

Strandveld Tourism & Conservation Association

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15 May 2010

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ESKOM - ENVIRONMENTAL IMPACT ASSESSMENT (EIA: 12/12/20/944) FOR A
PROPOSED NUCLEAR POWER STATION AND ASSOCIATED INFRASTRUCTURE

Dear Bongji,

With reference to your e-mail of 6 May 2010. Thank you for the opportunity to comment on the draft Environmental Impact Assessment Report concerning the application by Eskom to construct a nuclear power station.

The draft report with its attachments comprise a few thousand pages. We are sure that you will appreciate that with the limited resources available to an organisation like the Strandveld Tourism and Conservation Association it is impossible to comment on everything contained in the report and more specifically on the specialist reports. Our failing to do so does not imply that we agree with any of the information, methodologies, statements or conclusions contained in this report or any of the specialist reports attached to it.

In previous correspondence we have pointed out that the Environmental Impact Assessment for a proposed nuclear power station is flawed for a number of reasons. Although you have responded to our correspondence you have not convinced us otherwise. Notwithstanding our reservations about the validity of the process, we are pleased to note in your conclusion that Bantamsklip was not selected as the preferred site for the nuclear power station. It would appear that the only reason for disregarding Bantamsklip is an economic one, the economics

of Eskom. We believe that there are many other reasons why Bantamsklip should not be considered a potential site for such a development.

We limit our comments to a few statements and conclusions contained in the report and make proposals to change the wording.

Cumulative Impacts

In terms of Clause 24 (7) (b) of the National Environmental Management Act the assessment of the potential impact of an activity should include an investigation into the cumulative effects of such an activity. The EIA Regulations, in Clause 32 (2) (k), also states that an Environmental Impact Assessment Report must include "an assessment of each identified potentially significant impact including cumulative impacts...."

We have pointed out on many occasions that the cumulative impact of a power station and its associated transmission lines should be assessed before final conclusions can be drawn. It is our contention, however, that there will be no power station without lines and no lines without a power station. The logical way to have done the Environmental Impact Assessment would have been to determine the transmission line routes for each site by means of EIA processes and to then assess the sites with their accompanying transmission lines.

In the case of Bantamsklip it is stated in the Draft Scoping Report for the proposed transmission lines that: : *"If the principles of NEMA are to be adhered to it would thus appear that the proposed nuclear power station at Bantamsklip cannot be connected to the grid, unless alternative transmission line routes are found....."*¹. Since the Scoping Report for these proposed power lines has not even been finalised it is too early to make statements that *"there are no fatal flaws at any of the sites (provided appropriate mitigation is implemented) and that all three alternative sites are suitable for development of a nuclear power station in time"*.² While it may apply to other sites as well, such a statement about the Bantamsklip site is untrue or at least premature.

¹ Page 34 of the Botanical Scoping Assessment dated 24 November 2008 attached to the DSR for the Bantamsklip Power Lines.

² Page 10-8 of the Draft EIR

In the Draft EIR the following statement is made: *"Apart from cost, if the cumulative environmental impacts of the transmission corridors are considered, the potential impacts of construction of a nuclear power station at Bantamsklip would likely be much more significant than the other two site alternatives, considering the length of the transmission lines and the difficult mountainous terrain through which the Bantamsklip transmission lines would have to pass."*³ By making such a statement you are recognising that the cumulative impact of power station plus lines should be assessed. However, you continue in the same paragraph stating that this aspect is *"not considered a fatal flaw and does not disqualify Bantamsklip as an alternative site for a nuclear power station in the future."*

In response to our submission of 14 October 2009 on the Revised PoS for Nuclear-1 you mention that any decision on either the nuclear site or the transmission line EIA's are not mutually dependent. You also state that "The DEA could issue a negative or positive decision on either of the applications with a complete opposite decision been issued on the other." We are in full agreement with this statement but the implication thereof is surely that at this stage a statement that there are no fatal flaws at **Bantamsklip** is either untrue or premature. A site without the possibility to connect the power station with the power grid would surely qualify as a fatal flaw.

Radiological Impacts

We note that an agreement has been concluded between the Department of Environmental Affairs (DEA) and the National Nuclear Regulator (NNR) in respect of the assessment of radiation issues. This agreement states that any environmental authorisation granted for a nuclear installation would be conditional on the nuclear licence being in place. The prime responsibility to assess environmental impacts remains that of the DEA but they have in effectively **"out-sourced"** the assessment of radiological impacts to the NNR. Since the Draft EIR made available to the public to comment on does not assess all the environmental impacts statements containing the words 'no environmental fatal flaws' cannot be made.

On page 2 of the "Assessment of the Potential Impacts on Human Health Environmental Impact Report" (which is attached as Appendix E 24 to the Draft

³ Page 9-257 of the Draft EIR

EIR) it is stated that the draft regulations in terms of the National Nuclear Regulator Act **require** the applicant for a nuclear installation licence to submit a Site Safety Report comprising of a number of critical issues including data and assessments. These assessments are partly based on site-specific information, from there the terminology used in the name of the report.**[???Don't quite follow the meaning here???**] We cannot make **a** pronouncement regarding **the** other sites but, **with reference to the Bantamsklip site**, the required studies and assessments have not been made and therefore to state that there is no fatal flaw at the Bantamsklip site is unacceptable.

The Draft EIR also states that "*a proper evaluation of design Basis Accidents can only be completed once the actual reactor design has been selected*". The conclusion on page xxxx of the Draft EIR is "*provided that the NNR's statutory limits are adhered to, and that Eskom can demonstrate to the NNR that the design of the proposed Nuclear-1 will not exceed these statutory constraints, then there should be no impact on human health during normal operations.*"⁴ Since the choice of technology and specific type of nuclear reactor have not been made by Eskom it would appear to us that the validity of the conclusions drawn in a number of assessment reports including that on Human Health, Marine Biology, Air Quality and Emergency Response should be questioned. We believe that these assessments should be redone after a firm commitment is made by Eskom regarding the specific type and make of nuclear reactor they intend using and a firm decision has been made on the specific site on which the reactors will be constructed. In the meantime any statement about the absence of "fatal flaws" is premature.

Seismic Suitability

The draft EIR concludes that there is "*significant uncertainty regarding the seismo-tectonic model for Bantamsklip*"⁵ and that additional geo-scientific investigations may be required if a nuclear power station were to be located at the Bantamsklip site. Although the opinion is expressed that the only possible implication following these additional investigations could be additional **[delete one word space]** design and construction costs, we believe that there is enough uncertainty to justify scrapping the statement that **the** Bantamsklip site has no fatal flaws.

⁴ Page 9-238 of the Draft EIR

⁵ Page 9-12 of the Draft EIR

Tourism

TO BE COMPLETED [... see excellent submission by lady from Elsenburg, with Sue from the Avalon Guest House in Hermanus (Secretary to Save Bantamsklip Campaign)]

It is with disbelief that we read that the Botanical Assessment report states that the No-Go alternative in the case of Bantamsklip may be “*more costly than the development of a nuclear power station.*”⁶ This statement is based on the fact that the site currently **has** no “formal protected status” and that the construction of such a power station will result in the establishment of such a protected area.

TO BE COMPLETED [see strength of Rob Fryer (OCF) and John Williams’ (Save Bantamsklip) positions on conservation issues: surely one of the major strengths in dismissing Bantamsklip as a potential site. Do not forget that there remains a threat to Bantamsklip if a full nuclear “fleet” is embarked upon, so it really helps to hammer home the objective of removing Bantamsklip entirely from the list of possible sites. In other words, it is not sufficient to attack the particular EIA’s flaws, but the actual choice of site in the first place. It may have been underdeveloped when first chosen in the 1980s, but millions of rands – how much? – have gone into biodiversity, nature conservation, whale-watching, shark diving, agricultural development, eco-tourism, etc, including funds from the Global Environmental Facility (GEF) – over decades’ worth of investment in the region as a whole, but more specifically in the Agulhas Plain. This, I believe – and I have consulted with the Provincial authorities, who concur – is the strongest argument for dismissing the choice of Bantamsklip out of hand, since the economic LOSSES will be greater than the projected gains.]

⁶ Page

Conclusion

[THE FOLLOWING HAS BEEN SOMEWHAT CHANGED, SO I WILL HIGHLIGHT THE WHOLE, PROBABLY THE MOST CRITICAL PART OF YOUR SUBMISSION. See also the resolutions taken by the St Frances Bay Ratepayers Association (Hilton Thorpe) and the Kromme Trust.]

For the reasons set out above it is our contention that the conclusion reached and mentioned over and over again in the draft EIR that there is no fatal flaws at any or all of the sites are invalid and should be deleted. We have no problem with your identifying the preferred site, or sites, for Nuclear-1, based on the information that you have at your disposal. However, since

- (a) you do not have all the information available, and
- (b) some of the assessments and the relevant data are still outstanding (to be done by the NNR),

statements that there is no fatal flaws are incorrect and premature.

Before you can apply for environmental authorisation, therefore, we further suggest that you:

1. Decide on the nuclear technology that will be utilised;
2. Identify and focus on one site for Nuclear-1;
3. Examine the socio-economic impacts in relation to the negative impacts on established biodiversity, agriculture and eco-tourism infrastructure and investments
4. Complete the Site Safety Report using the correct data;
5. Redo the specialist reports with regard to the negative radiological impacts on marine life, agricultural products and human health, including the ingestion of radioactive particles via the food chain;
6. Examine the negative, cumulative, long-term impacts from the production of high-level nuclear waste (spent fuel)
7. Assess the cumulative impact of the power station plus the transmission lines at that specific location;
8. Assess the full impact from a worst-case scenario accident according to the International Atomic Energy Agency's INES-7 scale.

Only after this has been completed will the NNR be able to do the necessary assessments which will involve, in terms of the law, a public participation process.
TO BE COMPLETED

Proposals for amendments in the EIR.

At the Bredasdorp meeting of 25 March 2010 we were given the assurance that our comments on the Draft EIR will not merely be included into the "Issues and Response Report" but that real attention will be given to suggestions to change the wording of the report. We appreciate this assurance and in that spirit we wish to suggest the following amendments:

[This would require further, detailed study of the Executive Summary in the first instance, but I believe that far, deeper flaws exist in the Specialist Reports themselves. These can only be tackled properly if substantive sums are made available for equally specialised Peer reviews by non-aligned, fully independent and highly respected scientists. My own, amateur assessment of the air-quality report has been peer-reviewed by Professor Richard Kapp of Baltimore and Dr Helen Caldicott of Australia, but I would still defer to someone with an established track record in the field. Since the Thyspunt Alliance is preparing for a legal challenge, however, I would probably defer such a detailed critique until such time as it becomes legally necessary to do so.]