

March 11, 2010

The World Bank
1818 H Street, NW
Washington, DC 20433
USA

To: Ms. Obiageli Ezekwesili, Vice President for Africa, and
Ms. Kathy Sierra, Vice President for Infrastructure

Re: Proposed \$3.75 billion loan to Eskom

The World Bank Group is moving towards approving a \$3.75 billion loan for Eskom, primarily for construction of the 4800 MW Medupi coal-fired plant. We, representatives of communities that will be impacted by the construction of the Medupi plant and associated coal mines, would like to take this opportunity to present a number of our concerns, which we request that the World Bank resolve before putting the project forward for approval.

The World Bank's poverty reduction rationale for this project is dubious at best.

1. The Medupi plant will mainly benefit big industrial users, not the poor people who suffer the most from power disruptions. The current consumption level of the poor in South Africa is less than 5 percent of the electricity grid, in contrast to the 38 largest corporations that consume 40 percent. South Africa provides the cheapest electricity supply in the world to its biggest industrial consumers¹. In fact, the poor are paying far more for their electricity than are the export-oriented metals and mining industries, and these industries repatriate the vast bulk of their profits abroad. South Africa has one of the world's highest balance of payments deficits as a result, this being the main factor in *The Economist* magazine's February 2009 rating of South Africa as the world's riskiest emerging market.

2. Claims that this loan will alleviate energy poverty are inaccurate. Eskom projects that free basic electricity (FBE) for South Africa's poorest will increase from 50 to 70 kWh per month, yet after using this amount, they pay more per unit of electricity than the residents of rich areas and four times more than industry. The bottom 60% of South African households earn less than 15% of the average household income, yet most do not qualify for FBE. The National Energy Regulator, South Africa (NERSA) just approved a tariff increase of 25% every year for three years to help raise funds for Eskom's expansion program. This will double household bills and is unaffordable to most South Africans. By any calculation, the World Bank's loan will not alleviate energy poverty in South Africa, but rather aggravate poverty and worsen ongoing inequities in access to electricity.

Providing energy under the FBE model could improve significantly without the construction of Medupi. New research by Earthlife Africa, published March 8, indicates that if the FBE model were

increased threefold, this would equate to an increase of capacity from 8,263 GWh to 13,499GWh, resulting in an additional 5,236GWh of electricity that will have to be sourced. Roughly, this amounts to 17.5% of Medupi's capacity or 50% of government's renewable energy target. It must be noted that, relative to Megaflex users, this amount is very small. Megaflex users consume 66% of all electricity generated from Eskom's 13 coal-fired power stations.ⁱⁱ

3. Low-income people will pay a disproportionate share of the costs for building this project.

For example, capital spending on the power sector through 2015 is expected to be R619 billion. The largest industrial users are exempt from paying their share of these exorbitant costs because they are the beneficiaries of the still-secret Special Pricing Agreements concluded in a non-transparent manner during the last days of apartheid in the early 1990s.

At the same time, repaying the \$3.75 billion loan will require more exports and higher tariffs to compensate for any devaluation of South African currency. South Africa regularly experiences currency crashes; five of these crashes since 1996 have each resulted in at least a 15% devaluation.

4. The Bank did not consider alternatives to coal. South Africa has a large and unused renewable energy potential. The World Bank allocates less than 7% of the loan to renewable energy. NERSA calculates that wind energy will be cheaper than coal by 2025 and concentrated solar power will be on a par with coal by 2030. These dates will be brought forward by the energy crunch. An alternative strategy based on renewables assumes that South Africa's economy shifts from energy-intensive to job-intensive development. Renewable technologies create more jobs than coal fired plants. Wind, for example, creates 12.6 jobs per GWh of power sent out as opposed to coal's 0.7 jobs.

Moreover, the Bank did not consider the Demand Side Management alternative, especially the ending of Eskom Special Pricing Agreements. Without renegotiating the contracts to the Energy Intensive Users Group – 38 firms which receive 40% of South Africa's electricity at extremely low rates – the Bank did not properly exhaust non-coal options for addressing South Africa's electricity crisis.

At the same time, the loan does not factor carbon emissions pricing into its analysis. A switching cost analysis of the impact of prices on carbon emissions has either not been conducted, or its results have not been publicly released. Hence, the public is not aware of what alternative technologies were compared against the Medupi plant, and if such alternatives are economic at low-to-moderate carbon emission prices.

5. The proposed Eskom loan also does not comply with the Bank's procurement rules. As observed by the U.S. Government in its position on the African Development Bank's investment, Eskom's violations of international competitive bidding provisions for the Medupi coal plant should have prohibited financing of the project. The World Bank can correct this unfortunate lapse in standards by the African Development Bank by rejecting the Eskom loan.

Not only will low-income, predominantly black South Africans pay through their pocketbooks, poor people will also have compromised health, and land, air and water quality because of this plant.

6. The Bank has not properly assessed the potential health impacts and associated costs of emissions for the Medupi plant. A recent report by Environmental Defense Fund (EDF)ⁱⁱⁱ discusses how the policies that subsidize coal-fired power plants ignore their true costs which include serious human health impacts. EDF public health experts estimate between 6000 and 10,700 additional deaths per year just from cardiopulmonary diseases and cancer are attributable to the 88 plants listed in the report alone. A Dutch research institute, CE Delft, has estimated the costs of the world's coal-fired power plants on human health and the environment to be roughly \$355 billion in 2007. Yet, the World Bank has not indicated whether health impact studies were even conducted for the Medupi plant. Already health-related costs due to air pollution in South Africa is estimated to be R4 billion annually towards the state's expenditure. At the same time, people living in the vicinity of the Medupi plant may be exposed to the now serious problem of mercury residues in the air, water and land caused by coal-fired electricity generation.

7. Medupi is located in a dry area and the water supply for residents of the area is not assured. The sulphur scrubbers that will be associated with Medupi are water-intensive and will add to the strain on water supplies. It is assumed that recycled waste water will be piped from the Pretoria-Johannesburg conurbation but feasibility studies are yet to be done.

8. The Bank did not take into account the cumulative impacts on the environment and local communities located near the mines where the coal will be sourced. The loan will open up 40 new coal mines to feed the Medupi plant and related projects, in a country whose water table and air are being polluted by the coal industry, posing a grave threat to communities and environment. Eskom's consumption of water for cooling makes it South Africa's most wasteful user, and this in a drought-prone country with a long-term scarcity challenge. Acid mine drainage will result from these activities when water comes into contact with the exposed ore body of the coal mines leaving water high in dissolved metals and sulphates. Scientist Anthony Turton said that Mpumalanga's acid mine drainage problem was likely to erupt within the next two years. Wits University geologist Terence McCarthy said that the acid mine drainage from collieries, combined with the explosion of new coal mining applications could render Mpumalanga a 'total wasteland' within a century. The increased sulphate levels in dams and rivers due to coal and gold mining has rendered the water unfit for human consumption.

The South African government still has no air pollution emissions standards applicable to power stations or associated industries. The ability of the South African government to implement its recently gazetted ambient air pollution standards is not possible without concurrent emissions standards, requisite staff and enforcement protocols. The Bank needs to accept institutional responsibility to ensure that the Bank's environmental and social standards are met, failing which Medupi will impact negatively on peoples' health and well-being. The Bank cannot accept that South

Africa has a country system that is meaningful and adequate. The Bank must adequately assess and ensure that South Africa's policies, laws, and institutions can provide adequate protections for the environment or social concerns.

Support for the Medupi plant will exacerbate climate change.

9. The proposed loan will compromise the World Bank's commitments on climate change.

Estimates indicate that the Medupi plant will emit 25 Million Metric Tons of CO₂ per annum^{iv}. The World Bank is deeply involved in ongoing climate change negotiations and its proclaimed mission is to finance sustainable development. Yet, this proposed loan to Eskom is a disastrous step that takes the World Bank further away from meeting its own climate change goals. As the world's fourth-largest coal-fired plant, Medupi will add vast amounts to global greenhouse gas emissions and will result in increased local environmental degradation, as well as burden poor South Africans with significant price increases.

10. The World Bank loan will exacerbate greenhouse gas emission in Africa, and hence amplify South Africa's climate debt to the continent. While the loan aims to expand power supply, it does so by almost doubling the power sector's CO₂ emissions by 2018. South Africa already has the distinction of being amongst the top global greenhouse gas emitters, and its energy sector is twenty times more CO₂ intensive per unit of per capita GDP than even the USA's. This represents a vast climate debt that will have to be repaid to victims of climate change across Africa.

11. 'Cleaner coal' and 'carbon capture and storage' are not in place, and are dubious at best.

The Bank claims that Medupi and future plants will be 'carbon capture storage ready', yet Eskom's top technical manager has testified that, '... to be quite frank, no-one knows what that is at the moment.' The Bank has not spelled out what being 'ready' means either. Furthermore, there is no meaning to the term 'cleaner coal' as applied to Eskom. In 2008, Eskom emitted nearly 2 million tonnes of sulphur dioxide, 1 million of tonnes nitrogen oxide and 50 thousand tonnes of particulates. Eskom has not installed effective sulphur scrubbers on any of its power stations. There are no mercury pollution control devices on any of their plants. Kusile was the first plant planned with sulphur scrubbers because it is located in an area that is already very heavily polluted, largely by Eskom power stations. Medupi was planned and will be built without sulphur scrubbers because that area was held to be insufficiently polluted. The World Bank now says that scrubbers will be retrofitted in 2018, six years after it comes on line. This implies that Medupi is neither using cleaner technologies nor is ready for carbon capture.

12. World Bank support for Medupi would be in contravention of its own criteria for support to coal plants. This is supported by the Expert Panel report^v, which raises doubts about the World Bank supporting a coal-based Medupi plant without adequately complementing with renewable energy development. It is clear from the report that the proposed loan does not meet the criteria for such financing required by the Development and Climate Change Strategic Framework. The panel observes that Medupi will produce large quantities of carbon dioxide while CO₂ savings attributable

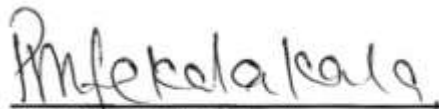
to efficiency and renewable projects that are part of the loan are ‘nowhere near commensurate’ with the scale of Medupi’s emissions. They note the substantial additional environmental penalties but fail to address the consequent financial and environmental burdens on poor people.

At the same time, the Extractive Industries Review (EIR) commissioned by the Bank in 2000 found in 2004 that the World Bank’s fossil energy projects had neither the intention nor the effect of achieving poverty alleviation, and that the Bank should ‘phase out’ fossil fuel financing.

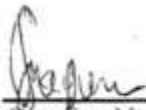
13. The World Bank, in order to achieve its vision of sustainable development, ensure consistency with its environmental and social standards, and demonstrate its commitment on climate change, cannot support a loan for the Medupi plant. The current analysis by the World Bank on this project is insufficient, and perhaps even inaccurate. Contrary to its public statements, the Bank’s proposed loan for Eskom can by no means be called ‘transitional’, nor is it a ‘down payment on a greener future’. We firmly believe that the World Bank should not approve the proposed loan to Eskom.

We will be making a visit to Washington during the week of March 15-19 to raise concerns directly with members of the World Bank’s Board of Directors, U.S. Government officials, as well as with World Bank management. We hope to use our meeting then, currently set for March 18, as a venue to discuss these concerns in more detail.

Sincerely yours,



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Earthlife Africa



Caroline Ntaopane
Vaal Environmental Justice Alliance

Cc:

Ms. Ruth Kagia, Country Director for South Africa
Mr. Jamal Saghir, Director, Energy, Transport and Water
Mr. Warren Evans, Director of Environment
Mr. Reynold Duncan, Task Team Leader

ⁱ Eskom Abridged Annual Report 2009, March 2, 2010.

ⁱⁱ http://www.eskom.co.za/annreport09/ar_2009/downloads/eskom_abridged_ar2009.pdf

ⁱⁱⁱ See <http://www.earthlife.org.za/wordpress/wp-content/uploads/2010/03/Free-Basic-Electricity-Final-Low-res.pdf>

^{iv} Foreclosing the Future: Coal, Climate and International Finance, Environmental Defense Fund.

http://www.edf.org/documents/9585_coal-plants-summary.pdf

^v Recommendations to the World Bank Group on Lending to South Africa for Eskom Investment Support Project that includes a Large Coal Burning Power Station at Medupi: A Report Prepared by Expert panel: Dr. Ogunlade Davidson, Chair, Mr. Neil Hirst, and Dr. William Moomaw.

^v This expert panel was constituted by the World Bank.

http://siteresources.worldbank.org/INTSOUTHAFRICA/Resources/Eskom_Power_Investment_Support_Project_Fact_Sheet.pdf