LIFE AFTER COAL
IMPILO NGAPHANDLE KWAMALAHLE

The Honourable Minister Jeff Radebe
Minister of Energy
Per email: kgomotso.maditla@energy.gov.za
phillip.musekwa@energy.gov.za

Copied to:

Mr Thabane Zulu
Director General
Department of Energy
By email: thembeka.zuma@energy.gov.za

4 June 2018

Dear Sirs

RELEVANT INFORMATION CONCERNING THE COAL IPPS – A STUDY BY THE ENERGY RESEARCH CENTRE

1. We address you as the Life After Coal/Impilo Ngaphandle Kwamalahle Campaign (made up of the Centre for Environmental Rights (CER), groundWork (gW) and Earthlife Africa Johannesburg ("Earthlife").[1] The Life After Coal Campaign aims to discourage investment in new coal-fired power stations and mines; accelerate the retirement of South Africa's coal infrastructure; and enable a just transition to renewable energy systems for the people.

2. We refer to our previous letters to you of 28 February 2018 and 22 March 2018 – copies of which are attached for your ease of reference.

3. In our 22 March letter, we alerted you to the significant social, environmental and financial impacts that Thabametsi and Khanyisa will have if there are permitted to proceed. To further substantiate our previous points in this regard, we wish to refer you to an important report recently published by the University of Cape Town's Energy Research Centre (ERC) entitled "*An*

[1] Website available at https://lifeaftercoal.org.za/

assessment of new coal plants in South Africa's electricity future: the cost, emissions and supply security implications of the coal IPP programme" ("the **ERC report**"). A copy of this report is attached.

4. The ERC report models several scenarios for an assessment of the effects of building the two coal IPP preferred bidders – Thabametsi (at 557MW) and Khanyisa (at 300MW) – compared to a future electricity build plan that excludes them. The modelling investigates: supply security; the cost implications of the inclusion of the coal IPPs on the system relative to cheaper alternatives; the emission 'lock-in' from the plants; and the effects this has on South Africa meeting its long-term climate change commitments. According to the report, since a least-cost electricity build plan for South Africa **does not include new coal plants**, in each scenario, the coal IPPs had to be forced into the model in order to compare the effects on the system.

5. The findings of the ERC report are, *inter alia*, that:

   5.1. the proposed Thabametsi and Khanyisa coal-fired power stations will cost South Africa an additional **R19.68 billion** in comparison to a least-cost energy system;

   5.2. the coal IPPs are not needed to meet South Africa's medium-term electricity demand, as alternate electricity sources i.e. wind, solar and flexible gas generation are more economical; and

   5.3. the coal IPPs will increase greenhouse gas (GHG) emissions by **205,7Mt CO2eq** over the 30 year period of the power purchase agreements. This would negate the government's GHG emission mitigation plans and efforts, including the expected savings of the entire Energy Efficiency Strategy to 2050. Even in a best-case scenario for the coal IPPs (with GHG emissions curtailed as far as possible), the two coal IPPs would still negate the emissions saved under the carbon tax and frustrate South Africa's commitments under the Paris Agreement, through raising the costs of mitigation technology and requiring significant GHG emission reductions in the power and other sectors.

6. In short, the ERC report finds that the inclusion of the coal IPPs in South Africa's electricity build plan raises the total system costs compared to a scenario without the coal IPPs. Similarly, in all scenarios, the coal IPPs increase GHG emissions. These increases, both in costs and in GHG emissions, are significant.

7. In relation to Eskom, the ERC report states that:

   7.1. *"Not only are the coal IPPs not required to meet demand, and not only do they raise costs, and increase emissions, but they also* ***result in increasing pressure on Eskom. Building new coal plants in a situation of low demand means reducing the output of Eskom's fleet, potentially accelerating the 'utility death spiral' in which Eskom already finds itself and putting the electricity supply industry – and thus the South African economy – at risk***" (emphasis added);[2] and

   7.2. "*When the coal IPPs are forced into the electricity build plan, this results in* ***decreased use of existing coal plants (which are also cheaper than the coal IPPs), which puts raises (sic) costs overall and puts Eskom at risk***" (emphasis added).[3]

[2] P8, ERC report.

[3] P17, ERC report.

8. ERC concludes that "*the implications of these findings are clear. South Africa is currently facing a large surplus in generation capacity, in particular inflexible base supply capacity. Eskom is facing a financial crisis and rising electricity prices will drive consumers away from the utility. Investments that unnecessarily increase costs in the electricity sector should be avoided*."

9. The ERC report is further evidence of the position held by Life After Coal Campaign – that Thabametsi and Khanyisa – are highly risky and harmful projects, both financially and environmentally. To further elaborate (and as already stated in the 22 March 2018 letter):

   9.1. both power stations will have significant and irreversible impacts for water, air and our climate. They will use large volumes of scarce water needed by communities and also put South Africa's already vulnerable water resources at a high risk of pollution;

   9.2. due to the technology proposed for both plants – these projects are incredibly GHG-emission intensive, with an emission intensity almost 60% higher than Eskom's Medupi and Kusile;

   9.3. these coal IPP projects do not provide a non-replaceable economic benefit. If and when additional electricity is needed, it would be preferable – and reasonable – to procure more renewable energy capacity, which would provide more jobs and clean and cheap electricity; and

   9.4. South Africa does not need new coal-fired power capacity. These power stations will simply increase the costs of electricity for consumers. The coal IPP price of R1.03 per kilowatt hour is significantly more expensive than the latest renewable IPPs.

10. In light of the findings above, as well as the significant health impacts of coal-fired power stations, we wish to reiterate that the commissioning of these projects is a bad decision, which will continue to be met with significant opposition from civil society.

11. As you are aware, regulation 9 of the 2011 Electricity Regulations on New Generation Capacity GN R399 (GG 34262) requires that, before concluding power purchase agreement (PPA), the buyer (Eskom) or the procurer (the Department of Energy) must ensure that the PPA is "value for money", namely that "*the new generation capacity project results in a net benefit to the prospective buyer (Eskom in this case) or to Government having regard to cost, price, quality, quantity, risk transfer or a combination thereof, but also where applicable to the Government's policies in support of renewable energy*."

12. We submit that there is no basis for these projects to be regarded as being "value for money".

13. We therefore urge the Minister of Energy to reconsider the Department of Energy's commitment to these two coal IPP projects and we wish to reiterate that we will continue, through litigation and advocacy, to oppose all new coal-fired power stations, including the two preferred bidders.

14. We repeat our request – and that of Greenpeace Africa – to meet with you at your earliest convenience and would be happy to discuss these findings in further detail, or to provide any additional information that you may require in relation to the ERC report. We will invite community representatives from the areas that will be impacted by these coal IPPs to join us at this meeting.

Yours faithfully

Robyn Hugo
Attorney and Programme Head: Pollution & Climate Change
Centre for Environmental Rights
rhugo@cer.org.za

Makoma Lekalakala
Director
Earthlife Africa Johannesburg
makoma@earthlife.org.za

Bobby Peek
Director
groundWork
bobby@groundwork.org.za