

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

EIA: 12/12/20/944

**FOR THE PROPOSED ESKOM NUCLEAR POWER STATION AND
ASSOCIATED INFRASTRUCTURE**

RECORD OF PUBLIC OPEN DAYS

AREA	DATE	VENUE	TIME
Northern Cape, Springbok	12 February 2008	Springbok Motel	14:30 – 18:30
Northern Cape, Garies	13 February 2008	Garies Town Hall	15:00 – 19:00
Northern Cape, Hondeklipbaai	14 February 2008	Hondeklipbaai Community Hall	15:30 – 19:30

OVERVIEW OF PUBLIC OPEN DAYS

The main purpose of the Public Open Days was to reflect back to the public in terms of the following:

- Have we captured issues raised by the public correctly during Scoping?
- Have we understood their issues?
- Have we properly contextualised and interpreted their issues?
- Are the proposed specialist studies eventually going to provide answers to the questions raised by the public?

FORMAT OF PUBLIC OPEN DAYS

The information displayed at the Public Open Days held in the Northern, Western and Eastern Cape Provinces was similar in nature.

Supporting documentation prepared by ARCUS GIBB included the following booklets:

- Summary of Draft Scoping Report (English and Afrikaans versions).
- Poster booklet (English and Afrikaans versions).
- Draft Terms of Reference for Specialist Studies.
- Receiving environment.

Additional information prepared by Eskom Holdings Limited included the following booklets:

- Nuclear energy - Unleashing Africa's Energy.

The content of the mobile display used at the various Public Open Days can be downloaded from the Eskom's website www.eskom.co.za/eia under Nuclear 1 link or requested from the Public Participation Office, ACER (Africa) at nuclear1@acerafrica.co.za or 086 010 4958.

The Independent EIA Project Team members and Eskom staff were available at various Public Open Days to address questions, comments and concerns that were raised by Interested and Affected Parties.

This document presents a summary record of issues and questions raised at the various Public Open Days. ACER has tried to capture and reflect as accurately as possible all issues raised. Should you wish to edit your comments, please advise ACER within two weeks of receiving this summary document.

This record has been:

- Compiled by:** ACER (Africa) Environmental Management Consultants
Reviewed by: ARCUS GIBB (Pty) Ltd
Accepted by: Eskom Holdings Limited, Generation and Enterprises Divisions

RECORD OF ISSUES RAISED AND DISCUSSED

No	Name & Organisation	Issue/Comment/Concern	Response	
1	Mr Solly Vuyeka Northern Cape Dept of Tourism, Environment and Conservation	Has there been sufficient information at this stage that led to the Scoping out of Brazil and Schulpfontein sites?	<p>Yes, in terms of the National Environmental Management Act (NEMA) EIA regulations, a site has to be feasible for it to be considered as an alternative.</p> <p>If the proposed Nuclear 1 power station is constructed, it is necessary to evacuate power to the major load centres (i.e. the areas where the electricity would be used), therefore requiring the construction of new transmission power lines and associated infrastructure. At this stage, the demand for electricity in the Northern Cape is relatively small compared to the size of the proposed power station, and hence the electricity generated would need to be evacuated to the major demand centres in the Western Cape, Eastern Cape and Gauteng.</p> <p>The Eskom Transmission Planning Division has indicated that these two sites cannot be integrated into the Eskom Power Grid in time to meet the demand for power - there is insufficient time for Eskom to have the environmental impact assessment completed, procure servitudes and build the power lines in two new corridors over more than 1,500 km to evacuate the power from either of these two sites to the major load centres and still meet the required date of operation of the proposed Nuclear 1 power station. Both these two sites are thus considered to be non-viable alternatives specifically for the proposed Nuclear 1 power station (although they are alternatives for future power stations). It has thus been recommended to exclude these two sites from further investigation in this specific EIA.</p>	Springbok

No	Name & Organisation	Issue/Comment/Concern	Response	Garies
2	Mr Helmut Kohrs Kamieskroon Hotel	<p>The inland area is very dependant on the mist that comes in from the cold sea currents, as the average rainfall of the Garies area is only 285mm per year. He is deeply concerned about the long-term impact that the nuclear power station will have on the temperature of the sea and the mist resulting from the coldwater currents.</p> <p>He would also like to understand if any long-term studies would be undertaken as part of the Nuclear 1 EIA to better understand the impacts of the above.</p>	<p>Both an independent and experienced Oceanographer and a Climatologist are part of the EIA specialist team. ARCUS GIBB will raise your concerns with them and ensure that your concerns are addressed in their specialist reports. Other experienced specialists will also review the specialist studies. The findings and recommendations of the specialist studies will be made available for public review in the Draft Environmental Impact Report (DEIR).</p> <p>It is proposed that this EIA is to be completed during 2009. Specialists have been appointed to undertake their independent studies. These specialists will use their expert knowledge and expertise to make recommendations as to what the potential impacts on the environment are likely to be. This includes both long- and short-term impacts, however long-term studies will not be something that will be addressed by this EIA.</p> <p>It is not unusual for further long-term studies and monitoring campaigns to be undertaken after the EIA. The initiation of such studies will be dependent, for example on the specialist recommendations and conditions in the environmental authorisation.</p>	

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3	Mr Helmut Kohrs Kamieskroon Hotel	What is the possibility of installing power generation systems, e.g. solar energy at the various farmhouses in the Garies area?	<p>Eskom's primary focus is on generation technology that produces power in the megawatt range, and then distributing that electricity to the different users through the transmission and distribution networks across South Africa.</p> <p>Eskom is continually researching and investigating the potential to implement various alternative generating technologies. There are a number of issues that need to be taken care of when looking at the options for electricity generation; these include cost, lead time for construction, environmental impact, and operating characteristics relative to peaking and base load power generation.</p> <p>Where appropriate Eskom will partner with other organisations. Regarding solar energy, Eskom is investigating a 100 MW concentrated solar power (CSP) station in the Northern Cape (Upington area).</p>	Garies
4	Ms Annelize Le Roux Succulent Karoo Knowledge Centre	<p>Climatology Studies:</p> <ul style="list-style-type: none"> <input type="checkbox"/> The impact of the proposed Nuclear Power Station on sea current. <input type="checkbox"/> The 3 sites will affect the cold Benguela current. <input type="checkbox"/> She is concerned about the mist that would disappear with the heating up of water. If you heat up the cold current, this will potentially have a negative impact on sea life. <input type="checkbox"/> Cold current provides a lot of moisture for the vegetation in the area around the nuclear sites. <input type="checkbox"/> What would the long-term impacts of heated water be on the climate? <p>Comment on Draft Scoping Report:</p> <ul style="list-style-type: none"> <input type="checkbox"/> It appears that the Specialists have only considered what they know at this stage. It is going to be important that modelling is also done as part of this EIA. 	<p>Both an Oceanographer and a Climatologist are part of the EIA specialist team. ARCUS GIBB will raise your concerns with them and ensure that your concerns are addressed in their specialist reports.</p> <p>All studies completed to date are part of the Scoping Phase of the EIA and are detailed in the Scoping Report. They therefore serve to identify potential issues for further investigation. All detailed studies, including modelling, where appropriate, will be undertaken as part of the Impact Assessment Phase.</p>	Garies

No	Name & Organisation	Issue/Comment/Concern	Response	
		<p>Transmission Lines:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Is Eskom going to upgrade the existing transmission lines for Nuclear 1? <input type="checkbox"/> Is Eskom planning to replace the old/existing transmission lines? <input type="checkbox"/> What is the separation distance between transmission lines running parallel to each other? In certain mountainous areas within the study area it may well prove difficult to accommodate transmission lines running in parallel. <input type="checkbox"/> How close can a transmission line be located to a regional road? 	<p>Where existing infrastructure exists and where it is required to evacuate the power from the site of the proposed Nuclear 1 power station, this infrastructure will be upgraded if possible. However new Transmission lines and infrastructure will be required. The potential environmental impacts associated with such upgrades and new lines will be assessed as part of the Transmission line EIA.</p> <p>Transmission lines in the same corridor should not be rendered inoperable from a single event; for example if a tower from one line should fall, it must not affect the operation of the lines and towers running parallel to it. The height of the Transmission line tower dictates the minimum distance between lines – hence the distance between two 765 kV lines is approximately 80 m from the centre of each power line, while the distance between two 400 kV lines is approximately 40 m.</p> <p>This is negotiated on a case-by-case basis, but in general a similar approach to the distance between transmission lines is taken.</p>	
5	Ms Annelize Le Roux Succulent Karoo Knowledge Centre	<p>Will Eskom upgrade the existing Koeberg Nuclear Power Station?</p> <p>She is concerned that the area around the Koeberg Nuclear Power Station is beautiful and has a conservation status.</p>	<p>The Duynefontein site is under investigation in this EIA for the proposed Nuclear 1 power station, which would be a new power station located adjacent to the existing Koeberg Nuclear Power Station.</p> <p>Comment noted. Eskom proclaimed the area around Koeberg as a nature reserve and has been very successful in improving and maintaining its condition. The nature reserve is open to the general public.</p>	Garies

No	Name & Organisation	Issue/Comment/Concern	Response	Garies
6	Ms Annelize Le Roux Succulent Karoo Knowledge Centre	Why have the Brazil and Schulpfontein sites been scoped out?	<p>If the proposed Nuclear 1 power station is constructed, it is necessary to evacuate power to the major load centres (i.e. the areas where the electricity would be used), therefore requiring the construction of new transmission power lines and associated infrastructure. At this stage, the demand for electricity in the Northern Cape is relatively small compared to the size of the proposed power station, and hence the electricity generated would need to be evacuated to the major demand centres in the Western Cape, Eastern Cape and Gauteng.</p> <p>The Eskom Transmission Planning Division has indicated that these two sites cannot be integrated into the Eskom Power Grid in time to meet the demand for power - there is insufficient time for Eskom to have the environmental impact assessment completed, procure servitudes and build the power lines in two new corridors over more than 1,500 km to evacuate the power from either of these two sites to the major load centres and still meet the required date of operation of the proposed Nuclear 1 power station. Both these two sites are thus considered to be non-viable alternatives specifically for the proposed Nuclear 1 power station (although they are alternatives for future power stations). It has thus been recommended to exclude these two sites from further investigation in this specific EIA.</p>	

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7	Ms Annelize Le Roux Succulent Karoo Knowledge Centre	<p>If you build a transmission power line, how close would it be to the Kudu line?</p> <p>Is there an opportunity for Eskom to share the cost with the Kudu line? If one considers the sensitivity of the environment, the cost would be much higher if there are many transmission lines. If Eskom plans on using the Kudu power at some stage, is Eskom looking at integrating or co-ordinating the two lines?</p> <p>If Eskom transmission lines are to be built, it would be better to go further inland in order to minimise impacts on vegetation sensitivities.</p>	<p>The Kudu line is subject to its own EIA, which will come out with its own findings. It is not correct to pre-empt what the findings would be of the investigations. However, where possible, existing or planned transmission infrastructure would be incorporated into the plans for the transmission systems required by the proposed Nuclear 1 power station. This would also be considered in the associated EIAs for the transmission systems. This would include the Kudu line if a power station were to be constructed on either of the two sites.</p>	Garles
8	Ms Annelize Le Roux Succulent Karoo Knowledge Centre	<p>People are unhappy because they are not getting any benefits from the lines in the Northern Cape area. Although this is a Distribution issue, Transmission needs to take consideration of this issue.</p>	<p>Comment noted.</p>	Garles
9	Mr Dudley Wessels NM Restoration cc	<p>If Nuclear 1 is not being built in the Northern Cape sites, i.e. Schulpfontein and Brazil, what sort of timeframe is Eskom considering for the next Nuclear power station?</p>	<p>Assuming a 4 % growth in the demand for electricity (equivalent to a growth of 6 % in the economy), South Africa requires construction of an additional 40,000 MW of electricity generating capacity by 2025. The Eskom Board has requested the investigation of whether 50% of the new capacity could be nuclear power stations.</p> <p>The current project for which this EIA is being undertaken is for a proposed nuclear power station of up to 4,000 MW, with construction estimated to commence in 2010 if all the required authorisations, including the Eskom Board approval of the investment, are received. To meet the generating capacity requirements of 2025, it is thus likely that the activities required for subsequent power stations will commence within the next 12 – 24 months.</p>	Garles

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10	A Resident Hondekliipbaai Community	Are there any benefits for the communities living near a Nuclear Power Station?	All potential benefits to communities will be assessed as part of the Impact Assessment phase, but would likely include improved infrastructure services, direct economic investment, employment and service provider opportunities.	Hondekliipbaai
11	Mr Z Mkonto Hondekliipbaai Community	Is Brazil and Schulpfontein still going to be used for a Nuclear Power Station in the future?	Possibly, yes. Although the recommendation of the Scoping Report is not to investigate these two sites further in this specific EIA – because the use of either of these two sites does not meet the requirements of the proposed Nuclear 1 power station for which the EIA is being undertaken - they are still considered feasible sites for the development of a future nuclear power station.	Hondekliipbaai
12	Mr Gillroy Muller Hondekliipbaai Community	Will you still transport waste to Vaalputs? For how long is this waste going to be transported to Vaalputs? The public is still concerned about Vaalputs, particularly issues relating to their safety.	In terms of the National Radioactive Waste Management Policy and Strategy for South Africa, Vaalputs is the designated national repository for low and intermediate level radioactive waste and hence will continue to be used while it has sufficient capacity. Currently less than 5% of Vaalputs is being used, so there is sufficient capacity to dispose of radioactive waste from more nuclear power stations over their lifetimes. Comment noted.	Hondekliipbaai
13	Ms Lisma Klaase Hondekliipbaai Community	Namaqualand people are extremely concerned about nuclear waste. It is important that Eskom comes back to the area and have a session with the communities around nuclear energy. The public needs to know facts about nuclear power.	Ms Carin de Villiers, Eskom Generation noted this concern and undertook to get in touch with Ms Lisma Klaase in order to communicate details for the Eskom Nuclear Awareness Programme. (This has subsequently occurred).	Hondekliipbaai