

ENVIRONMENTAL IMPACT ASSESSMENT

ISSUES TRAIL (VERSION 1)

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

JUNE 2008

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Issue/Comment		Raised By	Response
1. TECHNICAL COMMENTS AND CONCERNS			
SCOPING PHASE			
1.1	If the project will be located at the current Majuba power station	Mr. de Jager, Pixley Municipality Focus Group Meeting, Pixel ka Seme Local Municipality, 8 February 2008	A ten kilometer radius around the current Underground Coal Gasification was identified and that the ideal site will be determined through the environmental impact assessment and feasibility studies. <i>Mr. Morore Mashao, Eskom</i>
1.2	If the old mining site was considered and option	Mr. de Jager, Pixley Municipality Focus Group Meeting, Pixel ka Seme Local Municipality, 8 February 2008	The mining site has been identified as a potential site for the location of the CCGT plant. He also explained that the coal in that area is not feasible to be mined but that the site will be considered to provide gas for the CCGT plant. <i>Mr. Morore Mashao, Eskom</i>

Issue/Comment		Raised By	Response
1.3	The amount of sites to be investigated for the proposed project	Mr. Gift Kgoebane, Pixley Municipality Focus Group Meeting, Pixel ka Seme Local Municipality, 8 February 2008	<p>Ten (10) sites were identified during the screening exercise but six (6) sites have resulted from the scoping phase. This result is because the other four (4) sites may be used for extension of the UCG operations in the future. At the end of the scoping phase, three (3) sites will be taken for specialist investigations in the EIA phase.</p> <p>At the end of the EIA phase, the specialist EIA studies will identify and highlight the preferred site in terms of environmental assessments. Mr. Bokwe further encouraged the attendants to engage the process by completing the registration form attached and sending it to Bohlweki Environmental, with their comments and concerns. All the comments regarding the project will be captured in an issues trail, and will inform the EIA process.</p> <p><i>Mr Tobile Bokwe, Eskom</i></p>

Issue/Comment	Raised By	Response
<p>Please would you ensure that the Scoping Report provides for investigation of the options for renewable energy hybrid / add-on to this plant, incl. using concentrated solar thermal energy to pre-heat air and thus improve the electricity output per unit of fossil fuel input; including the benefits for rates of emissions per unit of output.</p> <p>This should be covered and would provide a basis for appeal if it is not rigorously investigated (i.e. not good enough to have some sort of dismissive statement on status of the technology).</p>	<p>Mr. Richard Worthington, Sustainable Energy and Climate Change Project Co-ordinator Earthlife Africa Jhb, Email, 11 March 2008</p>	<p>The usage of concentrating solar power is being rigorously researched and developed in another proposed Eskom pilot project. Once proven as a suitable technology for local application, additional concepts may be investigated. The CSP systems aimed at direct air heating are still under research and development internationally (i.e. the volumetric air receiver). As far as including a solar thermal electric option is concerned, the Integrated Solar Combined Cycle System Concept calls for part of the heat recovery steam generator (HRSG) to be either replaced or paralleled by equipment serviced by solar thermal energy to supplement turbine exhaust gases.</p>

Issue/Comment		Raised By	Response
	Can you provide any justification for the fuel supply not being included in the ambit of this EIA?	Mr. Richard Worthington, Sustainable Energy and Climate Change Project Co-ordinator Earthlife Africa Jhb, Email, 14 March 2008	This approach increases thermal energy input which produces more electrical output. However, this option will not be cost competitive with the initiative mentioned earlier in this response, hence the focus of Eskom's pilot project. The Amersfoort area is further considered as a moderate solar resource area within SA. DNI values for this area centre around 6kWh/m ² /day compared with values in excess of 8kWh/m ² /day in the Northern Cape.

Issue/Comment		Raised By	Response
	It is our view that fuel supply impacts must be taken into account when assessing a power station.	Mr. Richard Worthington, Sustainable Energy and Climate Change Project Co-ordinator Earthlife Africa Jhb, Email, 14 March 2008	With regard to the justification for the fuel supply not being included in the ambit of this EIA, the combustible synthetic gas from the Underground Coal Gasification (UCG) plant in the Majuba area will be used as fuel for combined cycle gas turbine (CCGT) technology and potential co-firing with coal in the Majuba power station, thus the development of a UCG-CCGT power complex. The mining right for the UCG plant falls under the ambit of another application process required by the Minerals and Petroleum Resources Development Act (Act 28 of 2002) and thus the power generation project only focuses on the CCGT plant component.

Issue/Comment		Raised By	Response
	<p>The BID is misleading in its contention that "first stage in the process of electricity production through the CCGT plant."</p> <p>The first stage is the underground gasification of coal, to produce gas to run the plant.</p>	<p>Mr. Richard Worthington, Sustainable Energy and Climate Change Project Co-ordinator Earthlife Africa Jhb, Email, 14 March 2008</p>	<p>Bohlweki-SSI Environmental does agree that the information contained in the Background Information Document (BID) can be misconstrued; however, this comment should be placed in context. As the scope of our work is for the proposed development of the CCGT plant, the first stage in the process of electricity generation in the CCGT plant is through the gas turbine.</p>

Issue/Comment	Raised By	Response
<p>It is also disingenuous to make no reference to the location of the underground gasification of coal in consideration of project siting</p> <p>Please would you indicate the status of any approval of the Underground Coal Gasification process to supply gas.</p> <p>Please also confirm receipt of our submission that all the opportunities for designing and constructing the plant for hybrid use of renewable energy to improve efficiency and reduce emissions factors need to be investigated within the EIA process.</p>	<p>Mr. Richard Worthington, Sustainable Energy and Climate Change Project Co-ordinator Earthlife Africa Jhb, Email, 14 March 2008</p>	<p>An additional comment indicated that no reference was made to the location of the UCG plant in consideration of the CCGT plant siting. During the Screening Study, a 10km radius was demarcated (as this took into account the distance of the gas pipeline from the UCG plant to the CCGT plant) around the UCG plant and specialists (hydrogeology, hydrology, biodiversity, air quality, noise, visual and risk) compiled a sensitivity map indicating ideal, acceptable and sensitive areas within the study area that could accommodate the CCGT plant (see Appendix H of the revised Scoping Report for the full Screening Report).</p>

Issue/Comment		Raised By	Response
			<p>Ten sites were identified as being feasible sites for the construction of the CCGT plant. After further discussions with the Eskom project technical team, four sites were eliminated as they occur in areas above valuable coal resources earmarked for the future expansion of UCG operations.</p> <p><i>Mr Malcolm Roods, Bohlweki</i></p>

Issue/Comment		Raised By	Response
	Enquired why a gas turbine can not work throughout the night.	Mr. Eddie Deacon, landowner, Focus Group Meeting, 06 March 2008	Indicated that this was determined by the pricing of fuel. Gas was operated at R250 per Megawatt. Gas-fired turbines are less expensive to operate than diesel or kerosene-fired turbines. Gas is a more affordable fuel. <i>Eskom Team</i>
	Wanted to know whether energy saving light globes were used by Eskom at the power station.	Mr. Johan Deacon, landowner, Focus Group Meeting, 06 March 2008	Eskom has currently embarked on an efficient lighting project to address this concern. <i>Mr. Rudi van der Walt, Eskom</i>

Issue/Comment		Raised By	Response
	Enquired if the turbines will be located together or far apart.	Mr. Johan Deacon, landowner, Focus Group Meeting, 06 March 2008	It was indicated that the turbines will be located close together. It was indicated that sites 3a & b and site 1 is intended for the EIA and that the station requires a 100ha site for location.
	Concerned that the proposed project could possibly cause acid rain. It further indicated that an air specialist will look at these concerns during the EIA and comment on it.	Mr. Johan Deacon, landowner, Focus Group Meeting, 06 March 2008	It was indicated that the GPN is less than 100 with the utilization of gas and this is much lower as for the current power station. .It was further indicated that an air specialist will look at these concerns during the EIA and comment on it. <i>Eskom & Bohlweki Project Team</i>

Issue/Comment		Raised By	Response
	It was indicated that there are blue cranes in the area that should be taken into consideration.	Mr. Johan Deacon, landowner, Focus Group Meeting, 06 March 2008	It was indicated that this will be taken up together with graves sites etc. He referred the attendees back to the list of specialist being used. <i>Mr. Nico Gewers, Eskom</i>
	Asked what the lifespan of the proposed plant would be and if it is dependant on the coal availability.	Mr. Johan van Niekerk, Department of Water Affairs and Forestry (DWAF), Key Stakeholder Workshop ,07 March 2008	It was replied that the design of the plant will be for 25 years. Currently Eskom could look at possibilities to extend the lifespan of the plant but the economic factors are also taken into consideration. He confirmed that the lifespan of the project is dependant on the coal availability. <i>Mr. Morore Mashao, Eskom Generation</i>
	Enquired if the lifespan is completed, will the CCGT then be move to another site.	Mr. Johan van Niekerk, Department of Water Affairs and Forestry (DWAF), Key Stakeholder Workshop, 07 March 2008	It was indicated that the site identified will be used for the power plant only. <i>Dr Mark van der Riet, Eskom</i>

Issue/Comment		Raised By	Response
	Asked if site one is owned by Eskom?	Mr. Neels du Toit, Department of Economic Development, Key Stakeholder Workshop, 07 March 2008	It was answered that Site 1 is the farm Palmietspruit and owned by a private land owner, but that sites 3a & b is owned by Eskom. <i>Ms Prashika Reddy, Bohlweki-SSI Environmental</i>
	Asked if the proposed plant will be running peak hours only.	Mr. Neels du Toit, Department of Economic Development, Key Stakeholder Workshop 07 March 2008	Answered that the proposed power plant will be flexible to run 24hrs if needed. <i>Mr. Nico Gewers, Eskom</i>
	Asked which criteria Eskom used to appoint specialists.	Mr Pieter Nortje, landowner Focus Group Meeting, 12 March 2008	Indicated that initially a tender goes out from Eskom. The environmental consultants then give out a scope of work for the specialist and then request a quote from the specialist. According to the quotes and experience the consultant appoint the most suitable specialist. <i>Mr Malcolm Roods, Bohlweki</i>

Issue/Comment	Raised By	Response
<p>Indicated that he is concerned with regards to the Agricultural Research Council (ARC). He indicated that ARC is state owned and Eskom is a state owned entity so there would be no transparency in their studies and as a result their farms would not be evaluated accordingly. The suggestion is to use another independent specialist for agriculture.</p>	<p>Mr Pieter Nortje, Landowner, Focus Group Meeting , 12 March 2008</p>	<p>Acknowledged the comment and committed that it will be look into and addressed.</p> <p><i>Mr Malcolm Roods, Bohlweki</i></p> <p>It was indicated that although these are State Owned Entities (SOE), they will be used on a specialist capacity. They are registered specialists who could lose their status if biased.</p> <p><i>Eskom Team</i></p>

Issue/Comment	Raised By	Response
<p>Asked how many hectares are needed for one plant.</p> <p>Concerned that the farm is a 500ha site and wanted to know if Eskom will fragment the farm. It was recommended that when Eskom decides to buy a farm it needs to buy the whole farm and not a portion. They would also need to buy the neighboring adjacent farms.</p> <p>Highlighted that Palmietspruit and Strydkraal are joined and need to be bought together as they are seen as one agricultural unit and cannot be separated.</p>	<p>Ms Ria Beukes; landowner, Focus Group Meeting, 12 March 2008</p>	<p>Indicated that they need only 65 ha.</p> <p>Explained that only 65 hectares are needed for one plant. However, how much land will be bought, is subject to the land negotiations process.</p> <p><i>Mr Morore Mashao, Eskom</i></p>

Issue/Comment		Raised By	Response
	Why Eskom does not allow municipalities to generate their own electricity.	Dumisani, eZamokuhle Public meeting , 06 March 2008	It was answered that Eskom gets the mandate from the government. Municipalities can generate their own electricity but they must still sell it to Eskom. <i>Mr Nico Gewers, Eskom Generation</i>
2. TIMEFRAME ISSUES			
SCOPING PHASE			
2.1	When will the operation take place?	Mr. Vusi Maseko, CDW Focus Group Meeting, Pixley ka Seme Local Municipality, 8 February 2008	Plan is to have it operational within the next two years. <i>Mr. Morore Mashao, Eskom</i>

Issue/Comment		Raised By	Response
2.2	When will the project start being functional	Mr Gift Kgoebane, Focus Group Meeting, Pixley ka Seme Local Municipality, 8 February 2008	Project has moved into a feasibility phase. At the moment, Eskom does not have exact details but by 2011 Eskom plans to have the first units of the project functional. <i>Mr. Morore Mashao, Eskom</i>

Issue/Comment	Raised By	Response
<p>Wanted to know as to when the construction of the power station will begin because one farm is still under a lease contract for three years.</p>	<p>Ms Ria Beukes, Focus Group Meeting ,Landowners, 12 March 2008</p>	<p>The proposed construction is proposed to start in October, 2010 but that construction is dependant to environmental authorization and that it is still very early in the EIA process.</p> <p><i>Mr Malcolm Roods, Bohlweki</i></p> <p>It was also indicated that everything should continue as usual. Should the site be environmentally preferred, Eskom will take into account any of the lease agreements</p> <p><i>Mr Morore Mashao, Eskom</i></p>

Issue/Comment		Raised By	Response
	<p>Remarked that the original gas project made use of coal and with regards to the timeframe why propose this new project.</p>	<p>Mr. Charles Hodsdon, landowner, 06 March 2008</p>	<p>It was indicated that the original gas project will not be able to supply additional power but that with the Majuba Combined Coal Gasification Project additional power will be supplied. It was indicated the timeframe for implementation of the CCGT will be 36 months</p> <p><i>Mr. Morore Mashao, Eskom</i></p>

Issue/Comment		Raised By	Response
3. SOCIAL & SOCIO ECONOMIC ISSUES AND COMMENTS			
SCOPING PHASE			
3.1	Job opportunities	Ms Mapaseka Madonsela, Executive Mayor Focus Group Meeting, Pixel ka Seme Local Municipality, 8 February 2008	The project has scope of work for manual workers, and the nature of the work involved does not cater for a huge number of jobs. However, there are a small number of people to be employed in the plant. In the year 2011 the numbers are anticipated to grow to 1000 as there would be higher labour requirements. The whole process of employment issues will be guided by the Accelerated Growth Initiative for South Africa (ASGISA). The contractor will also play a role in terms of employment. Mr. Morore Mashao, Eskom

Issue/Comment		Raised By	Response
3.2	Emission gasses, what will happen to them	Focus Group Meeting, Pixel ka Seme Local Municipality, 8 February 2008	Minimize as much as possible. There is also a proposal to sell the gasses to the suppliers interested such as companies like Sasol or Afrox. The EIA studies will look into all environmental impacts. The environmental management plan will manage the impacts and suggest mitigation measures. <i>Mr. Morore Mashao, Eskom</i>
3.3	Stakeholder involvement, who are they	Mandla Shabangu, Community Development Worker Focus Group Meeting, Pixel ka Seme Local Municipality, 8 February 2008	There is a focus group meeting for provincial authority that has been scheduled. Relevant government officials would be invited to the meeting to obtain their comments. <i>Ms Nicolette Raats, Bohlweki</i>
3.4	Impact on the agricultural industry	Mr Vusi Maseko, Focus Group Meeting, Pixel ka Seme Local Municipality, 8 February 2008	This aspect will be addressed during the EIA looking at the agricultural potential and suggesting mitigation measures. <i>Mr Nico Gewers, Eskom</i>

Issue/Comment		Raised By	Response
	Mentioned that the area is the second highest polluted area in South Africa	Mr Leon Grove, Focus Group Meeting, Pixel ka Seme Local Municipality, 8 February 2008	Eskom is in constant contact with DEAT and are aware of the air quality issues in the area. <i>Mr Nico Gewers, Eskom</i>
	The venue for the meeting is too far. He was invited in a very short space of time. Who would pay for the cost he would incur? Not prepared to drive those roads that late as It was dangerous (infact the previous week there was an accident and people died).	Mr. Piet Venter, Landowner, 12 March 2008	Mr. Piet Venter concerns were noted and it was indicated to him that minutes of the meeting will be sent to him and in future all correspondence will be in time as required by the law and the venue for the farmers meeting will be closer. The Majuba Power Station Lapa could be used for landowners meetings.
	The proposed project will help provide employment for the community, natural protection and development of the area.	Mrs Lindiwe Jobela, Amersfoort, comment form, 12 March 2008	Comment Noted.

Issue/Comment		Raised By	Response
	The project should look at Daggakraal because of poverty and lack of jobs.	Mr Thokozani S.A Mnisi , Vlakpoort, comment form, 12 March 2008	Certain job opportunities will be available for local people with certain skills. The contractor's will offer opportunities to local people. A formal structure will be formed working together with councilors to communicate project related issues. <i>Ms Sibongile Hlomuka, Bohlweki</i>
	I would like to see the project creating job opportunities in the area of Amersfoort and surrounding area .Secondly, I wish to see the town of Amersfoort being developed and lastly will the project do something in connection with air pollution and help not to affect our communities.	Mr Sipho S Khoza, Amersfoort, comment form, 12 March 2008	Bohlweki-SSI air quality unit is conducting the air quality studies. The specialist will report on the findings of the air quality of the area and give recommendations during the EIA phase. <i>Ms Sibongile Hlomuka, Bohlweki</i>

Issue/Comment		Raised By	Response
	I support this project because it will decrease the rate of unemployment.	Miss Delisile Mathebula, Vlakpoort, comment form, 12 March 2008	Comment Noted
	I wish to know to whether this project will require general workers or qualified individuals and the method that will be used to appoint people	Lindiwe Ngwenya, Amersfoort, comment form 12 March 2008	Certain job opportunities will be available for local people with certain skills. The contractor's will offer opportunities to local people A formal structure will be formed working together with councilors to communicate project related issues. <i>Ms Sibongile Hlomuka, Bohlweki</i>
	I would like to see development and job creation.I support this project so that the rate of unemployment will decrease.	Miss Rostah Mathebula, Amersfoort, comment form, 12 March 2008	The comment was <i>noted</i> .

Issue/Comment		Raised By	Response
	People who are taking part in these meetings should be given certificates to show that their attendance is appreciated.	Miss Ntombikayise Kubheka, member, Amersfoort, comment form, 12 March 2008	<p>The purpose of inviting people to the meetings is to inform them about the proposed project. This consultation process is part of public participation which is required as part of the environmental studies to obtain authorization from the Department of Environmental Affairs and Tourism (DEAT). For these kind of meetings there are no certificates of attendance issued. The consultants keep the attendance record as prove of the meeting conducted and keep the record of attendees.</p> <p><i>Ms Sibongile Hlomuka, Bohlweki</i></p>

Issue/Comment		Raised By	Response
	Supervisor positions should be available for young people who have recently completed their courses because we are suffering to get tenders in our area. Opportunities for matriculants who have passed to be assisted with bursaries and training.	Mr.Mabhudi Veles Nkosi, Technical electrician, Comment form, 12 March 2008	Certain job opportunities will be available for local people with certain skills and maybe contractors will offer training to certain local people. Young people should be on the look out for bursaries advertised in newspapers. As the forum will be established for effective communication with the communities and information will be disseminated through the forum and be updated regularly. <i>Ms Sibongile Hlomuka, Bohlweki</i>
	The project should not only focus on the individuals that are educated only,the less educated should also be considered	Mr Smanga ,Vlakpoort, comment form, 12 March 2008	The project will try to cater for people from all levels of education. It will depend on the positions available for certain levels.
	Whether the proposed development will affect my property rights	Drie Susters Boerdery, landowner, Standerton. Comment & Registration Form.March 2008	The land was affected. Eskom did consult with them and have being informed about the project. They also signed the consent form.

Issue/Comment		Raised By	Response
	The project will boost the economy and the employment rate	Shereena Mahabeer, Volksrust, Comment & Registration Form. 12 March 2008	The comment was noted
	Would like to subcontract for the project and currently a manager for the public works construction between Amersfoort and Daggakraal. Specialise in concrete work, security, bridges, building and plumbing	Mr. Stanley Motha , Vlakpoort, ,12 March 2008	The tender opportunities will be advertised on the national newspapers and all tenderes are welcome to submit their proposals and follow the necessary procedures.

Issue/Comment	Raised By	Response
<p>I am in particular interested in the source of gas to be utilised for the plant. My current understanding is this will be sourced via Underground Coal Gasification – from which coal reserve will this take place i.e. who owns the mineral rights and has an EIA / EMP been undertaken for this?</p> <p>I would also like to know how the CCGT impacts on the current Majuba Power station in so far as its current coal supply.</p> <p>Will it continue to utilise as per its current coal contracts or will these now be substituted by the UCG.</p>	<p>Ms.Sharon Clark, Environmental Co-ordinator BHP Billiton, Comment From 12 march 2007</p>	<p>Currently Bohlweki SSI is conducting the EIA studies for the proposed project. The EMP will be drafted as part of the study.</p> <p>The proposed power station will supply the Majova Power Station will electricity.</p> <p>Majova will continue to utilize the coal and UCG will offer support in terms of supplying more electricity.</p>

Issue/Comment	Raised By	Response
<p>How will the water quality of boreholes and streams be affected.</p> <p>Dealings with endangered mammals and corodylus lizard and blackcrane.</p> <p>Farming activities will be affected especially on Palmietspruit.</p>	<p>Mev. Hester van Loggerenberg , Drie Susters Boedery (BK), Comment & Registration Form, March 2008</p>	<p>SRK water specialists have been appointed to focus on water quality issues. Bathusi Environmental will conduct the ecology, flora and terrestrial flora.</p> <p>The agricultural studies will be conducted by the ARC. The specialist will give detailed results of the studies during the EIA phase.</p> <p><i>Mr Malcolm Roods, Bohlweki</i></p>

Issue/Comment	Raised By	Response
<p>Why household applications for electricity connections should be done at Pietermaritzburg and why is such a long process.</p> <p>Does Eskom sees that to meet millennium goals is impossible due to its ignorance for electricity distribution?</p> <p>On the premier speech during the opening of Mpumalanga Legislature, it was indicated that government and Eskom are setting up a Provincial Energy Risk Management .How will this benefit the communities?</p> <p>As Eskom Management how possible will it be able to assist in electricity backlog and assist with free 50 kilowatts of electricity for the poor who still fail to access it as beneficiaries.</p> <p>On a visit to South Africa by France President, he indicated that on agreement signed (Memorandum of Understanding) they will assist South Africa to build new power station, one in Mpumalanga and the other in Limpopo. Where exactly?</p>	<p>Councillor OT Shabangu, Zamokuhle, 06 March 2008</p>	<p>The concerns should be directed to the Gert Sibande District. These are issues that are dealt with at the municipal level. The consultants are not in a position to assist in any of the questions.</p> <p><i>Ms Sibongile Hlomuka, Bohlweki</i></p>

Issue/Comment		Raised By	Response
	Support the proposed project and hopes that there would be job opportunities created	Mr. Enoch Vilakazi, Volksrust, February 2008	The comment was noted.
	Supervisory positions should be available for young people who have recently completed their studies. We suffer in terms of getting tenders in the area. Matriculants should be assisted with bursaries or trainings	Mr. Mabhudu Nkosi, Technical electrician ,Registration and Comment Form, 07 March 2008	The tender opportunities will be advertised on the national newspapers and all tenderers are welcome to submit their proposals and follow the necessary procedures. Any arising opportunities will be given to local people only if they qualify.
	To improve economic utilization to share the land and ensuring that poverty in the society is reduced. People and the area should be developed. Generate energy with our natural resources	Mr. Welcome Mngomezulu, Daggakraal, Comment and Registration Form, March 2008	Comment and concerns noted.
	Request for labour and consideration of unskilled skilled and semi skilled people. Job opportunities should be provided for people with matriculation as they cant further their studies because of financial problems.	Liphatsoana Edward Moloi, Traditional leader , Vlakpoort, March 2008	The project will try to cater for people from all levels of education. It will depend on the positions available for certain levels.

Issue/Comment		Raised By	Response
	Owner of the farm Koppieskraal and concerned about the environment	Mr. Izak Fourie, Amersfoort, Comment & Registration Form, 01 March 2008	Environmental impact assessment studies are being carried out. Will choose the site with minimum environmental impact assessments. <i>Mr Malcolm Roods, Bohlweki</i>
	Enquired what the impact would be on the surrounding land and how this land will be affected if not used for the project.	Mr. Charles Hodsdon Landowner, Focus Group Meeting, 06 March 2008	The specialists will identify and study the total impact of the project and this will feed into the Environmental Impact Report to identify the preferred area. This research is undertaken according to legislation and studies will be taken in detail. <i>Mr. Nico Gewers, Eskom</i>

Issue/Comment		Raised By	Response
BIOPHYSICAL ISSUES			
SCOPING PHASE			
	Enquired about the impact on the natural environment	Mr Okkie Nortje, landowner, Focus Group Meeting, 12 March 2008	<p>Answered that the EIA studies being undertaken by Bohlweki Environmental will include specialist studies that will specifically look at the impacts surrounding the proposed project on the environment.</p> <p><i>Mr Malcolm Roods, Bohlweki</i></p>
	Enquired how the underground CCGT will affect the land above the ground.	Mr. Piet Venter, landowner, Focus Group Meeting 12 March 2008	<p>Indicated that the coal seams in the Majuba area are very deep underground and will have little affect above ground.</p> <p><i>Mr Mike Beeslaar, Eskom</i></p>

Issue/Comment		Raised By	Response
	Ms Ria Beukes; landowner, enquired whether the project will have a positive or negative impact.	Ms Ria Beukes, landowner Focus Group Meeting, 12 March 2008	It was answered that the EIA will look into the environmental impacts to ensure minimum impact on the environment. <i>Mr Malcolm Roods, Bohlweki</i>

ENVIRONMENTAL IMPACT ASSESSMENT

ISSUES TRAIL (VERSION 2) – REVISED SCOPING STUDY

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

AUGUST 2008

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Issue/Comment		Raised By	Response
1. TECHNICAL ISSUES AND COMMENTS			
SCOPING PHASE			
1.1	The technical team was asked to explain the drilling of underground gases in more detail. What are the by-products after gasification?	Mr. Thokozani Metiso, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	<i>Mr. Malcolm Roods (Bohlweki-SSI Environmental)</i> explained the drilling process in more detail and also added that ash will be left underground after gasification. <i>Mr. Nico Gewers</i> , further provided support in explaining the drilling process.
1.2	Are there any environmental issues that were identified anywhere in the country from using this technology?	Mr. Thokozani Metiso, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	<i>Mr. Tobile Bokwe (Eskom)</i> explained that after the burning process, reinforcement will be used to minimize any impacts.

Issue/Comment		Raised By	Response
2. EIA PROCESS ISSUES AND COMMENTS			
SCOPING PHASE			
2.1	Is the Environmental Impact Assessment process used as part of the Environmental Management Systems?	Mr. Thokozani Metiso, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	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. <i>Mr Nico Gewers, Eskom</i>
2.2	Is the Environmental Impact Assessment really helping to minimize the impacts of the proposed project?	Mr. Thokozani Metiso, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	<i>Mr. Nico Gewers (Eskom)</i> 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. <i>Mr. Malcolm Roods (Bohlweki-SSI Environmental)</i> 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.

Issue/Comment		Raised By	Response
2.3	Eskom together with Bohlweki-SSI Environmental are welcome to approach MDALA for any assistance they might require. MDALA can help in linking the Environmental Management Plan and the Environmental Management Systems.	Mr. Thokozani Metiso, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	Comment noted. <i>Mr. Malcolm Roods (Bohlweki-SSI Environmental)</i> , explained that the applicant (Eskom) must ensure that the conditions of the ROD and EMP are complied with.
2.4	If the EMP and the EMS are not complied with, MDALA will issue a notice of non-compliance. Mr Metiso further enquired if both the surface water and groundwater, and wetland delineation studies will be done?	Mr. Thokozani Metiso, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	<i>Mr. Malcolm Roods (Bohlweki-SSI Environmental)</i> , confirmed this by showing Mr Metiso 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.
2.5	A site visit is requested in order to inspect the site.	Mr. Micheal Nyirenda, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	<i>Mr. Malcolm Roods</i> , confirmed that Mr Nyirenda will be contacted for arrangements of the site visit. <i>Mr. Malcolm Roods</i> confirmed that the Scoping report is available for review in the Bohlweki website (www.bohlweki.co.za/library.php) or could be sent to anyone who is interested.

Issue/Comment		Raised By	Response
2.6	Why are the two applications separated, and not treated as one process?	Mr. Thokozani Metiso, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	<i>Mr. Nico Gewers (Eskom)</i> explained that one process is an application for a mining permit/right and the other process is an EIA application.
2.7	What happens to Eskom's plan if one application is approved and the other application is not approved?	Mr. Thokozani Metiso, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	<i>Mr. Tobile Bokwe (Eskom)</i> responded that since the two processes are still part of the planning process, none of the processes will start without approval of the other. <i>Mr. Nico Gewers (Eskom)</i> further explained that studies are conducted to assess the cumulative impacts such as air quality. He also 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.
2.8	The applications for Eskom projects are usually prioritized due to the energy crisis in the country. Which application would Eskom prefer to be prioritized?	Mr. Thokozani Metiso, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	<i>Mr. Nico Gewers (Eskom)</i> explained that NEMA regulations are followed and he mentioned that they prefer to prioritize the two applications since they are linked.

Issue/Comment		Raised By	Response
2.9	Was the Scoping report submitted to MDALA?	Mr. Micheal Nyirenda, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	<i>Mr. Malcolm Roods (Bohlweki-SSI Environmental)</i> indicated that if requested, an electronic copy can be submitted. In addition, it was confirmed that Ms Prashika Reddy provided MDALA with a hard copy on 2 July 2008.
2.10	Is the impact study complete?	Mr Oosthuizen, Landowner Focus Group Meeting, Eskom UCG Site, Amersfoort, 24 July 2008	<i>Mr Malcolm Roods (Bohlweki-SSI Environmental)</i> 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 impacts, 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 study will now undergo detailed studies in the environmental impact assessment phase.
2.11	Everything that needs approval by the landowners need to be translated into Afrikaans.	Mr Johan van Niekerk, Landowner Focus Group Meeting, Eskom UCG Site, Amersfoort, 24 July 2008	Comment and request noted.

	Issue/Comment	Raised By	Response
2.12	<p>The Mpumalanga Department of Agriculture and Land Administration has no objection to the proposed project. However, after considering the draft revised Scoping Report, the following must be included in the EIA Report: The result from the following specialist studies – hydrogeology, hydrology, soils and agricultural potential, wetlands and wetland delineation, air quality, noise, social and micro-economic, visual aspects and aesthetics, heritage, risk, traffic and geotechnical study.</p> <p>In addition, Civil Aviation Authority approval is required for the proposed erection of the weather and communication mast and air quality monitoring station. The following permits should also be requested from relevant authorities before activities commence i.e. Water Use Licence from the Department of Water Affairs and Forestry, the APPA permits from DEAT, the mining licence for borrow pits from the DME.</p>	<p>Mr. Micheal Nyirenda, MDALA Comments received via fax on 31 July 2008</p>	<p>Comments noted.</p>

Issue/Comment		Raised By	Response
3. SOCIO-ECONOMIC ISSUES AND COMMENTS			
SCOPING PHASE			
3.1	What are Eskom's plan on empowerment and institutional processes?	Mr. Thokozani Metiso, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	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 Nico Gewers, Eskom
3.2	What is the expected job creation from the project, and does Eskom have a form of training to offer to the local community for the required skills.	Mr. Thokozani Metiso, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	<i>Mr. Nico Gewers (Eskom)</i> mentioned that the expected number of jobs to be created is between 500 to 600. He also mentioned that it is early to elaborate on the training but it has been taken into consideration. <i>Mr. Tobile Bokwe (Eskom)</i> further added that jobs are expected to be created.
3.3	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. Local government also complains about companies not offering the transfer of skills.	Mr. Thokozani Metiso, MDALA Focus Group Meeting, MDALA Offices, Ermelo, 24 July 2008	Comment noted.

Issue/Comment		Raised By	Response
3.4	The impact on the landowner will only be understood later on in the process, will my property be affected and will there be construction etc?	Mr Johan van Niekerk, Landowner Focus Group Meeting, Eskom UCG Site, Amersfoort, 24 July 2008	<i>Mr Malcolm Roods (Bohlweki-SSI Environmental)</i> assured Mr van Niekerk 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. <i>Mr Nico Gewers (Eskom)</i> further indicated that the technology used for this project is more compact and that there is no need for ash dams as gas is used as a fuel source.
3.5	Please elaborate on the compensation for landowners.	Mr Oosthuizen, Landowner Focus Group Meeting, Eskom UCG Site, Amersfoort, 24 July 2008	<i>Mr Kritesh Bedessie (Eskom)</i> 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.
3.6	Is compensation provided 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 Oosthuizen, Landowner Focus Group Meeting, Eskom UCG Site, Amersfoort, 24 July 2008	<i>Mr Kritesh Bedessie (Eskom)</i> indicated that compensation is done per hectare but that the sustainability of the property after 100 hectares were extracted is taken into account.

Issue/Comment		Raised By	Response
4. BIOPHYSICAL ISSUES AND COMMENTS			
SCOPING PHASE			
4.1	Has any research been done on acid rain?	Mr Johan van Niekerk, Landowner Focus Group Meeting, Eskom UCG Site, Amersfoort, 24 July 2008	<i>Mr Malcolm Roods (Bohlweki-SSI Environmental)</i> 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.

4.2	Concern regarding ammonia.	Ms Ria Beukes, Landowner Focus Group Meeting, Eskom UCG Site, Amersfoort, 24 July 2008	<i>Mr Nico Gewers (Eskom)</i> 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.
4.3	A comment was made that the 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 Johan van Niekerk, Landowner Focus Group Meeting, Eskom UCG Site, Amersfoort, 24 July 2008	<i>Mr Malcolm Roods (Bohlweki-SSI Environmental)</i> indicated that the legislation requires the specialists to take cumulative circumstances into account and measure the cumulative impact. <i>Mr Mike Beeslaar (Eskom)</i> stated that this technology produces far less acid rain (SO _x and NO _x) emissions.

<p>4.4</p>	<p>There is a lot of rust present and with the gas being produced; will there not be the same amount of ammoniac released? And will this have a negative effect on the plants?</p>	<p>Ms Ria Beukes, Landowner Focus Group Meeting, Eskom UCG Site, Amersfoort, 24 July 2008</p>	<p><i>Mr Mike Beeslaar (Eskom)</i> indicated that under the research portion they (Eskom) 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. The 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.</p> <p><i>Mr Mike Beeslaar</i> indicated that it should not have an affect in the small quantities at which it is being evaporated.</p>
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