



## SCIENTIFIC SERVICES

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Attention: Theo Hansford  
NMA Effective Social Strategies  
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2017  
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Dear Theo

**Re: Draft Scoping Report for the Proposed Eskom Bantamsklip Transmission Lines and Associated Infrastructure.**

EIA refs: 12/12/20/1223 and 12/12/20/1224

CapeNature would like to thank you for the opportunity to comment on the above document. Please note that our comments relate only to biodiversity related impacts not the overall desirability of the proposed development.

## EIA PROCESS

### *Splitting of EIA applications:*

CapeNature would like to express its concern with the proposed EIA process(es) being followed. It is our opinion that it would be inappropriate to consider the proposed nuclear facility at Bantamsklip without considering alternative locations for such a facility. Similarly, we are of the opinion that since the proposed transmission lines (the subject of this assessment process) are inextricably linked to the nuclear facility at Bantamsklip, it would be inappropriate to assess (not to mention consider granting approval for) these two components of the development separately.

CapeNature acknowledges that it would be an enormous undertaking to conduct a single impact assessment for a proposed nuclear power facility (at various alternative locations) and their associated transmission lines (and their route alternatives). However, we are concerned that the full impact of the proposed facility cannot be adequately assessed if the impact assessments for the various components are dealt with separately. We suggest that piecemeal applications such as being undertaken here can result in environmental impacts being undervalued, especially cumulative impacts, and could result in "death by a thousand cuts".

CapeNature therefore recommends a phased approach. While the EIA processes can run separately as a way to manage the vast amount of information, the results of each assessment should feed in to a final consolidated report on which a single decision for

the entire development should be based. This way all issues and impacts associated with the proposed development can be considered.

### *Scale of assessment*

As the botanical specialist's report so eloquently highlighted, the area potentially impacted on by the transmission lines and the scale of this assessment is vast. The proposed corridors for the powerline routes are 5 km wide, while the actual footprint is likely to be much less (a servitude width of at least 80 meters per line, 320 meters for four lines, is required). Areas of high biodiversity sensitivity can often be less than 5 km wide and the impacts of the final placing of the power line (plus access roads, stringing and laydown areas etc) within such a 5km wide corridor can vary from being highly significant to negligible depending on the exact location of the infrastructure. CapeNature therefore suggests that these corridors do not provide sufficient information for an informed decision to be made.

CapeNature recommends that this assessment (i.e. assessment of 5 km wide corridors) be seen as a strategic level assessment informing which would be the most appropriate corridor alternative to pursue further. Once the preferred corridor alternative has been identified, we suggest that more detailed and specific layout alternatives (including access roads, laydown and stringing areas, etc) within the selected corridor should be assessed. It is this level of detail that is required for informed decision making with regards to environmental authorisations.

Should the process proposed above not be followed, CapeNature requests the opportunity to comment on and engage with the final, detailed layouts, as we see this as a vital component of the project.

### **IMPACTS and ALTERNATIVES:**

CapeNature notes with concern that all proposed powerline route alternatives cross areas of high biodiversity value and all routes have the potential to have negative impacts on biodiversity of high significance.

Potential impacts include both the direct loss of habitat, but perhaps of greater concern are the indirect impacts, for example habitat degradation. While some of these impacts may be reduced to acceptable levels through mitigation and management, we suggest that special attention should be paid to those impacts that are potentially irreversible and/or of high negative significance that cannot be readily or confidently mitigated.

In addition to the indirect impacts outlined in the specialist's reports, CapeNature requests that the risk of fires starting due to sparking be investigated as the majority of the ecosystems involved are fire-prone and sensitive to the impacts of too frequent fires. It would be useful to know the statistics regarding the frequency of fires starting this way.

In light of the potentially high negative impacts on biodiversity, CapeNature suggests that this assessment process should remain open to as many alternatives as possible, including new alternatives or amended alignments.

The botanical specialist in particular suggested that many of the proposed **routes should be substantially redesigned to avoid negative impacts**. This should be

done in conjunction with the specialists, prior to proceeding with the EIA process. CapeNature strongly supports this recommendation, yet it is unclear from the draft Scoping Report if this has occurred.

We suggest that an additional alternative be considered where Bantamsklip is linked to Muldersvlei via an underwater cable, with a much shorter transmission line on land.

We also suggest that opportunities to run the powerline routes parallel to one another should be considered as a means of reducing the overall impact of the lines.

### **Application 1: Bantamsklip – Kappa line**

All four of the alternative corridors traverse areas of high faunal and floral sensitivity and impacts are likely to be of high or medium significance in several areas. The Agulhas and Overberg areas are considered exceptionally sensitive with regards to biodiversity.

Bantamsklip, for example, is surrounded by substantial areas of high sensitivity (on a local, national and global scale). The area is of outstanding botanical significance and the wetlands surrounding Bantamsklip are habitat for a number of rare plants and animals.

It is our opinion that the area is not appropriate for large infrastructural development. None of the route alternatives suggested are acceptable with regards to the impacts on biodiversity. Since CapeNature does not support any of the proposed alternatives, we suggest that the location of a nuclear facility at Bantamsklip would be inappropriate unless alternative routes for the transmission lines can be found that would have impacts of lower significance.

Alternatives 1 & 2 cross several other areas of high botanical sensitivity, including Caruther's Hill the only known location of an endangered plant species. Alternatives 3 and 4 also cross many high sensitivity areas, including mosaic wetlands of the Agulhas Plain, the Plaatjieskraal cluster (a core site for conservation action) and the seeps and wetlands of the Zuurbrack mountains (also suggested to be no go areas by the botanical specialist).

The faunal assessment was not conclusive in the identification of preferred routes while the avifaunal specialists suggested that alternative 1 was the preferred route. However, it should be noted that our avifaunal specialists have indicated that route 2 appears to be more preferable and we suggest that this requires further interrogation. All routes were shown to contain some areas of high sensitivity.

It should be noted that the botanical specialist suggested that no construction should take place in areas identified as containing vegetation of high sensitivity. The specialist suggested that alternative 1 & 2 be substantially redesigned to minimize impacts on botanical diversity. This redesign should take place before the impact assessment phase continues. CapeNature is concerned that this redesign does not appear to have taken place yet and it is unclear if it will.

According to the draft scoping report the southern portion of alternatives 1 and 2 and northern portion of 3 and 4 will be taken forward for assessment as the northern sections of alternatives 1 and 2 are technically unfeasible. It is unclear how and where the route alternatives will join and what the impacts of this will be. Will alternative

'joining routes' be considered? It is also unclear if and how the southern portions of alternatives 1 and 2 and the northern portions of 3 and 4 have been redesigned to avoid sensitive areas and no-go areas.

The initial assessment of the ABI alternative looks promising although this too appears to transverse some sensitive areas (including Koudeberg, the eastern Klein Rivier mountains and areas supporting localised plant species in the Riveirsonderend mountains). CapeNature supports the further investigation of this alternative and if necessary, its realignment to avoid areas of high sensitivity.

### **Application 2: Bantamsklip – Bacchus line**

All proposed alternatives have potentially high negative impacts on biodiversity most notably around Bantamsklip. As noted above, Bantamsklip is surrounded by substantial areas of high sensitivity. Once again, none of the route alternatives suggested are acceptable with regards to the impacts on biodiversity and unless alternative routes can be found which will have impacts of lower significance, CapeNature cannot support the location of a nuclear facility at Bantamsklip.

Alternative 1 would also impact on several other sensitive areas, including locations of rare and/or localised plant species, Grootbos and Platbos (both areas of exceptional biodiversity), the Klein River mountains (which supports many rare and/or endemic plant species), Shaw's Pass (a hotspot of rare plants and a high priority for conservation action), patches of critically endangered Western Ruens Shale Renosterveld near Bot River, the Van der Stels Pass, a core conservation priority.

Alternative 2, the most direct route, would similarly impact on areas of high conservation priority, including areas of exceptional diversity, the Klein River mountains which supports many rare and/or endemic plant species, and peaty wetlands.

Alternative 3 is longer and crosses many areas of high biodiversity sensitivity, including critically endangered vegetation types, and habitat for rare and localized species, for example Fairfleid Farm, a core site for conservation action.

Alternative 4, the longest of the alternatives once again crosses areas of high sensitivity for both fauna and flora, with numerous sensitive wetlands potentially impacted on.

It should be noted that, once again, CapeNature's avifaunal specialist do not fully concur with the recommendations in avifaunal report. We are concerned that the wetland scoring may have had a role to play in this difference. It is likely that wetland layer used in the analysis was not accurate enough for the purposes of this assessment. Our avifaunal specialists recommend option 2 until it hits the agricultural area, after which it should swing west to follow the route of Option 1 to Bacchus)

Ideally all areas of high botanical or faunal sensitivity should be regarded as no-go areas. The botanical specialist recommended alternative 2 should be redesigned before being taken through to the next phase of assessment. This is also the preferred alternative of the faunal specialist.

The Scoping Report recommends that alternatives 2 and 3 be taken forward, plus the proposed corridor suggested by ABI corridors. CapeNature has no objection to this, provided these alternatives are redesigned to avoid all high sensitivity/no-go areas.

### **Application 2: Bacchus substation expansion**

The substation is surrounded by Endangered Breede Sand Fynbos, with numerous rare and localized plant species. It is therefore considered to be of high sensitivity and has been designated to be a Critical Biodiversity Area (CBA) by the Upper Breede River Valley Fine Scale Biodiversity Plan. According to the Scoping Report the aim is to keep the expansion to within the existing yard and CapeNature would not object to this. However, should a larger footprint be proposed, details must be provided of the proposed expanded footprint and preferably this should be limited to the area east of the existing yard.

### **Application 2 Baccus – Muldersvlei line**

As with all the proposed transmission lines discussed above, both alternatives along this route cross areas of high sensitivity with regards to biodiversity, including known localities of rare and/or localized species.

Alternative 1 is preferred in terms of impacts on avifauna and vegetation. This is the shorter of the alternatives and therefore would impact on less threatened habitat and species. However, this alternative could still impact on highly localized species especially in the Du Toits Kloof area. Both alternatives traverse through substantial patches of protected areas, wetlands and habitat of the endangered geometric tortoise.

The impacts of Alternative 2 on geometric tortoise habitat is especially concerning. Among other things, Alternative 2 could impact on Limietberg and Elandskloof (a hotspot for rare plant species), Elandsberg Private Nature Reserve (a contract reserve), and Kranskop Munitions Factory. These areas are of exceptionally high conservation value for both flora and fauna and should be considered as a no-go/ red flag. CapeNature does not support the further inclusion of this alternative for further consideration.

Please note that CapeNature has new information regarding known localities of the Geometric Tortoise in the Elandsberg area and the Upper Breede River Valley (although this is not in electronic format yet). We suggest that the faunal specialists consult with Dr Ernst Baard at our Scientific Services Unit to supplement their field survey data.

## **METHODOLOGY**

CapeNature is concerned that the faunal assessment relies heavily of ecosystem status to inform their faunal/vegetation sensitivity ratings, rather than the more detailed information used to inform the draft Critical Biodiversity Areas Maps for the region (although we acknowledge that this information may not have been available to authors at the time of writing). We suggest an effort should be made to align the vegetation/faunal sensitivity with the sensitivity analysis of the botanical specialist report as this would represent a much more detailed and finer level of assessment.

Similarly, we recommend that going forward, the fine scale (Critical Biodiversity Areas) maps of wetlands be used as a primary informant for biodiversity specialist assessments.

### *Consolidated Bio-Physical Map and Consolidated Sensitivity Map*

CapeNature is concerned with the methodology used to produce the Consolidated Bio-Physical Maps and the Overall Sensitivity Maps presented in the draft Scoping Report. We fail to see the usefulness in combining 'land capability' (roughly translated to agricultural potential) with biodiversity related measures. These features are not necessarily compatible and are more likely to represent competing land uses. It is our opinion that this indicator has little value.

Furthermore, the consolidated maps were based on additive scores. This means that an area with a score of only 6 in the "biophysical sensitivity map" could include areas of high botanical, faunal, or avifaunal sensitivity (i.e. potentially red flag or no-go areas). If an area is only identified as being highly sensitive by one of the specialists and low by all others, the consolidated map would indicate that area is of low sensitivity. In effect, the consolidated maps water down the apparent sensitivity of particular areas.

CapeNature suggests that it would be more useful to identify and highlight clear no-go or red flag areas along all routes. These should be areas where any loss or disturbance will have high negative impacts that cannot be readily mitigated without substantial realignment or detailed (possibly unrealistic) mitigation. For example the Geometric Tortoise is very sensitive to disturbance and all habitat known to contain this species should be avoided as mitigation is unlikely to be successful.

Should an area be identified as a red flag/no-go area for any one feature this should be highlighted as being of high sensitivity on the consolidated map and the route should be rejected or alternative alignments sought. Weighing up the various alternatives using additive scoring could then follow.

CapeNature suggests that it is important to distinguish between areas of high sensitivity where impacts are likely to be irreversible and/or of high significance which cannot be mitigated from areas where impacts are potentially high, but can be readily mitigated. For example, to a large extent impacts of bird strikes can be mitigated, whereas loss of habitat cannot be.

It should be noted that the faunal study is inconsistent with regards to the effectiveness of mitigation measures and the sensitivity ratings. While it states that Eskom should endeavour to redirect alignments to avoid red zones as far as possible as adequate mitigation will be difficult to achieve in these zones, it also states that usually mitigation measures can be put in place to minimize negative impacts to acceptable levels. This inconsistency should be resolved.

CapeNature does not support the establishment of infrastructure such as powerlines in nature reserves (that are not related to supplying power to the reserve itself), as this is not compatible with the objectives of protected areas (i.e. conservation and eco-tourism). This applies equally to contract nature reserves or areas designated as conservation priorities (as these should eventually become protected areas) . Not only would transmission lines interfere with the management of conservation areas (specifically the use of fire for vegetation rejuvenation), but they can also compromise

the scenic beauty and income generating potential of these areas. We are pleased to note that the latter aspect will be dealt with in the next phase of assessment and we suggest that all protected areas and stewardship priorities should be identified as red flag/no-go areas.

## WAY FORWARD

CapeNature is pleased to note that further, more detailed biodiversity assessments, including a freshwater assessment, will be conducted in the next phase of this EIA process. It is important that the findings of these specialists be integrated. For example, a route alternative may be only marginally preferable for one biodiversity specialist, but significantly so for another. This should be resolved as early on as possible.

CapeNature looks forward to commenting on the above information once it is made available for review. We trust that the process will remain open to any new alternatives and amended route alignments that may be suggested by the specialists (and/or I&APs) as a means to reduce the potential impacts of the proposed transmission lines.

CapeNature is extremely concerned with the proposed development and the impacts it may have on biodiversity and protected areas of the general region. Please note that our above comments are broad and do not outline our concerns with each proposed transmission route alternative in detail. We therefore request that a focus group meeting be arranged with CapeNature where particular issues and concerns can be discussed in more detail, specifically regarding potential issues in protected areas, stewardship sites and other conservation priorities. In order to facilitate the flow of information we once again request that GIS shapefiles of the proposed corridors be provided beforehand as this would help us greatly in providing useful and detailed input.

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

Yours sincerely



Samantha Ralston  
For: Manager (Scientific Services)