

Our comments above relate to the components of the project that have been assessed in the specialist studies, namely the new substation and linking powerlines. However, the powerline linking Vryheid substation and the new substation as described in Section 3.2 have not been assessed and is likely to affect the selection of the preferred alternative as well as the assessment of the various impacts.

A further aspect that requires clarity is whether the proposal is only for the strengthening of the existing network or if the substation is proposed to receive electricity from the renewable energy facilities in the vicinity. The project study area is located within one of the renewable energy development zones (REDZ) as identified in the Strategic Environmental Assessment (SEA) for Wind and Solar Photovoltaic Energy for South Africa and is likely to be a focus area for renewable energy development in future. Apart from this there are already wind energy facilities in the vicinity which are at various phases from proposal to implementation. Therefore it seems likely that the proposed substation would be related to these facilities – this must be clarified.

Linking powerlines from these renewable energy facilities are likely to result in impacts (as referred to above) and this would also play an important role in determining the preferred location of the substation. The sensitivity mapping undertaken for the above-mentioned SEA can be used as a guideline for the likely locations of future renewable energy facilities.

In conclusion, CapeNature supports the findings of the fauna and flora and avifaunal specialist studies at the Scoping level, based on the project components that have been assessed. It is recommended that the alternatives that should be taken forward to the EIA Phase for further consideration, based on biodiversity impacts, should be Alternatives A, E, F and G (it is understood that non-biodiversity factors could narrow this selection down further).

The EIA Phase specialist studies must include fieldwork and ground-truthing and the avifaunal specialist study should supplement their study with the existing work that has been undertaken regarding avifaunal impacts for the powerlines and wind energy facilities (e.g. pre-construction monitoring) in the vicinity.

As stated above, further clarity is required regarding the powerline referred to linking Vryheid Substation and the new substation as well as the potential for linking powerlines from renewable energy facilities as this must be taken into consideration in assessing the most suitable alternative location for the substation. This must also be included in the terms of reference for the specialist studies. Consideration of these factors is likely to also influence the selection of the preferred alternatives for consideration in the EIA Phase.

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

Yours sincerely



Rhett Smart
For: Manager (Scientific Services)

cc. Kevin Shaw, CapeNature