

Our Ref: J27035

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Attention: Mr. Potgieter

Johannesburg

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Dear Sir

ESKOM ENVIRONMENTAL IMPACT ASSESSMENT (EIA:12/12/20/944) FOR A PROPOSED NUCLEAR POWER STATION AND ASSOCIATED INFRASTRUCTURE: COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT

Your correspondence to Ms. Bongi Shinga of ACER (Africa) refers.

Arcus GIBB (GIBB) acknowledges receipt of the above-mentioned letter. We thank you for your valuable comments and your participation in the Eskom Nuclear Power Station Environmental Impact Assessment (EIA) process to date. Your questions and comments concerning the Nuclear-1 have been noted.

Responses to your comments / questions are as follows:

With respect to Dunefields, Wetlands and Flora as these are interdependent

Your comment (1)

Dunefields

- The functioning of this world unique Headland By-pass System is not fully understood and the building of a Nuclear Facility and its associated infrastructure however carefully managed will affect this ever moving dune system. Any deviation of the Dunefields can have an adverse effect on the Wetlands and the Flora

Response (1)

Your comments are noted and the importance of the dunefield are recognised. The Dune Geomorphology assessment will be revised if needed and will be part of the Revised Draft Environmental Impact Report (EIR).

Your comment (2)

Wetlands

- The Wetlands and especially Langefontein may in no way be compromised by the planned development either in construction or operation [Report Vol. 7 –Floral – Thyspunt page 6-2, Par 6-1-3]. The construction of the Facility with its deep foundations will affect the ground water and its levels. A variation in ground water levels will adversely affect the Flora.
- Building on a site with major underground water supplies has its own problems which can cause major difficulties to the structure during the construction and in later years.

Response (2)

Your comments are noted. Please note that response from the Botanical specialist is that it is not so much the flora but the habitat and systems whose functioning might be compromised due to excessive drawdown, should mitigation measures proposed not be followed.

Your comment (3)

Floral Biodiversity

- This is an area where there are a diverse number of plants near the Eastern end of the Cape Floral Kingdom. The following plants should have been included
 - Centella tridendata var. hermanniifolia -rare
 - Eulophia speciosa - declining
- If the Botanical investigations had been done at other times in the year various other plants may have also been found such as.
 - Brunsvigia litoralis EN [Endangered]
 - Gladiolus huttonii VU [Vulnerable]
- 3.2 million Cubic meters of spoil plus 0.4m cubes of rock to be dumped on previously disturbed sites— It is doubted the that there are enough previously disturbed areas to accommodated all the spoil. This will affect the flora.
- The appendices 4.3.4/ 5 & 6 were not included
- The black/ white maps are not readable
- Sampling was not done on the Eastern access road
- Do not support the power lines between the NPS and the HV yard

Response (3)

Your comments are noted. Any omissions from the specialist report and illegible maps will be rectified and be included in the Revised Draft EIR which will be made available for public review and comment.

The Botanical specialist notes Mr. Potgieter's comments and he thanked him for his efforts in responding to the Draft EIR.

- As stated in the assumptions of the Botany Assessment, owing the scope of work the detail of the botanical and dune ecological work at the three sites is naturally limited to that required for an EIA. The size and complexity of each site would necessitate studies of weeks or even months to ascertain the true nature of the systems and habitats present. Nevertheless, the detail contained in this report is considered sufficient to make confident recommendations for the location of the proposed infrastructure. However, once a site has been prioritised for development, detailed ecological studies would need to be undertaken to fine-tune location of these facilities and the plants listed above will most likely be identified.
- Please see our response to point 1 above. *Centella tridendata* var. *hermanniifolia* was recorded from four of the habitats sampled, with *Eulophia* occurring in three in three habitats
- In terms of the dumping of spoil – the alternative of spoil being dumped on the heavily disturbed sandstone land in the dog leg in the north of the site was assessed. This land does not warrant restoration due to its distributed nature; the original vegetation, Tsitsikamma Sandstone Fynbos is not threatened and is well represented elsewhere. The current preferred alternative is however for the spoil to be dumped at sea.
- Any omissions will be rectified in the Revised Draft EIR which will be made available for public comment and review.
- Habitats representative of those occurring long the planned eastern access road were sampled elsewhere, so we had a good idea of the habitats and systems present and could thus make an informed call on locating the route

- Any illegible maps will be rectified and be included in the Draft EIR which will again be made available for public review and comment.
- The Botany report states that the construction of powerlines along the proposed alignment would have a negligible effect on dune ecosystem functioning, as long as pylons avoid the mobile part of the transverse dunes. Any structure built in the mobile dunes will have a deleterious effect on functioning, leading to change in quality of sand supply and possibly direction. Such effect would be compounded through the building of a service road under the powerlines. In terms of the HV Yard the report states that losses would be minimal as the sandstone vegetation is in poor condition and is unconnected. Habitats which are not connected to mainland vegetation tend to lose vigour and ecosystem function.

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Your comment (4)

FINAL COMMENTS

- The following is a direct comment from the report Vol 7 Floral Thyspunt Page 6-3 paragraph 6-2
“If compromising the functioning of the wetlands at THYSPUNT cannot be avoided, then this site is not recommended for the establishment of a NPS ,especially as these systems are endemic to this coast, and the Langefontein is a “one –of-a-kind”, endemic system.”

In view of all the above , the Flora and the Wetlands coupled to the ever moving Head land Dunefields systems are submitted as reasons for NOT proceeding with Nuclear 1 at THYSPUNT

Response (4)

Your comments are noted. The Flora Assessment specialist report further states that “With no mitigation none of the sites is deemed suitable for construction of a nuclear facility. If, however, stringent mitigation as discussed in the report is implemented, then all sites have potential for the construction of a NPS facility. ”

Should you have any queries with respect to the above please do not hesitate to contact Arcus GIBB.

Yours faithfully
 For Arcus GIBB (Pty) Ltd



Jaana-Maria Ball
 Nuclear-1 EIA Manager