

Submission

to the

Department of Minerals and Energy (“DMRE”)

on the

Draft Integrated Resource Plan, 2023

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A) INTRODUCTION

About the Centre for Applied Legal Studies

1. The Centre for Applied Legal Studies (“CALs”) welcomes the opportunity provided by the Department of Mineral Resources & Energy (“DMRE”) to comment on the draft Integrated Resource Plan, 2023 (“Draft IRP”).
2. CALS is a human rights organisation and registered law clinic with the Legal Practice Council of the Northern Provinces, based at the School of Law at the University of the Witwatersrand. For over 40 years CALS has been committed to the protection of human rights through partnering with individuals and communities in the pursuit of systemic change.
3. CALS’ vision is a society historical and social justice are achieved, state institutions are strengthened and powerful entities are held to account by marginalised actors.

4. CALS works towards our vision by undertaking research, advocacy and strategic litigation organised according to our five intersecting programmes, namely: Business & Human Rights; Civil & Political Justice; Environmental Justice; Gender Justice and Home, Land & Rural Democracy.
5. The long-term strategic vision of the Environmental Justice Programme is a country where development occurs only if the environment can accommodate it; communities consent to how it occurs, management of natural resources is just, and communities and workers are principal beneficiaries.

Background and focus of our comments

6. Our comments are organised into a number of headings based upon theme. Under heading B we discuss the important objectives the IRP (and IEP) must advance including eradication of energy poverty (and realisation of rights in the constitution), energy security for the economy, decarbonisation of our energy system, and ensuring no workers and communities are left behind (hence a just transition). Under Heading C we argue that the draft IRP is based upon a fatally flawed policy framework of privatising energy which cannot achieve these above objectives. Under Heading D we argue that the public participation process the department has followed is fatally flawed and not the broad-based participation process required for a people-centred IRP. Under heading E we argue that the IRP is premature given the need for an updated IEP to provide an overarching energy planning framework. Under heading F we argue that the envisaged additional coal generation under the IRP would undermine workers and communities. Environmental Health and under heading G we argue that the IRP represents a backwards step in the effort to decarbonise our economy. In heading H we sum up these comments and call for the IRP process to be scrapped pending an IEP based around pillars such as energy justice and a public pathway to a just transition.

B) THE SOCIETAL GOALS THE IRP MUST ADVANCE

7. The IRP is required to provide a plan for affordable, reliable, safe and environmentally sustainable electricity that can progressively eradicate energy poverty, support the economy and overcome the challenges of poverty, inequality and unemployment and in a manner that is environmentally sustainable. In particular the IRP needs to contribute to addressing both the present energy crisis and the climate crisis. It should advance a just transition to a decarbonised economy in which the agency and interests of broader working class including communities, workers, marginalised sections of society including women and LGBTQ+ people

are afforded centre stage. The IRP needs to align with the Integrated Energy Plan (“IEP”) which therefore needs to be developed before the IRP.

The IRP must advance energy justice including the eradication of energy poverty

8. Despite progress made in the early years of the democratic dispensation on electrification it has been estimated that half of the population of South Africa who suffer energy poverty.¹ Grossly insufficient allocation of free basic electricity coupled with rising tariffs (a common feature of a marketised electricity system), and punitive and racist load reduction in poor areas, in the context of the intensifying crises of unemployment, poverty and inequality, are principal drivers of energy poverty.² Energy impacts on a vast range of Constitutional rights including but not limited to equality (including racial and gender equality)³; dignity⁴; freedom and security of the person⁵; access to healthcare, food, water and social security⁶; and education.⁷ Much of the public cannot afford the rising energy bills that must be paid to have sufficient electricity to refrigerate food, cook, and study. Load reduction leads to reduced safety at night, with women as disproportionate victims of gender-based violence. There is a body of empirical evidence for a link including a safety audit conducted under the auspices of the UN Women showing better street lighting increasing women’s safety.⁸ An increase in the allocation of free basic electricity to meet the real needs of all households is required as a matter of priority.

The IRP must advance energy security to support an economy that meets needs of society

¹ <https://www.sciencedirect.com/science/article/abs/pii/S014098832100428X>

² The Centre for Sociological Research and Practice at the University of Johannesburg conducted a study which reveals both the racist nature of load reduction (disproportionately targeting Black working class areas, for example, much of Soweto) and the dire impacts on a range of other human rights including but not limited to food security (cooking and food storage disrupted, broken appliance), education (homework impossible without lighting) and healthcare (storage of medicines requiring refrigeration). Centre for Sociological Research and Practice *Energy Racism Report* (April 2022). <https://www.uj.ac.za/wp-content/uploads/2022/04/energy-racism-csrp-web.pdf>

³ Section 9 of the Constitution of the Republic of South Africa, 1996 (“the Constitution”).

⁴ Section 10 of the Constitution.

⁵ Section 12 of the Constitution.

⁶ Section 27 of the Constitution.

⁷ Section 29 of the Constitution.

⁸ <https://www.unwomen.org/en/news/stories/2013/5/better-lighting-wider-pavements-steps-towards-preventing-sexual-violence-in-new-delhi>.

9. For all South Africans rolling blackouts are a daily reality and, for many working class neighbourhoods the situation is far worse with racist load reduction. Any IRP must chart a way forward for addressing the immediate crisis rapidly and to ensure the generation sufficient, reliable and environmentally sustainable power to meet households' needs and to power a green and socially just reindustrialisation that can resolve the challenges of unemployment, poverty and inequality by creating secure jobs with living wages for the majority.

The IRP must advance the decarbonisation of the energy system to prevent climate catastrophe

10. The Climate Crisis is perhaps the most severe crisis humanity has faced. Projections of the leading climate scientists in the International Panel on Climate Change ("IPCC") are that if the increase in global temperatures is not limited to below the 1.5 degrees planetary conditions will change irreversibly to a state no longer supportive of human existence and extinctions of species will occur on a scale not seen in millennia.⁹
11. The impacts of climate change are unevenly distributed on gender, race and class lines. Environmental racism¹⁰ is cruelly manifested with impacts are disproportionately felt within historically colonised societies whose land and natural resources were plundered by global north states and corporations whose fossil fuel-generated path of accumulation is responsible for the present climate crisis. In South Africa and the rest of sub-Saharan Africa, we are already seeing the catastrophic human impacts. One example is the recent floods in KwaZulu-Natal ("KZN"), which claimed the lives of an estimated 443 people with nearly 4000 left homeless.¹¹ Drought, famine and floods are becoming endemic features of life. These climate change impacts jeopardise the realisation of possibly all rights enshrined in the South African Constitution (and in international and regional law). These include, but are not limited to the right to life, dignity, socio-economic rights and, of course, the environmental right enshrined in Section 24. Section 24 imposes a duty on the state to:

⁹ IPCC [Masson-Delmotte et al (eds.)] Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. At 7-10.

¹⁰ <https://www.ohchr.org/en/press-releases/2023/08/south-africa-must-tackle-crude-legacy-environmental-racism-and-toxic>

¹¹ <https://reliefweb.int/disaster/fl-2022-000201-zaf>.

*'b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that -
(i) prevent pollution and ecological degradation;
(ii) promote conservation; and
(iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.'*

The IRP must advance a just transition to ensure no workers and communities left behind

12. Decarbonising the economy, including energy supply is therefore a necessity. However, decarbonisation itself is no guarantee that the energy system and economy will advance the rights and interests of the majority in relation to access to electricity, decent and secure jobs etc. The overarching demand for a just transition has a deep history in the labour movement predating the climate justice movements¹² and in essence has been a call to adapt the economy to be environmentally sustainable while ensuring that the costs are borne by capital who profited from the environmentally unsustainable status quo rather than the working class. While the term has increasingly been co-opted in favour of a project of using the climate crisis to justify privatisation of the energy system with very limited social initiatives as an afterthought, this is not true to the historical meaning of the term which is rooted in left traditions favouring working class control and socialisation of the economy and thereby diametrically opposed to the logic of marketization and commodification of a public good like energy.

13. While cabinet's Just Transition Framework is flawed in its details,¹³ its three pillars of procedural, distributive and restitutive justice do capture the fundamental facets of a just transition. Procedurally all decisions regarding energy transition (decommissioning, repurposing etc.) and changes in industry (e.g. move to electric vehicles) need to be made first and foremost by the impact workforce (including outsourced and casualised workers) and impacted communities and there must be full transparency on the part of ESKOM, companies etc. Regarding distributive justice, the transition cannot result in job losses, devastation of the local economy

¹² Alice Mah 'The Labour Movement Origins of "Just Transition:" '30 May 2023 <https://ourtimes.ca/article/the-labour-movement-origins-of-just-transition>.

¹³ Centre for Applied Legal Studies Comments on the PCC draft framework for a just transition in South Africa, 2022. <https://www.wits.ac.za/media/wits-university/faculties-and-schools/commerce-law-and-management/researchentities/cals/documents/programmes/environment/resources/CALS%20Comments%20on%20the%20PCC%20draft%20framework%20for%20a%20just%20transition%20in%20South%20Africa,%202022.pdf>

and the new form of energy generation and/or industries must be constituted to benefit workers and communities rather than corporations. Further, restitutive justice requires financing must not be in the form of loans in foreign denominated currency but should be rather be a mixture of grants (in repayment of climate debt by the corporations and countries who have profited from fossil fuels) as well as lending in ZAR by domestic public finance institutions.

C) THE IRP CONTINUES GOVERNMENT'S PRIVATE SECTOR APPROACH TO ENERGY AND CLIMATE CRISES THAT CANNOT DELIVER ON THE KEY SOCIETAL OBJECTIVES

14. The ambit of the IRP – i.e. how supply and demand are matched and the energy mix pursued to achieve this cannot be considered in isolation from broader questions of power and political economy as well as the related policies, laws and institutional arrangements that comprise the energy system. All the above matters in determining whether South Africa achieves a *just* transition that is worthy of the history of struggle behind this term or whether decarbonisation is used to justify the transfer of a public good like electricity into the hands of the private sector that primarily exists to advance the profits of the wealthy shareholders who comprise a miniscule minority of society.
15. While the official commitment of South African government to a just transition is laudable, the unfortunate reality is that a range of government policies, if maintained will render this a pipe dream. First, the consequences of the creeping marketization and privatisation of our electricity system as embodied in policies/mechanisms such as the unbundling of the energy system, procurement (REIPP) and embedded generation rather than through a public sector build mean that critical matters pertaining to the justness of the transition are increasingly left to the anarchy of the market rather than institutions subject to democratic accountability.¹⁴ These matters include the energy mix, amount of electricity supplied, efforts to avoid unused electricity (storage etc), the need to safeguard livelihoods of workers in the electricity sector are increasingly left to the anarchy of the market.

¹⁴ For a history and analysis of the policies that corporatised ESKOM, removing its public benefit mandate, as well as a proposed alternative public sector-led energy transition see Alternative Information & Development Centre (AIDC) Transnational Institute (TNI), and Trade Unions for Energy Democracy (TUED) *Eskom transformed: achieving a just energy transition for South Africa* (2020). <https://aidc.org.za/eskom-transformed-full-report/>

16. There are concrete examples that the private sector-led approach to the energy transition is in fact exacerbating rather than addressing poverty and inequality. For example research by the Institute for Economic Justice (IEJ) reveals that the experience of workers and communities of ESKOM's flagship just energy transition project namely the Komati Power Station decommissioning and repurposing was of a far-from-just transition.¹⁵ In particular the large numbers of outsourced workers at the plant were completely excluded from all agreements with no plans or guarantees to ensure their livelihoods in the new micro grid.¹⁶ In addition the operation of the micro grid was put to a tender process for private energy companies and the successful bidder was not required to put in place any concrete measures to guarantee jobs.¹⁷ Without adequate and participatory planning around localisation, livelihoods and training etc., the whole social and economic fabric of areas could be decimated on a scale far larger than we have to date seen in areas of mine closure.
17. A democratised ESKOM under community and labour oversight and control, operating on a public interest mandate, and adequately funded should instead lead the transition by embarking on a large scale build of both renewable facilities and extension of the transmission grid where required. It can encourage localisation and fair labour practices through its policies of procurement of materials and equipment and can, further, support social ownership of renewables including on the township co-operative or worker owned co-operative models as is appropriate to the context.
18. The marketization of electricity also is no guarantee of decarbonisation itself. The lowering of the renewable energy share of our energy mix in the 2023 IRP, for example, cannot be disconnected from the decision not to build any renewable generating capacity through ESKOM. The speed of the transition is compromised by relying on bid processes where the need for cost-effective energy while guaranteeing the profitability of IPPs and complex negotiations on allocating risk, as well as embedded generation by corporations and households wealthy enough to install their own renewable infrastructure (e.g. solar PV). As the AIDC has shown the REIPP mechanism has been both extremely costly and sluggish at installing

¹⁵ Brian Kamanzi 'Komati decommissioning: a spectre due to haunt the just transition' 6 December 2022 *Amandla*. <https://www.amandla.org.za/komati-decommissioning-a-spectre-due-to-haunt-the-just-transition/>

¹⁶ Ibid.

¹⁷ Ibid.

new capacity yielding only 8% of installed capacity but accounting for 30% of primary energy costs.¹⁸

D) THE LACK OF THE NECESSARY BROAD-BASED PUBLIC PARTICIPATION IN THE FORMULATION OF THE IRP

19. The process by which a law or policy is developed is as important as its content. The Tanzanian legal theorist Issa Shivji's elegant argument for the opportunities for raising levels of public consciousness in the context of Constitution making is equally applicable to all legal and policy instruments including the Bill:

*'...the very process of making a constitution is as, if not more important than the outcome. This is because full participation of the people has pedagogical effect. The process serves as a school of democratic struggles.'*¹⁹

20. The IRP (and the broader IEP which needs to proceed it) is by nature both a process that is highly complex and one that has a big impact of all sections of society who rely on energy and, in particular, on afore-mentioned half of the population of South Africa who suffer energy poverty.²⁰

21. First, with regards to complexity, the IRP is in its essence to ensure that the future supply of electricity matches projected demand and therefore requires making projections on the multiple interacting and often unpredictable factors that will shape both energy supply and energy demand. On the supply side the factors will include (amongst many others) available forms of energy generation technology, the costs of technology and grid capacity (to transmit the energy from where it is generated to where it is needed). On the demand side calculations include (amongst many others) the pace of population growth, economic growth and the spatial development of the economy. Modelling is required to make predictions regarding supply and demand that are as close to reality as possible. The majority of the public do not have specialist expertise to readily understand or interrogate such models. There therefore needs to be sufficient time to ensure that the broader public understand at least at a basic level the assumptions that are fed into the models (and also have time to take on board challenges to these assumptions), why particular scenarios both regarding supply of energy and demand are likelier

¹⁸ <https://aidc.org.za/powerless-op-ed-we-cant-just-wave-goodbye-to-eskom-we-need-to-fix-it-and-its-possible/>.

¹⁹ Issa Shivji 'The Pitfalls of Constitution-making in Tanzania: the lessons so far' (Lecture to the University of Dodoma Convocation, November 2013) at 16.

²⁰ <https://www.sciencedirect.com/science/article/abs/pii/S014098832100428X>

than others as well as to be able to form an opinion of whether the draft IRP's proposed mix of energy sources is supported by the most likely scenarios.

22. Second, as has been discussed above under the headings regarding energy justice and the just transition, decisions regarding the energy mix and balancing supply and demand have a huge impact on the rights and interests of the whole population.
23. The IRP, like the Integrated Energy Planning (IEP) which should precede it, merits a rigorous and inclusive public participation process. Public participation should occur in all areas of the country, especially areas especially affected by either climate change itself e.g. KZN and agricultural areas and/or the transition away from a fossil fuel-based economy e.g. (areas near coal mines and coal-fired power stations).²¹ In selecting the areas of the country for engagement meetings and stakeholders there should be a bias towards the broader working class including workers, communities, women, youth, unemployed people and persons living with disabilities and not towards elite interests.
24. The sessions should be conducted in a spirit of listening and engagement, with an open mind to questions and inputs of the afore-mentioned groups in particular. Facilitators need to be knowledgeable about the Bill and the subject matter and be able to answer questions. All inputs need to be recorded and made publically available. Public participation meetings should be tailored to enabling people to participate in a language of their choice, including through knowledgeable interpreters. Language and terminology to be used at meetings should be clear, accessible with technical jargon kept to a minimum. There needs to be adequate notice for each meeting. Notice should be clear and in advance to enable people to prepare for the meeting. It needs to be designed to reach people and therefore needs to use multiple forms of notice including community radio stations and notifying community-based organisations. Finally, there needs to be logistical support to enable communities to participate including the provision of transport and data.
25. None of these criteria for a broad-based participation process were met during the IRP process. While two-hour webinars the Department has utilised can be one form of engagement, it is no substitute for longer in- person public meetings with different societal groups across the country which afford more time for meaningful

²¹ I.e. the communities and workers for whom a just transition is especially needed.

engagement and can reach a far less elite cross section of society, many of whom are either not aware of webinars or don't have ready access to data to attend.

E) THE IRP SHOULD FOLLOW THE INTEGRATED ENERGY PLAN (IEP) AND NOT VISA VERSA

26. At the time of the publication of the IRP, the process for development integrated energy plan ("IEP") was yet to commence. The IEP, being the comprehensive overarching energy plan not solely relating to electricity, should be provide the overarching framework in which the IRP will need to be tailored towards. It is therefore our view that the commencement of the IRP process is putting the cart before the horse pending the development of an IEP. Instead CALS recommends that the IRP process be halted and the development of an IEP be prioritised prior to commencing with the development of the IRP. Once South Africa has an up to date IEP, the IRP process will need to commence afresh, to ensure that it does not contradict the IEP.

F) ENVISAGED ADDITIONAL COAL GENERATION WILL BE AT EXPENSE OF WORKERS AND COMMUNITIES ENVIRONMENTAL HEALTH

27. The targets in the IRP, in fact, slow down the proportion of renewable energy with lower targets than the 2019 IRP. Even if in the immediate term the stabilisation of the grid is an absolute imperative that is necessary to keep the lights on for the meeting of basic human needs, the economy and the maintenance of the fabric of society, this does not justify such low targets for renewable energy.

28. The environmental health impacts of coal mining and coal-fired power generation, together with a broader range of environmental impacts are well-documented.²²The coal fired power value stream means that hundreds of thousands of community members and workers suffer extreme physical hardship, medical costs they cannot afford and premature deaths of loved ones and breadwinners due to the particulate matter emitted. It is above all a human but also an economic cost that is unacceptable given available alternatives.

G) ENVISAGED ADDITIONAL COAL AND GAS WILL UNDERMINE PREVENTION OF RUNAWAY CLIMATE CHANGE

²²P Gopinathan (et al) 'Environmental impact and health risk assessment due to coal mining and utilization (2023) 45 *Environmental Geochemistry and Health* 6915 – 6922.

29. The need for South Africa to decarbonise the economy and reach net zero cannot only be viewed as a matter of our compliance with our international obligations under the Paris Agreement but has a bearing on whether we have a liveable future, especially for the working class majority. The impacts of climate change will be especially severe locally. The Southern African region is already experiencing severe climate shocks with rising temperatures, extreme weather events and droughts causing deaths, displacement and conflict.²³ This is projected to get far worse, especially if global temperature increases are not limited to the threshold of 1.5 degrees identified by the most preeminent climate scientists. It is also not accurate to claim that emissions in South Africa have a negligible impact on global warming. South Africa is estimated to be the 14th largest carbon emitter in the world.²⁴ It is therefore vital for the future of both South Africa, Africa and the planet that we decarbonise our economy which means phasing out fossil fuels altogether.
30. As much as a reasonable debate can and should be had on the timeframes and more importantly for closure of existing coal fired power plants in order to ensure the transition is just and to respond in the immediate term to the energy crisis (and more importantly how this can be done in manner that provides livelihood guarantees to workers), there should be no debate that fossil fuels should be avoided in any plans for future energy generation.
31. It is also vital not to confuse discussions about the dangers of the manner in which the energy transition is being pursued with the question of the need for a transition itself. While proponents of marketization (including the privatisation of generation, unbundling and even privatisation of the energy grid) often utilise the need to transition to make the case for these neoliberal reforms, these reforms, as well as the impacts, apply across the board to all forms of electricity. Therefore, while we echo the view that the current market-based transition to renewable energy cannot provide a solution to safeguard the livelihoods of workers in coal value streams and the local community, it is not the transition that is the problem but marketization. We echo AIDC in calling for a public pathway to decarbonisation, in which ESKOM receives the treasury funding, ability to borrow in favourable terms nominated in ZAR from public financial institutions e.g. SA reserve bank in order

²³ The KZN floods, Tropical Cyclone Idai which led to the deaths of an estimated 1500 people, and the intense drought in much of Southern African between 2018 and 2021 are especially devastating examples.

²⁴ Deborah Gordon et al 'Evaluating net life-cycle greenhouse gas emissions intensities from gas and coal at varying methane leakage rates' Environmental Research Letters (2023) <https://doi.org/10.1088/1748-9326/ace3db>.

to build its own renewable energy facilities (solar PV and storage, wind etc) and upgrade the grid to be able to accommodate the significant addition of new generation capacity from many areas of the country (for example Northern Cape).

32. The IRP, however, represents a ‘worst of both worlds’ scenario of marketization and delayed decarbonisation. It does nothing to reverse the marketization of electricity and, in fact, supports it, including through envisaging all additional renewable energy generation to be the responsibility of the private sector. It appears to abandon decarbonisation altogether in several respects. First, by incorrectly assuming that South Africa’s nationally determined contribution will remain the same as today. This assumption is faulty as like all other state parties, we are required under the Paris Agreement to set progressively stricter targets (i.e. lower emissions) with every nationally determined contribution.²⁵ Second, by reducing the share of envisaged renewable energy in the energy mix from the 2019 IRP, and third by placing reliance on additional coal and gas.

33. In relation to coal, the IRP envisages ‘clean coal’ being part of a future energy mix. There, however, exists no form of coal that is carbon neutral in the manner already-existing renewable energy technology is. Carbon capture technology is not a matured technology at this point, and is developing slowly with no tangible example of successful application at a large-scale power plant.²⁶

34. Gas destroys the marine environment irreparably and also the livelihoods of coastal communities around fishing and local tourism economies. In addition, while considerably lower in emissions than coal in the absence of leakages, gas still emits a not-insignificant amount of carbon dioxide and for this reason also categorised as a greenhouse gas. This is especially the case if there are leakages and leakages are especially prevalent amongst ‘non-conventional gas’ (deep sea, shale, liquefied natural gas etc). The latest estimates indicate that it would take only 0.2% of gas leaks, the total short term greenhouse gas emissions are the same as coal. It is therefore not surprising that the International Energy Agency (“IEA”) has in its report concluded that the goal of net zero emissions by 2050 to prevent the horrors of runaway climate change requires that no new oil gas and oil fields be established.²⁷

²⁵ Articles 4 (2) and (3) of the Paris Agreement.

²⁶ Ranajit Sahu *Potential Impacts of Proposed New Coal Generation* (Expert analysis commissioned by Centre for Environmental Rights) (July 2021) at 15.

²⁷ <https://www.iea.org/reports/net-zero-by-2050>.

H) CONCLUSION

35. Thank you for providing the opportunity to provide input.
36. It is our view that, for the reasons above, the present draft IRP ought to be set aside and that a comprehensive IEP be developed to provide a holistic map for our energy needs and in line with the imperatives of development, ending energy poverty, decarbonisation and a public pathway to a just energy transition that leaves no workers and communities behind. We therefore endorse the stance taken by the Climate Justice Coalition calling for a Peoples' Energy Plan.
37. For queries and further information, please contact Robert Krause (Researcher) at Robert.Krause@wits.ac.za or 081 427 7818