

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
KELWAY HOTEL**

05 MARCH 2008

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1. ATTENDANCE

1.1 Attendance - Interested and Affected Parties

- Local Government.
- Environmental Authorities.
- Conservation Interest Groups.
- Ratepayers and Residents Associations.
- Environmental Interest Groups.
- Farmers Associations/Dairy Industry
- Chamber of Commerce and Industry
- Industry.
- Parastatals (Transnet/Spoornet).
- Media.
- Non-Governmental Organisations.
- Educational Organisations.
- Community Based Organisations/Trusts.

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 Dave Wynne	Generation Division Nuclear Portfolio	Corporate Specialist (Project Management)
Ms Carin de Villiers	Generation Division Koeberg Nuclear Power Station	Senior Government and Media Liaison Practitioner
Ms Ria Prinsloo	Eskom Generation	Auditor
Mr Jongi Dyabaza	Eskom Generation	Communication Practitioner
Mr Ronald Marais	Transmission Division System Operations and Planning (Grid Planning)	Chief Engineer/Planner
Mr Thamsanqa Ngcobo	Transmission Division System Operations and Planning	Planner
Mr Itumeleng Noeng	Transmission Division Land and Rights	Senior Environmental Advisor
Ms Joyce Mashiteng	Transmission Division Land and Rights	Transmission EIA Manager
Ms Nonkululeko Nene	Transmission Division Land and Rights	Environmental Officer

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 Bongi Shinga	ACER	Public Participation Team Leader
Ms Karin Bowler	Karin Bowler Enterprises	Independent Facilitator
Ms Annelize Schwartz	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.

She requested all stakeholders to introduce themselves and the organisations they represent.

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 of 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 collection of issues & concerns.

2.3 Introductory Remarks by Facilitator

Ms Bowler stated that:

- ❑ The Draft Scoping Report (DSR) has been made available for public review.
- ❑ The DSR sets the scene for the Specialist Studies to be conducted during the Impact Assessment Phase.
- ❑ It is the responsibility of the various stakeholders to review the various reports and provide feedback to the study team,
- ❑ Stakeholders, who have a mandate to represent their structures, are required to feedback to their constituencies.
- ❑ It is important to note that not everyone will share the views of the people sitting around the table. It is the nature of such discussions.
- ❑ Requested stakeholders to clearly articulate their comments, issues and concerns, as they will set the scene for the specialist studies into the future.
- ❑ Requested stakeholders to focus on the issues relating to the Draft Scoping Report.

She then outlined all the presentations that will be given as part of the stakeholder feedback meeting and the various presenters:

- ❑ Mr Tony Stott presenting an update on Nuclear 1.
- ❑ Ms Jaana-Maria Ball and Mr Tim Liversage presenting findings on the Draft Scoping Report.
- ❑ Mr Ronald Marais presenting Transmission Integration of a Power Station at the proposed alternative sites.

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 on 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 Ronald Marais, Chief Engineer/Planner, 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 Marais' 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 Port Elizabeth Key Stakeholder Feedback Meeting.

Please note:

- ❑ ACER has tried to capture and reflect as accurately as possible the issues raised at the Port Elizabeth Key Stakeholder Feedback Meeting.
- ❑ 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 reminded stakeholders of their obligations in an EIA, which include the review of the various draft documents.

She also stated that all 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 all 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 KELWAY HOTEL, PORT ELIZABETH

NO	NAME & ORGANISATION	ISSUE/COMMENT/CONCERN	RESPONSE
1	Mr Owen Gush Woodlands Dairy Industry	<p>With regards to the Thyspunt Site, it is important that the study team notes that the Woodlands Dairy Industry is one of the biggest dairy producing areas in South Africa.</p> <p>Their concerns are as follows:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Radiation contamination. How radiation contamination will impact the food industry in South Africa should the worst-case scenario happen? <input type="checkbox"/> Have these potential impacts been investigated or will they be included in the investigations? <input type="checkbox"/> Can the study team confirm that such potential impacts will be taken into account during the investigations? <input type="checkbox"/> What will be the economic impact of the proposed Nuclear Power Station on the dairy industry? <input type="checkbox"/> What will be the potential impact on health of animals and humans? 	<p>Ms Jaana-Maria Ball confirmed that the investigation of the potential environmental impacts is still to be completed.</p> <p>The outlined potential impacts will be incorporated in the Terms of Reference for the Economic Specialist Studies.</p> <p>Stakeholders, who have local knowledge, were encouraged to engage with Specialists when in the field.</p>
2	Mr Stan Long Nelson Mandela Metropolitan University	<p>He would like some clarity on the following:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Is alternative energy being discussed in South Africa at a strategic level? <input type="checkbox"/> Is adequate attention being given to renewable energy? <input type="checkbox"/> Based on available information, it would appear that Eskom's focus in terms of their forward planning is on bulk supply. Is Eskom also focussing on smaller scale producers to help relieve some of the pressure? <input type="checkbox"/> Port Elizabeth has a small power station that has been mothballed, is Eskom considering usage of this power station? 	<p>ARCUS GIBB indicated that there is a section on the Draft Scoping Report where the report did investigate the strategic energy generation.</p> <p>Eskom has looked at the kind of energy supply that is needed, i.e. dispatchable base load and peaking power, and non-dispatchable opportunistic (i.e. wind and solar) power. Peaking power cannot efficiently and cost-effectively be used for base load, only for emergency and peak demand situations. Most of the renewable energy does not always fit into the base load category, as it cannot be guaranteed that they can generate electricity when needed. There are a number of options,</p>

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			<p>including renewables that are being considered for power generation, in addition to base load. Amongst others, these include:</p> <ul style="list-style-type: none"> ❑ 100 MW wind energy plant in Vredendal. ❑ 100 MW concentrated solar power plant in Upington, integrated with a molten salt energy storage system. ❑ The University of Stellenbosch is busy with research on wave energy, which can be used for base load power supply. ❑ Research is being done to develop large-scale energy storage mechanisms for wind and solar thermal systems, to extend the supply of electricity from such power stations even when the sun is not shining or the wind is not blowing. <p>Important criteria for all renewable energy sources are sustainability and viability. It is Eskom's stance that all of the primary energy resources including solar, wind, wave, ocean current, tidal energy, biomass, hydro, gas, etc should be harnessed using the appropriate technology to provide the electricity that South Africa requires to support its economic growth and development.</p> <p>Yes, the focus of Eskom has always been on bulk supply, i.e. supply over 50 MW. With the latest developments, Eskom is now looking at helping and partnering with Independent Power Producers (IPPs) using various sources to generate electricity and integrate them into the network grid. Eskom has issued requests for proposals and offers in this regard – this would include older moth-balled power stations.</p>

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			<p>Apart from the Eskom initiatives, there is a need to create an enabling environment through the legislative framework. This is however the mandate of Government and the National Energy Regulator of South Africa.</p>
3	Ms Trudi Malan Ajubatus Marine	<p>What EIA has been done to tell the public that the Brazil and Schulpfontein can be disregarded as potential sites for Nuclear 1? She objects to the scoping out of the Northern Cape sites. Has a decision been made from a technical point of view only or has the environmental impact been considered as well?</p> <p>The cost to the environment would be enormous for the Thyspunt Site. How are you going to get the transmission lines through Baviaanskloof, a World Heritage Site? Environmentally, it does not make sense. The Baviaanskloof Mega Reserve is a declared World Heritage Site. Have you considered the impacts on a World Heritage Site, impacts on provincial nature reserves and biodiversity impacts? If not, how can you compare the Northern Cape sites to Thyspunt if you do not have this information?</p> <p>Have you received a Record of Decision for the Gamma Grassridge lines?</p> <p>Have you considered the cost to the environment? What has been the level of Eskom's strategic studies? She strongly objects to the scoping out of the Northern Cape sites and feels that the environment has not been considered.</p> <p>Why are you not feeding power into the Saldanah line?</p>	<p>In responding, Mr Ronald Marais clarified that Eskom has not discarded any of the identified nuclear sites for future use – under the current planning scenarios, Eskom needs to consider the roll out of up to 20,000 MW of nuclear power over a number of sites over the next 20 years.</p> <p>However, for the first of the proposed nuclear power stations the Northern Cape sites are not feasible alternatives in terms of the requirements of the project and hence have been scoped out of the EIA for the proposed Nuclear 1 power station.</p> <p>Eskom has not received a Record of Decision (ROD) for the Gamma-Grassridge lines, as the EIA has not been completed. There has been substantial growth in the Port Elizabeth area, hence the need to bring power to the area. Eskom tries to limit the transporting of power over long distances. Eskom promotes local generation, strong network and stable supply. In terms of the entire network, there is a balance that we need to find between power supply and stability.</p> <p>The Saldanha line is a single 400kV line, and thus is insufficient to transfer power from a power station located on one of the Northern Cape sites to the load centres. Hence additional lines would be required. 400kV lines would be inefficient to transmit bulk power over very long distances hence the planning is for higher voltages, 765 kV and HVDC.</p>

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4	Mr Chris Barratt St Francis Bay/Kromme Trust	<p>He wanted confirmation on the fact that the environment has not been considered. Eskom's timeframes and cost have been the major consideration at this stage. It concerns him that the EIA process has not considered the environmental impact.</p> <p>Is there any reason why the specialist reports are not made available upon completion or immediately after? It is difficult and time consuming for stakeholders to review all 24- specialist reports at once.</p> <p>He strongly feels that the public/locals should know when the specialists are busy with their field investigations so that local specialists can also give their inputs. Is it possible to notify the public?</p>	<p>Mr Tim Liversage, ARCUS GIBB explained that the National Environmental Management Act (NEMA), 107 of 1998 requires that we look at feasible alternatives. Both from a cost and timeframe point of view, the Northern Cape sites are not feasible, therefore cannot be included for the first of the proposed nuclear power stations, i.e. Nuclear 1.</p> <p>There is a risk of the Specialist Reports being read in isolation. There is a review process, which is undertaken before reports are made available in the public domain. If the reports are bulky and lengthy, the public review period might be extended. This is a process issue.</p> <p>Keeping track of the various Specialist teams and their movements between the sites would be challenging.</p>
5	Ms Trudi Malan Ajubatus Marine	<p>ARCUS GIBB is recommending that Brazil and Schulpfontein sites be scoped out based on Eskom's timeframes and cost. By implication, ARCUS GIBB is willing to damage the environment because the timeframes do not suit their client, Eskom.</p> <p>The Brazil and Schulpfontein sites should be reinstated for detailed investigations.</p>	<p>In terms of the EIA regulations an alternative to be considered needs to be a feasible alternative. Construction of a nuclear power station at Brazil and Schulpfontein would mean that Eskom would not be in a position to integrate these two sites from a transmission integration point of view into the power grid. Such integration would require a new corridor of approximately 1,500 km to be constructed, which would also have huge cost and potential environmental implications. These sites are thus at this time not feasible alternatives for Nuclear 1.</p>
6	Mr Robin Simpson St Francis/Kromme Trust	<p>If one looks at the preliminary assessment of the proposed sites and their receiving environment, a number of areas indicate "insufficient information".</p>	<p>All sites will be fully assessed during the EIA phase at which time all outstanding data will be sourced and analysed. The primary function of the Scoping Phase is to identify all areas for further investigation.</p>

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		<p>Could you qualify someone who has lived in the area for more than 30 years as a specialist? Specific reference was made to the Kromme Trust that has vast local knowledge.</p> <p>Although he respects the fact that Specialists have specialist knowledge in their fields, he is concerned that Specialists come to the study area for a very limited time, however, there are local people who have lived in the area for a number of years and have significant local knowledge.</p>	<p>A specialist must be a qualified individual who has knowledge of the technical aspects of their chosen area of expertise. However, the knowledge possessed by local people can be invaluable and the optimal outcome is reached when the two combine their knowledge. For this reason alone public participation is crucial and all assistance from the public is welcome.</p>
7	Ms Karin Bowler Independent Facilitator	If the preliminary comparative assessment states insufficient data, are you not legally obliged to re-look at these sites if some of the stakeholders come up with sufficient data?	The issue for the Northern Cape sites is not the availability of data, but rather whether either of the two sites are feasible alternatives for the proposed Nuclear 1 power station. In terms of the EIA regulations an alternative to be considered needs to be a feasible alternative. Construction of a nuclear power station at Brazil and Schulpfontein would mean that Eskom would not be in a position to integrate these two sites from a transmission integration point of view into the power grid. Such integration would require a new corridor of approximately 1,500 km to be constructed, which would also have huge cost and potential environmental implications. These sites are thus, at this time, not feasible.
8	Mr Hilton Thorpe St Francis Bay Residents Association/Kromme Trust	<p>Issues relate to the following categories:</p> <ul style="list-style-type: none"> <input type="checkbox"/> The viability of the Thyspunt Site in terms of evacuation. <input type="checkbox"/> Pressurised Water Reactor (PWR). <input type="checkbox"/> Emergency Planning Zone. <input type="checkbox"/> Demographics/Census Figures. 	

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		<p>Detailed comments:</p> <ul style="list-style-type: none"> ❑ The National Siting Investigation Programme was done in 1980's. There is now a much larger community that stays in the area compared to 1980's when the initial study was done. ❑ In the event of a PWR being placed at Thyspunt, is there any conceivable event, which can necessitate the evacuation of the Greater St Francis area? ❑ If so, what demographic statistics will be used to determine the number of people requiring to be evacuated? ❑ Is there any conceivable Disaster Management Plan which could evacuate the communities of Rebelsrus, Mostert's Hoek, Cape St Francis, Sea Vista Township and St Francis Bay, spread along ten kilometres of coastline, under peak holiday conditions (estimated 25,000 people and growing), when the prevailing south westerly wind is blowing strongly, down one escape route, in 10 to 15 minutes? ❑ Will Eskom be applying to the National Nuclear Regulator for reduced Emergency Planning Zones? ❑ On what grounds would they do this, and what would be the implications if these were granted? ❑ Who is responsible for Disaster Management inside and outside the Emergency Planning Zones? 	<p>Mr Stott responded that for the Koeberg nuclear power station, designed in the 1970s, the National Nuclear Regulator has required 5 km and 16 km emergency planning zones. These zones have different timeframe requirements for evacuation purposes. The same emergency planning zones and requirements have been used in the past with respect to the identified nuclear sites.</p> <p>However, for the proposed Nuclear 1 power station Eskom is considering the latest design of Pressurized Water Reactor (PWR) technology. Internationally, these designs have formal emergency planning zones less than 16 km, and outside of a 3 km zone there should be no need for evacuation requirements. Eskom is however not sure if the National Nuclear Regulator (NNR) will accept these international specifications. The NNR will determine the emergency plan requirements and the extent of the required zone based on a safety assessment of the design of the proposed nuclear power station and the characteristics of the site and its environs. Mr Stott noted that the NNR will not issue a license for the proposed nuclear power station if it is not satisfied that a viable emergency plan can be implemented. The NNR will require regular demonstration that any emergency plan is implementable.</p> <p>Eskom is responsible for the establishment of emergency plans related to the power station in conjunction with the local Authorities. The execution of any emergency plan, outside the power station property would be the responsibility of the local Authority, supported by Eskom.</p>

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		<p>Follow up comments:</p> <ul style="list-style-type: none"> ❑ The information given by Mr Tony Stott is not contained in the Draft Scoping Report. ❑ So there is no possibility of the leakage, i.e. there will be no need for an emergency-planning zone? ❑ Such information is useful as it informs arguments from the public. <p>Comments continued:</p> <ul style="list-style-type: none"> ❑ For this proposed Nuclear Power Station, there is a threat of political interference. The National Nuclear Regulator is a body within the Department of Minerals and Energy (DME). DME is involved in promoting nuclear energy. He is concerned about political interference in this aspect. 	<p>The information regarding the emergency planning zones for Koeberg is given in the draft Scoping Report. It is also mentioned that the NNR will determine the emergency planning requirements for the proposed nuclear power station, and that further information will be included in the EIR.</p> <p>As indicated previously, the NNR will determine the emergency plan requirements and the extent of the required zones based on a safety assessment of the design of the proposed nuclear power station and the characteristics of the site and its environs.</p> <p>The NNR is established to execute its mandate independently of the DME. The National Nuclear Regulator Act 47 of 1999, approved by Parliament, provides the mandate and identifies the scope of activities of the NNR. The Regulator is governed and controlled, in accordance with the Act, by a Board of Directors, which specifically includes representatives of each of Labour, Business and affected Communities respectively, and specifically excludes anybody who is the holder of a nuclear authorisation or the employee of the holder of a nuclear authorisation.</p> <p>Each year, the NNR tables its Annual Report in Parliament. The NNR also provides <i>ad hoc</i> reports to Parliamentary Portfolio Committees on specific issues with which it is dealing.</p> <p>Eskom's projects are conducted in accordance with strict and robust commercial processes, and are continuously monitored and audited by independent national and international auditing specialist organisations. These auditing organisations would</p>

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		<p data-bbox="600 375 1294 507">❑ Would like to request that the NNR recuses itself from its responsibility for the assessment of the nuclear viability of the proposed sites, as there are issues of distrust.</p> <p data-bbox="600 550 792 576">Census figures</p> <p data-bbox="600 587 1294 858">❑ The census data that Eskom is using is completely unreliable. It mainly presents the best-case scenario and not the worst-case scenario. This is due to the fact the latest census only enumerated approximately 50% of the population. Accurate census data can only be done over holiday periods so as to ensure the adequate provision for evacuation in the event of a nuclear emergency.</p> <p data-bbox="600 901 902 927">Changes over the years</p> <p data-bbox="600 938 1294 1029">❑ He used aerial photographs, taken in 1961 and 2000 to show the significant change that has taken place over the years.</p> <p data-bbox="600 1040 1294 1173">❑ These photographs are completely different due to high-energy winds. There is only one route for evacuation for five communities in the area. This highlights a serious viability question.</p> <p data-bbox="600 1184 1294 1316">❑ If you bypass the dune field, one can see which way the prevailing wind has been running for a number of years. The Sea Vista and St Francis Bay communities are right in line of the prevailing wind.</p>	<p data-bbox="1317 272 2060 336">identify and would report any inappropriate activities or influencing of the commercial and procurement processes.</p> <p data-bbox="1317 379 2060 475">This is an issue that you will have to take up with the NNR directly. The NNR assessment of the viability of the proposed sites is dealt with through the NNR regulatory processes.</p> <p data-bbox="1317 587 2060 651">Comment noted. Census data that will be used for the study will be that provided by STATSSA.</p> <p data-bbox="1317 938 2060 1066">Comments noted. The information regarding the high energy winds and the movements of the dunes will be provided to the relevant specialists for the detailed impact assessment studies.</p> <p data-bbox="1317 1114 2060 1342">The NNR assessment of the viability of the proposed sites from an emergency planning perspective is dealt with through the NNR regulatory processes. As indicated previously, the NNR will determine the emergency plan requirements and the extent of the required zones based on a safety assessment of the design of the proposed nuclear power station and the characteristics of the site and its environs.</p>

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		<ul style="list-style-type: none"> ❑ The 2000 photograph shows the road from Humansdorp to Cape St Francis, St Francis Bay as the only road. ❑ He maintains that there is a serious viability issue in the area as there is only one escape route through the area. 	
9	Ms Trudi Malan Ajubatus Marine	The health impact study contained in the Draft Scoping Report states that there is a potential for water supplies to be contaminated. If the proposed Nuclear Power Station is safe and there is no pathway, why are you then looking at the health impact study?	This is being done to investigate if there are pathways, and to what extent these pathways may influence human health under normal and emergency operating conditions.
10	Mr Robin Simpson St Francis/Kromme Trust	<p>How can Eskom say that the power station site is safe? He feels that insufficient attention has been given to this aspect.</p> <p>How can Eskom go ahead and apply for a licence if the EIA has not been completed. If the Nuclear license were granted before completion of the EIA, would it not</p>	<p>The whole South African coastline was investigated as part of the original Nuclear Site Investigation Programme (NSIP). Criteria, such as demography (existing population densities), ecological sensitivity, geology, the characteristics of the coastal area and the tides and wave action and seismicity, amongst others, were taken into account in determining the potential suitability of sites. Thyspunt was identified through these studies as a viable site – the studies provided confidence in the safety of the site.</p> <p>Additional geological and hydrological re-confirmation studies are currently being undertaken. The results of these studies provide input into the EIA process, which forms part of the assessment of the viability of a site as well as into the site safety report to be submitted as part of the nuclear licensing process of the National Nuclear Regulator. Eskom is thus confident that the safety of the site is being addressed.</p> <p>Environmental issues and nuclear safety issues are regulated through two separate pieces of legislation and two independent Regulatory Authorities. DEAT is the authorising</p>

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		compromise other associated processes? He would like to get assurance that the EIA process will not be compromised in anyway.	body for this EIA and will be the authority that makes the decision regarding an environmental authorisation. The National Nuclear Regulator is the authorising body for the nuclear installation licence, which specifically addresses the nuclear safety considerations. Both authorisations are required – the one does not cancel the requirement to obtain the other. The NNR and DEAT have entered into a Cooperative Agreement, as required by the National Nuclear Regulatory Act, to ensure synergy and avoid duplication between their two respective regulatory processes.
11	Mr Robin Simpson St Francis/Kromme Trust	This NNR investigation, which surely has overriding influence on the EIA, is being overlooked. Eskom should virtually apply for a license if they understand that the plant is safe.	As mentioned previously, the EIA and Nuclear Installation Licensing processes are both required – the one does not negate the requirement to obtain the other. The nuclear installation licence considers both the plant as well as the site on which the plant would be constructed. As mentioned previously, studies are being undertaken that will provide input into both the EIA as well as the site safety report required by the NNR. However, the NNR review of the plant can only commence once the vendor has been selected by Eskom, thus determining the actual technology and design for the proposed Nuclear 1 power station.
12	Mr Robin Simpson St Francis/Kromme Trust	He is concerned that the National Nuclear Regulator (NNR) reports to the Department of Minerals and Energy and feels that there is a strong conflict of interest. He strongly feels that the NNR should report to an independent body.	Comment noted. Eskom is not in a position to respond or comment on Mr Simpson's concern, as it specifically applies to the NNR reporting line, which has been determined through legislation approved by Parliament. This concern needs to be addressed directly to the NNR and to DME.
13	Ms Karin Bowler Independent Facilitator	Is the NNR being reviewed by an international regulatory body according to international standards?	South Africa is a Contracting Party (signatory) to the international Nuclear Safety Convention, which requires the country to establish and maintain a legislative and regulatory framework to govern the safety of nuclear installations. Every three years the Contracting Parties are required to submit a

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			report for international review of their compliance with the requirements of the Convention. South Africa's 4 th report, dated September 2007, and submitted to a review meeting in April 2008, is available from the NNR website www.nnr.co.za .
14	Mr Robin Simpson St Francis/Kromme Trust	If Mr Jacob Zuma is pushing the government around, is it not possible that the same would happen for this proposed Nuclear Power Station? Political influence is a cause for concern.	<p>Comment noted.</p> <p>Eskom cannot comment or respond on the statement regarding Mr Zuma. As mentioned previously, Eskom's new build projects are conducted in accordance with strict and robust commercial processes, and are continuously monitored and audited by independent national and international auditing specialist organisations. These auditing organisations would identify and would report any inappropriate activities or influencing of the commercial and procurement processes.</p> <p>As the entity responsible for the Environmental Assessment process, ARCUS GIBB has stated that it would not associate itself with any project which deviates from ethical practice.</p>
15	Mr Hilton Thorpe St Francis Bay Residents Association/Kromme Trust	At Koeberg, the National Nuclear Regulator gives people between 4 and 16 hours to evacuate. Is Eskom saying that they will be able to contain people during this period for the proposed Nuclear Power Station? He is concerned about unplanned events that could happen in the area. An accident is an accident.	As mentioned previously, the National Nuclear Regulator determines the requirements for and extent of any emergency planning that may be required. The National Nuclear Regulator (NNR) adopts a precautionary principle. Hence even though the risk of an accident may be very low, the NNR still required an emergency plan. The 4 and 16 hours referred to are applicable to the Koeberg nuclear power station and the Koeberg site and environs. For the proposed nuclear power station, modern designs of the pressurised water reactor power plants are being considered. Internationally the emergency planning zones are much less than what was required for the Koeberg type – which was designed in the 1970s. However, the NNR will determine what emergency planning is required for the proposed nuclear 1 power station, based on an assessment of the plant design, the site and its environs.

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		Who is responsible for emergency planning? Is it the Local Municipality or Eskom?	Eskom would be responsible for what happens in the area within the plant. The Municipality would be responsible for what happens outside the plant. In terms of the National Emergency Disaster Act, Eskom is required to provide support to the local authority, e.g. Municipality.
16	Mr Ryan Donnelly For A Safe Tomorrow	<p>He is concerned about the manner in which the EIA process is conducted. There is misleading information that is given to people. As a result the study team is not giving the public information that would enable them to make an informed comment.</p> <p>Minutes that were compiled for the previous meetings had a lot of mistakes. He requested that minutes are recorded in a professional manner.</p>	<p>Mr Donnelly was encouraged to forward his comments to the study team as part of the Draft Scoping Report Review process. It was highlighted that the EIA process is been undertaken in strict accordance to the legislative requirements of the National Environmental Management Act, 1998 and associated Regulations.</p> <p>Mr Donnelly was encouraged to show all the gaps and errors that he has identified in the minutes. (This was subsequently resolved - Mr Donnelly and the ACER team sat together at the Public Open day and discussed the previous minutes to ensure that Mr Donnelly's concerns were addressed).</p> <p>All stakeholders were reminded that the Draft Scoping Report including supporting documentation is available for public review and are encouraged to use this opportunity to submit their comments.</p>
17	Mr Chris Barratt St Francis Bay/Kromme Trust	People use reports to get informed. If there are a lot of mistakes in the report, how do we go about rectifying the mistakes? How are perceptions going to be communicated to the public with regards to changes to the Draft Scoping Report?	If the changes in information are substantial, all Interested and Affected Parties will be made aware of the changes and notified accordingly. A copy of the Final Scoping Report, to be submitted to DEAT, will be forwarded to the Public for information.

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		An error pointed out referred to the diagram in the Draft Scoping Report showing Thyspunt at 4km and it is also shown at 16km. This will mislead any person who uses the report and has a potential to skew their interpretation.	The diagram in the Draft Scoping Report will be rectified. There will be a covering letter highlighting all the mistakes that have been rectified in the Final Scoping Report.
18	Mr Alwin Malgas Sea Vista Community	Information that is contained in the Draft Scoping Report seems to be in conflict with what the public is being told. He feels the information is misleading; at times Eskom refers to 3 km and sometimes to 16km. He is concerned that different information is given at these meetings (referring to Key Stakeholder Meetings).	<p>Mr Stott clarified: In the 1980's when the nuclear licence for Koeberg nuclear power station was issued, the National Nuclear Regulator required emergency planning zones of 5 km and 16 km. Different requirements were imposed for these two zones respectively, and they have different timeframe requirements for evacuation purposes. In the 1980's and 1990's when the Nuclear Siting Investigation Programme was undertaken, the same emergency planning zones and requirements were used with respect to the identified nuclear sites (including Thyspunt). In the absence of any change in the NNR position for Koeberg, Eskom has continued to use the 5 and 16 km for planning purposed for the identified nuclear sites.</p> <p>However, for the proposed Nuclear 1 power station Eskom is considering the latest design of Pressurized Water Reactor (PWR) technology. Internationally, these designs have formal emergency planning zones less than 16 km. It is anticipated that outside of a 3 km zone there should be no need for evacuation requirements. Eskom is however not sure if the National Nuclear Regulator (NNR) will accept the international specifications. The NNR will determine the emergency plan requirements and the extent of the required zone based on a safety assessment of the design of the proposed nuclear power station and the characteristics of the site and its environs.</p>

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		<p>If you have a look at the aerial photographs supplied by Mr Hilton Thorpe, it is evident that with the prevailing wind, the Thyspunt Site is directly in line with St Francis and Sea Vista communities; therefore the Nuclear Power Station at Thyspunt will definitely affect them.</p> <p>How does Eskom separate themselves from the National Nuclear Regulator in terms of their mandate and decision-making? Although Mr Stott says no decisions have been made, he is concerned about the fact that the National Nuclear Regulator has to report to the government.</p> <p>Most residents from the Sea Vista Community do not have access to internet, hence cannot be referred to the website for information requirements. Also, most material is available in English. Most Sea Vista residents use Afrikaans. Inaccessibility to the Draft Scoping Report in terms of language and distance should be rectified.</p>	<p>Comment noted. The impact that the proposed nuclear power station may have on the environment and on communities will be addressed through the EIA and through the nuclear licensing processes respectively.</p> <p>As mentioned previously, the NNR is established to execute its mandate independently of the government department (DME) to which it reports and operates independently of nuclear licence holders or licence applications. The National Nuclear Regulator Act 47 of 1999, approved by Parliament, provides the mandate and identifies the scope of activities of the NNR. The Regulator is governed and controlled, in accordance with the Act, by a Board of Directors, which specifically includes representatives of each of Labour, Business and affected Communities respectively, and specifically excludes anybody who is the holder of a nuclear authorisation or the employee of the holder of a nuclear authorisation.</p> <p>Each year, the NNR tables its Annual Report in Parliament. The NNR also provides <i>ad hoc</i> reports to Parliamentary Portfolio Committees on specific issues with which it is dealing.</p> <p>It was suggested that Mr Malgas discusses convenient venues for public review with Ms Shinga, ACER (Africa).</p>

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		The 14 March 2008 closing date for submission of comments on the Draft Scoping Report is insufficient for the Sea Vista Community. He is concerned that comments from their community might be excluded as they received an Afrikaans Version of DSR summary from the St Francis Bay Public Open Day held on 04 March 2008.	Subsequent to the Key Stakeholder Meetings, the public comment period on the Draft Scoping Report was extended by an additional 2 weeks making the closing date 01 April 2008.
19	Mr Ryan Donnelly For A Safe Tomorrow	Another concern is that the EIA is dominated by the developer's interest. There is no independent nuclear physicist. How can they trust the information given to the public when the developer, in this case Eskom has a vested interest in the process? This makes the EIA biased.	The Independent Nuclear Reviewers, Colenco Power Engineering are based in Switzerland. They will be reviewing material at the appropriate stages. Scoping is focussing on the identification of issues to be investigated during the impact phase. There will be a need for review at the next phase of this process.
20	Ms Karin Bowler Independent Facilitator	Has Eskom informed the community on how the Nuclear Power Station works?	In responding, Ms Carin de Villiers stated that Eskom have been to the Sea Vista community as part of the Nuclear Awareness Programme, which involves Eskom discussing and providing information on nuclear power to communities and schools in proximity to the existing five proposed nuclear sites.
21	Mr Stan Long Nelson Mandela Metropolitan University	He has not seen information on the appointment of the nuclear waste specialist? Has he missed such information? He feels that the building of Nuclear Power Station cannot go ahead if there is no plan in place for nuclear waste.	The National Nuclear Regulator (NNR) is responsible for the regulation and licensing of nuclear waste. Issues surrounding nuclear waste are not included in the scope of work for this EIA There is a transportation study, focussing on the transport of waste from the site up to Vaalputs. Once waste is at the disposal site, it becomes NECSA's responsibility. Eskom intends to follow the same waste management strategy as is used at Koeberg nuclear power station, under the regulatory control of the National Nuclear Regulator and subject to the requirements of the National Radioactive Waste Management Policy and Strategy.

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22	Mr Stan Long Nelson Mandela Metropolitan University	<p>If one looks at the excluded sites, Brazil and Schulpfontein one may presume that the impacts would be relatively less considering potential impacts associated with transportation.</p> <p>The scoping out of these sites appears premature at this stage.</p>	<p>Comment noted.</p> <p>Impacts associated with transportation are only one of the impacts arising from an activity.</p> <p>As mentioned previously, these two sites are not considered to be viable alternatives for the proposed Nuclear 1 power station, and hence the recommendations to exclude from this specific EIA. They are considered to be alternatives for the future.</p> <p>Refer also to the responses to issues 3, 5 and 7 above.</p>
23	Ms Lorraine Egan Kouga Local Municipality	<p>Is there still a possibility of new sites other than those already identified during the National Site Investigation Programme (NSIP)? Is there still scope for identifying new sites as part of the EIA process?</p>	<p>For the proposed Nuclear 1 power station, which is required to come into operation from 2016 onwards, the sites previously identified in the independent site investigations undertaken during the 1980s - termed the Nuclear Site Investigation Programme (NSIP) – are being considered. Additional geological and hydrological re-confirmation studies are currently being undertaken on these sites, for input, as appropriate into the EIA studies and/or the Site Safety studies, and into the design of the proposed power station.</p> <p>Since South Africa needs new power stations, and later will need to replace older coal-fired power stations as they reach the end of their economic life, investigations will be initiated to identify additional sites for future nuclear power stations. These will be in addition to the sites previously identified.</p>
24	Mr Graham Moolman St Andrews College	<p>Who is responsible for the actions currently undertaken by specialists that are already on site? Who is responsible for what is happening at the sites currently? He is concerned that they are drilling, ripping out the Fynbos, etc and there is no watchdog. He made a reference to the case of watchdogs when Coega was built.</p>	<p>Eskom is responsible. Mr Gert Greeff, the Nuclear Sites Manager is the contact person. The work currently being done on the sites is for the Site Safety Report, which requires that studies such as geology, geohydrology, confirmation of seismic risk, etc are done. Drilling is done to confirm data. Mr Gert Greeff explained that he visits all nuclear sites regularly.</p>

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			The drilling being done at the sites is relatively minimal. The specialists are keeping a limit on what they are doing.
25	Mr Angus Clark Chamber of Commerce and Industry	It would appear that Eskom's plan for 40,000 MW is not sufficient. What is the plan for future development taking into consideration the economic growth? If we are taking into considering a 4% economic growth, it means we have only taken care of the planning for the next few years.	<p>Eskom, the National Energy Regulator of SA and the Department of Minerals and Energy all do energy planning. Eskom and NERSA's planning is for electricity, DME's plans are for energy. In general these plans consider a 20-year look into the future.</p> <p>Eskom's plans are updated each year. Longer term scenario planning that looks beyond 20 years is also done. However, the further one projects into the future, the plans become more high-level and less detailed.</p> <p>It is projected by Eskom that South Africa requires 40,000 MW in order to meet the anticipated demand for electricity in 2025. In addition to meeting the projected demand, Eskom also needs to prepare for the replacement of power stations, some of which will reach the end of their economic lifespan after approximately 2025.</p>
26	Mr Ryan Donnelly For A Safe Tomorrow	What is the percentage of Nuclear Energy that is predicted for 2025? He perceives this nuclear programme as a short-term sustainable approach as nuclear does not have a long lifespan.	Eskom requires 40,000 megawatts of additional electricity generating capacity to be constructed in phases over the next 20 years. Eskom's investigations are up to 20,000 MW of nuclear capacity by 2025. The other 20,000 MW will come out of other generation mixes, e.g. renewables, coal, gas, etc. If the requirement of 40,000 MW additional capacity in 2025 is achieved, 20,000 MW of nuclear power in 2025 would be approximately 25% of the total generating capacity. The anticipated lifetime of each new nuclear power station would be about 60 years.

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		Is Eskom not creating a sustainability issue here? What will happen if the uranium resources run out?	South Africa has more than sufficient uranium deposits to meet the requirements for fuel for the proposed 20,000 MW of nuclear power stations over their projected lifetimes each of 60 years.
27	Mr Hilton Thorpe St Francis Bay Residents Association/Kromme Trust	Potential economic impacts on dairy farming and fisheries industries should be included in the Terms of Reference for the economic specialist studies. He would like to encourage the study team to use the expertise of Prof Richard Cowling, who is well versed with the fauna and flora issues.	Comment noted for specialist investigations. Prof Richard Cowling along with other specialists have, or will be consulted with, by Barrie Louw.
28	Mr Ryan Donnelly For A Safe Tomorrow	What is your progress, thus far, for the wind plant? Any progress on the solar facility in Upington?	An EIA is currently in progress for a wind energy facility of 100 MW on the West Coast of South Africa (near Vredendal). An EIA has been completed and the Department of Environmental Affairs and Tourism issued environmental authorisation for a research and demonstration project for a concentrated solar thermal plant of 100 MW near Upington. It is expected that construction of the solar thermal plant will commence in approximately 18 months time.
29	Ms Trudi Malan Ajubatus Marine	It is clear and well understood that Eskom needs to expand its power generation capacity to help meet the future demand for electricity. Is it not possible to re-look into funding and see if it is possible to have alternative replacements of Nuclear Power Stations? Nuclear is not an issue; we understand that South Africa needs nuclear power. Some of the money being spent on nuclear studies should rather be invested in the investigation of possible new sites that are not environmentally sensitive. The proposed Nuclear Power Station sites are hugely sensitive. We need to move the Nuclear Power Plants from the most active and hugely sensitive environments,	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. The main reasons Eskom needs to build power stations on the coast, include the stabilisation of the transmission network and

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		<p>e.g. ocean to areas where they will have limited impact. There are other options to place these sites away from environmentally sensitive areas.</p> <p>A formal submission will be forwarded to ACER.</p>	<p>the improvement in the reliability and security of supply at the coastal area and particularly the coastal areas of high growth in the demand for electricity, and the reduction in transmission line losses. Apart from these objectives, there are also other advantages of locating a power station on the coast, the primary one being the use of seawater for cooling of the turbine exhaust steam and condensing it back to water.</p> <p>The sites under investigation were identified as most suitable based on a range criteria including environment, social and economic amongst others. More detailed investigations will be undertaken during the EIA phase.</p>
30	Mr Robin Simpson St Francis/Kromme Trust	He congratulated the Facilitator, Ms Karin Bowler for handling the meeting exceptionally well.	The Facilitator responded to the remarks with appreciation.

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 REGISTER