



PROPOSED ANKERLIG CONVERSION PROJECT FOCUS GROUP MEETINGS

RECORD OF FOCUS GROUP MEETING

CITY OF CAPE TOWN BLAAWBERG ADMINISTRATION

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Held on
Wednesday, 21 November 2007,
Municipal Office, Milpark on Koeberg Road,
Milnerton

Notes for the Record prepared by:

Sustainable Futures ZA & Savannah Environmental

Please address any comments to Shawn Johnston at the above address.

FOCUS GROUP MEETING:

CITY OF CAPE TOWN BLAAWBERG ADMINISTRATION - MILNERTON

Venue: Municipal Office, Milpark on Koeberg Road - Milnerton

Date: Wednesday, 21 November 2007

Time: 14h00

WELCOME, INTRODUCTION AND APOLOGIES

Shawn Johnston, the process facilitator for the proposed Eskom Ankerlig Facility Public Participation Process, introduced the teams from Sustainable Futures and Eskom. Representatives from the City of Cape Town, Blaawberg Administration introduced themselves. Shawn provided an overview of the project and the process that lead up to the current phase of the environmental impact assessment process.

- » Nico Gewers - Chief Environmental Advisor - Generation Environmental Management
- » Morore Mashao - Chief Engineer - Division Client Office. Acts as the client for Generation
- » Dean Wilson – Eskom Transmission
- » Albert van der Walt – Corporate Specialist (Project Development), Eskom Enterprises
- » Shawn Johnston - Sustainable Futures ZA, the public participation consultant for the project
- » René Ngwenya – Sustainable Futures ZA

MEETING ATTENDEES

- » Morné Theron – CCT ERM
- » Pat Titmus – CCT ERM
- » Dean Wilson – Eskom Transmission
- » Nico Gewers – Eskom Generation
- » Morore Mashao – Eskom Generation
- » Albert van der Walt – Eskom Projects Development Department
- » Shawn Johnston – Sustainable Futures ZA
- » René Ngwenya - Sustainable Futures ZA

BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

Pat Titmus explained that her work jurisdiction is within District B in the City of Cape Town, however, she also oversees District C. Her work operations covers three areas namely; environment, heritage and signage & control.

Proposed Ankerlig Conversion from OCGT to CCGT

Draft minutes: Focus Group Meeting held with the City of Cape Town Blaauwberg Administration – Municipal Office, Milpark on Koeberg Road, Milnerton

Shawn Johnston noted that the Ankerlig conversion of the OCGT (Open Cycle Gas Turbine) project attempts to involve all the stakeholders around the 'eye' shape on the map (refer to map in the centre of the information booklet). A range of meetings, including public meetings; focus groups; and standard meetings, will be held as part of the broader public participation process. The City of Cape Town is viewed as an important role-player and a significant constituency with whom a partnership is necessary. Shawn also intimated that the reports for the project will be finalised during 2008.

Morore Mashoa explained that the project is about the conversion of the OCGT to the CCGT (Combined Cycle Gas Turbine) at Ankerlig. The current open cycle gas turbines offer 1350 MW energy, whereas the anticipated conversion will add 720 MW. The overall purpose is to market the plant to operate more effectively.

DISCUSSION SESSION

Morné Theron	Will the cooling towers involve dry cooling or wet cooling?
Response: Nico Gewers	The towers will operate with dry cooling. Eskom is aware about the water problem in the area, for example, the options will consider the utilisation of municipal water or waste water from the Wesfleur Waste Water Plant.
Morné Theron	While understanding the idea on water conservation, why is a 60m high stacking tower considered?
Response: Morore Mashao	The principle for the high stacking tower is centred on the need for cooling the water. It is also a common principle that air be elevated to cool the water.
Morné Theron	The normal height for the cooling tower is 30m, it is a concern that the anticipated towers will have a 60m height.
Response: Nico van der Walt	The condensers are normally 50 m high, however, the reason for the 60m high tower is to create extra velocities that will allow the gases to exit the plant quickly.
Morné Theron	There is a worry about the double visual impact that the towers will create. Will there be more fuel gases?
Response: Morore Moshao	Not quite, however, the turbines might need to run slightly longer (mid-merit). This might mean that the turbines need to operate for few days in the week.
Morné Theron	There is a concern about the cumulative impact, and that the towers are being increased from 4 to 9 units. Why was this not done earlier?
Response: Dean Wilson	The project is driven by need and demand and at the time it was not envisaged to run the plant at mid-merit.
Pat Titmus	If a fuel pipeline is used to transport fuel to the Ankerlig, would it be underground or above ground?
Response:	This would be investigated as part of looking alternatives for getting fuel

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Albert van der Walt	to site. This is part of a separate EIA process.
Morné Theron	Discomfort exists over the incremental footprint of Eskom's activities within the Blaauwberg Area and the possibility of a second nuclear reactor at Koeberg. Eskom's cumulative footprint which includes powerlines, Ankerlig, Koeberg and the Omega substation is worrying. Eskom needs to provide information on the size of land that it will need for its projects over the next 10 years within the Blaauwberg Area.
Response: Albert van der Walt	This point is noted and the advice is welcomed.

Albert van der Walt provided the following information on the conversion from the OCGT to the CCGT:

Albert van der Walt explained the anticipated structure at Ankerlig is for 9 OCGTs to be erected and 5 units at Gourikwa in Mosselbay. It has become a reality that, while surplus electricity capacity was intact for many years, the country is running out of capacity at the moment. The reserve margin is very low and when a coal unit trips there is no backup in place. The idea is that when a big unit trips a gas turbine can be started.

With ASGI-SA the government is looking at 4-6% growth. The first coal units will be installed by 2012. The Chief Executive Officer of Eskom has warned that the country will live with a strain on its electricity provision until the coal units are established. There are about 42 projects anticipated, however, while some can be built, all of the projects needs to be investigated. There is a program in place that suggests that more coal units should be built as a long term strategy, however, the details are still unclear.

The OCGTs can be constructed quickly and these are relatively inexpensive compared to the coal units. While the OCGTs are inexpensive to build it is, however, expensive to maintain and for this reason versatile machines should be explored as an alternative option. The 'mothball' towers of the 1980s are now re-emerging to be restored. In addition, demand side management is encouraged as a way to buy power back (buying the right of that person to use power). The nuclear facility at Koeberg has a total capacity of 900 MW supply and Koeberg only provides half the power that the Cape needs.

Projects in the Western Cape are not restricted to only servicing the province but also to impact on the electricity demand in the rest of the country. The OCGT/CCGT project will therefore provide national support. These are considered peaking plants, there are more in Port Elizabeth and in other parts of the Western Cape.

ADDITIONAL DISCUSSION SESSION

Pat Titmus	The hope is that the project will take up minimum footprints on the environment. Koeberg is also taking up footprints in terms of its height and width. There is only 5% left of a very important vegetation pyramids.
Morné Theron	Eskom should think about the biodiversity offset. In terms of the impact of the environment, environmentalists have become aware that some developers say 'it is small thing' and then expect the environmental specialists to approve all the time.
Response: Albert van der Walt	Albert acknowledged Morne's point on biodiversity offsets. He indicated that Eskom have established various environmental offsets and ecological corridors along the national grid.
Response: Morore Mashao	Morore indicated that it has become best practice within Eskom to focus on ensuring ecological corridors are integrated were possible. He sited the example of the Plattekloof Nature Reserve that link the Accacia Sub station with the Durbanville Hills and Tygerberg Nature Reserve.
Response: Dean Wilson	Indicated it might be possible to create a series of ecological corridors in the Blaauwberg Area between the existing Koeberg Nature Reserve, the outgoing servitudes towards Omega and the planned servitude between Ankerlig and Omega and link it all into the established Blaauwberg Conservation Area and the West Coast Biosphere Reserve. This would then increase the ecological footprint and address biodiversity management concerns in the area.
Morné Theron	Is there a rationale between the lines and routes as shown on the map? (referring the blue, green and red options as depicted on the map in the information booklet). Is it possible to minimise the visual impact and the impact on the vegetation?
Response: Dean Wilson	The engineers will do an inspection of the routes and they will provide technical advice and make suggestions regarding the best option. A total of 55 m of land is required from the landowners, however, no decision has been made about the power line structure. Visual impacts and biodiversity will be investigated and Eskom would look at biodiversity as it has done with the Plattekloof Nature Reserve servitudes.
Morné Theron	The issue of the biodiversity offsets is an important one.
Response: Albert van der Walt	The Koeberg power station has been beneficial to biodiversity. There are three basic requirements for powerlines: <ol style="list-style-type: none">1. No planting;2. No stacking materials; and3. No building under the powerline.

WAY FORWARD AND CLOSURE

Proposed Ankerlig Conversion from OCGT to CCGT

Draft minutes: Focus Group Meeting held with the City of Cape Town Blaawberg Administration – Municipal Office, Milpark on Koeberg Road, Milnerton

Shawn Johnston thanked everybody for their participation and questions. The staff of the City of Cape Town, Blaawberg Administration was informed of the next steps in the EIA process.

The meeting closed at 15h30.



PROPOSED ANKERLIG CONVERSION PROJECT FOCUS GROUP MEETINGS

RECORD OF FOCUS GROUP MEETING

ATLANTIS RESIDENTS & RATEPAYERS ASSOCIATION

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E-mail: swjohnston@mweb.co.za

Held on
Wednesday 21 November 2007,
Protea Park Primary School, Atlantis

Notes for the Record prepared by:

Sustainable Futures ZA & Savannah Environmental

Please address any comments to Shawn Johnston at the above address.

**FOCUS GROUP MEETING:
ATLANTIS RESIDENTS & RATEPAYERS ASSOCIATION - ATLANTIS**

Venue: Protea Park Primary School, Atlantis

Date: Wednesday, 21 November 2007

Time: 16h00

WELCOME, INTRODUCTION AND APOLOGIES

Shawn Johnston, the process facilitator for the proposed Eskom Ankerlig Facility Public Participation Process, introduced the Sustainable Futures team, the Eskom team and the EIA Specialist from Southern Hemisphere. Shawn introduced the project process, explained the scoping phase and invited the participants to voice their concerns and their impressions of the project. He highlighted the deliberate attempts are made to include as many people as possible in the public participation process that include meetings, consultations, and conversations with stakeholders. Letters will be sent soon to all stakeholders and the use of the radio, the local newspapers, information dissemination at local shops and other forms of media will be employed.

- » Nico Gewers - Chief Environmental Advisor - Generation Environmental Management
- » Morore Mashao - Chief Engineer - Division Client Office. Acts as the client for Generation
- » Albert van der Walt – Corporate Specialist (Project Development), Eskom Enterprises
- » Dean Wilson – Eskom Generation
- » Shawn Johnston - Sustainable Futures ZA, the public participation consultant for the project
- » René Ngwenya – Sustainable Futures ZA

MEETING ATTENDEES

- » Noël Williams – ARA
- » Abe Croutz – ARA
- » John Arends – ARA
- » S. McKinna Petersen - ARA
- » Liezl Coetzee, Southern Hemisphere
- » Nico Gewers – Eskom Generation
- » Morore Mashao – Eskom Generation
- » Albert van der Walt – Eskom Projects Development Department
- » Shawn Johnston – Sustainable Futures ZA
- » René Ngwenya - Sustainable Futures ZA

DISCUSSION SESSION

John Arends	It appears that the project still needs to happen. The understanding is that this project has already begun and it left the community with a lot of hurt. We understand that the community cannot survive without Eskom and that a partnership is needed, however, a discussion should happen about the past hurts and current concerns. John Dean was given a list of our concerns, however, no report back has come back to the community.
Response: Albert van der Walt	What are the concerns from the community?
John Arends	<ol style="list-style-type: none">1. The treatment of the local community: The presence of the labour brokers caused conflict between the local workers and the people who were from outside the community and worked on the site.2. No feedback was given to local workers who worked overtime.3. Eskom should provide training and capacity building opportunities to the local community and not rely too much on outside expertise. This situation causes an economic justice concern for the local community.4. Black Economic Empowerment is critical, the Republic of SA Constitution is clear about BEE. For example, a guest house initiative that was started by the local women in the community was not utilised since Eskom decided to support other accommodation facilities.5. Favouritism and preferential treatment by Eskom to workers who are not local e.g. lack of access to transport for the local workforce.6. Hire and Fire: Instantaneous decision-making that contradicts the LRA.
Dean Wilson	Dean thanked John for his frank input and noted that the concerns are valuable information that Eskom will have to consider and respond to.

BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

Albert van der Walt explained that the country's economic/growth is more than what was anticipated. The growth indicates a demand for electricity. Eskom takes the power where it is needed. When Ankerlig commenced it was part of the plan to build 4 open cycle gas turbines. The OCGTs can be built very quickly e.g. within 2 years. Eskom is in the process of building new power stations and the constraint around electricity will be a reality until 2012. Eskom is therefore considering options and the consideration to have a reserve margin is important (15%). Gas 1 is needed to increase the reserve margins to accommodate peak times. The exhaust fumes can be used in a steam recovery system in

which the excess heat from the OCGT is utilised to generate steam and run a turbine to generate additional electricity. Each turbine generates approximately 150MW power. With the conversion process completed, Eskom could generate another 80MW. This might mean that the unit needs to run for approximately 5-6 hours a day. The current machines need to be improved and more machines need to be build to generate more energy. A transmission line from Ankerlig to Morning Star (Omega substation), that involves an approximate 20km, needs to be installed in order to evacuate the additional power generated at this power station.

DISCUSSION SESSION

Abe Croutz	What happened to the existing power stations? Can the new system not be incorporated into the old systems?
Response: Nico van der Walt	The other power stations, including the Athlone power station, are very old stations. Also, with its operations, coal must be imported. The biggest benefit of electricity is that we have the cheapest (affordable) electricity in the world, e.g. for the making of aluminium 35% electricity is utilised. Currently the media is discussing the tariff increases needed because of the installation of new power stations. There are attempts to bring back the old power stations.
Abe Croutz	We are living in the 20 th century. Has Eskom invented a device yet that will allow for the storing of current?
Response: Albert van der Walt	One way of storing electricity is to use a battery and perhaps pump storage, e.g. Palmietrivier. Another form of generation is wind farming. Renewable energy is very important for Eskom.
Abe Croutz	It is important that Eskom provides information on the technical issues.
Response: Albert van der Walt	The community should be reassured that they have been informed in the past about the project.
Response: Dean Wilson	What will be impact be on the people staying in the area. In other areas, people's TV signals were blurred? It is important that the community voice out how they will be impacted.
Noël Williams	Is what we have currently, the first phase of the project? What will it do to the environment with regard to the social and economic perspective?
Response: Albert van der Walt	The conversion of Ankerlig will be the only additional components to the site.
Noël Williams	How many loads of diesel will be required and what is the impact of the quantity of diesel usage? How will the environment be affected in terms of transport, traffic flow, the environment and roads? Mr. Williams noted that none of these issues were properly addressed previously.
Response: Nico	The issue about emission are carefully monitored and the issues around

Proposed Ankerlig Conversion from OCGT to CCGT

Draft minutes: Focus Group Meeting held with the Atlantis Residents & Ratepayers Association, Protea Park Primary School

Gewers	the roads, tanker transporting of fuel is constantly being monitored and part of a different EIA process looking at the best options for getting fuel to Ankerlig.
Response: Morore Mashao	A study on the impact of the roads is part of a separate study. The amount of carbon is about a third.
Response: Nico Gewers	Nico assured the group that Eskom has audits, environmental evaluations and other checks and balances in place to ensure integrity of the environment.
Noël Williams	Mr Williams proposed that Eskom considers the establishment of an environmental monitoring committee. The committee should comprise representatives from the province, the City, community, and unions. The committee should be open and transparent and include interested and affected parties. Mr Williams made the following observation about the previous Eskom project: <i>“The company had no relationship with the community except for the people that worked for it.”</i>
Abe Croutz	Has Eskom considered wind direction? There are strong south easterly winds, also strong westerly winds.
Response: Nico Gewers	Air quality modelling takes into account wind direction. It is important to get input back from the community, however, Eskom is engaged in ongoing monitoring. Liaison happens with the Atlantis Community Environmental Forum.
John Arends	Mr Arends proposed that the committee in question be disbanded by Eskom since the people were not fairly elected.
Response: Albert van der Walt	Albert cautioned the meeting that it had no mandate to make the decision as proposed by John Arends. The point was noted and it would be looked at.
Response: Nico Gewers	The re-establishing of the forum is important in light of what was raised by John. He assured the meeting that Eskom was there to listen and to consider the input.
Response: Morore Mashao	Morore acknowledged the trust issues with the Atlantis community needed attention.
John Arends	John emphasised that there are no representation in the current Committee established by Eskom. Any committee must have the blessing of the community and the community’s needs and concerns must be accommodated.
Response: Shawn Johnston	Shawn indicated that processes are in place to solicit more information from the community about this issues and the point has been noted and will be taken forward.
Noël Williams	He noted that the past way of operations should be accepted for how it transpired. There is, however, an expectation around new relations. There are two things in Atlantis that cumulatively will impact on the whole

Proposed Ankerlig Conversion from OCGT to CCGT

Draft minutes: Focus Group Meeting held with the Atlantis Residents & Ratepayers Association, Protea Park Primary School

	<p>community.</p> <ul style="list-style-type: none">(1) The new City of Cape Town Regional Dumping Site; and,(2) The extension of the clay mine (Apollo Bricks) <p>An additional concern will be about diesel emissions from Ankerlig and smog from the brickworks. The people of Atlantis must become more environmentally aware. The Atlantis area does not have enough water to support the Ankerlig conversion, 90% of the water in used in Atlantis is from the local aquafier.</p>
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WAY FORWARD AND CLOSURE

Mr Johnston thanked everybody for their candid feedback, their input and questions. He noted that their participation set the scene for good engagement. The attendees were informed that the next steps in the EIA process.

The meeting closed at 17h15.



PROPOSED ANKERLIG CONVERSION PROJECT FOCUS GROUP MEETINGS

RECORD OF FOCUS GROUP MEETING

MELBOSSTRAND & DUINEFONTEIN RATEPAYERS ASSOCIATION

Held on
Wednesday 21 November 2007,
Melkbosstrand Police Station

Savannah Environmental (Pty) Ltd
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FOCUS GROUP MEETING:

MELKBOSSTRAND & DUINEFONTEIN RATEPAYERS ASSOCIATION - MELKBOSSTRAND

Venue: Melbosstrand Police Station
Date: Wednesday, 21 November 2007
Time: 18h30

WELCOME, INTRODUCTION AND APOLOGIES

Shawn Johnston, the process facilitator for the proposed Eskom Ankerlig Facility Public Participation Process, introduced the Sustainable Futures team and the Eskom team. Brett Laing explained that the Melbosstrand & Duinefontein Ratepayers Association is an active association. Raymond Williamson noted that he expressed his concerns as a resident. He, however, has no expert position and would listen for how the impact happens. Raymond explained that he would like to have a feeling of comfort as the project unfolds.

Eskom Team

- » Nico Gewers - Chief Environmental Advisor - Generation Environmental Management
- » Morore Mashao - Chief Engineer - Divisional Client Office. Acts as the client for Generation
- » Albert van der Walt – Corporate Specialist (Project Development), Eskom Enterprises
- » Dean Wilson – Eskom Generation
- » Liezl Coetzee – Southern Hemisphere. Environmental Specialist in EIA.
- » Shawn Johnston - Sustainable Futures ZA, the public participation consultant for the project
- » René Ngwenya – Sustainable Futures ZA

MEETING ATTENDEES

- » Brett Laing – Melkbos Ratepayers Association
- » Raymond Williamson – Melbos Ratepayers Association
- » Liezl Coetzee - Southern Hemisphere
- » Nico Gewers – Eskom Generation
- » Morore Mashao – Eskom Generation
- » Albert van der Walt – Eskom Projects Development Department
- » Shawn Johnston – Sustainable Futures ZA
- » René Ngwenya - Sustainable Futures ZA

BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

Albert van der Walt explained that the country is facing constraints in terms of capacity. This results in load shedding at times. The Chief Executive Officer of Eskom warned that the constraint will be in effect until 2012. The country use to have access capacity, however, we do not have a sufficient reserve margin and most of the power stations are old plants which have deteriorated. A number of initiatives are being investigated, for example:

- (1) Eskom is pursuing demand side management possibilities with customers
- (2) An open enquiry process has been initiated to procure power from cogeneration operations
- (3) Moth-balled power stations are being revamped which is a very expensive process.

Eskom is constantly exploring options for power generation capacity enhancement. These options include screening opportunities; concept study; pre-feasibility; feasibility; and implementation of feasible projects. At Ankerlig, Eskom built open cycle gas turbines. The initial four units were built as a peak power supply option. Project Gas 1 (i.e. an additional 5 units) was initiated to increase the reserve margin.

DISCUSSION SESSION

Raymond Williamson	What is the capacity of energy currently at Ankerlig? How many mega watts?
Response: Albert van der Walt	Approximately 147-150 MW per unit. The combined cycle gas turbine consists of a combination of conventional gas turbines that drives its respective generators. The hot exhaust gasses of the gas turbines are then used to generate steam in a heat recovery steam generator which is used to drive a steam generator. The efficiency improvement is in the order of 50% and to achieve this, the units have to run long enough to produce the steam. The heat recovery and the steam generator will be installed at the back of the existing OCGT turbines.
Response: Albert van der Walt	When Eskom is embarking on this project it is important to consider that this is done to enhance supply on the Eskom national system and not only for supply to the Western Cape Province.
Raymond Williamson	Melkbosstrand residents require clarity around Eskom's processes and projects in the area around Melkbosstrand, Duinefontein, Atlantis, Klein Dassenberg and Morning Star. Improved communications strategy is needed for communicating with surrounding communities.
Response: Albert van der Walt	This is an issue that been noted and needs to be addressed through the correct mechanism.

Proposed Ankerlig Conversion from OCGT to CCGT

Draft minutes: Focus Group Meeting held with the Melkbosstrand & Duinefontein Ratepayers Association, Melkbosstrand Police Station

Raymond Williamson	What will be the actual size of the footprint be for the 9 units at Ankerlig? Will the units produce more noise?
Response: Morore Mashao	The units will not necessary produce more noise. Since the units will run for longer times, it might produce prolonged noise.
Response: Albert van der Walt	One of the options being investigated is the use of an evaporative cooling system. The fans might produce some noise, however these issues are being investigated as part of the noise study.
Raymond Williamson	What are the future fuel sources to be used at Ankerlig, are you planning to use petroleum gas?
Response: Albert van der Walt	This is an option that's been explored and investigated and would depend on the availability of large volumes of gas and the unit cost of the gas.
Raymond Williamson	What will labour opportunities consist of?
Response: Albert van der Walt	All labour contracting at Ankerlig is done through Eskom's procurement processes in accordance with Eskom's governance requirements.
Raymond Williamson	The current road transport has already caused fatigue to the roads. What about rail options?
Response: Albert van der Walt	Pipeline and rail options are currently being explored.
Raymond Williamson	Where does the fuel come from?
Response: Morore Mashao	The fuel could come from the Caltex refinery or the Killarney area, depending on the outcome of the fuel negotiations. Eskom will also make the necessary assessment regarding the transport options.
Brett Laing	If there is not an increase in consumption, is Eskom able to quantify how many tankers will be used?
Response: Albert van der Walt	Conversion cost a lot of money even to get energy for 5 hours. Eskom has already embarked on a study to explore options for transport e.g. rail, pipelines and where the fuel come from. It is premature to make definite decisions at this stage.
Raymond Williamson	In terms of the route to be used to transport the fuel, could the entry be from the top of the road (referring to a road that might not affect the community directly).
Response: Albert van der Walt	Part of the total process is to explore other options than road transport. This issue was the subject of a separate EIA process already underway.
Raymond Williamson	The landfill site will become problematic at a later stage. In all cases infrastructure is the last thing to be considered. The question is whether the City and Eskom is communicating to each other? The community

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Draft minutes: Focus Group Meeting held with the Melkbosstrand & Duinefontein Ratepayers Association, Melkbosstrand Police Station

	certainly does not seem to have a plan.
Response: Albert van der Walt	The process ahead will be communicated.
Raymond Williamson	How will the new proposed City of Cape Town regional landfill site affect the project?
Response: Nico Gewers	We are not sure about the siting of the new landfill site, the EIA component focussing on the power line alignments would highlight any issues relating to the landfill site.
Brett Laing	Brett requested for an explanation about the different power line options (referring to the colour coded powerline routes in the information booklet).
Response: Morore Mashao	Morore Mashao clarified each of the powerline options that will be investigated and indicated that the EIA process will focus on clarifying the best powerline options to be taken forward.
Raymond Williamson	Raymond requested that all the stakeholders be informed about future processes. He mentioned that the Melkbosstrand population stands at 16000 and the Atlantis population comprise about 70000 residents.
Brett Laing	Asked the team to clarify how the electrical fields around the transmission lines and substations like Omega would affect local residents living in the area.
Response: Albert van der Walt	Albert assured the meeting participants that there are globally acceptable standards that Eskom has to observe and adhere to. All powerlines implemented by Eskom comply with accepted standards.
Raymond Williamson	What will future noise levels be like, compare to the current noise levels of the Ankerlig Plant?
Response: Nico Gewers	The EIA process will fully investigate noise levels. The concerns about possible noise levels have been noted and will be fully investigated as part of the EIA process. A specialist have been appointed to conduct the relevant noise/sound study for the conversion process.
Raymond Williamson	What will Eskom put back into the communities? Raymond made the example of the Duinefontein community facility next to Koeberg Nuclear Power Plant. However, without community consent, Eskom sold the facility resulting in a deterioration of the facility and no social responsibility in the local Duinefontein/Melkbosstrand community.
Response: Albert van der Walt	This should be investigated and dealt with through the Eskom Development Foundation who deals with Eskom's social responsibility aspects. The point was noted.
Raymond Williamson	Information dissemination options could include the Tygerberger, Table Talk newspapers. Additional stakeholders to consider are the Nederduitse Gereformeerde Kerk (including the farming communities), and another congregation with Willem Steenkamp. Shawn will get the contact details from Brett and Raymond.

Proposed Ankerlig Conversion from OCGT to CCGT

Draft minutes: Focus Group Meeting held with the Melkbosstrand & Duinefontein Ratepayers Association, Melkbosstrand Police Station

Brett Laing	Brett indicated that they want to be a proactive governing body. He asked how they could assist and support Eskom as an association.
Response: Albert van der Walt	Albert welcomed the the support form the Melkbosstrand Residents and Ratepayers Association and thanked Brett Laing and Raymond Williamson for their input.

WAY FORWARD AND CLOSURE

Mr Johnston thanked everybody for their participation and their questions. The attendees were informed that the next steps in the EIA process.

The meeting closed at 20h00.



PROPOSED ESKOM ANKERLIG CONVERSION FROM OCGT TO CCGT FOCUS GROUP MEETINGS

RECORD OF FOCUS GROUP MEETING

ATLANTIS AREA DEVELOPMENT FORUM

Held on
Thursday 22 November 2007,
Parkview Primary School, Atlantis

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Please address any comments to Shawn Johnston at the above address.

**FOCUS GROUP MEETING:
ATLANTIS AREA DEVELOPMENT FORUM - ATLANTIS**

Venue: Parkview Primary School, Atlantis

Date: Thursday, 22 November 2007

Time: 10am

WELCOME, INTRODUCTION AND APOLOGIES

Georgina Kastoor, from the Atlantis Area Development Forum, thanked everybody for their attendance. Staff of the Forum was introduced. Shawn Johnston, the process facilitator for the proposed Eskom Ankerlig Facility Public Participation Process, introduced the Sustainable Futures team and the Eskom team.

- » Nico Gewers - Chief Environmental Advisor - Generation Environmental Management
- » Morore Mashao - Chief Engineer - Division Client Office. Acts as the client for Generation
- » Albert van der Walt – Corporate Specialist (Project Development), Eskom Enterprises
- » Shawn Johnston - Sustainable Futures ZA, the public participation consultant for the project
- » René Ngwenya – Sustainable Futures ZA

MEETING ATTENDEES

- » Matilda Maarman – Atlantis ADP
- » Andernline Petersen – Atlantis ADP
- » Molety Thoriso – Atlantis ADP
- » Felicia Bruintjies– Atlantis ADP
- » Shamelah Solomons– Atlantis ADP
- » Amelia Blaauw– Atlantis ADP
- » Claudine Cousal– Atlantis ADP
- » Liezel Adriaanse– Atlantis ADP
- » Andrit Muller– Atlantis ADP
- » Sello Chilusana– Atlantis ADP
- » Georgina Kastoor– Atlantis ADP
- » Cherylidene Hector– Atlantis ADP
- » Wlady Kastoor– Atlantis ADP
- » Bradley Kastoor– Atlantis ADP
- » Xavier Diedericks– Atlantis ADP
- » Liezl Coetzee, Southern Hemisphere
- » Nishani Singh – Eskom PDD

- » Nico Gewers – Eskom Generation
- » Morore Mashao – Eskom Generation
- » Albert van der Walt – Eskom Projects Development Department
- » Shawn Johnston – Sustainable Futures ZA
- » René Ngwenya - Sustainable Futures ZA

BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

Shawn provided an overview of the project and outlined the process preceding the current phase of the environmental impact assessment. Shawn noted that the project had started already. He referred to page 5 in the information booklet and outlined the phases of the EIA process. Page 6 in the booklet provides an overview of the different public participation processes. Shawn explained that purpose of the meeting was to gain information from the Atlantis community regarding their concerns and issues on the project and to feed the information into the scoping phase. A specialist will do a study at different levels towards compiling a draft scoping report that will be distributed to the public followed by a public meeting. The meeting participants were referred to the map in the centre of the booklet, and Shawn explained that the project is located within the “eye” (diagrammatically presented on the map). He also highlighted the various options for the power lines that are indicated through the colour coding on the map. The public participation processes will be intensified until the end of the year and the community input is vital since they are resourced with a wide network of people and contacts for information dissemination.

Albert van der Walt gave the following overview of the history and the technical aspects of the project:

The project is about the Ankerlig power station conversion from OCGT to CCGT (conversion from Open Cycle Gas Turbine to Combine Cycle Gas Turbine). The increase in demand of electricity led to new initiatives and steps to avoid shutdown of electricity. The intention is to ensure that sufficient capacity is in planned for by Eskom. Electricity is a very important economic development factor for the country. There is historic reasoning for the current load shedding scenarios. The reality is that electricity capacity should be in place quickly. The Chief Executive Officer of Eskom warned that the constraints will happen until 2012. Coal fire power stations produce carbon dioxide and are not good for the environment. Old power stations are brought back but they are expensive to upgrade. The target is to get 900MW for cogeneration. The reason for the building of OCGT's is that they are quick to construct, however, the usage of diesel becomes very expensive. It is for this reason that Eskom's preference is not to run them for long periods.

Slide Presentation **(please see detailed slides as an appendix)**

1. National electricity requirements
2. Medium term supply requirements
3. Ankerlig history: mid-merit (30% of the hours of the year; base load (70% of the hours of the year).
4. Open Cycle Gas Turbine Plant
5. Open Cycle Gas Turbine Plant continues
6. Open Cycle Gas Turbine Plant continues (convert open gas turbines to combined gas turbines)
7. Gas Turbine Fuel
8. Fuel to Ankerlig (exploring possibility of building pipeline from tank farm to plant)
9. Transmission Integration

DISCUSSION SESSION

Emelia Blaauw	The community is concerned about the Koeberg nuclear plant especially how it might impact on the community as a whole. There are real fears that the Ankerlig plant is in close proximity to the community in addition to the anticipated dumping site and Koeberg. The community fear that the gasses emitted from the power station and the dumping site will cause harmful effects to the community and especially the babies.
Response: Albert van der Walt	The energy generation from the nuclear turbine can cause problems, however, generators are in place to cool the water. Koeberg is already in existence for 30 years and there is no evidence of any harmful effects on the community. The OCGT is not a problem for the community. It is not situated close to the community. It will cause smoke (when it starts up) and noise but no other concerns. The dangers are the normal dangers that we can get on an everyday basis.
Emelia Blaauw	What is the impact of the gasses emitted by the turbines on the babies?
Response: Albert van der Walt	There is no effects from the Ankerlig emissions on the surrounding community. All emissions at Ankerlig is within local and international standards.
Cheryldene Hector	There are many people in the community that do not know the developments. Information does not filter to the people on the ground. Another creative way needs to be found to disseminate information to people, for example, information on presentation slides are very useful but also very technical.
Cheryldene Hector	There are grave concerns around Ankerlig, resulting in lots of research done by the leaders in the community. The gas/smoke causes concerns. Numerous perceptions exist in the community, for example, the black sand at Ankerlig is obvious and she is not sure whether it is harmful.
Cheryldene	There are concerns regarding the way the project is developing. The

Hector	project growth in terms of how it is moving forward seems a continual growth. Does Eskom consider a strong increase in the number of people and houses along the Westcoast? It also seems that the area of Kalbaskraal and the usage of electricity are not taking into consideration within the spectrum of Eskom's growth. The projections should be more realistic in terms of what is actually happening and it will take a while before the community needs are addressed.
Response: Albert van der Walt	During the 1970s Eskom built too much. From 1994 to now, the country had sufficient electricity. Electricity price increase will happen. Behaviour patterns will be changed because of electricity increase. When Eskom builds too much in advance, it becomes unwise for Eskom regarding planning.
Cheryldene Hector	It is important that the information from Eskom is disseminated at the schools and that energy education happens at schools and during home visits.
Response: Nico Gewers	Eskom does have a department that deals with electricity efficiency.
Waldy Kastoor	It is important to target the lowest levels in the education sector, the message will get across. The principal forum is another body to consider. Information on saving energy is also incorporated in the curriculum life skills.
Cheryldene Hector	When will the project be completed?
Shawn Johnston	The project will be completed by 2008. This includes the finalisation of the scoping report, comments, the EIA and EMP: information dissemination will be done in the community newspapers, on the radio etc.

WAY FORWARD AND CLOSURE

Mr Johnston thanked everybody for their participation and questions. The attendees were informed that the next steps in the EIA process.

The meeting closed at 11h30.



PROPOSED ESKOM ANKERLIG CONVERSION PROJECT FOCUS GROUP MEETINGS

RECORD OF FOCUS GROUP MEETING

ATLANTIS LOCAL ECONOMIC DEVELOPMENT FORUM

Held on
Friday, 23 November 2007,
New Shopping Centre Shop LS19, Wesfleur
Circle, Atlantis

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Notes for the Record prepared by:

Sustainable Futures ZA & Savannah Environmental

Please address any comments to Shawn Johnston at the above address.

**FOCUS GROUP MEETING:
ATLANTIS LOCAL ECONOMIC DEVELOPMENT FORUM - ATLANTIS**

Venue: New Shopping Centre Shop LS19, Wesfleur Circle

Date: Friday, 23 November 2007

Time: 10h00

WELCOME, INTRODUCTION AND APOLOGIES

Shawn Johnston, the Public Participation facilitator for the proposed Eskom Ankerlig CCGT, introduced the team from Sustainable Futures, the Social Impact Assessment Specialist and the Eskom representative. Representatives from the Atlantis Local Economic Development Forum introduced themselves. Shawn Johnston provided an overview of the project and the process that lead up to the current phase of the environmental impact assessment process.

- » Albert van der Walt – Corporate Specialist (Project Development), Eskom Enterprises
- » Liesl Coetzee – Senior Consultant, Southern Hemisphere. Acts as Social Impact Assessment Specialist.
- » Shawn Johnston - Sustainable Futures ZA, the public participation consultant for the project
- » René Ngwenya – Sustainable Futures ZA

MEETING ATTENDEES

- » Sebastian Wewers – Atlantis Local Economic Development Forum
- » Benito Hoop – Atlantis Local Economic Development Forum

BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

Shawn Johnston explained that he is responsible for the facilitation of the public participation process for this project. The project is in its second phase, during the first phase data was collected for the project and the second phase is concerned with the scoping information. Shawn referred to the project information booklet and clarified the processes for broader public participation process. Page 6, in the information booklet highlights the different steps to be accomplished in the scoping phase. He noted that a number of focus group meetings had been held with various organisations that represent the community and that more meetings are anticipated. The scoping phase reports will be finalised in 2008 and the public will have further opportunities to participate in the broader process. Shawn also explained that the Atlantis Local Economic Development Forum is already registered on the database.

Benito, Centre Manager thanked Eskom for the information extended to them. Contact lists have already been sent to Liesl. Benito emphasised that it is important to involve the broader public in meetings. The multi-purpose centre “Thusong” was recommended as an ideal place for public meetings.

Albert provided an overview of the CCGT (Combined Closed Cycle Gas Turbine) project. The following points were made:

Past impact assessments were done to install the Ankerlig project. Currently it is an OCGT (Open Cycle Gas Turbine) facility, and each of the 4 units produces 150MW power. Installation of the OCGT units was intended to compensate for peak hours electricity use. Albert illustrated the notion of peak hours through a diagrammatic sketch. He highlighted that an additional EIA process (over and above the first process for the 4 units) with the community was already concluded for the building of 5 additional OCGT units. In response to the demand for electricity, and as a result of the demand growth in the country, the current units needed to be converted to CCGTs. This means that the exhaust gas from the current gas turbines is used to generate steam, (heat recovery steam generator), that is in turn used for the production of electricity. This will result in increasing the output produced by each OCGT (Approximately 150 MW) converted to a CCGT to 230MW. The EIA is currently done for the purposes of the conversion of the OCGT's. The implication for the community is that the units need to run for a longer time span and more fuel is needed for its operations. It is anticipated that a 400kV power line will have to be installed from Ankerlig power station to the planned new Omega substation to evacuate the additional power generated by the CCGT units. The study at the moment is to test whether all the units or some of the units will be converted as well as how best to transport the fuel.

DISCUSSION SESSION

Sebastian Wewers	Will there be any outlet gases that will affect the community?
Response: Albert van der Walt	The operation of the gas turbines is similar to the turbines that drives an aeroplane.' There will be outlet gases, however, there are norms in place to ensure that it is safe and that the community will not be affected. Carbon gases will be contained and is a low percentage. An air quality assessment will be done to quantify these and its impacts.
Benito Hoop	The community is concerned about the black cloud of smoke that is visible from the Ankerlig units.
Response: Albert van der Walt	The smoke appears when the unit is started. The smoke disappears when the units are running for a while. The concern about possible dangers is noted, however, the units are quite safe.
Sebastian Wewers	The public would like to know what are the risks involved in the conversion of the OCGTs to CCGTs.

Response: Albert van der Walt	The risk for the public is that if the units are not built that electricity interruptions can happen. There are other risks to be considered such as fire risk.
Benito Hoop	It does not appear that the risk is too high, it seems that it is a good idea that the units are been built and the necessary conversion happens.
Response: Albert van der Walt	Load shedding had to happen and it not always a desirable option. In the 1970s too many power stations were built, this has changed in the 1980s. At present the cost of electricity produced by Eskom is amongst the lowest in the world. The facility at Ankerlig is done with lots of consideration for the environment. Gas turbine generators are also being constructed at Mossel Bay, in the Eastern Cape and in KZN.
Sebastian Wewers	How does Eskom cope with the current demand for electricity?
Response: Albert van der Walt	Households are encouraged to shut off lights when they can. Gas 1 was planned to be in place before the winter of 2008 and in relation to the yearly profile on electricity use. This means that a record of decision from the EIA needed to have been in place by February 2007. Appeals were lodged because of concerns of noise levels etc. The ROD therefore was delayed since February. For this process it is therefore requested that the public give their input to reduce the risk of delays. Project Gas 1 is anticipated to be finalised by 2009. The Chief Executive of Eskom warned that the country will have electricity interruptions until 2012 due to the demand for electricity.
Benito Hoop	Benito thanked Eskom for the effort that they made to inform the community. He also indicated his appreciation that Eskom provided frank input in terms of the implication and the possible risk factors for the community
Response: Albert van der Walt	Albert requested that the Forum encourage the broader community to participate in the meetings and to voice their opinions about the project.
Sebastian Wewers	Sebastian encouraged Eskom to use the local media especially the local radio station (Radio Atlantis, 107.9 fm) to inform the community about the project.

WAY FORWARD AND CLOSURE

Shawn Johnston thanked everybody for their participation and questions. He will inform the Local Economic Development Forum of the next steps. The meeting was closed at 11h15.



PROPOSED ANKERLIG CONVERSION PROJECT FOCUS GROUP MEETINGS

RECORD OF FOCUS GROUP MEETING

NACA & INSTITUTE OF NUCLEAR ENGINEERS

Held on
Friday, 23 November 2007,
5 Narina Road, Milnerton

Savannah Environmental (Pty) Ltd
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Notes for the Record prepared by:

Sustainable Futures ZA & Savannah Environmental

Please address any comments to Shawn Johnston at the above address.

**FOCUS GROUP MEETING:
NACA & INSTITUTE OF NUCLEUR ENGINEERS, MILNERTON**

Venue: 5 Narina Road, Milnerton
Date: Thursday, 21 November 2007
Time: 14h00

WELCOME, INTRODUCTION AND APOLOGIES

Shawn Johnston, the process facilitator for the proposed Eskom Ankerlig Facility Public Participation Process, introduced the Sustainable Futures team and the Eskom team. Shawn introduced the project process. He highlighted that deliberate attempts are made to include as many people as possible in the public participation process that include meetings, consultations, and conversations with stakeholders. Letters will be sent soon to all stakeholders and the use of the radio, the local newspapers, information dissemination at local shops and other forms of media will be employed.

MEETING ATTENDEES

- » R. Mike Longden-Thurgood
- » Nico Gewers – Eskom Generation
- » Morore Mashao – Eskom Generation
- » Albert van der Walt – Eskom Projects Development Department
- » Shawn Johnston – Sustainable Futures ZA
- » René Ngwenya - Sustainable Futures ZA

BACKGROUND & TECHNICAL ASPECTS REGARDING THE PROPOSED PROJECT

Albert van der Walt explained that the crunch of the matter is the medium term supply constraints anticipated by Eskom. Independent power producers (IPPs) for peaking power are being established in KwaZulu Natal and Port Elizabeth. The IPP process is driven by the Department of Minerals and Energy (DME) and Power Purchase Agreements (PPAs) are being finalised for Eskom will buy the power generated by the IPP facilities, The planning and construction of power stations take a long time. Eskom's current projections are that the its first new coal fired power station units will start to come on line in 2012 . The Eskom CEO stated that the country may experience power constraints until 2012.

The electricity demand growth over the past two years has been higher than anticipated. Eskom's stated objective is to concentrate on the development of coal fired and nuclear power generation for its busload requirements.

Mr Longden-Thurgood stated that he is aware of a solar project is near Upington and the EIA is finished.

In response to Mike, Albert stated that Eskom is exploring solar energies and therefore renewable energies, but this is not an economic option the production of large quantities of energy.

Mike Longden-Thurgood agreed that a high volume of MW is needed and even wind constraints results in limitations.

Albert explained that it takes time to build nuclear facilities. Thre planning and implementation of coal fire power stations can take up to 10 years. Various initiatives are being undertaken by Eskom to manage the medium supply constrains such as demand side management and cogeneration. In addition, the conversion of a component of Eskom's open cycle gas turbines (OCGTs) to combined cycle gas turbines (CCGTs) is an option that can be implemented in a relatively short time and is. Due to the high demand growth the reserve margin is deteriorating and unplanned generation outages is becoming problematic. The building of the OCGTs is done at low capital, however, the running costs is very high. Four units are already installed at Ankerlig and additional 5 units will serve as a contingency and add some additional reserve margin. It is important for Eskom not to 'switch off' customers.

The conversion of the OCGT to CCGT is currently being investigated. One of the unresolved issues to clarify is whether the conversion should be done at Ankerlig or at Gourikwa in Mosselbay. An exploration of the energy requirements are under investigation.

DISCUSSION SESSION

Mike Longden-Thurgood	Mike indicated that he presumed that the layout of the OCGT will allow for conversion.
Response: Albert van der Walt	The Ankerlig site has ample space for implemnting the conversion without having to purchase or find additional land. The current space is big enough for all the requirements of the conversion.
Mike Longden-Thurgood	Mike expressed his concern about the volumes of fuel and other hazardous materials being transported on roads. He indicated that he was concerned about the hauling of diesel fuel between the Chevron Refinery and Ankerlig.
Response: Albert van der	Albert said that it is important to identify the issues early in order to deal with it effectively and mentioned that the concerns around the

Walt	transportation of fuel is currently being investigated further through a separate process.
Mike Longden-Thurgood	In the event that issues are identified, who should be liaised with? Mike suggested that he would pass information to the National Association for Clean Air, of which he is a member. Mike asked whether the National Association for Clean Air (NACA) and members of the Institute of Nuclear Engineers could visit the Ankerlig site and provide feedback to Eskom about possible airborne pollution and noise levels.
Response: Shawn Johnston	Shawn indicated to Mike that he would communicate with him directly.
Response: Nico Gewers	Nico agreed to liaise with Mike and to arrange that a visit to the site could be conducted.
Mike Longden-Thurgood	Mike explained that Earthlife Africa was involved in the EIA process around the proposed Pebble Bed Reactor and they were able to stall the process. He also added that the Germans were effective with pebble bed technology.
Response: Albert van der Walt	Eskom's preference is to minimise any potential delays in the EIA process proactively. A number of issues halted the the RoD for Project Gas 1 that resulted in a more than six month delay in the implementation of the project..
Mike Longden-Thurgood	Mike asked whether Eskom needed a RoD for the original project (Gas 1) or for the conversion of the OCGT.
Response: Albert van der Walt	Albert responded that the ROD is needed to convert the OCGT to a CCGT.
Mike Longden-Thurgood	Mike asked whether Eskom is studying the air quality and emissions. He also enquired about the measurement of airborne pollution. He noted that the perception of sound is more acute than the accurate hearing of the noise.
Response: Albert van der Walt	Albert responded that Eskom has to observe and work with world standards. The monitoring and evaluation of noise or any other perceived issues are constantly assessed and dealt with in a pro-active manner.

WAY FORWARD AND CLOSURE

Mr Johnston thanked Mr Longden-Thurgood for his input and questions. He informed Mr Longden-Thurgood of the next steps in the EIA process. The meeting closed at 15h00.