

13 October 2023

Mr Sahlulele Luzipo

Chairperson of the Portfolio Committee on Mineral Resources and Energy

For attention: Mr Arico Kotze

Per email: akotze@parliament.gov.za

ALTERNATIVE INFORMATION AND DEVELOPMENT CENTRE (AIDC) WRITTEN SUBMISSION ON THE ELECTRICITY REGULATION AMENDMENT BILL

1. The Alternative Information & Development Centre (AIDC) is a grassroots-based non-governmental organisation based in Cape Town, South Africa. The AIDC acts as a resource base for a number of partnered movements and progressive organisations, including community-based organisations and trade unions, providing research and other support towards the attainment of economic, ecological, and social justice.
2. Our interest is on the proposed amendments to the Electricity Regulation Act, 2006 particularly in relation to the establishment of the Transmission System Operator SOC Ltd and the provision of its duties, powers and functions toward an open market platform that allows for competitive electricity trading.
3. The amendments to the ERA will have major implications for the electricity market in the country. The main objective of the Bill is to introduce a competitive market in the electricity sector. This is congruent with the government's strategy to unbundle Eskom from a vertically integrated energy utility into three separate companies, starting with the creation of an independent transmission company. This is central to enabling the increased liberalisation of the South African energy

market through facilitating increased private-sector energy generation. Our concern with the Bill is that (i) its proposed reforms will undermine the state's capacity to “achieve the efficient, effective, sustainable and orderly development of electricity supply”, and will result in added risk on the state's finances; (ii) there is lack of clarity on how tariffs will be set in a competitive energy market, and we caution that it may result in rising tariffs and perpetuate energy poverty; and (iii) increased privatisation of energy, while leading to a greater share of renewable energy in the short term, jeopardises the prospects of transitioning to a low-carbon energy sector and economy in the long run.

ENERGY SUPPLY RISKS AND THE ACCELERATION OF THE ESKOM DEATH SPIRAL

4. We make our submission cognisant of the fact that South Africans continue to experience high levels of load shedding and that the energy crisis in the country intersects with the challenge of climate change.
5. The energy crisis in SA is due to a number of factors, chief among which are long standing maintenance issues and a lack of sufficient new generation capacity. In addition to a massive debt burden, these issues combine to place Eskom in a precarious operational and financial position. Corruption has exacerbated these issues but it's not the root cause. The fundamental problem behind Eskom's woes is its corporatisation and the adoption of an [unsustainable financing model](#).
6. Underlying Eskom's financial woes is a structural problem arising from the adoption of the full cost recovery model and the user-pays principle, following its corporatisation in 2001. Eskom had to operate as a standard private company. Electricity ceased to be a public good and was treated as a commodity, with all its users being turned into “customers”, while at the same time taking on a developmental mandate of supporting economic growth and completing the task of nation-wide electrification.

7. The consequence of this is that the utility is dependent on selling electricity at a sufficiently high price to raise revenue in order to recover its costs, with additional profit and market-rate debt being used to fund new projects. As a result of South Africa being among the most unequal countries in the world, most people are unable to afford rising tariffs. Recent years have seen declining sales volumes due to more consumers switching to alternative sources of energy such as paraffin or going off-grid. These are major constraints on Eskom's ability to raise sufficient revenue. Growing debt-service costs, following loans often denominated in foreign currency, add strain to Eskom's financial position. The fact that some of these loans are [considered by many](#) to be illegitimate and have been used for bad financial investments adds insult to injury.

8. Unbundling Eskom and establishing the NTCSA will allow for increased levels of private sector energy generation. This will have a direct cost in terms of the purchase of energy from private generators. Besides increased direct cost, Eskom faces the much greater indirect cost of falling sales volumes overall, with the majority of lost sales coming from Eskom's "best-paying customers". The reduction in its market share and declining sales volumes will accelerate its death spiral and drive the utility to collapse.

9. That said, given that Eskom is still responsible for the vast majority of the country's electricity supply, it cannot be allowed to fully collapse. Due to the variable nature of wind and solar energy, and the fact that utility-level battery technology remains unrealistically expensive, Eskom's power plants, whether coal, gas, or nuclear, will still be needed to balance the grid. We caution that this set of factors could lead to an Eskom that is both commercially unviable but still necessary, leading to further bail-outs.

COST-REFLECTIVE TARIFFS AND ENERGY POVERTY IN A COMPETITIVE ENERGY MARKET

10. As per the Amendment of section 21 of Act 4 of 2006, as renumbered by section 16 of Act 28 of 2007, the National Transmission Company of SA (NTCSA) will provide non-discriminatory access to the transmission power system to third-parties through the establishment of the Transmission System Operator SOC Ltd.

11. This will be facilitated by providing the Transmission System Operator with the power to be the central purchasing agency as the wholesale buyer in the transition to a competitive electricity market. The insertions of Sections 34A and 34B in Act 4 of 2006 will provide powers to the Transmission System Operator SOC Ltd to provide an open market platform that shall allow for competitive electricity trading. Critically, the license conditions allow for **tariffs underpinned by the principle of full cost recovery - which includes “a reasonable margin or return” i.e profit**. This echoes NERSA’s June 2022 Methodology for Determining Tariffs and Prices in the Electricity Industry - the first principle entrenches the principles of full cost reflective tariffs in arguing that tariffs “must enable an efficient licensee to recover the full cost of its licensed activities, including a reasonable margin or return”.

12. While the amendments certainly do not do away with pricing regulation altogether, the inclusion of the vague and wide-ranging proposed subsection 15(4) in particular indicates that the ultimate intention is to allow for end-user tariffs dictated by the function of market forces. This subsection states that “a licensee may charge a customer a tariff which has not been set or approved by the Regulator where such tariff is charged pursuant to a direct supply agreement or arises as an outcome of a competitive market.”

13. Average electricity tariff increases have already strongly outpaced inflation for more than a decade. In the same period, economic (and wage) growth has plateaued or reversed. The results of this are reflected in a 2020 study, which found that 52% of South African households experience energy poverty, the overwhelming majority of which are low-income households. The cost of electricity is clearly an increasingly heavy burden for all South Africans; an issue we also see come up more frequently in our engagements with community-based organisations. Free basic electricity (FBE) does not address this problem. There are two reasons for this. First, the 50kWh provided would need to be increased to at least 350 kWh to meet basic needs. Second, although the FBE programme is budgeted to provide free electricity to about 11-million poor households, only about 2.3-million (21%) of them [actually receive even the 50kWh](#). Business constantly cites the cost of electricity as a major constraint on growth. The price of electricity ought to be central when considering the future of the energy sector. There are a number of reasons to believe that this reconfiguration of the market structure and pricing policy will lead to even more unsustainable tariff increases for the majority of South Africans.
14. One indicator of the impact of the proposed reforms is the fact that, although considered overly-expensive, Eskom has not been able to adopt a fully fledged “cost-reflective tariff model”, and thus the tariffs set by NERSA do not “reflect the true cost of generating power”. A “more” cost-reflective tariff model would increase tariffs dramatically. According to former Eskom CEO, Andre De Ruyter, NERSA has not permitted Eskom to recover cost-reflective tariffs since 2006, leading to a revenue shortfall of approximately R40 billion to R60 billion per annum in recent years. By all accounts, Eskom has been selling electricity at below the rates that it would deem reasonable to charge if it were given the “freedom” to fully set its own prices. This helps us to understand why, as Eskom’s former CEO pointed out how Eskom “does not manage to generate sufficient revenue from operations to meet its debt servicing costs and some capital investment requirements”. Eskom already indicated it needs a cost-reflective tariff

structure “to reflect unbundled costs more accurately” as well as the changing energy environment in which the energy sector is more fully marketised.

15. It is now common knowledge that the nation’s transmission network requires substantial re-development in order to accommodate additional capacity, particularly solar and wind capacity. The immense costs (at least R178bn) involved in the expansion and reconfiguration of the country’s transmission network will be borne largely by eventually the National Transmission Company as well as local authorities (also see Section 4.2.2.4 in the Just Energy Transition Investment Plan). Further, the increased proliferation of variable generation through wind and solar will in turn increase the ‘system costs’ borne by the transmission operator. The pricing policy reforms reflected in the Bill make way for these costs to be passed through to end-users on tariff charges. This will have a strong upward effect on the price of electricity unless strong cross-subsidisation measures are put in place; measures which current reforms are explicitly moving away from.

16. In addition to these potential upward pressures on prices, we also believe that the benefits of market-related tariffs have been overstated:

- a. It is assumed that competition would place significant downward pressure on energy prices in a sufficiently marketised energy sector - for instance, the Electricity Pricing Policy argues that “economic theory suggests that a perfectly competitive market would produce efficient prices”. However, due to the nature of the energy sector, increased market concentration is highly likely; a process already seen in the REI4P programme. In a sector potentially dominated by a handful of corporations, price fixing is just as likely as competition. One needs to only look at the state of the telecommunication sector as an example. Further, there are also unnecessary *costs* introduced through competition and a market structure, such as the duplication of administrative and marketing functions,

technology costs, and the need to factor in a rate of return that will be satisfactory for return-hungry shareholders.

- b. International experience has also shown how marketised energy sectors leave end-users extremely vulnerable to external shocks, while allowing for reckless profiteering by energy suppliers. Countries such as the United States, Germany, Australia, and the United Kingdom have all seen cases where ordinary residential energy bills have increased fivefold or even more, as for-profit energy companies passed through the costs of unexpected climate events or supply shortages related to the war in Ukraine. These increases are not purely cost-driven; European energy company profits have soared alongside costs over the past year.
- c. Finally, proponents of more cost-reflective tariffs have put forward the argument that these will result in more accurate price signals, encouraging energy efficiency and conservation. This argument is theoretically true, but in practice flawed. While there is scope for greater energy efficiency among wealthier residential consumers or larger corporations, the majority of South Africa's population live below the poverty line and do not have a great deal of either unnecessary energy expenditure or elastic energy demand. Cost-reflective tariffs are a clumsy tool for achieving greater energy efficiency, and will only lead to a great proportion of people who opt to use alternative energy sources such as paraffin instead.

DECARBONISATION AND SOUTH AFRICA'S CLIMATE TARGET COMMITMENTS

17. It is recognised that decarbonisation is not one of the main objectives of this Bill. That said, given the increasingly severe impact of extreme weather events on South Africa, and the trade disadvantages imposed by “carbon taxes” such as the European Carbon Border Adjustment Mechanism, the impact of this Bill on

South Africa's decarbonisation project ought to be discussed.

18. While the gradual liberalisation of the energy sector has led to an expansion in the quantity of energy produced from renewable sources, the actual decarbonisation of South Africa's energy sector still requires long-term and large-scale sustained investment in renewable energy as well as unproven technologies such as utility-scale battery storage and grid-balancing green hydrogen.
19. Given the pressures placed on Eskom, South Africa's energy transition is expected to be led by private investment. This is given expression in documents such as the JET-IP, as well as in the lack of any plans for large-scale public sector investment in renewable energy.
20. The market-based structure of the energy sector as outlined in this Bill thus ties the future of South Africa's decarbonisation project to its continued profitability for investors. Should the costs of investing in renewable energy increase as a result of supply shocks or shortages, then the rate of decarbonisation will slow unless these costs are able to be recouped through tariff hikes or costly state guarantees. Should the costs of new renewable energy fall, and profit margins are driven down through competition as hoped, then investor interest will similarly decline due to limited returns.
21. Of course, there is nothing in this Bill that prevents public sector investment in renewable energy per se. However, the potential impact of the Bill on Eskom and state finances outlined previously make this kind of investment an unlikely prospect.

POLICY RECOMMENDATIONS

22. End the process of setting up an independent transmission company to facilitate the shift to a competitive energy market. Maintain Eskom as a vertically

integrated public utility with a regulated pricing model. This should also entail a review of underlying assumptions and appropriateness of the 1998 White Paper on Energy. We suggest exploring the potential of decorporatising Eskom and the abandoning of the unsustainable full-cost recovery model, given that notions of full cost recovery and pass-through costs are incompatible with both South Africa’s developmental needs and with its economic realities. In this process, it is also important to examine whether the tariffs should include a “reasonable margin or return”. This provision is intended to ensure continued investment by the private sector, as well as the self-financing of capital expenditure by any energy supplier through the profit on sales. In the case of private power producers, it means that South Africans are not only expected to fund infrastructure investment themselves, but also to cover the added “costs” of providing returns for shareholders.

23. The consequence of this would be to allow for adequate funding directly from the Treasury to break the utility’s dependence tariffs and debt denominated in foreign exchange. This can be financed through additional revenue harnessed through more progressive sources such as higher effective tax rates on high net worth individuals; curbing illicit financial flows, base erosion and profit shifting; and moving towards establishing a progressive net wealth tax. Moreover, it will be critical to explore domestic resource mobilisation strategies, including the use of surpluses in state-managed investment funds. This will be essential to ensure that Eskom has adequate resources for operations, maintenance and investment in new generative capacity from low-carbon energy sources.

24. Additional electricity and new generative capacity in low-carbon technologies to be produced by Eskom based on the revised Integrated Resource Plan and in-line with South Africa’s commitments to reduce greenhouse gas emissions. In the first instance, this should be through fixing Eskom’s fleet and improving the energy availability factor of strategic power stations.

25. Legislative changes are necessary to drive a public-led expansion of renewable energy that is not dependent on private profit maximisation. This can include diplomatic efforts to secure technology transfer agreements that can enable a domestic renewable energy industry at the lowest cost, thereby driving job creation and economic growth.

REFERENCES

Alternative Information and Development Centre. 2020. [*Eskom Transformed: Achieving a just energy transition for South Africa*](#)

Battistini, N., Bobasu, A., & Gareis, J. 2023. [*Who foots the bill? The uneven impact of the recent energy price shock*](#)

Brown, D. 2023. [*We can't just wave bye-bye to Eskom - we need to fix it and its possible*](#)

Brown, D & Oelofsen, J. 2023. [*If Eskom's tariff increase is to go, its financing model needs to bite the dust too*](#)

Cannard, J. 2019. [*Cancel Eskom's Odious debt to the World Bank*](#)

Christophers, B. 2021. [*Fossilised Capital: Price and Profit in the Energy Transition*](#)

De Ruyter, A. 2023. *Eskom Answering Affidavit*

Department of Minerals Resources and Energy. 2022. [*Electricity Pricing Policy*](#)

National Energy Regulator of South Africa. 2022. *Methodology for Determining Tariffs and Prices in the Electricity Industry*

Overy, N. 2019. [*Ownership in the Renewable Energy Independent Power Producer Programme*](#)

Wingfield, B. 2023. [*Soaring Profits Are a Feature of Europe's Energy Crisis*](#)

Ye. 2020. *Measuring Energy Poverty in South Africa Based on Household Required Energy Consumption*, (University of Pretoria: 2020)

AIDC submission on the Electricity Regulation Amendment Bill. October 2023.

Zulu, A. 2022. [*Eskom's death spiral caused by policies and political choices*](#)

For enquiries contact

Dominic Brown dominic@aidc.org.za

Jaco Oelofsen jaco@aidc.org.za