

Our Ref: J27035



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Attention: St Francis Bay Residents' Association, on behalf of the Thyspunt Alliance

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. Bongzi Shinga of Acer (Africa) entitled "Appendix 3, DEIR conformity with DEA letter to Arcus Gibb, 19/11/08" refers.

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

**Your Comment (1)**

	Requirement	Comment	Response
2.1	Project description inadequate	<ul style="list-style-type: none"><li>• Still no specific technology</li><li>• Fundamental material information</li></ul>	The consistent dataset included in Appendix C of the Draft EIR contained a comprehensive set of criteria to which the proposed nuclear power station must comply. This is based on a conservative envelope of criteria, taking into account examples of commercially available Generation III nuclear power stations. Any power station not complying with these criteria would fall outside the scope of what has been assessed and would, by implication, not be able to be authorized without re-assessing its environmental impacts.
2.2	Lay-out plan of footprint & all infrastructure included in EIR	Envelope only	The approximate location of the footprint will be indicated by the least sensitive areas. The exact layout can only be completed once the technology is chosen and the concept design is complete. To ensure that the environment is not impacted and that the recommendations of the specialists is considered during this phase further engagement with the specialists will take place.



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	Requirement	Comment	Response
			the final layout will have to be approved by the DEA through the EMP process.
2.3	Emergency Planning	NNR when info supplied. Illegitimate exclusion from EIA.	As indicated in the Draft EIR, RSA legislation makes the NNR licensing process separate from the EIA process. Issues such as emergency planning for nuclear power stations falls within the ambit of the NNR licensing process. However, the draft emergency planning document has been included in the Draft EIR for information purposes.
2.11	Long-term storage of HLW must be addressed	Project description 3.1.7.3 Awaiting DME legislation Inadequate response	The current controlled practice of storage of HLW at the power station in wet storage is also proposed for the Nuclear-1 project. This storage occurs under safe conditions, and the risk of release of contamination to the environment is safely controlled. In addition, the management of radioactive waste will be done in accordance with the Radioactive Waste Management Policy and Strategy, which mandates the National Radioactive Waste Management Agency (NRWMA) for the management of radioactive waste disposal on a national basis
2.13	Evacuation plan details to be communicated to public	Not addressed Unacceptable	The emergency evacuation plan falls within the ambit on the NNR licensing process. This process, subject to NNR board consideration, and includes the opportunity for public participation.
2.17	Site alternatives	Limited to five Non-conformity with NEMA No discussion of implications of changes	The site alternatives in this EIA have been formally accepted by the Department of Environment Affairs in their approval of the Final Scoping Report and their approval of the Plan of Study for EIA.
2.21	All radiological issues raised but not comprehensively addressed to be referred to NNR	No. Delegated to NNR When will specific technology be known?	The responsibility for assessing radiological aspects of the proposed power station as per legislation lies with the NNR as the competent authority in terms of the National Nuclear Regulator Act. The NNR and the DEA have concluded a legally binding co-operative agreement with respect to the assessment of radiological issues within EIAs (Appendix B4 of the Draft EIR).  Please refer to the response to 2.1 above with regards to the specific technology. The specific technology will be selected as part of the procurement process lead by Government.
2.22	Methodology for assessment of impacts vague.	See contradictions & limitations of impact criteria (Appendix 2)	The impact criteria have been revised and simplified in the Revised Draft EIR based on input from the public and the independent peer

	<b>Requirement</b>	<b>Comment</b>	<b>Response</b>
	Impacts must be studied, assessed & included in EIR		reviewers.
2.23	Sensitivity mapping of sites, to include terrain and location of other infrastructure in least sensitive areas	Not possible without specific technology	Please refer to the response to 2.1 above with regards to the specific technology.
2.25	Radiology impacts to be qualitative but not quantitative	"Meaning Strontium 90, Caesium 131, etc? No discussion identified"	Discussion on the most important radionuclides is included in the air quality report (Appendix E10 of the Draft EIR) and the marine ecology report (Appendix E15 of the Draft EIR). This is also further assessed in the Human health impact study
2.26	Air quality Baseline monitoring Actual Koeberg emissions Cumulative impact	No	The air quality report in the Revised Draft EIR includes full reference to the Koeberg air quality monitoring results.
2.28	Evacuation	Based on 5 & 16 km EPZs Deferred to NNR Dependent on decision re Generation 11 or 111	As indicated in the public meeting for the Draft EIR, the proposed EPZs for Nuclear-1 are based on the European Utilities Requirements (EUR) guidelines and are assumed to be 800 m and 3 km.
2.32	Oceanography Possible storm damage to intake pipes	Totally ignored. Major potential problem See appendix 7	Intake pipes will be designed to withstand storm damage.
2.37	Economic study Cost implications in relation to other generation activities	Briefly	The revised Economic Impact Assessment, included in the Revised Draft EIR, includes a brief assessment of the relative financial costs of other generation options. However, this is given for information purposes, since the intention of this project-specific EIA process is not to assess different generation options. This EIA is specifically for nuclear power station providing base load. Please refer to a more detailed assessment in the Draft Integrated Resource Plan recently released for public comment by the Department of Energy.
2.44	Input by I & APs Clarity as to how used to define PoS Ease of tracking how affected report	Not evident Ditto	Inputs by I&APs are reflected in the Issues and Response Reports, in which there is reference to the relevant section of the Scoping Report and the EIRs to indicate where the issues are addressed.  Since the decision has been taken to issue a Revised Draft EIR, all substantive changes in the EIR and in the specialist reports will be highlighted.

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2.45	Radiology issues addressed by Eskom Specialist to review	Air Quality by E Nortje. No CV Human Health Risk by HHRA No CV Do these conform with this requirement?	The air quality report was prepared by Dr. Lucian Burger of Airshed Planning Professionals. The Human Health Risk Assessment was prepared by Dr Willie van Niekerk. Their CVs were included in the Draft EIR.
2.50	Issues from pp - Waste management - safety & emergency measures	Not adequately addressed  Not adequately addressed	A specialist assessment of nuclear waste management is included in the Revised Draft EIR.  As indicated in the response to item 2.1.3 above, safety and emergency planning are within the domain of the NNR.
3.	Content of PoS for ToR		Your comment is not understood.
3.1	All issues raised & not screened out to be addressed	Not evident	All issues are addressed in the Issues and Response Reports. Each specialist has taken account of the issues raised and where relevant considered and addressed them.
3.2	Refinement of specialist baseline studies	Only approved after reports prepared	Specialist studies often get commissioned long before the approval of the Plan of Study for EIA in order to allow sufficient background to be obtained over a number of seasons. This is not unique to this project and is common practice in EIA processes in order to reduce delays on EIA programme.
3.3	List of key impacts & how addressed	Where? & How?	A comprehensive explanation of the basis for assessment of impacts is provided in Chapter 7 of the EIR. The list of impacts is included in Chapter 9 of the EIR.
3.4	NNR does not address models	When will technology be decided? Radiological inextricably intertwined with environmental May radically affect outcome	The preferred vendor for the power station has not yet been identified and is dependent on the process being followed by Eskom with government.. The specific technology will be selected as part of the procurement process. As indicated above, provided that the technology complies with the envelope of criteria specified in the Consistent Dataset in Appendix C of the EIR, and with all EIR recommendations, then the plant execution may proceed.
3.5	Potential radionuclide emissions during accidents Time frames and significance of risk Clarification on docs, methodologies & models &	Not identified	The assessment of possible radiological impacts during accidents falls within the ambit of the NNR licensing process with the requirements contained in Government Notice R388 of 28 April 2006, "Safety Standards and Regulatory Practices".  The air quality specialist report (Appendix E10 of the Draft EIR) assessed the potential air pollution

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	assessment criteria		<p>impacts associated with the construction, operation and decommission of the proposed nuclear power station on the surrounding environment..</p> <p>A comprehensive explanation of the impact assessment criteria, including intensity, duration, scale, impact on irreplaceable resources, significance and probability are provided in Chapter 7 of the Draft EIR.</p>

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




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Jaana-Maria Ball  
Nuclear-1 EIA Manager