

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

EIA: 12/12/20/944

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

DRAFT SCOPING REPORT

**RECORD OF KEY STAKEHOLDER FEEDBACK MEETING HELD AT
SPRINGBOK MOTEL**

12 FEBRUARY 2008

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1. ATTENDANCE

1.1 Attendance - Interested and Affected Parties

- Local Government.
- Provincial Government.
- Environmental Authorities.
- Conservation Interest Groups.
- Environmental Interest Groups.
- Industry.
- Non-Governmental Organisations.

1.2 Attendance – Eskom Holdings Limited

Name	Eskom Division	Position/Role
Mr Tony Stott	Enterprises Division Nuclear Programmes	Senior Manager (Nuclear Stakeholder Management)
Mr Tyrone Singleton	Generation Division Environmental Management	Chief Environmentalist
Mr Mervin Theron	Enterprises Division Project Development	Chief Advisor/Project Manager
Mr Gert Greeff	Generation Division Koeberg Nuclear Power Station	Manager, Eskom Nuclear Sites
Ms Carin de Villiers	Generation Division Koeberg Nuclear Power Station	Senior Government and Media Liaison Practitioner
Mr Kevin Leask	Transmission Division System Operations and Planning (Grid Planning)	Chief Engineer
Mr Itumeleng Noeng	Transmission Division Land and Rights	Senior Environmental Advisor

1.3 Attendance – Independent Environmental Consulting Team

Name	Organisation	Role in the project
Ms Jaana-Maria Ball	ARCUS GIBB (Pty) Ltd	EIA Project Manager
Mr Tim Liversage	ARCUS GIBB (Pty) Ltd	Assistant Project Manager
Ms B Shinga	ACER	Public Participation Team Leader
Ms K Bowler	Karin Bowler & Associates	Independent Facilitator
Ms A Schwarz	ACER	Public Participation Assistant
Mr J Combrinck	ACER	Public Participation Assistant

1.4 Apologies

The following apologies were received by ACER (Africa):

Company	Name
De Beers Namaqualand Mines	Mr Donly Dave Cloete
Wildlife and Environment Society of South Africa	Mr Eric Herrman
Pearly Beach Conservancy	Ms Elrina Versfeld
Endangered Wildlife Trust	Mr Bradley Gibbons
WC Dept of Environmental Affairs, Development and Planning	Mr Percy Langa
Eskom	Ms Jenny Holthuysen
Industrial and Petrochemical Consultants	Dr Philip Lloyd
Dept of Minerals & Energy	Ms Lerato Sedumedi
Bergrivier Municipality	Mr Samuel Claasen
Woodlands Dairy	Mr Coenie Landman
Overstrand Conservation Foundation	Mr Rob Fryer
Kogelberg Branch, Botanical Society of SA	Prof Nancy van Schaik
Overstrand Municipality	Mr Louis van Heerden
Overberg Municipality	Mr Francois Kotze
Swartland Municipality	Mr Alwyn Burger

2. WELCOME, INTRODUCTIONS AND OBJECTIVES OF MEETINGS

2.1 Welcome and Introductions

The facilitator, Ms Karin Bowler, welcomed all those present and thanked them for their participation in the review process of the Draft Scoping Report for the proposed Eskom Nuclear Power Station, which has been made available for public review. She then introduced the EIA Project Team members and the Eskom personnel.

2.2 Objectives of the meetings

Ms Bowler stated that this Key Stakeholder Feedback Meeting is intended to provide stakeholders with an opportunity to discuss the findings as they are currently presented in the Draft Scoping Report.

The primary objectives of the meeting were to present and discuss the following:

- Findings as outlined in the Draft Scoping Report.
- Project alternatives to be evaluated in the Impact Assessment Phase.
- Proposed Specialist Studies and their draft Terms of Reference.
- Plan of Study for Environmental Impact Assessment.
- Ongoing Public Participation Process.
- Process for the collection of issues and concerns.

3. NUCLEAR 1 PROJECT UPDATE - PRESENTATION

Mr Tony Stott, Senior Manager, Nuclear Stakeholder Management, Enterprises Division, Eskom, presented an update on the Nuclear 1 project. The following sections were covered in the presentation:

- Overview of the proposed Nuclear Power Station.
- Potential suppliers.
- Commercial process.
- Transmission line integration studies.
- Regulatory processes.
- Schedule for Nuclear 1 (indicative timeframes).

A summary of the information presented is provided in Appendix 2. The issues raised and discussed following Mr Stott's presentation are summarised in a table presented in Appendix 1.

4. FINDINGS OF THE SCOPING PHASE - PRESENTATION

Ms Jaana-Maria Ball, EIA Project Manager and Mr Tim Liversage, EIA Assistant Project Manager, ARCUS GIBB (Pty) Ltd, presented the findings of Scoping as outlined in the Draft Scoping Report. The following sections were covered in the presentation:

- Project description.
- Project motivation.
- Project background.
- EIA process.
- Issues identified in the Scoping Phase.
- Scoping phase findings.
- Impact Assessment – Specialist Studies.
- Plan of Study for EIA (Draft Specialist Terms of Reference).
- Public participation process.
- Way forward.

An outline of the information presented is provided in Appendix 2. The issues raised and discussed following ARCUS GIBBs presentation are summarised in a table presented in Appendix 1.

5. TRANSMISSION INTEGRATION - PRESENTATION

Mr Kevin Leask, Eskom Transmission - Systems Operations and Planning, presented an overview of the studies on the integration of the proposed power station into the transmission system at each of the alternative sites. His presentation included the following sections:

- Transmission requirements for integrating a large power station.
- Nuclear 1 requirements.
- Transmission power line corridors and sites.
- Nuclear 1 transmission requirements for:
 - Brazil and Schulpfontein Sites.
 - Duynefontein Site.
 - Bantamsklip Site.
 - Thyspunt Site.

- Status of Brazil and Schulpfontein sites.
- Transmission Line EIA process.

An outline of the information presented is provided in Appendix 2. The issues raised and discussed following Mr Leask's presentation are summarised in a table presented in Appendix 1.

6. ISSUES AND COMMENTS RAISED AND DISCUSSED

The table contained in Appendix 1: "Record of Issues Raised and Discussed" details the issues, comments and concerns, which were raised and discussed at the Springbok Key Stakeholder Feedback Meeting.

Please note:

- ACER has tried to capture and reflect as accurately as possible all issues raised at various public meetings.
- Should you wish to edit your comments, please advise ACER within two weeks of receiving these minutes.
- In some cases a name was not captured during the stakeholder meetings, this in no way diminishes the value of the issue or concern raised.
- Should you identify your input and would like your name to be registered next to it, please advise ACER.

7. WAY FORWARD AND CLOSING REMARKS

7.1 Facilitators concluding remarks

In closing, the Facilitator encouraged stakeholders to review the Draft Scoping Report and to submit comments. She further reminded stakeholders of their obligations in an EIA, which include the review of various draft documents.

She also stated that the issues raised had been captured and will be included in the minutes, which will be made available to stakeholders. She also reminded all stakeholders that comments on the Draft Scoping report should be submitted to ACER using the various means available:

Tel: 086 010 4958

Fax: 035 340 2232

Email: nuclear1@acerafrica.co.za

Postal address: PO Box 503, Mtunzini, 3867

Website: www.eskom.co.za/eia on the "Nuclear 1" link

The Facilitator thanked all Key Stakeholders and the Study Team for their input and participation in the EIA and closed the meeting.

APPENDIX 1**Record of Issues Raised and Discussed at the Springbok Motel**

No	NAME & ORGANISATION	ISSUE/COMMENT/CONCERN	RESPONSE
1	Mr Andy Pienaar Namaqualand Action Group for Environmental Protection	<p>He asked, on behalf of the Komaggas Community, if Eskom and the consultants would note that the Komaggas Community want to be involved as Key Stakeholders in planning activities relating to the transmission power line integration.</p> <p>The Komaggas Community should be notified of the transmission lines integration EIA so that they would be able to submit comments.</p>	Comment noted and passed onto Eskom Transmission.
2	Mr Andy Pienaar Namaqualand Action Group for Environmental Protection	He is concerned about the insufficient data in the executive summary of the Draft Scoping Report, e.g. Seismology, Vertebrates, etc (although this would not be applicable to Brazil and Schulpfontein sites, as they have been scoped out).	<p>Mr Pienaar's comments were noted. It was however indicated that the executive summary report was in fact only a summary of the key issues and that more information is contained in the different chapters of the Draft Scoping Report. The terms of reference for the specialist studies should also be taken into consideration.</p> <p>Should Mr Pienaar continue to feel that an issue was inadequately addressed this should be brought to the attention of the Arcus Gibb, who will subsequently ensure that it was addressed in the forthcoming detailed specialists studies.</p>

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3	Mr Andy Pienaar Namaqualand Action Group for Environmental Protection	<p>He commented on the phrase under the Tourism heading “A <i>substantial nuclear incident is unlikely to permanently diminish the Namaqualand tourism asset as a whole assuming that no major tourism developments are in the planning process at present...</i>”(Draft Scoping Report, p. 8).</p> <p>There are a number of tourism initiatives in this area, some are still in the planning phase particularly for Schulpfontein and Brazil. He also commented that this phrase is “inappropriate” and would destroy their tourism plans if made public.</p> <p>Mr Gert Klopper supported Mr Andy Pienaar’s concern and mentioned that the coast has great tourism potential for the area. In general, development opportunities are vast in the coastal region.</p> <p>The assumptions given are not correct and he would like this information to be updated. Although some of these plans have not been included in the Integrated Development Plans for the various Municipalities, initiatives are in the pipeline.</p> <p>Should specialists want to get more information on these opportunities, they are welcome to contact Messrs Gert Klopper and Andy Pienaar.</p>	<p>Comment noted. Ms Ball indicated that the Scoping Report is still a <u>Draft</u> for public comment. Changes will be made to the Final Scoping Report.</p> <p>She emphasised that the Draft Scoping Report has been made available for public comment and review. All comments received from the public and key stakeholders will be used to produce the Final Scoping Report.</p> <p>ARCUS GIBB confirmed that they would get the relevant specialist to rephrase the section under tourism.</p>
4	Mr Samuel Cloete Qatar Komaggas Advice Office	Komaggas is a previously disadvantaged community and he requests that meetings in this area be conducted in Afrikaans.	Comment noted. Ms Ball indicated that documentation is available in Afrikaans. It was also noted that the facilitator is bilingual and persons are welcome to ask all questions in Afrikaans and answers will be provided in Afrikaans or translated if needed.
5	Mr Gert Klopper De Beers Consolidated Mines	He is concerned about the transmission lines going over the Schulpfontein farm. The Kudu power line from Namibia (Kudu gas fields) to Cape Town is using the same route and there are a number of problems around the EIA. He enquired if it is possible for Eskom to	Mr Kevin Leask indicated that the transmission lines required for the proposed Nuclear 1 power station would be subject to full technical and environmental investigations

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		<p>combine these power lines so as to minimise negative impacts on the receiving environment? If one were to consider the long term plans of the Kudu Power Line there is a potential to integrate the transmission lines coming out of Brazil and Schulpfontein sites with the Kudu Project. Will it still be necessary in the long term to have the new transmission lines?</p> <p>A Record of Decision for the Kudu power line has been issued by the Environmental Authorities. He advised Eskom that the Record of Decision for the Kudu power lines authorised a route over the Schulpfontein farm. There is, however, a concern around the Public Participation Process conducted for the Kudu Power Lines. The public did not have an opportunity to participate in this EIA and, therefore, there is potential to create problems for the corridor routing or alignment of transmission power lines. Since there are already a lot of issues around the Kudu Power Line, would it not be better for Eskom to deal with the possibilities of integration at this stage? There are going to be problems because Key Stakeholders have not been part of the process. The integration of the transmission lines has potential to create problems. His advice to Eskom would be to take care of integration that may be required at this early stage.</p> <p>He also wanted to establish if it is in Eskom's interest and/or long term plans to build or utilise the low voltage power lines and the possibility of using 400kV lines.</p>	<p>as part of an independent EIA. It is not possible to pre-empt what the findings would be of such investigations.</p> <p>All of these issues relating to the Kudu Line will be taken into account in future Transmission line EIA's</p> <p>Comment noted with thanks. Integration of transmission lines is always a consideration.</p> <p>In terms of Eskom's long term planning both 400kV and 765kV lines are been investigated. Eskom will only be in a position to indicate the best transmission integration options following the completion of the relevant studies.</p>

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6	Mr Andy Pienaar Namaqualand Action Group for Environmental Protection	<p>He is concerned that the community most affected by the nuclear waste has not really been notified of the meetings.</p> <p>He further stated that the economic growth of the area is dependant on agriculture and minerals. He is concerned that the expansion of the Vaalputs site will restrict economic growth and that the community will be deprived or impoverished.</p> <p>He also questioned why nuclear waste that is generated somewhere else is being sent to their communities. He also wants to know if studies have been done to determine whether the Vaalputs Site would be able to cope with the additional waste that will be generated and if nuclear waste would be controlled responsibly. At some stage these issues need to be integrated and understood.</p> <p>He believes that the proponent should be responsible for waste disposal.</p>	<p>Ms Ball advised Mr Pienaar that all registered Interested and Affected Parties (I&APs) have been notified of Draft Scoping Report review meetings. In addition, Public Open Days are also scheduled at Garies and Hondeklipbaai. Communities can submit their comments using different methods, including writing, attending meetings and open days, and via telephone.</p> <p>In terms of nuclear waste, ARCUS GIBB's terms of reference includes transportation of waste only, i.e. excludes waste disposal and waste disposal sites.</p> <p>Mr Stott confirmed that the National Nuclear Regulator (NNR) and the Department of Minerals and Energy (DME) control nuclear waste. Vaalputs is the designated national radioactive waste disposal site for South Africa, and is operated by Necsa under a licence issued by, and under the regulatory control of the NNR.</p> <p>Nuclear waste is sent for disposal at the Vaalputs National Radioactive Waste Disposal site, in accordance with Government Policy and under the regulatory control of the National Nuclear Regulator. Eskom does not have the mandate to regulate nuclear waste and disposal at Vaalputs.</p>

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		<p>Mr Pienaar requested that records of the meeting should reflect that he was not satisfied with the response provided at the Key Stakeholder Meeting regarding nuclear waste.</p>	<p>In terms of the Nuclear Energy Act, the Minister of Minerals and Energy has control over the handling, storage and management of radioactive waste. The NNR is responsible for the licensing, transporting to and disposal of waste at Vaalputs. When the NNR is considering the licence application for a proposed nuclear installation such as a power station, they will also look at the transportation of waste. Hence different authorities address different aspects of the waste issue.</p> <p>Current indications are that Vaalputs will have sufficient capacity for the potential development of the proposed 20.000 MW of nuclear power</p> <p>Noted and recorded.</p>
7	Mr Gert Klopper De Beers Consolidated Mines	He requested that the meaning of the phrase ' <i>under conserved</i> ' (<i>refer to page 6 of the EIA Scoping Report</i>) be explained. He is concerned that this phrase is inappropriate, particularly for the Schulpfontein site.	ARCUS GIBB stated that they would get the relevant specialist to provide a footnote explaining the exact meaning of this term in this context and this will be provided in the Final Scoping Report (FSR).
8	Mr Gert Klopper De Beers Consolidated Mines	He reminded the EIA study team of the fact that the Schulpfontein farm is under conservation.	Comment noted.
9	Mr Gert Klopper De Beers Consolidated Mines	Since five nuclear sites have been identified, does this imply that Nuclear Power Stations will be built on all of them?	At this stage the Eskom Board has mandated negotiations with potential suppliers for the first of the proposed nuclear power stations, as part of the investigations of up to 20,000 MW of nuclear power. This EIA for Nuclear 1 forms part of the investigations.

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			<p>It is anticipated that once approval is obtained for the proposed Nuclear 1 power station, the required activities, for example, commercial and environmental, for the subsequent proposed power stations (Nuclear 2, Nuclear 3, etc) will commence.</p> <p>The EIA and nuclear licensing processes will determine the viability of each site currently under investigation. However, should all sites be found to be technically and environmentally feasible, all 5 sites may be used in the future.</p>
10	Mr Schalk Lubbe Nama Khoi Municipality	Many studies are being done by the mining industry to sink a shaft 1 km deep to bury waste. It is understood that this is aimed at reducing radioactive levels.	Comment noted.
11	Mr Andy Pienaar Namaqualand Action Group for Environmental Protection	He is concerned that a number of issues have been discussed before and are continuously being ignored. Groundwater might be contaminated if they sink a shaft 1 km deep. This area is greatly dependant on groundwater.	This comment has been noted and will be forwarded to the relevant authorities.
12	Mr Alexander Agenbacht Council for GeoScience	What are Eskom doing about the fact that the people will be estranged from the minerals of the land on the proposed site? Even though De Beers cannot mine this area economically, some people can mine privately. Is there someone investigating the economic potential of this land and is a geologist conducting the investigation?	Geologists are part of the EIA technical team. The economic potential of the land would be investigated during the Impact Assessment Phase.
13	Mr Andy Pienaar Namaqualand Action Group for Environmental Protection	Why have Schulpfontein and Brazil been taken out of the Study?	In terms of the NEMA EIA regulations a site has to be feasible for it to be considered as an alternative. 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

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			<p>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 in time to meet the required date for operation of the proposed Nuclear 1 power station. Both these two sites are thus considered to be non-viable alternatives specifically for this proposed 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>
14	Mr Willem Justine Cloete Richtersveld Municipality	It is not clear why the Brazil and Schulpfontein are not further recommended for detailed investigations. Also, if they are not being considered for Nuclear 1, why are you still investigating the transmission lines?	In terms of the NEMA EIA regulations a site has to be feasible for it to be considered as an alternative. 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

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			<p>new transmission power lines and associated infrastructure.</p> <p>Mr Leask explained that there is no significant local load for the Brazil and Schulpfontein sites, even including the export of electricity to Namibia. This will necessitate the establishment and construction of new power corridors to export power to other areas. As a result, the timing and activities to establish the necessary Power Corridors makes these Brazil and Schulpfontein sites unsuitable for the proposed Nuclear 1 power station.</p> <p>Both these two sites are thus considered to be non-viable alternatives specifically for this proposed 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> <p>However, this recommendation could change, as the Draft Scoping Report is available for discussion with the public. Importantly, the environmental authorities have not approved the report at this stage. So all recommendations are up for examination.</p>
15	Mr Anton Meyer De Beers Consolidated Mines	What is Eskom doing in terms of investigating power generation using renewable energy sources?	<p>Examples of the Eskom's investigations into renewable energy are the following:</p> <p>Wind energy: An EIA is currently in progress for a wind energy facility of 100 MW on the</p>

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			<p>West Coast of South Africa (near Vredendal). Wind energy is an important complement to other forms of electricity generation. Since the wind does not blow continuously, and, apart from pumped storage schemes (which use more electricity than what they produce), large scale storage of electricity is not yet possible, wind energy cannot be relied upon for either base load or peaking or emergency electricity generation.</p> <p>Solar energy: An EIA has been undertaken and an environmental impact report has been submitted to the Department of Environmental Affairs and Tourism for a research and demonstration project for a concentrated solar thermal plant of 100 MW near Upington. Mirrors reflect the sunlight onto a central point. The project aims to research and demonstrate the heating of a molten salt at the central point in an intermediate step before boiling water and creating steam to drive a turbine and generate electricity. In principle the molten salt would retain its heat and hence be able to boil water and create steam after the sun is no longer shining.</p> <p>Eskom is also conducting research into the feasibility of ocean current and wave energy.</p>
16	Mr Andy Pienaar Namaqualand Action Group for Environmental Protection	How can companies get involved in providing power, i.e. Independent Power Producers (IPPs)?	The National Energy Regulator of South Africa (NERSA) licenses the generation of electricity. There is procedure to be followed and applications can be submitted to NERSA.

APPENDIX 2

Presentations

Nuclear 1 Project Update

Note: The size of this presentation is 1, 413KB.

Findings of the Scoping Phase

Note: The size of this presentation is 535KB.

Update on EIA for the transmission lines integration

Note: The size of this presentation is 1, 015KB.

All presentations can either be downloaded on the website (www.eskom.co.za/eia) or requested from ACER (Africa) at nuclear1@acerafrica.co.za or 086 010 4958

APPENDIX 3

Attendance Registers