



Scientific Aquatic Services

Applying science to the real world

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Attention: Ms. H. Mlotshwa

Dear Madam,

RE: SPECIALIST REVIEW - SAS KAPPA-OMEGA 765KV POWER LINE TERRESTRIAL ECOLOGICAL STUDY FOR EIA

Scientific Aquatic Services (SAS) was appointed to conduct faunal and floral assessments as part of the proposed transmission line development from the Kappa sub-station near Breede River to the Gamma sub-station near the town of Victoria West and the proposed transmission line development from the Kappa sub-station near the Breede River to the Omega sub-station near Koeberg as well as the transmission line from the Omega sub-station to Aurora sub-station east of Saldanha.

Comments with regards to the baseline reports were made by Simon Todd Consulting. After investigation, SAS wish to take this opportunity to reply to the comments. This response is set out as an issue and response report where the issues raised by the Simon Todd Consulting are presented one by one followed by a response to each by SAS.

1 - *The description of the various plant and faunal communities within the study area is too broad and lacks focus on the actual species or associated habitats likely to be impacted by the development.*

All available and regionally known faunal and floral resources were considered or assessed in order to assure that the assessments take as many of the potential species as well as important habitats into consideration as possible given the extent of the various alternatives. However, consideration should be given to extreme extent each of the proposed alternatives cover that resulted in the likelihood of all documented species as well as a vast variety of different habitats being present along portions of the routes. It should also be noted that the study was aimed at assessing 1km wide corridor alternatives and as such detailed assessments are not practicable at this stage of the



investigations. The assessment approach was aimed at identification and prioritisation of portions along the various alternatives that are considered most likely to be able to sustain the most diverse and sensitive faunal and floral populations. It has been made clear in the reports developed that as part of the planning phase of the development a walk down be undertaken of all areas considered of higher ecological importance identified within the baseline report for the selected route within the selected corridor. By so doing areas of least concern can be identified for the construction of support structures.

2 - The data sources used are largely appropriate but the reliance on some of the provincial-level synthesis reports such as the Western Cape State of Biodiversity Report is very high. There is little utility in repeating the lists already present in the State of Biodiversity Report which includes many species which have zero probability of occurring within the study area.

Please refer to point 1.

3 - The lists provided should be edited and all species which certainly do not occur in the study area can be eliminated from the lists. Furthermore, the likelihood that each species may be present in the study area should be provided with an interpretation of where the species is likely to be found along the routes or if there is a particular route which would generate a negative effect on a particular species.

Please refer to point 1.

4 - Greater attention should be paid to the distribution of listed fauna within the study area. There does not appear to be independent evaluation of the presence of listed species in the study from a data source such as Smithers & Chimimba. The current source for fauna is the various databases available from the Animal Demography Unit. While this is a useful source, it should not be relied upon as the sole data source and should be complemented with other sources. The ADU databases are based on observations and collections and are biased towards larger and more conspicuous species as well as areas that have been intensively sampled. Rare and listed species are by their nature not often encountered and the so the database does not adequately reflect the potential occurrence of such species.

Please refer to point 1.

5 - Perhaps there is an independent wetlands assessment for the EIA, but even so, a conspicuous gap in the data sources used by the current study is the NFEPA wetland assessment.

Noted, however the assessment of wetlands on desktop level was beyond the scope of these assessments. It is recommended that sensitive areas (both desktop as well as field observations) as identified during the wetland assessment undertaken by Royal HaskoningDHV, be taken as supplementary information to the sensitivity mapping provided by the faunal and floral assessments.

6 - There is a lack of explicit consideration of CBAs in the determination of ecological sensitivity. Areas of CBA should receive greater emphasis in the study and the extent of CBA along each route should be taken into consideration when deriving the sensitivity as well as the overall impact of each route.

CBA's were referred to within numerous sections within the report, the reviewer is specifically referred to section 8 (sensitivity mapping and conclusion) within the Kappa Omega report which states: "Many areas demarcated as CBAs as well as areas with intact vegetation within threatened ecosystems are located along the west coast. The intricate nature of floral habitat close to the ocean means that it would be very difficult to rescue and relocate floral species from these areas successfully. By re-routing option 3 and alternatives to more disturbed areas inland, intricate coastal floral habitat, CBAs and threatened ecosystems, could be avoided".



Furthermore, the reviewer is referred to Figure 30 within the same report “key background information used for the sensitivity map is depicted in the figure below.” Both Fine Scale Plans (CBAs and habitat condition) as well as threatened ecosystem status in relation to the different options are depicted, indicating that these two resources were used as the core identification tool for very high and high sensitivity areas.

Fine scale plans were also consulted in order to determine areas that could be of pristine or of very high conservation value that could be surveyed during the field visit as representative points.

7 - It is not clear from the report how CBAs and listed ecosystems were incorporated into the sensitivity mapping. This should be clarified in the report, which simply states: “All results obtained during the literature review as well as field assessments were used to map each option according to sensitivity.” The actual classes and their definitions need to be explicitly stated in the report.

Noted and amended. Furthermore, please also refer to the Biodiversity GIS (BGIS) and Municipal Plans section within both reports; detailed descriptions for all CBAs as well as other categories are provided within each applicable section.

8 - The approach appears to fail to account firstly for the amount of vegetation within listed ecosystems that occur along each route and secondly for the extent of CBAs along the route.

It is the opinion of the ecologist that providing separate extents would not be of value seeing that both these aspects are represented within the sensitivity mapping as very high sensitivity areas for which extents were provided (refer to section 7).

9 - In addition, significant impact on a Critically Endangered ecosystem should be considered unacceptable and should be red flagged. Although the routes across the Swartland are largely restricted to wheat fields and other types of intensive agriculture, both the National List of Threatened Ecosystems and CBA maps illustrate intact remnants many of which are of very high conservation significance.

Please refer to point 6 as well as point 1.

10 - The assessment does not meet the requirements as laid out in the EIA regulations in terms of providing a comparative assessment of the different alternatives.

Noted and the recommended section included.

11 - The desktop study and the field assessment have not been well integrated in the report. For example, in their conclusions the authors identify several exceptional areas, however, these are based solely on the field-based component and no desktop sources are used to support these assertions.

Noted and report amended.

12 - In addition, the map of exceptional areas provided by the authors is at a very broad scale and it would be more useful to depict the exceptional areas in three different maps, allowing for a closer inspection of the routes and attributes of each identified area.

Noted, however all areas of sensitivity were provided to the client in GIS format to allow for more fine scale planning.

13 - Although there were 25 hotspots originally defined, these have been subsequently updated and there are nowadays 34 hotspots defined. In addition, due to the update, the Succulent Karoo is no longer the only arid hotspot.



Noted, and report amended.

14 - In addition, the Fynbos is also one of the hotspots, which is not mentioned in the description of the Fynbos Biome which precedes section 3.3.

Noted, and report amended.

15 - Figure 7. This is very outdated information and a more current map is available from the BGIS website as part of the NPAES. Since the authors later use the data I am referring to as part of Figure 9, I'm not sure why they use the old ENPAT source at all.

A meeting was arranged with Cape Nature during the scoping phase of the project in order to ensure that all available databases and information were included within the desktop study. All information resources as presented to Cape Nature at the time of the meeting were kept as part of the desktop study.

16 - Figure 8. As for Figure 7, this is an outdated source and there is the NLC2009 available from BGIS or elsewhere as used in Figure 10 and I don't think it is useful to show the older data when a newer source is available.

A meeting was arranged with Cape Nature during the scoping phase of the project in order to ensure that all available databases and information were included within the desktop study. All information resources as presented to Cape Nature at the time of the meeting were kept as part of the desktop study.

17 - Figure 16. It would be useful to differentiate between terrestrial and aquatic CBAs.

The value of differentiating between terrestrial and aquatic CBAs is recognised, however after the two groups were split on ARC GIS it became confusing and the potential of overlooking areas of increased importance or the possibility of considering one more important than the other were considered a possibility. It is therefore recommended that the CBA mapping be left as is, should separate terrestrial and aquatic CBA shape files be required this can be supplied to the client with clear guidelines.

18 - Table 8. It would help a lot with the interpretation of this table if the species of conservation concern were sorted from most to least threatened.

Noted, and report amended.

19 - Figure 1, 2 and 3 – The colours of the line options as depicted on the maps do not match the legend, making it impossible to differentiate the different options. For example there is no yellow or bright pink line in the legend. This should be corrected.

Several line options overlap. The overlapping does make mapping that clearly depicts the different options difficult. The only way this can be avoided is if 8 separate maps, for all sections where mapping has been included are provided, at the same scale in order to accurately depict the relation to other options. This is not deemed feasible within an already extensive report.

20 - Contrary to the assertion that clearing underneath Eskom power lines does not appear to be a regular practice, it is the policy of Eskom that all vegetation beneath power lines should be cleared if it exceeds about 1m or poses a fire risk. Therefore fynbos vegetation is usually mowed to reduce the height of the vegetation while arid vegetation types are not usually affected they are low and do not pose a fire risk. In the absence of information which dictates otherwise, the assessment must assume a worst-case scenario. As such, power lines traversing intact renosterveld or fynbos remnants should be considered to pose a significant



potential threat to these habitats unless Eskom specifically states that they would not clear vegetation in these areas.

Effort was made to ascertain if vegetation would be cleared underneath transmission lines. Unfortunately no clear answer was provided by either the EAP or Eskom. Careful attention was afforded during the site assessment in order to establish what vegetation types have been cleared underneath existing transmission lines. Very few areas were encountered where vegetation has been cleared.

As recommended, vegetation clearing was included in the impact assessment, however, it should be noted that it was done on a broad scale due to the significant number and diversity of vegetation types within the assessed areas. The assessment was however based on a worst case scenario and is therefore considered indicative of the significance of impact that could result due to vegetation clearing within each sensitivity class.

21 - There are however a number of potentially sensitive habitats that have not been identified in the study, but which are likely to occur along the routes.

Refer to point 1.

22 - There may be specific features present along some of the routes that warrant specific mitigation. Understandably, with the variety of routes included in the assessment it is difficult to include specific cases. However, avoidance and mitigation measures within the 'exceptional' areas should probably be expanded to ensure that impacts on these areas are minimised.

Refer to point 1, in addition the reviewer is referred to section 7.3 within both documents, where it is stated that a walk down of the preferred alternative or at least portions regarded of higher ecological sensitivity be undertaken. Prior to this being done it is not deemed feasible to provide mitigation measures for all habitat types along each alternative. It is suggested that the provision of habitat specific mitigation measures be included as part of the scope of the specialist appointed for the walk down.

I trust that I have interpreted your comments correctly. Please do not hesitate to contact me if there are aspects that you would like to discuss further.

Yours Faithfully,

Digital Documentation Not Signed For Security Purposes

Natasha van de Haar

