

**MANAGEMENT RESPONSE TO THE REQUEST FOR VERIFICATION OF COMPLIANCE TO BANK  
POLICIES REGARDING THE MEDUPI POWER PROJECT, SOUTH AFRICA**

**I Summary of Project Information**

The Medupi power project is a coal-fired power plant, currently under implementation by Eskom, and has an installed capacity of 4,764 MW, and was approved by the African Development Bank's Board of Directors on 25<sup>th</sup> November 2009. The objective of the project is to increase the South African generation capacity and improve the energy reserve margin in order to adequately, efficiently and reliably serve electricity demand in the country and in the Southern Africa region.

The South Africa Minister of Finance extended an invitation to the African Development Bank Group (the Bank) to undertake an appraisal and advise on the terms and conditions of the loan to ESKOM (National Power Utility) through the sovereign guarantee credit window.

Government took several measures to help ESKOM implement its 5-year capital expenditure program (CAPEX), estimated to cost R385 billion (USD42 billion equivalent). The program would be funded through a combination of (i) debt raised by ESKOM, (ii) contributions from the National Treasury and (iii) ESKOM's internally generated cash-flows through tariffs.

In support of ESKOM's Capex program, the Government of South Africa approved in February 2009 guarantees totalling R175.97 billion over five years. The guarantees were in addition to a R60 billion subordinated loan to ESKOM that had already been approved.

ESKOM and the Bank agreed that the Bank would co-finance the boilers and turbo-generators with Export Credits Agencies (ECAs) for a total amount of R45 billion excluding IDC. The power plant would consist of 6 turbo-generators of 794 MW each. The financing plan for these components is USD2.63 billion for the Bank, USD1.73 billion for ECAs and USD1.23 for Eskom.

**II Information on the request for registration and corresponding management response**

The complaints, highlighted in bold below, have been registered with the Compliance Review and Mediation Unit (CRMU) of the Bank by two individuals who are South African nationals who requested that their identity be kept confidential. The complainants requested the Bank to intervene to address the concerns raised.

A draft management response was received from ONEC and ORPF and has been reviewed by ORQR on the extent to which it addresses the issues raised in the complaint and the necessary feedback provided to ONEC and ORPF for preparation of the final management response for submission to CRMU within the stipulated deadline of 05<sup>th</sup> November 2010.

The specific issues and corresponding management response are detailed out below:

## Issue 1

*The complainants allege that the AfDB has not complied with its own policies in terms of promoting clean sustainable energy projects, developing a low carbon economy and its responsibility to assist in long term mitigation measures on climate change. Furthermore that the AfDB ignored its own rules on promoting a low carbon economy, clean energy and on encouraging countries to mainstream clean energy options into national development plans and energy planning.*

## Response 1

AfDB has no corporate policy in place which asks for replacement of support to power generation through conventional fossil-fuel based sources with clean and renewable energy solutions. What AfDB has endorsed is a clean energy investment framework aimed at increasing energy access in the African Continent while at the same time trying to shift the balance in favor of clean energy, low carbon development options - given the Continent's vast renewable resources, including hydro-potential (estimated around 1,750 TWh), geothermal (estimated at 9,000 MW), wind, and solar - and the fact that renewable sources of energy are not only best positioned to respond to the access needs of Africa's large rural population but also to provide the necessary scale to avoid reliance on costly small-scale national power systems, which are heavily reliant on expensive oil-based generation.

However, AfDB also recognizes that given the higher costs of clean energy solutions, promotion of these solutions in the short-term will depend to a significant extent on the sustained availability of existent and new concessional forms of funding and as such Africa should be given priority access to concessionary resources that reduce the costs and risks of such investments.

By financing the Eskom Medupi project, the Bank has not violated its policies. AfDB is at the same time supporting South Africa expand its power supply and energy access through conventional sources and working with South Africa to diversify its energy mix making use of concessionary resources like the Clean Technology Fund. An example of such efforts is a project aimed at promoting renewable energy applications recently submitted for approval under the Clean Technology Fund. The project is planned to finance a 100 MW wind farm in the Western Cape and 100 MW Concentrating Solar Power Plant (Pilot) at Upington, for which funding is expected to be approved before the end of 2010. The African Development Bank (US\$260 million), World Bank (US\$260 million) and the International Finance Corporation are leveraging additional co-financing for these Eskom projects (at least US\$1.2 billion). In addition, the Clean Technology Trust Fund Committee has also recently approved a US\$100 million allocation for promoting renewable energy and energy efficiency through private sector investments which will be jointly implemented by the African Development Bank and International Finance Corporation (IFC). Under the Renewable Energy Private Sector Program it is expected that support will be given to the generation of 100MW of wind, 10MW of solar and 150 MW of cogeneration power and that an additional US\$155 million

and US\$455 million will be leveraged from the MDB's and other sources, respectively. Under the Energy Efficiency Private Sector Program it is anticipated that around 100 Petajoules of annual primary energy will be saved (over 50 million tCO<sub>2</sub> equivalent), that US\$52 million will be leveraged from AfDB and IFC and U\$20 million from sub-borrowers in the form of cash / equity into their own energy efficiency investment.

## ISSUE 2

*The complainants are concerned about the impact which the AfDB loan will have on South Africa's carbon reduction commitments and for scaling up of investments on renewable energy technologies and to deal with the threat of climate change. They indicate that "a loan request on renewable energy projects would be most appropriate and beneficial, instead of supporting dirty, polluting coal-fired plants which will increase SA's already high carbon emission per capita."*

## Response 2

By investing in the Medupi Power Station, South Africa's carbon reduction commitments and scaling up of investments on renewable energy will not be affected. The government has prepared an Investment Plan for seeking financial support from the Clean Technology Fund to upscale investment in the renewable energy technologies. Under the Investment Plan, Clean Technology Fund (CTF) resources will be used to support the Government's specific goals of (a) generating 4 percent of the country's electricity requirements (about 10,000 GWh) from renewable energy by 2013; (b) improving energy efficiency by 12 percent by 2015; and (c) modal and technology shifts in transport, including shifts from private to public modes for passengers, shifts from road to rail for freight, and introduction of clean passenger vehicles such as electric vehicles.

The economy of Republic of South Africa is expected to grow at the rate of 4% per annum in the medium to long-term. To support this level of economic growth, options for diversification are insufficient to meet all of the forecast demand for electricity over the next 20-year planning horizon. Coal-fired options are still required for expansion during this period. Eskom needs to establish 1500 MW of electricity generation capacity per annum. However, if no domestic generation capacity is built, the GDP growth will be negatively affected, employment will fall, imports will rise and exports will fall. This scenario of building no domestic generation capacity is economically and politically unsustainable and thus not recommendable. The Medupi project has been compared with 200 MW wind and solar plant and it is considered that these projects cannot be the substitutes of Medupi coal fired power plant.

The project has recommended the use of super critical boiler technology and dry cooling technology: The use of super critical boiler technology will raise the efficiency of the power plant to 40%. The super critical design is an advanced coal utilization technology which has environmental benefits in terms of reduced greenhouse gases compared to conventional power plant.

Furthermore, dry cooling is preferred to wet cooling since the consumption of water with dry cooled technology will be less than that of wet cooled technology and thus, is suitable for South Africa.

### Issue 3

*Communities living near the Medupi plant will bear the burden of hidden costs, including health impacts from air pollution, elevated Sulphur-dioxide (SO<sub>2</sub>) levels, and mercury residues in their water, air and land; constrained access to water; and livelihood impacts from degradation of land and water in the largely agrarian area.*

### Response 3

#### 3.1 Health Impacts from Pollution:

According to the Environmental and Social Impact Assessment (ESIA) report for the project, the primary potential impacts due to the proposed project on environmental quality and health may arise from emissions from Sulphur Dioxide (SO<sub>2</sub>), Nitrous Oxide (NO and NO<sub>2</sub>) and particulate matter, including dust (PM10), if no abatement controls are applied. The environmental quality assessment applied adopted a conservative (more stringent) approach covering the cumulative impact outside the immediate "fence" of both the existing and proposed project; and also studied the potential impact of different configurations for the proposed plant. These studies involved baseline measurements and simulated predictions using industry standard dispersion models.<sup>1</sup> Required control efficiency of abatement measures were assessed on the basis of avoiding any significant increment in non-compliance as previously defined or health risks, on the basis of the predicted ambient concentrations. In line with the Bank's policy, the following conclusions and mitigation recommendations have been drawn from the assessment process:<sup>2</sup>

*(i) SO<sub>2</sub> Emission:* In the case of SO<sub>2</sub> emission, the ESIA concluded that at least 60% control efficiency would be required for the first phase of the proposed 2400 MW power station to ensure that it could operate coincident with the existing Matimba Power Station without substantial changes in the magnitude, frequency or spatial extent of non-compliance, nor significant increment in health risks. This is, however, assuming that no further units are installed at a later date. It also assumes that more stringent air quality limits are not introduced prior to the decommissioning of the existing Matimba Power Station. With the addition of six new units (whether commissioned together or phased in) operating coincident with the existing Matimba Power Station, at least a 90% control

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<sup>1</sup> Atmospheric dispersion modeling was undertaken using the CALPUFF modeling suite recommended for regulatory use by the US-EPA for complex terrain environments and regional-scale modeling domains.

<sup>2</sup> Environmental Impact Report for the proposed establishment of a New Coal-Fired Power Station in the Lephalale Area, Limpopo Province

efficiency would be required to ensure that the magnitude, frequency and spatial extent of non-compliance is within levels comparable to those projected for the baseline.

According to the assessment, the SO<sub>2</sub> concentrations due to the existing Power Station are predicted to be associated with low and moderate health risks for the neighboring residential areas. Note, that the aforementioned control efficiencies were recommended to avoid any significant increment in health risk potentials that is specifically associated with the proposed plant. These recommendations would also reduce potential for corrosion effects and vegetation to levels classified as low. The proposed plant as designed is ready for Flue Gas Desulfurization (FGD) technology which is capable of reduction efficiencies in the range of 50% to 98%.

*(ii) Nitrogen Oxides:* In the case of Nitrogen Oxides, the ESIA report indicated that predicted NO and NO<sub>2</sub> concentrations (that is including cumulative concentrations due to existing Matimba Power Station emissions) would be within local and international air quality limits for all proposed power station configuration scenarios. In addition the report has noted that cancer risks associated with maximum possible exposures to trace metals associated with particulate matter released were calculated to be very low, with total incremental cancer risks for all carcinogens quantified to be in the range of 1:10.6million to 1:24.8million.

*(iii) Mercury emissions:* On the specific case of mercury emissions, the impact assessment predicted that the potential for health risks associated with long-term public exposures from coincident operations of the existing Matimba and proposed Power Station are low even given the potential for multi-pathway exposures. In addition, the application of the control measures for the other pollutants would also control mercury emissions.

*(iv) New Technologies to Control Emissions:* It is clear that the installation of technologies for the mitigation of impacts on environmental quality has been envisaged and planned for in the proposed project. For example the installation of FGD systems has been estimated to result to additional capital expenditure of approximately 20% and additional operational costs of 10%. In addition, Eskom has expressed willingness and has developed financing plans for retrofit technologies which would further control emissions in its existing plants.<sup>3</sup> The ESIA report also recommended routine monitoring and quantitative risk assessment specific to any control technology that is installed. When these

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<sup>3</sup> South African Government's Response to Questions on the Eskom loan application to the World Bank.

technologies are installed as required, it would be a cost borne by the project proponents and not a hidden cost in terms of health impacts to the neighboring communities.

### 3.2 Constrained Access to Water

The project area falls within the Mogol River Catchment, which drains into the Limpopo River. The main water users in the area include agriculture (87%) and the rest 13% (industry, mining, power generation and domestic activities). According to the Internal Strategic Perspective (Report WMA 01/000/00/0304 available at [www.dwaf.gov.za](http://www.dwaf.gov.za)), presently water availability and water use in the catchment are in balance. However, the area has been earmarked as a growth node by the provincial government and plans are in place to increase the water resource to assist with development in the area (Limpopo Province Development Blueprint Vision 2020). It is anticipated that water demand will increase with new developments proposed in the Mokolo Catchment, such as new or expanded mining activities, new power stations and other developments. In order to ensure adequate water for the station and available water to other users, the project has included, as a loan condition, that Eskom obtains water permits from the Department of Water Affairs (DWA) for Mokolo Dam phase one and the integrated water permit for Crocodile West Catchment; and that Eskom should develop boreholes.

**Ground Water Quality:** No major impacts are anticipated as water usage for the power plant is reduced from approximately 2.0 to approximately 0.1 – 0.2 litres per kWh of electricity sent out by using either one of two different non-evaporative cooling techniques: indirect cooling with dry-cooled heat exchangers within a conventional natural draught tower, and direct dry-cooled condensing heat exchangers installed above forced draught fans, situated just outside the power station's turbine generator hall. A monitoring program for surface and groundwater quality and levels would be established on the project site. A water use or water wastage minimization plan will be implemented, which will include:

- Monitoring groundwater quality and water levels; and monitoring neighboring boreholes.
- Surface water controls to be installed and maintained.
- Monitoring the water quality used for irrigation.
- Monitoring groundwater levels and quality.
- Implementing a water use or water wastage minimization plan.

### 3.3 Soils and Agricultural Potential:

Due to the fact that the project will establish an ash dump and power station, there will be permanent loss of land and the soil resource. The project design has recommended that the topsoil (approximately 300-400 mm) be removed and stored prior to construction. In this way, the soil will be available elsewhere at a later date for rehabilitation purposes. However, there is no significant difference between the topsoil and subsoil, so if some mixing occurs, it should not be significant. Erodibility is not a problem in flat areas, such as the existing terrain, but if the stored topsoil is to be used for rehabilitation in sloping areas (for example on the sides of the ash dump), appropriate mitigation measures would be implemented to ensure that erosion does not occur.

Considering the above measures, Management further notes that Eskom has developed an elaborate Environmental Management Plan (EMP) which will form the basis for monitoring and minimizing risk of impacts to the environment and neighboring communities on these aspects. The Bank on its part will meet its obligation of close supervision of the project for safeguards compliance.

#### ISSUE 4

*The complainants further allege that “the ruling party, the African National Congress is set to reap major profits from the loan through its investments in Hitachi Power Africa, which was awarded a dubious contract, an obvious conflict of interest.” In effect they challenge the contracting and tender process which led to selection of Hitachi Power Africa.*

#### Response 4

At the time of Bank’s appraisal of the terms and conditions that would pertain to the loan, ESKOM had already concluded most of the procurement associated with its 5-year CAPEX program using its own procedures. As a result, from the perspective of procurement activities, the financing requested from the Bank was considered as a retroactive financing. In this regard, the process of tendering and appointment of contractors had already been completed and by the time of appraising the loan to Eskom, the contractors for both boiler and turbine contracts were twenty months into the design and build phase of the project. At that time it would have been difficult to expect Eskom, in tendering for the two contracts, to have adhered to all AfDB's procurement rules and procedures, According to Bank’s rules and procedures, for eventual contracts to be eligible for Bank retroactive financing, “the procurement procedures, including advertising, shall be in accordance with the Rules of the Bank, and the Bank shall review the process used by the Borrower”. Therefore, the Bank is expected to provide funding only if the contracts awarded by ESKOM are consistent with Bank’s procurement principles of economy, efficiency, transparency and equal opportunity to eligible bidders.

To ensure that Bank’s due diligence is properly carried out with regards to its fiduciary obligations, the Bank commissioned a consultant to conduct an independent review of Eskom procedures used for procurement, contracting and implementation under ESKOM Capex program, in particular with respect to the contracts for boiler and turbine respectively. The objective of the review was to provide the Bank with an expert opinion on the compliance with Bank’s major procurement and fiduciary principles of economy, efficiency, transparency and equal opportunities to eligible bidders.

From the review, the consultant concluded that the procedures used by Eskom were unbiased and sufficient to provide equal opportunity to all bidders, transparent in the process and to have ensured that the prices were competitive. In the report it was noted that several factors culminated in a very poor response to the invitations for bids but these were not due to any deliberate attempt by Eskom to reduce competition.

In its analysis, the Bank noted that despite the significant differences<sup>4</sup> from its procurement rules and procedures and some procedural weaknesses, risks associated with Eskom procurement procedures were low, especially considering that (a) the design and construction phase of boilers and turbines were already well advanced; and (b) contracts signed by Eskom with Alstom and Hitachi contained sufficient safeguards to mitigate any risk that may negatively affect the deliverables of such contracts.

To further mitigate risks and to ensure fiduciary safeguards, an agreement between the Bank and Eskom was reached to amend both contracts to include provisions for:

- 1) the Bank's right to audit and inspection of all financed contracts in accordance with clause 1.14(e) of the Bank's Rules and Procedures for Procurement of Goods and Works;
- 2) Eskom to submit to the Bank's review for comments and no objection prior to any amendment to the financed contracts, particularly when the value of such amendments exceeds 15% of the contract amounts.

Regarding compliance to the Bank's rules and procedures for procurement, and whether these were properly followed, it should be noted that the Bank is in a position to detect any violation through different mechanisms, including above mentioned rights to audit and inspection of the contracts financed under the loan granted to Eskom, as well as any type of fraud and corrupted practices can be detected and sanctioned under internal investigation and anti-corruption mechanism.

## ISSUE 5

*The complainants also allege that AfDB failed to consider communities consultations and participation processes in the assessment of the project, noting that local communities, who live close to the power plant were subjected to removals and the desecration of ancestral graves which, in their view, demonstrated a gross violation of their cultural and human rights.*

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<sup>4</sup> For some of the deviations judged to be significant from AfDB's procurement rules and procedures, the consultant's review commissioned by the Bank found that the risk associated with the procurement aspect of the proposed loan was low. To further reinforce the mitigation measures and ensure fiduciary safeguards and compliance with the Bank's rules and procedures, the two contracts were amended to include the provisions of clause 1.1.4 (e), of the Banks rules. In conclusion, there was overall compliance with the Bank's rules and procedures in that the general principles of procurement which was used by Eskom for the appointment of the turbine and boiler contractors adhered to principles of economy and efficiency, equal opportunity and transparency and that the international best practice was applied in the process.

## Response 5

### 5.1 Communities Consultations and Participation Processes:

The consultations undertaken during the environmental and social impact assessment process were in line with the Country's legislative requirements and also with the AfDB requirements. The process included;

- Advertising in national, regional and local newspapers;
- Subsequent notifications in regional and local newspapers;
- Holding several key stakeholder meetings;
- Distributing a background information document and two subsequent revised versions;
- Producing a series of information letters;
- Holding two sessions of public forums at three venues in the area;
- Lodging of the draft ESIA report in public libraries, municipal offices and on the internet;
- Hosting another round of public meetings to present the findings of the draft ESIA and to provide an opportunity for the affected population to comment on the findings. Registered affected persons were informed of the planned public open days and meetings by fax or e-mail.
- Key stakeholders and affected persons were engaged on an individual basis and special attention was paid to consultations with affected landowners within the study area.

Eskom used professional social and environmental consultants to facilitate meetings which were planned ahead of time and advertised locally and regionally. Presentations given were consistent in all meetings and results of the consultations were all made public. The table below summarizes the main requirements from AfDB and how they were adhered to.

Main AfDB requirements regarding consultations	Compliance
Identification of the primary and secondary stakeholders of the proposed project	Eskom has a list of interested and affected parties who include all farm owners of involved and neighboring farms, relevant authorities and other interested and relevant stakeholders
Collect adequate information on similar projects in the same sector and take note of lessons learned	Eskom already runs similar projects and the use of super-critical technology is a better option of existing ones in terms of efficiency, emissions etc
Identify the socio-cultural factors that might influence the consultation process	Eskom conducted private and individual meetings to ensure that all people are heard and understood
Consult with all categories of stakeholders and classes of people	Eskom requested people to register as stakeholders with no exclusions
In identifying participants to multi-stakeholder consultations, select a broad spectrum of interests and views, paying particular attention to women, poor and more vulnerable groups (youth, vulnerable ethnic minorities, elderly, etc.)	Eskom considered the previously disadvantaged and relatively poor community of Marapong in making a decision on the site to be used. Eskom chose one furthest from the community

Main AfDB requirements regarding consultations	Compliance
Consider various alternative approaches based on the particular country situation and adapt the participatory process according to stakeholder preferences (individual meetings, focus groups, consultative committee, workshop, etc.);	Eskom held several meetings including meetings with individuals NB: meeting individuals is not mandatory in terms of the South African Environmental Impact Assessment requirements

**5.2 Community Relocation and Compensation:** The ESIA had indicated that in the event some members of the communities would have to be relocated or resettled, a negotiated process would be followed on willing-seller willing-buyer basis in which case the Bank Policy on Involuntary Resettlement was not invoked. However, as mentioned in the table above, Eskom chose sites far from the community and there was no resettlement involved. The selected site for the power station is on Naauwontkomen farm which was owned by Kumba Resources (Exxaro) and had been purchased by Eskom. No relocations were required as there were no people living on the farm at the time of purchase. The neighboring farm Eenzaamheid (the selected site for the ash dump) was owned by Mr. J. J. Thuynsma, and there was one full-time worker residing on the farm when purchased by Eskom. It was agreed that the aforementioned farm worker would continue to be in his employment and be relocated at Mr Thuynsma's expense to one of his other properties. The farm Kromdraai, directly to the south of Eenzaamheid, was owned by Noordgrond Eiendom, duly represented by Mr. L. Steyn, which property was purchased by Eskom. No laborers or any other occupiers resided on the farm at the time of purchase and therefore no relocations were required with respect to the property.

**5.3 Desecration of ancestral graves:** The removal of graves issue was thoroughly taken into consideration, hence Eskom's interaction with the relevant authorities in the country and the final decision on which the eight farms to be purchased was based was on the recommendation from The South African Heritage Resource Agency (SAHRA). It was also based on social issues that the chosen sites are relatively remote from densely populated areas such as the township of Marapong. The project site consists of only two graves, one old grave (less than 60 years) for which there is an affidavit showing that the grave has not been visited since 1967. Eskom has identified a formal cemetery where this grave will be relocated and registered. This activity requires no authorisations. The second one is that of a child "Jaantjies" and Eskom has consulted the mother who in principle agreed to the relocation of the grave but is being prohibited from signing by other stakeholders opposed to the project. In addition, there is an environmental management plan that entails social issues; the Department of Environmental Affairs authorisation and the loan agreement documents which require Eskom to immediately report and investigate if any archaeological sites are exposed during construction work

## ISSUE 6

*Poor people will not benefit from the project, except for large corporations.*

## Response 6

**6.1 Project Benefits to the People:** What generally transpired from the consultations is that the public is highly supportive of the project with expectation of benefits from additional employment during the construction and operation phases. This would be maximized by employing local labour where possible ascertained by contractors liaising with local community structures to identify appropriate local labor pool. Additional benefits of the project will be from the tourism industry in the area. The project has the potential to increase tourism numbers to the area (albeit in the form of business tourism) as well as broadening the profile of the area as a unique ecotourism area.

**6.2 Eskom Social Corporate Responsibility:** Through Eskom's social corporate responsibility program, the project will identify investment initiatives in consultation with communities regarding their needs. The Eskom Development Foundation has on-going involvements in the area. This is an independent Section 21 company, which incorporates and integrates Eskom's social responsibility initiatives. The Development Foundation provides grants for economic development as well as donations for social projects/programs. Its Mission is to contribute towards the improvement of the quality of life of previously disadvantaged South African citizens through integrated, efficient and effective social investment programmes. Over the recent years, Eskom has spent approximately R10.9 million in Limpopo – Lephalale area to the benefit of 18049 people in areas of education support for teaching and learning materials and capacity building for teachers.

**6.3 Electricity Affordability for the Poor:** Eskom supplies electricity to mines, large industrial consumers and municipalities. Municipalities in turn distribute electricity to households, commercial consumers and enterprises. The Government of South Africa and Eskom are well informed about the impacts of the price increase on the poor consumers. The Government launched, in 2003, the Free Basic Electricity (FBE) policy that provided 50kWh per month for free to poor households. In its 2008 request for a rule change of the Multi Year Price Determination (MYPD) 1, Eskom recommended that one way to soften the impact of higher prices on the poor members of society was to apply a lower price increase. This was applied by the National Energy Regulator of South Africa (NERSA) in the 25 July 2009 determination for the 2010 financial year increase. Whilst the standard average tariff was increased by 31.3%, the price increase for Eskom and municipalities' poor customers (Home light 1 and 2) was only 15%. Under the guidance of NERSA, Eskom also implemented different types of subsidies to address the affordability of its residential and rural customers. Under the MYPD 2, NERSA at a meeting held on 24 February 2010 awarded average tariff increases of 24.8% for the period 2010/11, 25% for 2011/12 and 25.9% for 2012/13. In addition, a decision was made by NERSA to introduce inclining block rate tariff for residential clients, which replaced Eskom's residential tariff structures as a solution in shielding the poor from high energy costs. The structure of the inclining block tariffs, together with the average c/kWh and percentage price increases, are as follows:-

Monthly Consumption Level	2010/11		2011/12		2012/13	
	c/kWh	% increase	c/kWh	% increase	c/kWh	% increase
Block 1 (less than 50 kWh)	54.70	(10.59)	57.65	5.40	60.83	5.50
Block 2 (51-350 kWh)	58.48	(5.20)	66.16	13.23	75.09	13.50
Block 3 (351-600 kWh)	76.35	21.95	96.05	25.80	120.93	25.90
Block 4 (more than 600 kWh)	83.74	35.82	105.35	25.80	132.63	25.90
Average residential tariff	60.60		68.83		78.62	

From the table above, tariff increases for residential customers consuming less than 350kWh per month are less than the yearly increases granted to Eskom over the period to 2010/13. This change however impacts only the conventional residential consumers and implementation to cover the prepayment residential consumers remains a challenge which is under discussion.

**6.4 Pricing Structure for Large Corporations:** Eskom has special pricing agreements that link the price of electricity to commodity prices which result in embedded derivatives on Eskom financial statements. The price of electricity paid under such agreements has tended to increase when the related commodity has done well on the world market and fallen, when the commodity prices have performed badly. This impact can be seen from the financial statements for 2009 and 2010. Eskom made a loss of R9,506 million on the embedded derivatives in 2009 but for 2010 reported a profit of R2,283 million reflecting the performance of the commodities on the world market. Such agreements were entered into to attract much needed investments and protect jobs in difficult times for the industries. However Eskom has been renegotiating these contracts to eliminate the embedded derivatives. It has concluded an agreement with Mozal (Mozambique Aluminium Smelter), which was linked to the price of Aluminium. Other agreements are at advanced stages of negotiation, and are estimated to be concluded by the end of the 2011 financial year.

### *Conclusion and Way Forward*

The Bank Management has acted according to the Bank's Environmental and Social Assessment Procedure for Public Sector Operations (2001), an Environmental and Social Impact Assessment was carried out and the ensuing report was reviewed. The Bank's management has therefore **not violated** the Bank's policies and procedures including policies for good governance, social and environmental and climate risk and management adaptation strategies. Procurement rules have also not been violated.

In conclusion, it is worth noting that Eskom has an Environmental Management Plan for both construction and operation that includes social issues as well and this serves as confirmation that mitigation measures will be applied and compliance assessed. The Bank's management has already undertaken one supervision mission to the project site in 14-18 June 2010 and no non-conformances were identified with respect to safeguards procedures of the Bank.