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**Monday, 1 March 2009**

Mr. Toga G. Mcintosh
Executive Director
World Bank

By e-mail: tmcintosh@worldbank.org

Annexure 1: The World Bank and Eskom - Banking on Climate Destruction
Annexure 2: Eskom World Bank Final Statement
Annexure 3: Endorsements of Statement

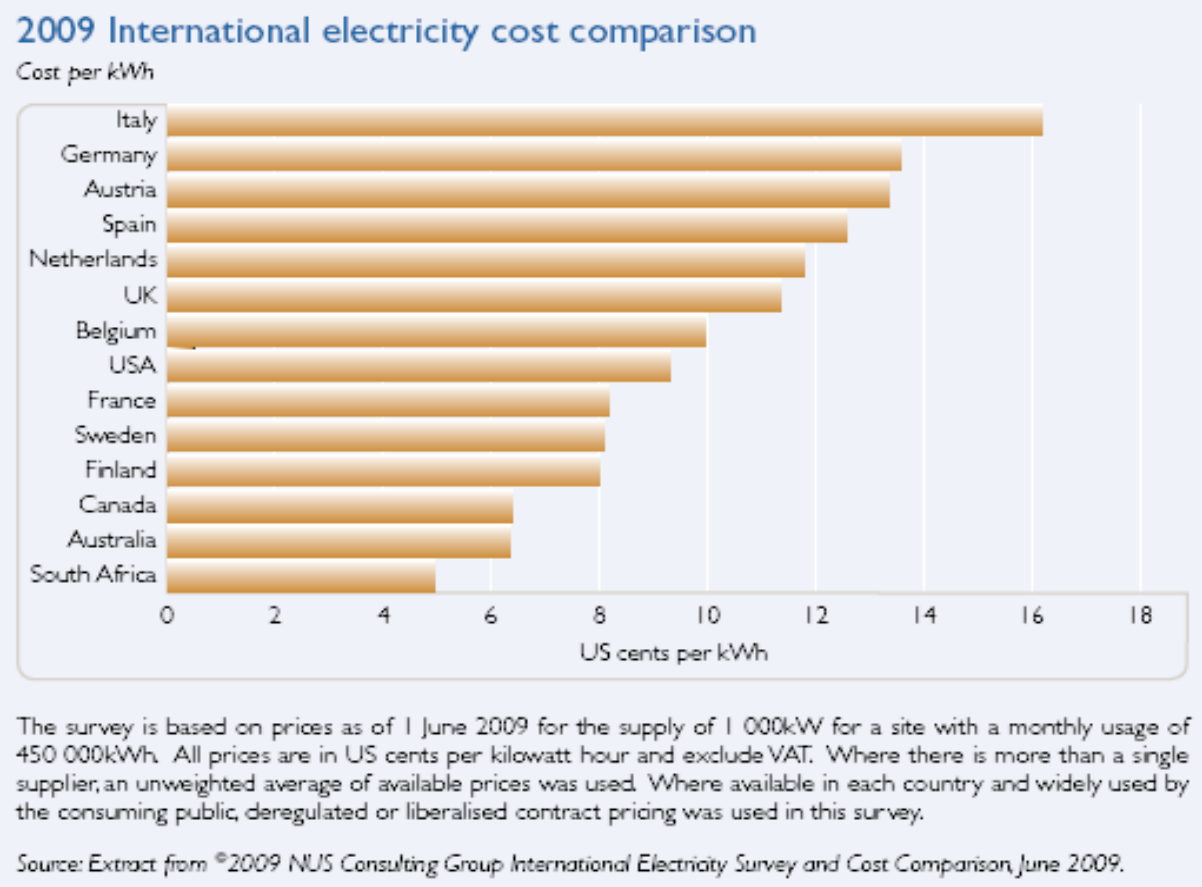
Dear Sir

**Re: Proposed 3.75 billion USD loan by World Bank to South African power utility Eskom**

1. The World Bank Group is reportedly moving towards approving a US$3.75 billion loan in the coming months for the 4800 MW Medupi coal fired plant with an estimated emission of 25 Million Metric Tons of $CO_2$ per annum[1]. 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 huge price increases. According to the UN Intergovernmental Panel on Climate Change, climate change will affect Africa dramatically: African farmers' ability to feed themselves will decline by 50% by 2020, while between 75 million and 250 million Africans are projected to be exposed to increased water stress by 2020. If the climate changes through even a two degree warning, then

2. The World Bank's rationale behind supporting the loan is that without increasing its energy supply, South Africa will face economic losses and hardship for the poor. However, Medupi is designed mainly to supply big industrial users, not the poor people who suffer the most from power disruptions.

Their current consumption level is less than 5% of the electricity grid, in contrast to the 38 largest corporations which consume 40%. South Africa provides the cheapest electricity supply in the world to its biggest industrial consumers (See graph below). In fact, the poor are paying far more for their electricity than are the export-oriented metals and mining industries, and these industries export the vast bulk of their profits to international headquarters in London, New York, Zurich, Melbourne, and Luxembourg. South Africa has one of the world's highest balance of payments deficits as a result, this being the main factor in the *The Economist* magazine's February 2009 rating of South Africa as the world's riskiest emerging market.




3. The World Bank's justification for this carbon intensive coal burning project is contrived and transparently false. Low-income people will pay a disproportionate share of the costs for building this project. For example, capital spending on the power sector for the next seven years (up to March 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 Special Pricing Agreements concluded in a non-transparent manner (they are still secret) during the last days of apartheid in the early 1990s, when corruption and backroom deals spiraled out of control. (During apartheid, the World Bank lent Eskom $200 million, and then – as now – the electricity empowered large industry and white South Africans, while no black South Africans received electricity, as a matter of state policy. The Bank's apologies and reparations for this history are still awaited.) 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. The Bank and its expert panel did not take into

account the extreme damages faced by residents of areas where forty new coal mines are expected to open (many on land stolen from black people during apartheid), by people in the vicinity of power plants, or by South Africans exposed to the now serious problem of mercury residues in the air, water and land caused by coal-fired electricity generation. This raises very important questions about the "real costs and benefits" of this project. The Bank overemphasis benefits in terms of "poverty alleviation", "energy security" and "economic growth"[2] whereas deliberately ignoring social and environmental costs associated with coal-fired power plants and associated coal mines.

4. The "Expert Panel"[3] report on the proposed Eskom loan released on the 18 February 2010, is flawed, yet it too raises doubts about the World Bank supporting a coal based Medupi plant without adequate compensating renewable energy development. They observe that Medupi will produce large quantities of carbon dioxide while $CO_2$ savings attributable to 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.

**5. Civil society organizations from South Africa, Africa and all over the world request that the World Bank Executive Directors vote NO on this loan, because it will neither alleviate poverty nor increase electricity access to poor, but will have the opposite impacts: increasing disconnections due to inability to pay, and increasing theft of electricity – and many more electrocutions – by those who are disconnected, plus more intense social protests by communities who are already protesting at the highest rate per person in the world (with police regularly reporting 8,000 protests/year even prior to the price increases).** The World Bank claims that this loan will alleviate "energy poverty" in South Africa, because Eskom is reportedly increasing its 'free basic electricity' (FBE) from 50kWh to 70 kWh per household per month, a trivial amount considering that basic consumption requirements are typically in the 350 kWh/hh/month range, and large low-income families have larger needs (and moreover, many municipalities will not follow step to raise the existing inadequate level). After using this amount, low-income people typically pay more for a unit of electricity than the residents of rich areas and at least four times more than industry. The bottom 60% of South African households earn less than 15% of the average household income, thus South Africa has raced ahead of Brazil to become the most unequal large society in the world, with a rising Gini coefficient close to 0.70. Eskom has applied to the National Energy Regulator of South Africa (NERSA) for a price increase of 35% every year for three years to help raise funds for its expansion program, and received an average of 26% on the 24 February. Eskom has threatened to come back within this period for even larger amounts – its initial requests were in the range of an 80% annual increase. A typical black township household's electricity bills will nearly triple over the period 2008-2013 to become 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 worsen ongoing inequities in access to electricity. In order to pay back a US$3.75 billion loan, South Africa will be required to export more, especially to compensate for any devaluation of South African currency (South Africa regularly experiences currency crashes of at least 15%, more than any other major country, including five since 1996). More devaluation is anticipated during the life of the loan, at a time when South Africa's internal financial markets remain highly liquid due to the low rate of investments by manufacturing capital and the crash of local real estate markets.

**6. 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 $CO_2$ emissions by 2018. South Africa already has the distinction of being amongst the top global greenhouse gas emitters. $CO_2$ emissions for 2004 were estimated at 440-million tonnes with Eskom accounting for more than 40%. In the 2007-08, Eskom burnt in excess of 125-million tonnes (mt) of coal and emitted 223.6 mt of carbon, according to its 2008 Annual Report. Further, Eskom does not report methane emissions – and is reckoned to emit 2,267 tonnes (49,874 CO2e) or close to 60% of national methane emissions, which is 21 times more potent than carbon dioxide[4]. South Africa's 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 repaid to victims of climate change across Africa, as financing mechanisms for this purpose are finally set up (SA is not yet contributing to the fast-track funding to Africa and small islands, but will be pressured by civil society to do so).

**7. The loan will open up 40 new coal mines to feed the Medupi plant and related projects.** Eskom is encouraging the development of 40 new coal mines 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 2 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.

**8. The loan documentation has not properly assessed the hidden costs of Medupi plant.** How great are those costs? A parallel calculation from Kosovo will assist us measuring the broad range of damages. In 2006, the IDA approved a grant for technical assistance to Kosovo for assessing the potential development of a new lignite fired power plant, among other things. According to Project Appraisal Document for the Kosovo project, the environmental costs (mostly due to health impacts of local air pollution) were around 0.8 eurocents/kWh for a 600 MW subcritical lignite-based plant, which adds about 20% more to the levelised cost of producing electricity from the lignite plant. The environmental cost analysis was based on a dispersion model from the University of Stuttgart, Germany, along with information from epidemiological studies[5]. A recent report by Environmental Defense Fund also supports these findings about the health costs of power plant emissions[6]. Yet, the World Bank has not indicated whether similar studies were conducted for the Medupi plant. If such studies were conducted, the Bank has not released any information about the results of these studies. Given that the Medupi plant is nearly eight times as large as the plant considered in the Kosovo study, it is clear that the cost of air pollution can be significant. Already health related costs due to air pollution in South African is estimated to be R4 billion annually towards the States expenditure.

**9. The loan does not consider carbon emissions pricing and alternative technologies.** A switching cost analysis of the impact of prices on carbon emissions is not conducted, or if conducted, the results are not

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. The cost of carbon emissions is another element of the socio-environmental cost of the Medupi plant that is not properly accounted for.

**10. 'Cleaner coal' and 'carbon capture and storage' are not in place, and are dubious at best**. The Bank claims that Medupi and other SA plants will be 'carbon capture storage ready'. But, in contrast, Eskom's top technical manager has testified, "… to be quite frank, no-one knows what that is at the moment." The Bank has not spelled out what being 'ready' means either. Futhermore, 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 devises 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. Moreover, Medupi is located in a dry area and the water supply is not assured. Scrubbers are water-intensive and will add to the strain on supplies. It is assumed that recycled waste water will be piped from the Pretoria-Johannesburg conurbation but feasibility studies are yet done.

**11. 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 shift 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. These are controversial, because on 24 February Eskom filed court papers alleging that Mr Jacob Maroga, the Eskom CEO with whom the Bank negotiated the loan (subsequently fired by the Eskom Board of Directors in November 2009), had not fulfilled his contractual responsibility for renegotiating these Special Pricing Agreements, with the likes of BHP Billiton, Anglo American, Arecelor Mittal, Alcan and other huge corporations. Most were originally negotiated during apartheid, and can be considered in the category of Odious Contracts. Without renegotiating the contracts to the Energy Intensive Users Group – 38 firms which receive 40% of South Africa's electricity at extremely low (undisclosed) rates – the Bank did not properly exhaust non-coal options for addressing South Africa's electricity crisis. (Nor did the expert panel the Bank hired to consider the loan, in spite of civil society suggestions that the panel do so.)

**12. The loan does not meet World bank's EIR and DCCSF criteria:** 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. The Eskom project is no different. The Eskom loan does not even meet the goals envisioned in the Bank's "Development and Climate Change Strategy Framework", which allegedly guides the approval of any World Bank loan to future coal projects.

**13. Conclusion.** The World Bank, in order to demonstrate its commitment on climate change and achieve its vision of sustainable development, 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 proposed loan for Eskom can by no means be called "transitional", nor is it a "down payment on a greener future". But instead is a travesty to both the environment and South Africa's low-income people, who have already begun to protest the Bank at Eskom offices, and threaten strike action against Eskom's price increases **Therefore, the Executive Directors are requested to vote NO on the Eskom Medupi project.**

Please send all replies to bobby@groundwork.org.za and sunita@groundwork-usa.org.

Sincerely yours,

S. (Bobby) Peek
Director

Footnotes:

[1] ***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.
[2] Eskom Power Investment Support Project Fact Sheet By World Bank
[3] This expert panel was constituted by the World Bank.
http://siteresources.worldbank.org/INTSOUTHAFRICA/Resources/Eskom_Power_Investment_Support_Project_Fact_Sheet.pdf
[4] Worthington, Richard: "Cheap at half the cost: Coal and electricity in South Africa", in Electric Capitalism, (ed: David McDonald), Earthscan. 2008.
[5] http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2006/09/25/000160016_20060925112319/Rendered/PDF/35430.pdf
http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2006/09/25/000160016_20060925112319/Rendered/PDF/35430.pdf
[6] http://www.edf.org/documents/9553_coal-plants-health-impacts.pdf