

The SiVEST logo consists of the word "SiVEST" in white, bold, sans-serif capital letters on a red rectangular background.

# **Proposed Thyspunt Transmission Lines Integration Project (TTLIP)**

## **DRAFT MINUTES OF THE KEY STAKEHOLDER WORKSHOP**

**Held on  
Friday, 15 May 2009**

**at  
The Kelway Hotel, Port Elizabeth**

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**SiVEST Environmental (Pty) Ltd**

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**Draft Minutes prepared by:**

**Ashleigh Ward**

Please address any comments to Themba Skonje/Chris le Roux or Nicolene Venter at the above address

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### YOUR COMMENTS ON THE DRAFT MINUTES

Your comments on this draft Minutes will be appreciated. In particular, we request you to verify that your comments during the meeting have been minuted correctly. It is important to note that the draft Minutes are not verbatim. Please address your comments, in writing, before or on **Monday, 30 November 2009** to Themba Skonje/Chris le Roux or Nicolene Venter at the address given on the cover page.

## **KEY STAKEHOLDER WORKSHOP:**

**Venue:** The Kelway Hotel, Port Elizabeth  
**Date:** Friday, 15 May 2009  
**Time:** 10h00

### **1 WELCOME AND INTRODUCTIONS**

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Nicolene Venter thanked the attendees for attending the Key Stakeholder Workshop (KSW) and thus giving the project team an opportunity to present the proposed project to them. She introduced the project team members to the attendees and informed them of their respective roles at the meeting.

Permission was requested and thus granted by the attendees that the meeting can be recorder for minute taking purpose and should there be a query regarding a comment / question / concern raised, it can be verified.

The attendees were requested to identify themselves when raising questions, comments and/or concerns for minute taking purposes.

### **2 MEETING ATTENDEES**

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A copy of the Attendance Record is attached as Annexure A.

### **3 PURPOSE OF THE MEETING**

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Nicolene Venter informed the attendees that the purpose of the Key Stakeholder Workshop was to:

- Provide Key Stakeholders with information regarding the proposed project;
- Provide Key Stakeholders with information regarding the proposed Nuclear 1 Power Station project and how it relates to the proposed transmission line project;
- Provide an opportunity for the Key Stakeholders to become involved and seek clarity on the project;
- Provide feedback on the environmental finds as in the draft Scoping Report;
- Describe and discuss the construction methods which Eskom uses whilst erecting powerlines like the ones that have been suggested for the proposed project;
- Briefly discuss the way forward and;
- Record comments, issues and concerns raised at the meeting.

### **4 BACKGROUND & PROJECT CONTEXT**

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Thamasanga Ngcobo, of Eskom Transmission, briefly explained the construction methods and materials that are used by Eskom Ltd when erecting transmission lines.

Magnus Wegen, of Eskom Generation, briefly explained the Nuclear-1 Power Station project to the attendees.

Liesl Koch explained to the attendees that the proponent is Eskom Holdings Ltd, and the project is aimed at strengthening the national electricity grid to meet its mandate and commitment to supply the ever-increasing needs of the end-user. She added that Eskom has to plan, establish and expand its generation capacity and transmission power lines infrastructure on an on-going basis. The attendees were requested not to confuse the Thyspunt Transmission Lines Integration Project (TTLIP) with that of the proposed Eskom Nuclear 1 Power Station Project. Arcus Gibb, the independent environmental consultants are currently undertaking the EIA for the **three (3)** proposed Eskom Nuclear 1 Power Stations. Thus, the preferred site for the proposed Nuclear 1 Power Station still needs to be confirmed through a separate EIA process.

However Eskom Transmission has embarked on the following:

- To integrate the electricity that will be generated by the proposed Thyspunt Nuclear Power Station (should an Environmental Authorisation be granted by the Department of Environmental Affairs and Tourism - DEAT), Eskom Transmission need to investigate possible Transmission power line routes (within the 5km corridors) from the proposed Eskom Nuclear 1 Power Station at Thyspunt to a newly proposed Port Elizabeth transmission (Tx) substation and to Eskom's existing Dedisa and/or Grassridge transmission substations.

## **5 AN OVERVIEW OF THE PROPOSED PROJECT**

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Liesl Koch informed attendees that:

- The applicant is Eskom Holdings Ltd;
- SiVEST has been appointed as the independent environmental consultants for the EIA;
- The decision-making authority is the Department of Environmental Affairs and Tourism
- Need for the project: To link the electricity generated by the proposed Thyspunt Nuclear 1 Power Station into Eskom's electricity network;
- Two corridors are being investigated, a northern corridor and a southern corridor, that are not alternatives to one another; instead there are route alignment alternatives within each corridor;
- The construction of a newly proposed Port Elizabeth Tx Substation;
- The upgrade of Eskom's existing Grassridge and Dedisa Tx Substations; and
- An EIA is being undertaken because it is a legal requirement to ensure that environmental best practice is followed.

## **6 SUMMARY OF ENVIRONMENTAL IMPACT ASSESSMENT (EIA) PROCESS TO BE UNDERTAKEN**

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Liesl Koch informed the attendees that the draft Scoping Report is currently available for public review and that the scoping phase of an EIA is:

- An issues-based, desk top investigation
- Identification of potential impacts which require more detailed assessment
- Investigation of the potential impacts relating to:
  - Biophysical environment
  - Socio-economic environment

**Biophysical aspects that were assessed include:**

- Avifauna – Birds
- Geology – Rocks/Soils
- Geohydrology – Groundwater
- Surface water – Rivers/Streams/Wetlands
- Agricultural Potential – Soil Productivity
- Biodiversity – Flora/Fauna (plants/animals)

**Social and Socio-economic aspects that were assessed include:**

- Archaeological / Cultural and Heritage resources
- Visual impact
- Socio-economic environment
- Tourism

A copy of the presentation is attached as Annexure B.

## **7 DISCUSSION SESSION AND QUESTIONS**

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Please refer to Annexure C.

## **8 CLOSURE AND WAY FORWARD**

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Liesl Koch informed attendees that the process forward will be:

- Distribution of the draft KSW minutes to all who attended and submitted apologies.

All present were thanked for their attendance and the valuable inputs received at the meeting. All were informed that the meeting would not be the only opportunity to submit comments on the proposed project. At any time throughout the EIA process they can submit comments and/or concerns.

The meeting was closed at 12h00.

**Annexure A**

**ATTENDANCE RECORD**

**KSW Attendees - Kelway Hotel, Port Elizabeth on 15 May 2009**

<b><u>Name:</u></b>	<b><u>Position</u></b>	<b><u>Company</u></b>
Breytenbach, Johan	Project Manager:	Eskom
	Nuclear-1 Project	
Chiume, Sipho	Energy Officer	Department of Minerals and Energy
Dodd, Mark	Chairman	Elands River Conservancy
Donnelly, Ryan	Chairperson	For A Safe Tomorrow
Ferndale, TB	Planning Engineer	Nelson Mandela Bay Metropolitan Municipality
Lungile, Thanduxolo	Provincial Manager	SAHRA: Eastern Cape Province
Malgas, Alwin	Chairman	Sea Vista Residents Association
Ngcobo, Thamsanqa	Technical Advisor	Eskom
Smetrys, Serge	Vice Chairman	Elands River Conservancy
Stroh, Lizell	Obstacle Specialist	SA Civil Aviation Authority
Vockerodt, Brian	Lines and Servitude Manager	Eskom Transmission Limited
Wagener, Magnus	Chairman	Mountain Club of SA: Eastern Cape
Weitz, Frank	Manager	Dept of Agriculture: Eastern Cape
Wilmans, Greg	Foreste: Manager	MTO Forestry (Pty) Ltd: Longmore Plantation

Totals

## **Annexure B**

### **COPY OF PRESENTATION**



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ESKOM THYSPUNT TRANSMISSION LINES  
INTEGRATION PROJECT

PUBLIC PARTICIPATION PROCESS

Key Stakeholder Workshop

Kelway Hotel, Port Elizabeth

Friday 15 May 2009

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Agenda

- Welcome, Apologies & Introduction
- Purpose of the Meeting
- Background to the proposed development
- Environmental aspects regarding the project
- Issues to be investigated during EIA Phase
- Route recommendations
- Discussion Session
- Closure

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Conduct of the Meeting

- Focus on issues at hand
- Equal opportunity
- Cell phones on silent
- Work through the facilitator
- Speak in language of choice

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Purpose of Today's Meeting

- To provide I&AP's with information regarding the proposed development
- Provide an opportunity for I&APs to become involved and seek clarity on the project
- To record comments, issues and concerns raised
- To provide feedback on the Scoping Process

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PROJECT OVERVIEW

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Overview of Project

- Who is the Applicant?
  - ESKOM
- Who is the independent Environmental Consultant?
  - SiVEST
- Decision-making authority:
  - DEAT
- Why do an EIA?
  - Legal requirement
  - To ensure environmental best practice

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## Overview of Project



- Why is the project necessary?
  - The project is required to integrate electricity to be generated by the proposed Thyspunt Nuclear Power Station.
- What does the proposed development entail?
  - The construction of five 400kV Transmission lines. Two corridors are proposed, a Northern Corridor which will contain 3 lines and a Southern Corridor which will contain 2 lines. The proposed corridors will run between the proposed Thyspunt Nuclear Power Station High Voltage Yard to the existing Grassridge and Dedisa substations

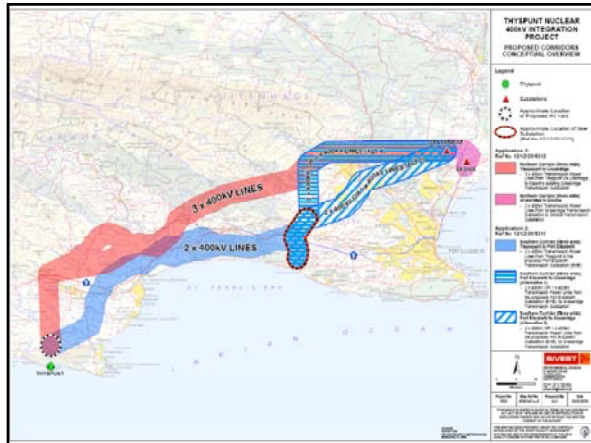
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## Corridors and Alternatives



- Corridors are 5km wide
- Northern and Southern Corridors are not alternatives
- Based on technically feasible alignments
- In some places – corridor wider than 5km
- Each line requires 55m servitude
- Many alternative alignments exist in each corridor
- Corridors have been amended as a result of PPP

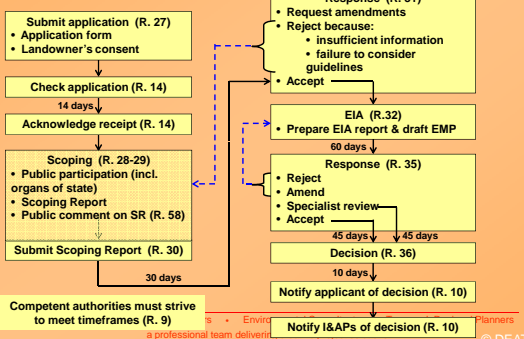
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## NEMA EIA Process



### SCOPING AND EIA



## Environmental Process



- Scoping Phase
  - An issues based, desk top investigation
  - Biophysical environment
  - Social environment
- ID potential impacts to be further investigated during the EIA phase

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## Environmental Aspects



- Biophysical aspects that were assessed include:
  - Biodiversity (fauna & flora)
  - Avifauna (birds)
  - Geology and geohydrology
  - Surface water
  - Agricultural Potential

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## Environmental Aspects



### ● Social aspects that were assessed include:

- Visual Environment
- Socio- Economic Environment
- Tourism
- Heritage and Cultural Aspects

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## Issues identified - Biophysical



Aspect	Issues identified – Northern and Southern Corridors
Flora	<ul style="list-style-type: none"> <li>• Loss of natural vegetation and fragmentation</li> </ul>
Fauna	<ul style="list-style-type: none"> <li>• Loss of habitat</li> <li>• Sensitive areas – Mountains with Red Data species present</li> </ul>
Avifauna	<ul style="list-style-type: none"> <li>• Collision Impact and habitat destruction</li> </ul>
Geology and geohydrology	<ul style="list-style-type: none"> <li>• Potential soil erosion and disruption of dune dynamics</li> </ul>
Surface Water	<ul style="list-style-type: none"> <li>• Potentially affect large floodplains and drainage systems with tower placement and vegetation removal</li> </ul>
Agricultural potential	<ul style="list-style-type: none"> <li>• Potential loss of soil productivity</li> </ul>

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## Issues identified - Social



Aspect	Issues identified – Northern and Southern Corridors
Visual	<ul style="list-style-type: none"> <li>• Several sensitive receptors which could be affected</li> </ul>
Social	<ul style="list-style-type: none"> <li>• Influx of workers</li> <li>• Change in irrigation activities</li> <li>• Reduction in property value</li> <li>• Improvement of power supply</li> <li>• Change in sense of place</li> </ul>
Tourism	<ul style="list-style-type: none"> <li>• Several tourism routes and establishments which could be affected</li> </ul>
Heritage	<ul style="list-style-type: none"> <li>• Impacts on sense of place and cultural landscape</li> </ul>

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## Recommendations



### Northern Corridor

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## Recommendations - NC



Aspect	Fatal flaws	Refinement recommendations	Further Investigations
Flora	None	<ul style="list-style-type: none"> <li>• Steer away from sensitive and fragmented vegetation types.</li> <li>• Keep corridor 5km through Gamtoos to allow for a broader investigation area during EIA phase.</li> <li>• Steer away from Groendal and mountains – move corridor to the east</li> <li>• Avoid Longmore Forestry area as Red Data species have been recorded</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP

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## Recommendations - NC



Aspect	Fatal flaws	Refinement recommendations	Further Investigations
Fauna	None	<ul style="list-style-type: none"> <li>• Steer away from Groendal and mountains – move corridor to the east in these areas.</li> <li>• Move corridor south near Loeie to avoid sensitive areas.</li> <li>• Avoid Longmore Forestry area as Red Data species have been recorded</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP
Avifauna	None	<ul style="list-style-type: none"> <li>• Keep to west of corridor near Humansdorp.</li> <li>• Avoid Loeie dam.</li> <li>• Avoid irrigated lands.</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP

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## Recommendations - NC



Aspect	Fatal flaws	Refinement recommendations	Further Investigations
Geology and geohydrology	None	<ul style="list-style-type: none"> <li>No clear preference but to avoid dunes and steep slopes</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP
Surface Water	None	<ul style="list-style-type: none"> <li>Align away from drainage areas and rivers.</li> <li>Cross at least sensitive points if possible</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP

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## Recommendations - NC



Aspect	Fatal flaws	Refinement recommendations	Further Investigations
Agricultural potential	None	<ul style="list-style-type: none"> <li>Avoid centre pivots</li> <li>Avoid Longmore Forestry area due to potential fatal flaws on operation of forestry activities.</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP

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## Recommendations - NC



Aspect	Fatal flaws	Refinement recommendations	Further Investigations
Visual	None	<ul style="list-style-type: none"> <li>Avoid sensitive receptors</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP
Social	None	<ul style="list-style-type: none"> <li>Avoid centre pivots</li> <li>Avoid dwellings, establishments</li> <li>Avoid schools</li> <li>Avoid small holdings</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP

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## Recommendations - NC



Aspect	Fatal flaws	Refinement recommendations	Further Investigations
Tourism	None	<ul style="list-style-type: none"> <li>Avoid Groendal Wilderness Area</li> <li>Avoid Loerie Dam</li> <li>Cross Gamtoos as far north as possible</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP
Heritage	None	<ul style="list-style-type: none"> <li>No routing preference</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP

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## Recommendations



### Southern Corridor

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## Recommendations - SC



Aspect	Fatal flaws	Refinement recommendations	Further Investigations
Flora	None	<ul style="list-style-type: none"> <li>Steer away from sensitive and fragmented vegetation types. Stay out of thicket vegetation due to impact of removal.</li> <li>No clear preference for refinement apart from: <ul style="list-style-type: none"> <li>Alt 2 preferred</li> <li>Move substation towards Fitches Corner</li> <li>Avoid Lady Slipper Reserve</li> </ul> </li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP

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## Recommendations - SC

**SIVEST**

Aspect	Fatal flaws	Refinement recommendations	Further Investigations
Fauna	None	<ul style="list-style-type: none"> <li>Cross Van Stadens where existing infrastructure is present</li> <li>Steer away from Groendal</li> <li>Stick to existing infrastructure near dune thicket</li> <li>More transformed areas along Alt 2 thus more preferable</li> <li>Move substation towards Fitches Corner</li> <li>Avoid Lady Slipper Reserve</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP

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## Recommendations - SC

**SIVEST**

Aspect	Fatal flaws	Refinement recommendations	Further Investigations
Avifauna	None	<ul style="list-style-type: none"> <li>Alt 2 preferred</li> <li>Follow existing infrastructure</li> <li>Move substation more towards Fitches Corner</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP
Geology and geohydrology	None	<ul style="list-style-type: none"> <li>No clear preference but to avoid dunes and steep slopes</li> <li>Move substation more towards Fitches Corner</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP

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## Recommendations - SC

**SIVEST**

Aspect	Fatal flaws	Refinement recommendations	Further Investigations
Surface Water	None	<ul style="list-style-type: none"> <li>Align away from drainage areas and rivers.</li> <li>Cross at least sensitive points if possible</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP
Agricultural potential	None	<ul style="list-style-type: none"> <li>Avoid centre pivots</li> <li>Move substation more towards Fitches Corner</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP

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## Recommendations - SC

**SIVEST**

Aspect	Fatal flaws	Refinement recommendations	Further Investigations
Visual	None	<ul style="list-style-type: none"> <li>Avoid sensitive receptors</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP
Social	None	<ul style="list-style-type: none"> <li>Avoid centre pivots, schools etc</li> <li>Move substation site up towards Fitches corner</li> <li>Corridor to be reduced to 100m between Uitenhage and Despatch agreed with NMBMM (and as per town planning information)</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP

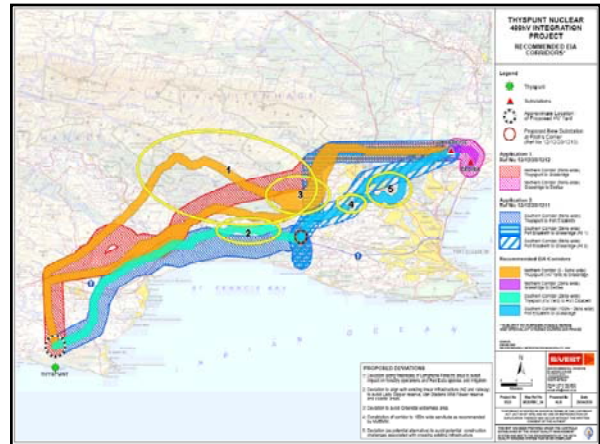
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## Recommendations - SC

**SIVEST**

Aspect	Fatal flaws	Refinement recommendations	Further Investigations
Tourism	None	<ul style="list-style-type: none"> <li>Stay as close to R330 as possible or to the west of the R330.</li> <li>Overall the southern corridor is expected to have a more substantial effect on the area compared to the northern corridor. It should therefore be relocated more inland</li> <li>Move substation more towards Fitches Corner</li> </ul>	To be considered further in the EIA, with mitigation measures to be detailed in the EMP
Heritage	None	No routing preference	To be considered further in the EIA,

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## Recommendations



- The following studies will be undertaken through to the EIR:

- Flora
- Fauna
- Avifauna (birds)
- Geology and geohydrology
- Surface water
- Agricultural potential
- Visual
- Socio-economic
- Tourism
- Heritage

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## Way Forward - 2009



May	June	July	August	September
Public Comment period – Draft Scoping Report	Public Comment period – Draft Scoping Report			
		Submit Final Scoping Report to DEAT		
			Proposed start EIA Phase	
			Ongoing PP Process for EIA Phase	Ongoing PP Process for EIA Phase

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## Contact Details



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## **Annexure C**

### **DISCUSSION SESSION AND QUESTIONS**

DISCUSSION DOCUMENT

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ABBREVIATIONS:

KSW:	Key Stakeholder Workshop
NEMA:	National Environmental Management Act
DWAE:	Department of Water and Environmental Affairs
EMP:	Environmental Management Plan
CEMP:	Construction Environmental Management Plan
ECO:	Environmental Control Officer



## ANNEXURE C

Issue/Comment	Raised By	Response
<b>1 EIA Process Comments/Issues</b>		
Stated that there are many specialist reports, each stated what should and shouldn't happen during the construction and maintenance phases, yet in the past contractors came in and cut fences and left them unrepaired, workers left rubbish and litter lying around, roads have not been fixed and maintained as stated in the EMPs, therefore he is not convinced about anything that is put on paper. He stated that he has evidence of where people have removed cycads from the veld etc and if this project goes ahead, there are going to be many issues in the sense that these problems are not going to be avoided regardless of what the reports state. He then enquired as to what recourse do landowners etc. get if and when these activities do occur.	Mr Mark Dodd Chairman: Elands River Conservancy KSW: 15 May 2009	<p>Responded by saying that an Environmental Control Officer (ECO) is appointed who enforces compliance with the CEMP. These reports get sent to the determining authority. In some cases it's been useful to appoint a local person who is familiar with the community, the issues in the area and who can be more aware of what to expect in that area. This is a recommendation that SiVEST will make. Local people carrying out this function must be strict and there are success stories such as that of the road around the Knysna Lagoon where a local gentleman was appointed as the ECO.</p> <p><b>Liesl Koch: SiVEST</b></p> <p>Responded saying that before any construction occurs in each area, photos of the site are taken and when construction is complete, the site is to be rehabilitated to the same condition that it was in prior to when the construction activities occurred. There is also a Final Release Certificate that has to be signed in order to take responsibility of that land, but included will be the level of rehabilitation which the landowner has to be in agreement with in order for the form to be signed and for the completion of the negotiation.</p> <p><b>Lerato Mokgwatlheng: Eskom</b></p>
<b>2 Water Related Comments/Issues</b>		
Stated that he does mountaineering and drinks water from the mountains as well as under the powerlines and he requests that a water study be conducted both prior to as well as after the construction activities have occurred in order to ensure that the drinking water standards remain the same as he is concerned about his wellbeing should this water be polluted by workers etc.	Mr Serge Smetrys Vice Chairman: Elands River Conservancy KSW 15 May 2009	<p>Comment Noted and will be forwarded to the relevant specialist. The CEMP will ensure that water quality of rivers is maintained. All potential pollutants will be placed well away from all water resources.</p> <p><b>Liesl Koch: SiVEST</b></p>
Enquired whether or not the oil holding dam at substations gets a lid on it and raised the concern that in Port Elizabeth there are flash floods and many millimetres of rain can fall in one evening/day. His concern is that the water will build up and the holding dams will overflow. Therefore an oil spill will impact on surface and ground water.	Mr Serge Smetrys Vice Chairman: Elands River Conservancy KSW 15 May 2009	<p>Responded saying that one of the main purposes of the net is in order to stop animals and/or people from falling in.</p> <p><b>Nicolene Venter: SiVEST</b></p> <p>Responded that holding dams are designed in such a way as to hold 1.5 times the capacity of oil within it and it is not located in a low lying area so that the possibility of flash floods actually filling it up is very remote. The rain that does go into it during the course of the year will</p>

## ANNEXURE C

Issue/Comment	Raised By	Response
		evaporate so Eskom does not have to pump it out continuously. The holding areas are for extreme circumstances and are usually never used in its lifetime. They are monitored and checked regularly so if they are reaching a certain level, the oil will be pumped out of them. <b>Brian Vockerodt: Eskom Lines and Servitude Manager</b>
3 Heritage Impact Related Comments/Issues		
Stated that the specialist who will be conducting the Heritage Impact Assessment should remember to consider all heritage aspects.	Mr Thanduxolo Lungile SAHRA Provincial Manager Eastern Cape Province KSW 15 May 2009	Responded by saying that the specialist is very thorough as the cultural environment/landscape is also very important. <b>Liesl Koch: SiVEST</b>
Mentioned that during construction activities some artefacts and/or graves may be unearthed therefore it is vital that a specialist be employed/appointed in order to determine the significance of any artefact that may be found.		Responded by saying that if the project is approved, the specialists who have been appointed for each theme i.e. the faunal specialists, the heritage specialist etc. will all walk the proposed route and conduct a point specific assessment of the proposed line for the Construction Environmental Management Plan and will provide mitigation measures and recommendations for every single tower location. If a heritage site etc is found the 2km servitude comes into play as the specialist may state that the line must be moved in order to protect that specific site. This occurs before anything is constructed. <b>Liesl Koch: SiVEST</b>  Mentioned that Eskom has a procedure, as stated in their presentations, that if anything is unearthed during construction, the area is cordoned off and SAHRA are contacted immediately. This is also stated in the CEMP. <b>Nicolene Venter: SiVEST</b> (The above was confirmed by Eskom team members).
4 Socio-economic and Social Related Comments/Issues		
He also mentioned that toilet facilities are put up, but the workers do not make use of them and this is a serious problem for farmers and may pose as a water pollution risk and measles are transmitted to cattle through faeces. He then enquired as to what recourse do landowners etc. get if and when these activities do occur and what guarantee is there of the safety of the women and children (who are normally at home alone), especially since he lives in a rural area where people are spread	Mr Mark Dodd Chairman: Elands River Conservancy KSW: 15 May 2009	Responded by saying that an Environmental Control Officer (ECO) is appointed who enforces compliance with the CEMP. These reports get send to the determining authority. In some cases it's been official to appoint a local person who is familiar with the community, the issues in the area and who can be more aware of what to expect in that area and this is a recommendation that SiVEST will have to make. Local people

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some distance from one another.		<p>carrying out this function must be strict and there are success stories such as that of the road around the Knysna Lagoon where a local gentleman was appointed as the ECO.</p> <p><b>Liesl Koch: SiVEST</b></p> <p>Responded saying that before any construction occurs in each area, photos of the site are taken and when construction is complete, the site is to be rehabilitated to the same condition that it was in prior to when the construction activities occurred. There is also a Final Release Certificate that has to be signed in order to take responsibility of that land, but in there will be the level of rehabilitation which the landowner has to be in agreement of in order for the form to be signed and for the completion of the negotiation.</p> <p><b>Lerato Mokgwathheng: Eskom</b></p>
Enquired as to which communities would be affected where these power lines are being proposed to run in close proximity to and how close the lines are expected to be to these communities.	Mr Ryan Donnelly Chairman: For a Safe Tomorrow KSW 15 May 2009	<p>Responded saying that many communities are affected and this keeps changing according to the changes to the proposed route corridors. Currently the Rocklands community is affected by the proposed transmission lines and this will be looked at closely in the EIR phase of the project. Other areas that are also important in this regard or those of Uitenhage, Despatch, Kruisfontein, KwaLanga and KwaNobuhle as they are densely populated and therefore present problems from a space perspective as well as a health and safety perspective.</p> <p><b>Liesl Koch: SiVEST</b></p>
Enquired as to what distance would Eskom place power lines away from a clustered poor community / township.	Mr Ryan Donnelly Chairman: For a Safe Tomorrow KSW 15 May 2009	<p>Responded saying that this issue would have to be placed in the post-meeting minutes in order to ensure an accurate response.</p> <p><b>Nicolene Venter: SiVEST</b></p> <p><b>Post-meeting Note:</b></p> <p>Eskom would avoid community settlements and no structures are allowed within the servitude being 55m wide for a 400kV transmission line.</p> <p><b>Dean Wilson: Eskom</b></p>
Enquired whether or not SiVEST and Eskom knew of the Comparative Supply and Development Programme and then went on to mention that it is a programme that was developed by the Department of Public Enterprises and it is a programme for all state enterprises who are obligated to comply with the programme. The aim of the programme is to develop local suppliers in South Africa to supply parts to the Eskom enterprises. This acts as an opportunity for job creation. Eskom has already	Mr Alwin Malgas Chairman: Independent Democrats KSW 15 May 2009	<p>Comment noted and information will be forwarded to the SIA specialist.</p> <p><b>Nicolene Venter: SiVEST</b></p>

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signed to be in accordance with the programme and they will be audited.		
<b>5 EIA Process Comments/Issues</b>		
Enquired whether or not DWEA are the determining authority and what would happen if they denied authorisation for the proposed project.	Mr Mark Dodd Chairman: Elands River Conservancy KSW: 15 May 2009	Should an EA be denied, Eskom would be allowed to appeal the decision in terms of NEMA, just as all of the stakeholders and I&APs have the right to appeal any decision that is made. If the appeal is turned down then Eskom will not be allowed to erect the transmission lines. <b>Liesl Koch: SiVEST</b>
<b>6 Electro Magnetic Fields Comments/Issues</b>		
Enquired as to what the health and safety requirements are regarding EMFs and as to what the standards are regarding the distance that transmission lines have to be placed away from communities and residential areas. He also mentioned that the poorer communities tend to reside underneath the powerlines which is detrimental to their wellbeing.	Mr Ryan Donnelly Chairman: For a Safe Tomorrow KSW 15 May 2009	Responded saying that a document discussing EMFs has been included in the DSR (annexure 11), but the servitude widths that were mentioned i.e. 55 metres per a line is the recommended requirement. She noted his concern regarding the spreading townships and the possibility that these poorer communities may eventually locate themselves underneath the transmission lines and that this would have to be noted in the operational environmental management plan. <b>Liesl Koch: SiVEST</b>
<b>7 Proposed Port Elizabeth Substation Related Comments/Issues</b>		
Enquired as to the size of the proposed substation i.e. the size of the area that the proposed substation is likely to take up.	Mr Mark Dodd Chairman: Elands River Conservancy KSW 15 May 2009	Responded saying that it depends on what Eskom requires for the substation i.e. two transformers and number of feeder bays. Therefore the size of Tx substations varies based on these requirements. The proposed new PE Tx substation is based on between 100 m <sup>2</sup> to 150m <sup>2</sup> . Should detailed information be required, a written request can be submitted to Eskom and Eskom will be able to supply the relevant information. <b>Thamasanga Ngcobo: Eskom Transmission</b>  Responded saying that SiVEST is doing the environmental studies for an area of 400m <sup>2</sup> . <b>Liesl Koch: SiVEST</b>
It was enquired for confirmation purposes that the proposed substation site has been moved from the Blue Horizon Bay area to Fitches corner and that is the final decision.	Representative Blue Horizon Bay Residents' Association	Responded saying that from an environmental viewpoint, this site appears to be the preferred site as it is already a degraded area. It also serves the need of the NMBMM for the distribution lines to get out from

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	KSW 15 May 2009	the area. She then added that the substation would not be placed near Blue Horizon Bay. <b>Liesl Koch: SiVEST</b>
Enquired as to the capacity of the proposed sub-station.	Mr Sipho Chiume DME Energy Officer KSW 15 May 2009	Responded saying that it is proposed to be a 400kV sub-station and then go down to a 275kV or 132kV for the municipality, but this is not for certain therefore feedback will be given at a later stage. <b>Liesl Koch: SiVEST</b>
8 Servitude Related Comments		
Enquired as to what exactly the servitude entails for the farmers i.e. what are they able to do underneath it.	Mr Gregg Wilmans MTO Longmore KSW 15 May 2009	Responded by saying that cattle farming and grazing activities as well as low level agricultural crop farming can occur. She went on to mention that central pivot farming activities are problematic because the powerlines span 400 metres and the pivots span a greater distance than that, therefore those areas are to be avoided if possible, but other farming activities can continue as normal underneath the powerlines. <b>Liesl Koch: SiVEST</b>
Enquired as to what would happen should Eskom not be able to avoid farms making use of central pivot irrigation.		Responded saying that Eskom would follow normal procedure and those farmers would be compensated. <b>Liesl Koch: SiVEST</b>
9 Map Related Comments		
It was requested that the corridor information (co-ordinates) be forwarded to SACAA in order for them to determine how the proposed lines may affect the smaller airports within the study area.	Ms Lizell Stroh Obstacle Specialist: SA Civil Aviation Authority KSW 15 May 2009	Request noted and will be forwarded to the GIS specialist. <b>Liesl Koch: SiVEST</b>
10 Technical Related Comments		
Enquired as to what the maximum pylon height is that is to be erected i.e. are there plans to use the pylons that are 55 metres in height.	Ms Lizell Stroh Obstacle Specialist SA Civil Aviation Authority KSW 15 May 2009	Responded saying that the height of the pylons that are expected to be used is 38 metres. If the designers decide to use those with a wider span there may be areas where the pylons will be taller, but at least 90% of the line will be made up of pylons that are 38 metres in height. The design will be determined by the final route alignment which has not been finalised and therefore no plans can be given at this point in time. <b>Thamasanga Ngcobo: Eskom Transmission</b>  Responded saying that SiVEST will take the worst case scenario i.e.

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		<p>the highest possible pylons (55 metres) and assess this in the reports. Therefore, 55 metres will be taken as a precautionary measurement.  <b>Liesl Koch: SiVEST</b></p> <p>Responded saying that the 765kV lines are those of 55 metres and therefore these lines should never go to that height, but the self supporting towers may be extended by two to three metres; but it is really not expected that these lines will exceed 38 metres in height.  <b>Brian Vockerodt: Eskom (Lines and Servitude Manager)</b></p>
Enquired what would the impacts be on the structure of the lines that are expected to be located in the area between Jeffrey's Bay and St Francis Bay due to the flat topography and high wind speed.	Mr Ryan Donnelly Chairman: For a Safe Tomorrow KSW 15 May 2009	<p>Responded saying that the structures are designed with many aspects in mind including wind loading on the conductors and the structures. The structures are designed to fit those for the conditions typical of the country.  <b>Thamasanga Ngcobo: Eskom Transmission</b></p>
Enquired, from a forestry point of view, as to the distance that must be maintained between the lines and any vegetation.	Mr Greg Wilmans Forester MTO: Longmore Plantation KSW 15 May 2009	<p>Responded saying that Eskom requires 55 metres servitude per power line and that MTO informed the project team that provision will have to be made to ensure the integrity of the power lines should a tree of. 5m high (for example) falls over into the servitude. These details will be discussed during Eskom's servitude negotiations.  <b>Nicolene Venter: SiVEST</b></p>
<b>11 General Comments &amp; Issues Raised</b>		
Enquired as to what the clearance is that is required between the distribution lines and the trees as in the examples given in Eskom's construction presentation.	Mr Mark Dodd Chairman: Elands River Conservancy KSW 15 May 2009	<p>Responded saying that the clearance between the distribution lines and the trees is four metres (4m).  <b>Brian Vockerodt: Eskom (Lines and Servitude Manager)</b></p>
Enquired whether or not vegetation will have to be cleared underneath the power lines.		<p>Responded saying that the maximum height of vegetation relates to the four metre clearance between the vegetation and the conductor. This actual height of what the vegetation underneath the lines will therefore vary.  <b>Brian Vockerodt: Eskom (Lines and Servitude Manager)</b></p>
Enquired whether or not recording of the meeting was for minute taking purposes.	Mr Alwin Malgas Chairman: Independent Democrats KSW 15 May 2009	<p>Responded saying that the meeting is being recorded for minute taking purposes so that if discrepancies occur it can be accurately dealt with and amended if need be. She then added that an electronic copy would be made available to the attendees upon written request.  <b>Nicolene Venter: SiVEST</b></p>
Stated that Eskom are buying property and therefore it appears to be a sealed deal that the power station and the transmission lines will be constructed.	Mr Serge Smetryns Vice Chairman: Elands River	<p>Responded by stating that Eskom does take a lot of risk, regarding the purchase of property, with potential projects such as the proposed</p>

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	<p>Conservancy KSW 15 May 2009</p>	<p>nuclear power station. He then mentioned that studies for road access, bridges etc. are also taking place at the moment because Eskom can not afford to only start those processes if and when the project is approved by the authorities.</p> <p><b>Johan Breytenbach: Eskom Generations</b></p> <p><b>Post-meeting note:</b> No properties are being purchased by Eskom for the proposed Transmission power lines. Eskom will only consider purchasing property should it be a narrow piece of property and the effect of the Transmission power line disrupt land operations. The preferred method however is to acquire options to register servitudes from landowners.</p> <p><b>Dean Wilson: Eskom</b></p>
<p>Enquired as to the status of the Concentrated Solar Plant in Upington as he believes that the EIA for that project was approved. He also enquired whether or not the wind farm and the plant in Upington were plants that are urgently required.</p>	<p>Mr Ryan Donnelly Chairman: For a Safe Tomorrow KSW 15 May 2009</p>	<p>Responded by saying that it has been put on hold due to financing issues, but it and the Wind Farm are not major and/or urgent plants for electricity generation.</p> <p><b>Mervin Theron: Eskom</b></p> <p>Mentioned that the World Bank usually helps with funding for projects relating to alternative energy, but due to the world-wide financial crisis the bank is now hesitant to back up such projects at this point of time.</p> <p><b>Johan Breytenbach: Eskom</b></p> <p><b>Post-meeting note</b> These renewable energy projects are definitely part of the Eskom generation mix. However, nuclear <b>power is usually used for base load and operates continuously (day &amp; night)</b> due to their availability while renewables such as wind and the sun are dictated by environmental conditions .ie depending on when the wind blows which are highly unpredictable which render them more intermittent. Due to the financial melt down and Eskom funding constraints they have been put on hold.</p> <p>It is also well known that the World Bank usually helps with funding for projects relating to renewable energy, but due to the world-wide financial crisis the bank is now hesitant to back up such projects at this point of time.</p>

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		<i>Mervin Theron: Eskom</i>
<b>12 Nuclear Power Station Related Comments</b>		
Stated that the site is expected to be 4000MW he then enquired whether or not it meant that the site will never go above that. He also enquired whether or not for every 4000MW there is a requirement of five lines out of the plant.	Mr Ryan Donnelly Chairman: For a Safe Tomorrow KSW 15 May 2009	Responded saying that Eskom predict that some of the sites may be able to take up to 10,000MW capacity. Eskom are therefore looking into the maximum carrying capacity of each site. Nuclear 1 is projected to be approximately 4 000MW, but Eskom are also looking into putting another nuclear plant on the same site as Nuclear 1 as it will be more beneficial. Five lines are more or less what are required for every 4000MW. <b>Thamasanga Ngcobo: Eskom Transmission</b>
It was enquired as to what the exact size of the site is and where can information regarding the site size be obtained.	Mr Alwin Malgas Chairman: Independent Democrats KSW 15 May 2009	The footprint as described and assessed during the EIA will not be exceeded as it will currently be able to handle a power station with a maximum capacity of 10 000MW. Information regarding this footprint is available in the EIA reports. <b>Johan Breytenbach: Eskom Generations</b> <b>Post-meeting note:</b> The current application is for the construction and operation of a 4 000MW nuclear power plant. It was consistently communicated at all public meetings that the Eskom's Board approved the investigation of developing 20 000 MW of Nuclear Power. Subsequently although any development of any nuclear power station beyond the prescribed 4000 MW would require an additional EIA all specialists studies are also required to assess the maximum generating capacity that could be constructed on each of the three sites, with respect to environmental constraints. Eskom proposed that the specialists assume a capacity range of a minimum of 4000 MW to a maximum of 10000 MW Further information is available on the following website: <a href="http://projects.gibb.co.za/">http://projects.gibb.co.za/</a> <b>Mervin Theron: Eskom</b>
Enquired whether or not the possibility of upgrading has been identified within the current projected footprint. He also enquired whether or not there are diagrams illustrating the proposed Nuclear 1 and where the future expansions may occur.	Ryan Donnelly Chairman: For a Safe Tomorrow KSW 15 May 2009	Responded saying that it has been included because Eskom identified the area where it would be possible to place the Power Station so because there are studies currently taking place by EIA specialists, they will indicate if and where there are sensitive areas where Eskom can not place the station. Due to the variation between vendors, a detailed drawing has not been produced as yet, but the environmental studies stipulate (according to the size of a regular power station) where a



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<p>Enquired as to what the total amount of watts is that Eskom envisions getting out of Nuclear 1 i.e. what is the national target.</p>		<p>station of roughly that size may be placed.  <b>Mervin Theron: Eskom</b>  <b>Post-meeting note:</b>  Refer to the above response. Any further information on the Nuclear-1 sites EIA can be obtained from the following website:  <a href="http://projects.gibb.co.za/">http://projects.gibb.co.za/</a></p> <p>Responded saying that 20000 MW is the national target, including sites inland and up into Natal in order to try and spread the generation more equally around the country. They need to be near a water source and that is why coastal areas have been targeted at this point in time. The Eastern and Western Cape areas were seen as strategic options for the proposed stations. Inland dams may also be an option for the future.  <b>Mervin Theron: Eskom</b>  <b>Post-meeting note:</b>  The current EIA sites for Nuclear-1 is for a maximum of 4 000MW. Eskom is investigating developing 20 000 MW of Nuclear Power.  <b>Mervin Theron: Eskom</b></p>
<p>Enquired as to why Thyspunt has been chosen as the location for the proposed power station i.e. if it is the simplest and most economical way of doing it; as there seems to be lots of logistics involved.</p>	<p>Mr Mark Dodd  Chairman: Elands River Conservation  KSW 15 May 2009</p>	<p>Responded saying that nuclear plants need to be close to water and that was why coastal areas were targeted when looking for possible sites for the plants. The Sterkfontein Dam was also taken into consideration, but it is very close to the current generation capacity of South Africa.  Nuclear energy is being introduced as transported coal is a problem and therefore Eskom does not want to construct more coal power stations.  The Nelson Mandela Metropolitan area was scoped and the area north of it i.e. Alexandria; was ruled out as the sand is too deep, therefore to hit bedrock (for construction of the power station was not a logistical option. Five sites were then identified near Signal Point in the Cape St Francis area. Three of those i.e. west of Oyster Bay; were ruled out as they occurred along a major geological fault. This left two sites available namely; Thyspunt and Tony's Bay which are close to one another and therefore consolidated into a single site.  <b>Mervin Theron: Eskom</b></p> <p>Mentioned that the detailed process as to how Eskom identified the</p>

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		<p>potential sites is attached to the Scoping Report for the Nuclear 1 Power Station and it is also available on Eskom's website.</p> <p>The Thyspunt site is very important as Eskom is trying to minimise consumer's costs by creating local supply to the various areas as this minimises costs in importing energy and also creates more security within the areas. Lots of development is occurring in the Eastern Cape, therefore a local energy supply is favourable.</p> <p><b>Johan Breytenbach: Eskom</b></p> <p><b>Post-meeting note:</b> The initial identification of all sites considered as part of the sites EIA was the result of an extensive Nuclear Site Investigation programme, which occurred in the mid 1980's. Sites were identified based on a range of socio economic and bio physical criteria. You are encouraged to review the NSIP summary, which was included as part of the Final Scoping report of the sites EIA. Any further information on the Nuclear-1 sites EIA can be obtained from the following website: <a href="http://projects.gibb.co.za/">http://projects.gibb.co.za/</a></p> <p><b>Mervin Theron: Eskom</b></p>
<p>Enquired whether or not Eskom looked at more than one site (regarding the area north of the Nelson Mandela Metropolitan area).</p>		<p>Responded saying that an area was first looked at and then specific locations are pin-pointed.</p> <p><b>Mervin Theron: Eskom</b></p> <p><b>Post-meeting note:</b> See response above.</p>
<p>Enquired whether or not SiVEST and Eskom knew of the Comparative Supply and Development Programme.</p>	<p>Mr Alwin Malgas Chairman: Independent Democrats KSW 15 May 2009</p>	<p>It is a programme that was developed by the Department of Public Enterprises and it is a programme for all state enterprises who are obligated to comply with the programme. The aim of the programme is to develop local suppliers in South Africa to supply parts to the Eskom enterprises. This acts as an opportunity for job creation. Eskom has already signed to be in accordance with the programme and they will be audited. He then mentioned that he would make the Nuclear Policy Document available for people to read. He stated that the Nuclear Policy Document is on the Department of Minerals and Energy's website.</p> <p><b>Mervin Theron: Eskom</b></p>