

# **ENVIRONMENTAL IMPACT ASSESSMENT – REVISED SCOPING PHASE**

PROPOSED CONSTRUCTION OF A COMBINED CYCLE GAS TURBINE  
(CCGT) POWER PLANT IN THE AMERSFOORT AREA, MPUMALANGA  
PROVINCE

## **DRAFT FINAL MINUTES OF THE FOCUS GROUP MEETING**

MPUMALANGA DEPARTMENT OF AGRICULTURE AND LAND  
ADMINISTRATION (MDALA)

**HELD ON  
THURSDAY, 24 July 2008  
09H00**

**AT  
MPUMALANGA DEPARTMENT OF AGRICULTURE AND LAND  
ADMINISTRATION (MDALA) OFFICES ERMELO**



## ENQUIRIES

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### YOUR COMMENTS

Your comments on this document would be greatly appreciated. In particular, we request you to verify that your comments during the meeting have been minuted correctly. Please address your written comments to Nicolette van Brakel or Sibongile Hlomuka at the address given above by no later than **25 August 2008**. Please note however that the minutes are not verbatim.

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## MINUTES OF THE MEETING

THURSDAY 24 July 2008

### MPUMALANGA DEPARTMENT OF AGRICULTURE AND LAND ADMINISTRATION (MDALA) OFFICES ERMELO

#### 1. WELCOME, INTRODUCTION AND APOLOGIES

Mr. Malcolm Roods opened the meeting and welcomed everyone present at the meeting. He asked everyone to introduce him/herself.

Bohlweki- SSI Environmental was represented by the following team members:

- Malcolm Roods (EIA unit)
- Shiba Rankapole (Public Participation)

Eskom was represented by the following team:

- Nico Gewers – Eskom (Generation Environmental Management, GEM)
- Tobile Bokwe – Eskom (Generation Environmental Management, GEM)
- Kritesh Bedessie – Eskom (Generation Properties)

The attendance record is attached as **Appendix A**

#### 2. PURPOSE OF TODAY'S MEETING

Mr. Malcolm Roods briefly explained that the purpose of the meeting was to:

- Provide Interested and Affected Parties (I&APs) with information regarding the proposed Combined Cycle Gas Turbine (CCGT) power plant in the Amersfoort area, Mpumalanga Province
- Provide an overview of the Environmental Impact Assessment (EIA) & Public Participation Process (PPP) being followed for the proposed project
- Provide an opportunity for I&APs to seek clarity and provide input into the project
- To record comments raised and include them in the Environmental Scoping process and report
- Interaction with the project team

### 3. RATIONALE AND BACKGROUND TO THE PROPOSED PROJECT

Mr Nico Gewers presented the Rationale and Background to the proposed construction of a Combined Cycle Gas Turbine (CCGT) power plant. The presentation is attached in **Appendix B**. He also gave a brief technical description of the project as Mr Morore Mashao could not attend the meeting.

### 4. ENVIRONMENTAL IMPACT ASSESSMENT (EIA) PROCESS

Mr. Malcolm Roods presented the Environmental Impact Assessment process that will be followed for the proposed project according to the EIA regulations. A summary of the process involves:

- Phase 1: Site Screening Study
- Phase 2: Environmental Scoping Study
- Phase 3: Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP)

Public Participation Process – Ongoing throughout the EIA Process

The presentation in **Appendix B** highlights the findings and feasible or preferred sites identified for the revised scoping study. The aims of the revised environmental scoping study include:

- To identify potentially significant environmental impacts (both positive and negative impacts)
- Evaluation of sites and issues to be investigated in the EIA phase
- Nominations of a preferred site/s for further investigation in the EIA phase (taking environmental, economic and technical issues into account).
- Make recommendations regarding studies required within the detailed EIA
- Public Participation
  - \* Inform the public of the proposed project
  - \* Opportunity to raise concerns about and provide input into the project

Mr. Malcolm Roods further presented the following specialist studies which were undertaken as well as the potential impacts associated with the proposed project.

<b>Specialist Study</b>	<b>Organisation</b>
Groundwater and Surface Water	SRK Consulting
Biodiversity	Bathusi Environmental Consulting (BEC)
Air Quality	Bohlweki- SSI Environmental (Air Quality Unit)
Noise	Jongens Keet and Associates
Social	Master-Q Research
Visual	MetroGIS
Traffic	SSI Engineering and Environmental Consultants
Risk (MHI assessment)	Riscom
Heritage	National Cultural History Museum
Wetland	SiVest Environmental
Soils & Agricultural Potential	Dr Johan van der Waals

## 5. PUBLIC PARTICIPATION PROCESS (PPP)

Mr. Malcolm Roods gave a brief overview of the process to be followed during the Public Participation Process. The PPP starts in the Environmental Scoping Phase and will be followed throughout to the Appeal period of the project.

## 6. DISCUSSION SESSION

- *Mr. Thokozani Metiso, MDALA*, wanted to know if the Environmental Impact Assessment process is used as part of the Environmental Management Systems.

*Mr. Nico Gewers, Eskom Generation* explained that the first process is the Environmental Impact Assessment in preparation for the environmental authorisation, the second process will be implementation of the Environmental Management Systems in compliance with the Eskom SHE Policy and the ISO 14001 standards followed by Environmental Auditing.

- *Mr. Thokozani Metiso*, asked if the Environmental Impact Assessment is really helping to minimize the impacts of the proposed project.

*Mr. Nico Gewers*, explained that the Environmental Impact Assessment process will be used together with the Environmental Management Plan to identify and minimize the impacts to arise from the proposed project. He mentioned that they will also be used during implementation of the Environmental Management Systems.

*Mr. Malcolm Roods, Bohlweki- SSI Environmental*, further added that the Environmental Authorisation conditions, the Environmental Management Plan, with its Environmental Management System will be used for monitoring from time to time.

- *Mr. Thokozani Metiso*, mentioned that Eskom together with Bohlweki-SSi environmental are welcome to approach them for any assistance they might require. He further mentioned that they can help in linking the Environmental Management Plan and the Environmental Management Systems.

*Mr. Malcolm Roods*, explained that the applicant must ensure that the conditions of the ROD and EMP are complied with.

- *Mr. Thokozani Metiso*, explained that if the EMP and the EMS are not complied with, they will issue a notice of non compliance. He further asked if both the surface water and groundwater, and wetland delineation studies will be done.

*Mr. Malcolm Roods*, confirmed by showing him the section of specialist studies from the presentation that both studies will be conducted, and indicated that these studies will be done during the EIA phase.

- *Mr. Thokozani Metiso*, wanted to know the plan of Eskom on empowerment and institutional processes.

*Mr. Nico Gewers*, explained that Eskom has an Eskom Development Foundation (ESDEF), which is an institution that identifies and addresses (some of) the needs of the communities in which Eskom undertakes projects, in terms of corporate social responsibility. .

- *Mr. Michael Nyirenda*, requested a site visit in order for him to inspect the site, he proposed 11h00 in the morning on any day of the week 28<sup>th</sup> -1<sup>st</sup> of July 2008.

*Mr. Malcolm Roods*, confirmed that Mr Nyirenda will be contacted for arrangements of the site visit to be conducted next week, unless if he is available for the site visit after the meeting.

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*Mr. Malcolm Roods* confirmed that the scoping report is available for review in the Bohlweki website ([www.bohlweki.co.za/library.php](http://www.bohlweki.co.za/library.php)) or could be sent to anyone who is interested.

- *Mr. Thokozani Metiso*, asked the team to explain the drilling of underground gases in more details, he wanted to know the by-products after gasification.

*Mr. Malcolm Roods* explained the drilling process in more details and also answered that ash will be left underground after gasification.

*Mr. Nico Gewers*, further provided support in explaining the drilling process.

- *Mr. Thokozani Metiso*, wanted to know if there are any environmental issues that were identified before anywhere in the country from using this technology.

*Mr. Tobile Bokwe*, explained that after the burning process reinforcement will be used to minimize the impacts.

- *Mr. Thokozani Metiso*, asked why the two applications are separated, and not treated as one process.

*Mr. Nico Gewers*, explained that one process is an application for a mining permit and the other process is an EIA application.

- *Mr. Thokozani Metiso*, asked Eskom what happens to their plan if one application is approved and the other application is not approved.

*Mr. Tobile Bokwe* responded that since the two processes are still part of the planning process, none of the processes will start without approval of the other.

- *Mr. Nico Gewers*, further explained that studies are conducted to assess the cumulative impacts such as air quality. He further mentioned that construction will not take place without the fuel source; he explained that the sustainability or the expected life span of the fuel source is taken into consideration.

- *Mr. Thokozani Metiso*, explained that the applications for Eskom projects are usually prioritized due to energy crisis in the country, and wanted to know the application which Eskom prefers to be prioritized.



*Mr. Nico Gewers*, explained that NEMA regulations are followed and he mentioned that they prefer to prioritize the two applications since they are linked.

- *Mr. Thokozani Metiso*, asked about the expected job creation from the project, and he also wanted to know if Eskom has a form of training to offer the local community for the required skills.

*Mr. Nico Gewers*, mentioned that the expected number of jobs to be created is 500 to 600. He also mentioned that it is early to tell about the training but it has been taken into consideration. *Mr. Tobile Bokwe*, further added that jobs are expected to be created.

- *Mr. Thokozani Metiso* commented that it will be a good thing if training is taken into consideration since local community members always complain about not getting jobs from local projects. He also mentioned that the local government also complains about companies not offering skills transfer.
- *Mr. Michael Nyirenda*, asked if the scoping report was submitted to them.

*Mr. Malcolm Roods* indicated that if requested, an electronic copy can be submitted. In addition, it was confirmed that Ms Prashika Reddy did give a hard copy to MDALA on 2 July 2008.

Ms. Shiba Rankapole, Bohlweki- SSI Environmental, requested the attendees to take the comment forms and send us their comments regarding the project.

## **7. CLOSURE AND WAY FORWARD**

The draft minutes of the meeting will be distributed to those who attended the meeting, and delegates were thanked for their attendance.

The way forward after distribution and finalization of the minutes are:

- Inclusion of I&AP comments in Final Scoping Report and EIA Process.
- Submission of Final Scoping Report and Plan of Study (PoS) for EIA to DEAT for decision making.
- Comments and approval of Scoping Report and PoS for EIA.
- Commence with the EIA Phase of the project – detailed investigations.

The focus group meeting was closed by Mr. Malcolm Roods at 10h15

**APPENDIX A**

**ATTENDANCE RECORD**

**APPENDIX B**

**PRESENTATIONS**

# **ENVIRONMENTAL IMPACT ASSESSMENT – SCOPING PHASE**

PROPOSED CONSTRUCTION OF A COMBINED CYCLE GAS TURBINE  
(CCGT) POWER PLANT IN THE AMERSFOORT AREA, MPUMALANGA  
PROVINCE

## **MINUTES OF THE FOCUS GROUP MEETING**

LANDOWNERS

HELD ON  
THURSDAY, 24 JULY 2008  
AT 16H00  
AT  
ESKOM UCG PLANT,  
MAJUBA



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## ENQUIRIES

### BOHLWEKI SSI ENVIRONMENTAL

#### *Public Participation Process*

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#### *Environmental Impact Assessment*

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### YOUR COMMENTS

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**MINUTES OF THE MEETING  
THURSDAY, 24 JULY 2008  
ESKOM UCG PLANT, MAJUBA**

**1. WELCOME, INTRODUCTION AND APOLOGIES**

Mr. Malcolm Roods opened the meeting and welcomed everyone present at the meeting. He asked everyone to introduce themselves.

Bohlweki- SSI Environmental was represented by the following team members:

- Malcolm Roods – Bohlweki;
- Shiba Rankapole – Bohlweki;
- Nicolette van Brakel – Bohlweki.

Eskom was represented by the following team:

- Nico Gewers – Eskom (Generation Environmental Management, GEM)
- Tobile Bokwe – Eskom (Generation Environmental Management, GEM)
- Kritesh Bedessie – Eskom (Generation Properties)
- Mike Beeslaar – Eskom UCG Project

The attendance record is attached as **Appendix A**

**2. PURPOSE OF TODAY'S MEETING**

Mr. Malcolm Roods briefly explained that the purpose of the meeting was to:

- Provide Interested and Affected Parties (I&APs) with information regarding the proposed Combined Cycle Gas Turbine (CCGT) power plant in the Amersfoort area, Mpumalanga Province
- Provide an overview of the Environmental Impact Assessment (EIA) & Public Participation Process (PPP) being followed for the proposed project
- Provide an opportunity for I&APs to seek clarity and provide input into the project
- To record comments raised and include them in the Environmental Scoping process and report
- Interaction with the project team

**3. RATIONALE AND BACKGROUND TO THE PROPOSED PROJECT**

Mr Nico Gewers presented the Rationale and Background to the proposed construction of a Combined Cycle Gas Turbine (CCGT) power plant. The presentation is attached in **Appendix B**.



**4. ENVIRONMENTAL IMPACT ASSESSMENT (EIA) PROCESS**

Mr. Malcolm Roods presented the Environmental Impact Assessment process that will be followed for the proposed project according to the EIA regulations. A summary of the process involves:

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Public Participation Process – Ongoing throughout the EIA Process

The presentation in **Appendix C** highlights the findings and feasible or preferred sites identified for the scoping study. The aims of the environmental scoping study include:

- To identify potentially significant environmental impacts (both positive and negative impacts)
- Evaluation of sites and issues to be investigated in the EIA phase
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Mr. Malcolm Roods further presented the following specialist studies which were undertaken as well as the potential impacts associated with the proposed project.

<b><i>Specialist Study</i></b>	<b><i>Organisation</i></b>
Groundwater and Surface Water	SRK Consulting
Biodiversity	Bathusi Environmental Consulting (BEC)
Soils and Agricultural Potential	Terra Soil Science
Wetlands	SiVEST Environmental
Air Quality	Bohlweki- SSI Environmental (Air Quality Unit)
Noise	Jongens Keet and Associates
Socio-economic	Master-Q Research

<b>Specialist Study</b>	<b>Organisation</b>
Visual	MetroGIS
Traffic	SSI Engineers and Environmental Consultants
Risk (MHI assessment)	Riscom
Heritage	Dr Johnny van Schalkwyk

## 5. PUBLIC PARTICIPATION PROCESS

Mr. Malcolm Roods gave a brief overview of the process to be followed during the Public Participation Process. The Public Participation process starts in the Environmental Scoping Phase and will be followed through to the Appeal period of the project.

## 6. DISCUSSION SESSION

### 6.1 Environmental concerns

- \* *Mr Johan van Niekerk, landowner*, wanted to know if any research has been done on acid rain.

*Mr Malcolm Roods, Bohlweki*, indicated that an air quality specialist was appointed to do the modeling and will be investigating acid rain. Currently the scoping study indicates that it is predicted that the project will have less of an air pollution impact because gas is used as opposed to the use of coal. However during the environmental impact phase more detailed modeling will be conducted that will take into account the emission gases, the prevailing wind and all factors that are indicators of and/or contribute to air quality.

- \* *Ms Ria Beukes*, indicated that her concern was addressed regarding ammonia?? as indicated above.

*Mr Nico Gewers, Eskom*, responded that the formation of acid rain was more prevalent/likely in areas with high rainfall as in Europe and that South Africa was relatively dry in comparison. In the Cape Town area, Eskom is operating an Open Cycle Gas Turbine power station (Ankerlig), and power plant emissions are monitored due to the wet circumstances in the Cape.

- \* *Mr Johan van Niekerk, landowner*, commented that Amersfoort area has the highest rainfall containing acid in the country, and added that Sasol in Secunda has an effect on the conditions in Amersfoort.

*Mr Malcolm Roods, Bohlweki*, indicated that the legislation requires the specialists to take cumulative circumstances into account and measure the cumulative impact.

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*Mr Mike Beeslaar*, stated that this technology produces far less acid rain (SOx & Nox) emissions.

- \* *Mr Oosthuizen, landowner*, enquired if the impact study is completed yet.  
*Mr Malcolm Roods, Bohlweki* indicated that a screening study was conducted to identify ten sites and this was then narrowed down to six sites that were assessed in the scoping phase. From those six sites assessed according to social and environmental impact three sites were identified but these sites were not feasible from a technical point of view and thus another three sites were identified and used within the second round of the scoping study and this is where the process currently is. The sites identified in the scoping will now undergo detailed studies in the environmental impact assessment phase.
- \* *Ms Ria Beukes, landowner*, indicated that what she wanted to know she has heard, she stated that she experienced a lot of rust taking place and that with the gas there will not be the same amount of ammoniac released.  
*Mr Mike Beeslaar, Eskom*, indicated that under the research portion we were using a evaporation pond to collect by-products. The ammonia is water-soluble and evaporates from the evaporation pond. The ammonia will not necessarily contribute to or cause some amount of rusting as a result of the low levels. Future plant will include a purifying plant and will reduce emissions. Currently there is a small odour from the evaporation process that could be smelled in the surrounding areas depending on wind direction. The levels have been measured and are below the recommended daily exposure limits.
- \* *Ms Ria Beukes*, wanted to know if it will have a negative effect on plants.  
*Mr Mike Beeslaar* indicated that it should not have an affect in the small quantities at which it is being evaporated. He further indicated that ammonia is used in fertiliser products and sees no real harm in the low levels being emitted.

## **6.2 Language requests**

- \* *Mr Johan van Niekerk, landowner* requested that everything that requires his signature needs to be in Afrikaans.  
The request was noted and will be addressed.

## **6.3 Technical impacts**

- \* *Mr Johan van Niekerk, landowner* stated that the impact on the landowner will only be understood later on in the process, he wanted to know if his property was affected will there be a construction etc.

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*Mr Malcolm Roods, Bohlweki*, assured him that the project footprint will be smaller than the Majuba Power Station. The project needs 100 ha that will include pipelines, access roads, and other associated infrastructure. The EIA process will determine where this will be.

*Mr Nico Gewers, Eskom*, further indicated that the technology used for this project is more compacted and that there is no need for ash dams as gas is used as a fuel.

*Mr Mike Beeslaar, Eskom*, presented the technology (presentation attached in **Appendix B**).

#### **6.4 Compensation**

\* *Mr Oosthuizen, landowner*, enquired about the compensation for the landowners.

*Mr Kritesh Bedessie, Eskom* responded that a professional evaluator will be evaluating the property, taking into consideration access and current activities and then a negotiation process between the landowner and Eskom will be engaged.

\* *Mr Oosthuizen*, further wanted to know if the compensation is done per hectare or per volume gas that Eskom will be removing and what will happen to the property of the landowner that is affected.

*Mr Kritesh Bedessie, Eskom* indicated that compensation is done per hectare but that the sustainability of the property after 100 hectares were extracted is taken into account.

### **7. CLOSURE AND WAY FORWARD**

The draft minutes of the meeting will be distributed to those who attended the meeting and delegates were thanked for their attendance.

The way forward after distribution and finalization of the minutes are:

- Inclusion of I&APS comments in Final Scoping Report and EIA Process.
- Submission of Final Scoping Report and Plan of Study (PoS) for EIA to DEAT for decision making.
- Comments and approval of Scoping Report and PoS for EIA.
- Commence with the EIA Phase of the project – detailed investigations.

The focus group meeting was closed by Mr Malcolm Roods at 18h00.

**APPENDIX A**

**ATTENDANCE RECORD**

**APPENDIX B**

**PRESENTATIONS**