

Date

# PROPOSED POWER STATION AND ASSOCIATED INFRASTRUCTURE IN THE WITBANK AREA

**Public Meeting** 

Time

Venue

5 September 2006	18:00 – 20:00	El Toro	
			Action
An open house was held betwee	n 16h00 and 18h00 in the same	venue. An attendance	e
egister for the open house an	d meeting is shown on the las	t page of the minutes	s.
. Welcome and introduction			
Ms Karen Shippey (KS) we epresentatives and the Ninham	elcomed everybody and intro	oduced the Eskom rpose of the meeting	
was explained as being to des process in the future, present the dentify issues, questions and co	scribe the EIA process undertal e draft scoping report and to prov incerns of the public.	ken this far and the vide an opportunity to	
2. Overview of electricity supp	ly and demand		
Ms. Deidre Herbst (DH) presen	ted an overview of Electricity su	pply and demand in	
he country.			
The presentation covered the fol	llowing points:		
The role of the governme	ental policy documents was expla	lined	
<ul> <li>DME's Integrated</li> </ul>	Energy Plan;		
<ul> <li>the National Integ</li> </ul>	rated Resource Plan (NIRP); and	d	
<ul> <li>Integrated Strateg</li> </ul>	gic Electricity Plan (ISEP).		
The demand requirement	nts were outlined and the effor	rts for demand side	
The renewable energy re	search and pilot projects were di	scussed	
<ul> <li>The available coal, gas a</li> </ul>	nd nuclear technologies being us	sed were outlined	
Among other reasons,      relatively short period w	coal-fired power stations were ithin which they could be built a	selected due to the and since large coal	
deposits were available.	ad		
	eu, ompleted)		
– Withank (EIA pro	cess initiated)		
– Vaal South (EIA	process initiated)		
The meeting was advis	ed that these three projects ar	re not alternatives if	
resource and the time lin	es associated with accessing this	s resource.	
3. Technical appreciation of th	e power station		
Mr Suren Rajaruthnam (SR) pr	ovided a technical overview of	the proposed power	
station. He also discussed some	of the technical and process alte	ernatives available.	



	Action
<ul> <li>The presentation highlighted the following aspects:</li> <li>Technical Parameters and the process flow of a coal-fired Power Station</li> <li>Typical Power Station Site Layout</li> <li>Typical Technology : Coal and ash Handling and Water Treatment</li> <li>The proposed coal-fired power station would have a nominal capacity of 5400 MW (6 X 900 MW) capacity. The proposed power station would be fueled by pulverised fuel (pf) and would be dry cooled</li> <li>The technology applied in the proposed power station would have the following benefits: <ul> <li>Increased efficiency</li> <li>Lower emission levels</li> <li>Correater operating cost</li> <li>Greater operating and Flue Gas Desulphurisation would be considered to reduce airborne pollutants</li> </ul> </li> <li>Ash dump requirements were outlined.</li> <li>All Eskom stations are Zero Liquid Effluent Discharge (ZLED) and waste water will be dealt with on site and recycled</li> </ul>	
Chris Cloete (CC) asked where DWAF would get water from to supply the power station. SR explained that the Vaal River Eastern Sub-system Augmentation Project (VRESAP) would import water from the Vaal River into the region.	
Dan Campbell (DC) asked what the main constituents of the power station emissions would be and whether acid rain would occur as a consequence of the power station emissions. DH said that the emissions comprised oxides of sulphur, oxides of nitrogen, carbon dioxide ( $CO_2$ ) and particulates. In terms of acid rain, DH noted that acid rain was a possibility in regions of high rainfall such as Europe and some of South Africa's coastal areas. However, the last 30 years of research indicate that dry deposition of sulphur is more typical to the region than acid rain. In this regard, independent research has shown that the impact of dry deposition is minimal. SR added that emission levels are regulated by government and that Eskom would comply with these regulations.	
CC noted that the locality maps did not illustrate the coal resource. KS asked that this	

John Byrne (JB) wanted to know whether the power station would be directly or indirectly cooled and where excess water and wastewater would be disposed off. SR indicated that both direct and indirect dry cooling systems would be assessed in the EIA Phase. He also explained that the power station would have a Zero Liquid

question be held until later, when other relevant presentations had been made.



emissions.

	Action
Effluent Discharge (ZLED) policy. Once in the power station, water of varying quality	
would be used for different purposes. The effluent water would be used on the ash	
dump to suppress dust.	
4. The EIA and site selection processes	
Mr Brett Lawson (BL) explained that the Environmental Impact Assessment (EIA)	
process being followed would be undertaken in accordance with the Environment	
Management Act (ECA) and not the National Environmental Management Act	
(NEMA) as the application was submitted before the NEMA EIA Regulations were	
promulgated. A brief explanation of the EIA process in terms of ECA was provided.	
BL explained that the building of this power station was a project of considerable	
magnitude and the process is being undertaken as comprehensively as possible	
BL presented an overview of the site selection process for the proposed power	
station. The presentation highlighted the following aspects:	
• Preliminary site selection criteria included: proximity to coal (within 30km), site	
needed to be off the actual coal resource, air quality and at least 10km away	
from settlements	
• Within these constraints an area was identified- 8 sites were located. These	
were ranked using a multi criteria decision analysis tool	
• Six site selection criteria then used to determine which of these 8 sites should	
be investigated further. The criteria were: operational logistics, landuse,	
geology/geomorphology, ecology, local air quality and socio-economics	
• Three sites showed as being worthy of taking forward for more detailed	
investigation. I wo of the sites were consolidated into Site X, due to their	
proximity and similarity to each other, and another became Site Y	
A participant asked how far the proposed Site X was from the R545. Mr Kamal	
Govender (KG) indicated that it was approximately 2 km west of the R545.	
JB asked whether the EIA would take existing businesses in the area into	
consideration. He also wanted to know whether the EIA practitioners had compiled a	
list of industries that could be affected by the proposed power station. BL indicated	
that a socio-economic study would incorporate those sorts of considerations into the	
EIA, but not at the level of detail of all individual businesses in the greater region. KS	
enquired whether there was a specific business that he had in mind. He stated that	
he was concerned specifically about impacts on poultry and livestock in the area. BL	
noted that the air quality study would give some idea of the potential impacts of	
emissions but that dust may have more of an impact on poultry and livestock than	l



	Action
Mr Geoff Byrne (GB) asked where the site of the coal operations would be and why the coal mine impacts were not considered as part of this EIA. BL stated that, in terms of decision-making, the Department of Environmental Affairs and Tourism (DEAT) would need to apply the principle of good co-governance and consult with the Department of Minerals and Energy who would be dealing with e coal mine EIA. While the mining itself was excluded from power station EIA, the coal conveyor corridor from the coal mine to the proposed power station would be included. KG noted that should people want to be involved in the coal mine EIA they should inform Ninham Shand and their details would be passed on to the coal mine environmental practitioners.	
informed at this late stage of the intention to construct a power station in the Witbank area. DH stated that the location of proposed power stations was not determined years in advance. She explained that in 1994 government decided that Eskom would not be responsible for constructing any new power stations, but that independent power producers would be provided with this opportunity. However, in late 2004 Eskom was instructed to build new power stations. DH added that future coal reserves and power stations would be better planned.	
GB wanted to know why Eskom did not plan properly and hence avoid the current electricity problems. DH indicated that there was a dip in electricity demand in the 1980's and then a sudden escalation that government was unprepared for.	
Eric Ndhlovu (EN) wanted to know where Eskom's employees would be housed. SR stated that Eskom no longer constructed residential areas on site and that employees would be integrated into existing local communities.	
4. The Draft Scoping Report	
Mr Kamal Govender (KG) presented an overview of the Draft Scoping Report. The	
presentation highlighted the following aspects:	
<ul> <li>Purpose of the Scoping Phase in an assessment</li> <li>Project level alternatives which were being considered:</li> </ul>	
<ul> <li>Site alternatives</li> </ul>	
<ul> <li>Layout alternatives</li> </ul>	
<ul> <li>Combustion alternatives</li> </ul>	
<ul> <li>Coal conveyor routes/corridors to be considered. Mine to be looked at</li> </ul>	
as part of a separate EIA	
<ul> <li>Ash management alternatives</li> </ul>	
<ul> <li>Emission management alternatives</li> </ul>	
<ul> <li>Cooling system alternatives</li> </ul>	



	Action	
<ul> <li>Water supply pipeline routing corridors /alternatives</li> </ul>		
<ul> <li>Access road alignment alternatives</li> </ul>		
<ul> <li>Identified impacts for specialist investigations</li> </ul>		
<ul> <li>Air quality impacts</li> </ul>		
<ul> <li>Noise impacts</li> </ul>		
<ul> <li>Visual impacts</li> </ul>		
<ul> <li>Impacts on terrestrial flora and fauna</li> </ul>		
<ul> <li>Impacts on aquatic ecosystems</li> </ul>		
o Groundwater impacts		
<ul> <li>Risk assessment</li> </ul>		
<ul> <li>Heritage impacts</li> </ul>		
<ul> <li>Impacts on agricultural potential</li> </ul>		
<ul> <li>Socio-economic impacts</li> </ul>		
<ul> <li>Planning impacts</li> </ul>		
<ul> <li>Traffic impact assessment</li> </ul>		
<ul> <li>Geotechnical constraints</li> </ul>		
5. The Public Participation Process		
input. She emphasized that it is important that evenuence consider the sec	or public	
input. She emphasised that it is important that everyone consider the scop		
determine whether it is acceptable to them. She re-iterated that there are still		
concerning whether it is acceptable to them. She re-iterated that there are su	KS then	
opportunities for input, but that as much public comment is encouraged.		
outlined each of the four phases of PPP and indicated what each phase entail	lied.	
6. Discussion		
EN asked whether the presentations could be translated into other langua	ages. KS	
replied that the project documents were available in English, Afrikaans, 2	Zulu and	
sePedi. She said that earlier that day in Phola, where English was not the	dominant	
language, an Open House instead of a public meeting had been held to en	sure that	
the community had access to the project information. There had I	been no	
presentations at the Open House, only one-on-one discussions with an in	iterpreter	
present to assist.		
CC asked when the construction work would begin. DH indicated that if everything		
went according to plan, and the Record of Decision from DEAT and internal Eskom		
approval were provided in March 2007, site preparation would begin in the last		
quarter of 2007.		



	Action
EN enquired who was financing the project. DH indicated that Eskom would finance the project.	
Ms Nicolene Venter (NV) asked whether the coal conveyor belts were part of the power station EIA or coal mine EIA. KG confirmed that they would be part of the power station EIA.	
SR added that the conveyance of coal up to the boundary of the coal mine would be the responsibility of the coal mine.	
Hendrik Louwrens (HL) enquired how long it would be before the public was informed of the preferred site. BL indicated that the Draft Environmental Impact Report (EIR) would be available in mid-November and would contain the results of the EIA Phase, which would include an indication of a preferred site.	
GB asked how much the project would cost. DH replied that it would cost approximately R40 billion.	
JB wanted to know where the exact footprint of the power station would be within the alternative sites. BL stated that an area within a preferred site would be identified in the Draft EIR.	
EN asked whether there was sufficient coal from various mines in the area to supply the proposed power station for its $40 - 50$ year lifespan. SR indicated that coal would be sourced from one mine only and that it has sufficient coal for the next $40 - 50$ years.	
JB requested more information about the coal source and the mining house. SR pointed out the coal source on a map and indicated that the mine house would be applying for prospecting/mining rights.	
EN asked whether the residents of Wilge and Phola would be impacted by the mine. KS suggested that Ninham Shand pass EN's contact details to the mine environmental practitioner to be included in their database so he could be provided with more information about the proposed mine.	
GB enquired whether a new power station close to the existing Kendal power station would compound the air quality problem in the area and whether the air quality study would consider the Kendal power station as well. BL indicated that the air quality study would determine exactly how the ambient air quality would be affected by the proposed power station. KG added that in assessing impacts on the ambient air quality, the cumulative impacts would be addressed by the air quality study. BL indicated that the Terms of Reference for the air quality study was presented in the Draft Scoping Report.	



	Action
GB stated that, depending on wind direction, Witbank experienced "bad" smells. He also noted that the population in the Witbank area was growing. He commented that he felt that the power station could be placed elsewhere as there are other places in the country where coal could be found. BL noted the concern but indicated that those strategic-level decisions had already been taken before the EIA began. The EIA could only focus on project-level alternatives. DH added that the latest technology would be implemented to reduce emissions and stated that particulate emissions had been reduced by more than 90% at operational power stations.	
GB re-iterated that a power station in the Witbank area did not make sense to him due to the bad air quality and growing population. DH noted the concern but pointed out that the air quality study would help to quantify potential impacts, providing more information on which to base decisions. GB accepted this but added that population growth should be taken into consideration. DH noted the point.	
7. Way forward	
KS reminded the meeting of the opportunities for input and encouraged everyone to submit their comments to Ninham Shand by 15 September 2006. No additional questions were raised. The meeting was closed at 20h05.	

#### ATTENDANCE REGISTER (OPEN HOUSE AND PUBLIC MEETING)

NAME	ORGANISATION
T.E.C. Botha (TEB)	Private
Geoff Byrne (GB)	Fairacres
John Byrne (JB)	Fairacres
Justine Bolton (JBo)	Oryx Environmental
Graeme Campell (GC)	Streeknuus
Chris Cloete (CC)	Kendal Forest Hotel
C.L. de Kok (CLK)	Klipfontein 566 JR Farm Owner
M Erasmus (ME)	Grond Eienaar
Nikki Fisher (NF)	Oryx Environmental
I.L. Holtzhausen (ICH)	Private
M Labuschagne (MLA)	Private
Marius Louwrens (MLO)	Grond Eienaar
Hendrik Louwrens (HL)	Grond Eienaar
H.J. Meyer (HJM)	Private
Eric Ndhlovu (EN)	Wilge Community Leader
S. Parkhouse (SP)	Anglo Coal
P.M. Res (PMR)	Grond Eienaar: Klipfontein & Heuwelfontein Farm Owner
Jan Hendri Roos (JHR)	Roodepoortje Farm Owner
Ronnie Rees (RR)	Grond Eienaar: Heuwelfontein Plot 70
M.E. Schroender (MES)	Private
J. Sindanu (JS)	Private
Nomvuselelo Skhosana (NS)	Wilge Waste Management
Des Sterley (DS)	Sterley Farm
George Strydom (GS)	Private
H.P. Strydom (HPS)	Grond Eienaar: Heuwelfontein Plot 71
Hendrik Van der Merwe (HWM)	Private
M.P. Van Eeden (MPE)	Klipfontein Farm Owner
P.J. Van Eeden (PJE)	Klipfontein Farm Owner I.C.
Nicolene Venter: (NV)	NMPP Project
Frik S Vivier (FSV)	Klipfontein Farm Owner
Eskom Team	
Deidre Herbst	ESKOM
Tobile Bokwe	ESKOM
Bruce Stroud	ESKOM
Suren Rajaruthnam	ESKOM
Environmental Team	
Brett Lawson	Ninham Shand
Kamal Govender	Ninham Shand
Karen Shippey	Ninham Shand
Natanya Bezuidenhout	Ninham Shand
Gift Maganganye	Bohlweki Environmental