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8 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 ("Earthlife").[1]

2. 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.

3. We refer to our previous letter to you of 1 February 2018,[2] in which we indicated, among other things, that we would like to see Eskom transformed into an organ of state that promotes clean,

[1] Website available at https://lifeaftercoal.org.za/
[2] Available at https://cer.org.za/wp-content/uploads/2018/02/LAC-Letter-to-Eskom-1-Feb-2018_final.pdf.

healthy, affordable energy for everyone – becoming the owner of significant renewable energy assets in the interest of all. We have not received a response to this letter.

4. We write to you to bring to your attention an important report – which includes information that is relevant to Eskom – recently published by the University of Cape Town's Energy Research Centre (ERC) entitled "*An 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.

5. The ERC report models several scenarios for an assessment of the effects of building the two preferred bidders under the first bid window of the Coal Baseload Independent Power Producer (IPP) Procurement Programme – Thabametsi (at 557MW) and Khanyisa (at 300MW) ("the coal IPPs") – 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.

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

   6.1. 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;

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

   6.3. 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.

7. 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.

8. In relation to Eskom in particular, the ERC report states that:

   8.1. *"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);[3] and

8.2. "*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).[4]

9. 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*."

10. Evidently, proceeding with these coal IPPs could have severe negative impacts for Eskom.

11. We note that at the National Energy Regulator of South Africa (NERSA) generation licence application hearing for the coal IPPs, held on 27 March 2018, Eskom recommended to NERSA that these projects should not go ahead, citing concerns around the flexibility of the grid and the carbon tax (locking in Eskom and consumers to high costs), as the coal IPPs will be entitled to recover any carbon tax that they are required to pay, from Eskom, in terms of the power purchase agreement.

12. The Life After Coal Campaign has always maintained that Thabametsi and Khanyisa are – financially, socially, and environmentally – highly risky and harmful projects. To further elaborate:

12.1. 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;

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

12.3. 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

12.4. South Africa does not need new coal-fired power capacity. These power stations will simply increase the costs of electricity for consumers.

13. We submit that the coal IPP projects are not in the interests of the people of South Africa, or Eskom. As such, they will continue to be met with significant opposition from civil society.

14. 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*

[3] P8, ERC report.
[4] P17, ERC report.

combination thereof, but also where applicable to the Government's policies in support of renewable energy”;.

15. The Request for Qualification and Proposals for New Generation Capacity under the Coal Baseload IPP Procurement Programme (RFP) states that the “*outcome of the consideration as to whether or not a project can deliver value for money, is required to produce an assessment that the* ***project is in the best interests of and delivers an acceptable outcome to the buyer (Eskom) and the Government acting on behalf of and in the best interests of the people of South Africa, including electricity users***”.[5]

16. In relation to the requirement for the projects to be “value for money”, we dispute that this is the case. The ERC report shows that the coal IPPs will cost South Africa an additional R20 billion (not taking into account external costs and impacts) and will further destabilise Eskom’s precarious financial position.

17. In light of the current excess electricity capacity, Eskom’s dire financial situation, the high cost of electricity from the coal IPPs in comparison to the latest renewable IPPs,[6] and constantly-rising electricity tariffs, we urge Eskom to fully consider and use the information outlined above, to inform any decision in relation to the signing of the PPAs for these two coal IPP projects.

18. Should you wish to discuss these findings in further detail, or request any additional information in relation to the ERC report, please feel free to contact us.

19. We also reiterate our request for meeting at your earliest convenience.

Yours faithfully

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[5] P 59, 6.1.8.2, Part A RFP.

[6] See http://www.ee.co.za/wp-content/uploads/2016/10/New_Power_Generators_RSA-CSIR-14Oct2016.pdf at p7.