



# The Overstrand Conservation Foundation

*...more effective conservation management through co-ordinated partnerships*

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**Attention: Bongqi Shinga**

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Dear Bongqi Shinga

## **ESKOM NUCLEAR POWER STATION AND ASSOCIATED INFRASTRUCTURE (Environmental Impact Assessment EIA 12/12/20/944)**

### **REVISED PLAN OF STUDY for IMPACT ASSESSMENT**

Thank you for the opportunity to make comment on the revised plan of study. The Overstrand Conservation Foundation's (OCF) comments are as follows:

#### **1 Consolidation of EIA's**

The OCF does not in principle object to the proposed combination of the EIA's for the proposed Duynfontein, Bantamsklip and Thyspunt sites. The OCF strongly objects, however, to the statement made in para 2.3 of the above referenced revised plan document that "Site alternatives were considered during the Scoping Phase of the environmental authorisation process." and that "During the EIA process site alternatives will not be pursued since it is ESKOM's intention to sequentially construct NPSs on each of the (3) following sites:"

The implications of this statement are that, before the specialist studies have been conducted and evaluated:

- the three sites are all deemed to be the most suitable sites available for the proposed NPSs and
- there are no more suitable uses for the sites than the development of the proposed NPSs.

The OCF contends that Bantamsklip in particular is not a suitable site and that there are alternative applications for that site that are in the national best interest.

There will be serious international repercussions associated with building a nuclear power station, associated infrastructure and transmission lines on a



registered national heritage site and in a location that is globally recognised as being a biodiversity hot spot of international importance both from a terrestrial and marine perspective. The Bantamsklip area falls within the internationally funded Agulhas Biodiversity Initiative project area and is earmarked for incorporation into a national park with an associated marine protected area. This alternative has international support and must be seriously considered as an alternative to the site being used for a proposed nuclear power plant which can be located in less sensitive areas.

The OCF further contends that the consideration of the environmental impact of the power plants separately from the environmental impact of the associated transmission lines is fundamentally flawed. A single EAP should be tasked with the integration of the recommendations resulting from the specialist reports relating to the proposed nuclear power plants and with the associated power transmission lines so that an overall recommendation is made to the authorising authority for the total project proposed at each site. This aspect is not dealt with in either the Revised Plan of Study for Impact Assessment for the nuclear power station EIA nor in those for the associated transmission lines.

## **2 Establishing World Best-Practice for locating a Nuclear Power Station in an Internationally Significant Biodiversity Hot-Spot**

The environmental issues identified during the scoping phase (para 3) do not identify the need to show that other equivalent nuclear power stations have been successfully built and operated in internationally significant sensitive and threatened biodiversity hotspots. This must be addressed.

The Bantamsklip area in which the proposed nuclear power station is to be located and through which the proposed transmission lines will pass forms a key part of the Cape Floristic Kingdom, internationally recognised as a biodiversity hot spot that is under threat. The marine biodiversity along the Bantamsklip coastline is also internationally recognised as unique and of international significance, particularly for the breeding of whales and sharks and African penguins.

The EIA needs to include a study to demonstrate that an equivalent nuclear power station has been successfully located and operated in a biodiversity hot spot of similar sensitivity to that of the Cape Floral Kingdom and the marine environment along the Bantamsklip coastline without compromising the integrity of those areas. The study needs to identify international best practice for successfully locating nuclear power stations and transmitting electrical power through threatened biodiversity hot spots and show how this best practice must be applied to the specific circumstances in the Bantamsklip area.

## **3 Impact Assessment Methodology and Criteria**

The Western Cape Provincial Spatial Development Framework (WCPSDF) sets out the objectives, policies, strategies and guidelines that are to be used for the planning of developments across the Western Cape. This WCPSDF is consistent with the National Spatial Development Perspective issued by the President's Office and was drawn up with full public participation. It (and the subordinate Overstrand Municipal Spatial Development Framework) is the only



document that has had wide public input that can be used as a reference in matters relating to the planning of development.

The impact assessment methodology and criteria set out in the Revised Plan of Study for Impact Assessment makes no reference to the WCPSDF and completely ignores the objectives, policies, strategies and guidelines it contains. This is not acceptable to the OCF and must be addressed in the Revised Plan of Study.

Specialist studies must all draw their conclusions and make their recommendations in terms of the contents of the WCPSDF and this document must form the basis upon which the Department of Environment and Tourism makes its decisions about the impact upon the environment and sustainability in the area.

If any other basis other than the WCPSDF is going to be used to decide the impact of the proposed nuclear power station and associated transmission line specialist reports, the public must be given opportunity to participate in the process of drawing up these criteria.

The OCF sent a letter (attached) on 2009-04-14 to the Assistant Director, Parastatals (Ms Lené Grobbelaar), Department of Environmental Affairs & Tourism (DEAT) in which it asked for clarification of DEAT's decision-making criteria. This letter was copied to ACER and ARCUS GIBB. No reply has been received from any of the recipients up to now.

The impact assessment criteria and rating scales and the convention for assigning significance ratings, set out in Tables 2 & 3, need to specifically require that a negative / high rating be assigned for any aspect for which inadequate scientific evidence exists to justify using a rating that is more favourable to the implementation of the proposed project. This is demanded on the basis of the obligation in environmental law to apply the "precautionary principle."

#### **4 Feasibility of the Revised Plan of Study for Impact Assessment**

The OCF notes that internationally the implementation of nuclear power plant projects have neither met time nor cost budgets and have run into serious technical difficulties due to inadequate global engineering capacity. We also note that ESKOM proposes in Table 1 that the construction phases of Nuclear-1, -2 & -3 will overlap not only with each other but with the proposed construction phase of the proposed pebble bed nuclear demonstration unit. No other country, to the OCF's knowledge, has successfully embarked upon such an ambitious nuclear power plant building programme and succeeded.

The OCF requests that the feasibility of the programme be studied as part of the revised plan of study for the impact assessment and that the socio-economic impact of a protracted construction and commissioning phase be made.

#### **5 Summary**

5.1 The OCF accepts in principle the proposed consolidation of EIA's for the 3 proposed nuclear power stations. We reject the contention that this



combination proposal and/or the work done in the scoping phase so far makes redundant the examination of alternatives. The EIR must deal with the issues relating to the international significance of the Bantamsklip area being a globally important terrestrial and marine biodiversity hotspot that is earmarked for inclusion into a national park with an associated marine protected area.

- 5.2 The revised plan of study does not address the need for a single EAP to integrate the recommendations of the proposed combined nuclear power plant EIA with those produced by the associated transmission line EIAs. This is viewed as critically important.
- 5.3 The EIA needs to include a study to demonstrate that an equivalent nuclear power station has been successfully located and operated in a biodiversity hot spot of similar sensitivity to that of the Cape Floral Kingdom and the marine environment along the Bantamsklip coastline without compromising the integrity of those areas. The study needs to identify international best practice for successfully locating nuclear power stations and transmitting electrical power through threatened biodiversity hot spots and show how this best practice must be applied to the specific circumstances in the Bantamsklip area.
- 5.4 Specialist studies must all draw their conclusions and make their recommendations in terms of the contents of the WCPSDF and this document must form the basis upon which the Department of Environment and Tourism makes its decisions about the impact upon the environment and sustainability in the area.
- 5.5 The impact assessment criteria and rating scales and the convention for assigning significance ratings, set out in Tables 2 & 3, need to specifically require that a negative / high rating be assigned for any aspect for which inadequate scientific evidence exists to justify using a rating that is more favourable to the implementation of the proposed project. This is demanded on the basis of the obligation in environmental law to apply the "precautionary principle."
- 5.6 The Revised Plan of Study for Impact Assessment now envisages the overlapping of the construction phases of the 3 proposed nuclear power stations and these projects will overlap with the construction phase of the proposed pebble bed reactor demonstration plant. There needs to be a feasibility study and impact assessment of the cumulative effect of these given that no other country has successfully embarked upon such an ambitious nuclear power plant building programme.

Please acknowledge receipt of this submission.

Yours sincerely

Rob Fryer  
Manager