

Attention: NERSA

22 March 2017

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**Submission by Project 90 by 2030 relating to Eskom's third Multi-Year Price Determination (MYPD3) Regulatory Clearing Account (RCA) Year 2 (2014/15), Year 3 (2015/16) and Year 4 (2016/17) applications**

Project 90 by 2030 is an environmental organisation that aims to inspire and mobilise a low carbon generation. We work with individuals, organisations, and decision makers to identify actions that can reduce their impact on the environment. Our specific focus in pushing for low-carbon actions in South Africa is centred on developing environmental leadership in youth, enhancing energy and water security in communities and advocating for a transition to an equitable, low-carbon energy system.

Before dealing with the RCA applications, we would also like to use this opportunity to remind NERSA of their mandate and the existing realities in South Africa. These are energy poverty, energy planning that is not completely transparent and players in the energy sector that are still pushing for an energy system that is mostly not sustainable, not affordable and does not encourage a transition to a low carbon economy.

NERSA's mandate is "to regulate the energy industry in accordance with government laws and policies..." and it should therefore act in line with the National Development Plan 2030 to ensure "sufficient energy to support industry at competitive prices, access for poor households, while reducing carbon emissions per unit of power by about one-third"<sup>1</sup>.

In the RCA context the idea of competitive prices becomes important as Eskom is evidently asking for increases far in excess of inflation. While poor households may have access to electricity, they are increasingly unable to afford it due to above these price above-inflation price increases.

However, behind this, is a system that allows Eskom to ask for these increases, and as we discuss the single biggest issue is the methodology. As per the 3 RCA applications, they relate to section 14 of the MYPD Methodology (published December 2012).

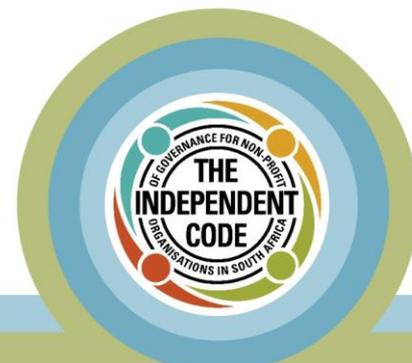
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<sup>1</sup> National Development Plan (2011)

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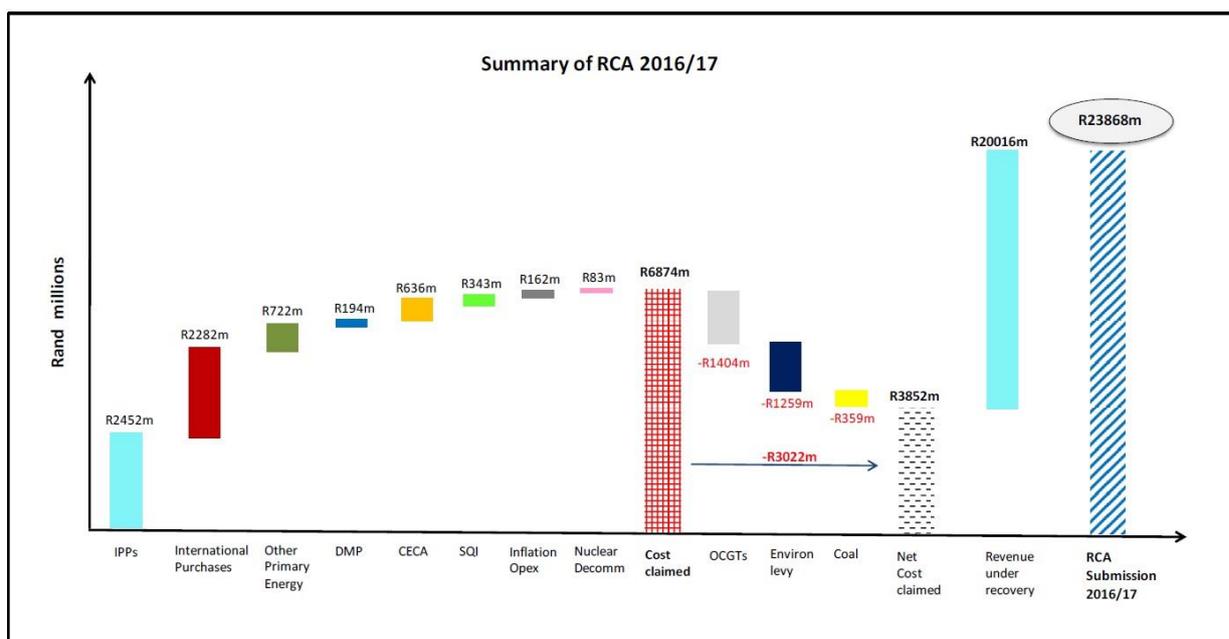


**1. The MYPD methodology is not fit for purpose, and must change to fit an evolving energy landscape.**

Problem: As has been raised in previous submissions by various organisations to the last RCA application in 2015/2016, and at the hearings, the main problem is the methodology itself. Simply put, it is not working. These rules allow Eskom to be claw back costs rather than focus on not spending unnecessary money in the first place. Although the primary issue is with “revenue under recovery”

As per the the figure below from the RCA 2016/17, by far the largest portion (over R20Bn, in light blue) is from Eskom not making as much money as they were ‘allowed’ to in the MYPD 3.

**FIGURE 1: WATERFALL CHART OF RCA 2016/17**



From the 2016/2017 RCA, pg 12

“In summary the RCA mechanism allows Eskom the opportunity to achieve the initial revenue that was allowed during the MYPD3 revenue decision...”

This does not make sense for the following reasons:

1. Eskom is comparing actual revenue with expected revenue and asking that the future price be increased to cover this. Lower than expected sales should not be a reason to increase the price of any service, and in a competitive business environment this would never work, but as Eskom is a monopoly there is no real competition.
2. Essentially, if customers save electricity, sales go down, and Eskom can put up the prices. So effectively this methodology penalises energy efficiency.
3. This setup encourages Eskom to overestimate its future sales so that they get a larger allowance. However, by planning for these inflated demand forecasts, they incur huge and unnecessary electricity generation costs.
4. Furthermore, this system does not encourage operational efficiency and prudent expenditure, as they can rely on the RCA to try get their allowed revenue regardless of how they run the business.

Consider this, from 2016/2017 RCA, pg 16

“The value of RCA submissions over the MYPD3 period is been consistently about R23 billion per annum...”

Since the lower than expected revenue is the chief component, it means this methodology has constantly failed, as each year the actual is less than the expected, and Eskom want to claim this from future sales, which again are likely to be less than they predict and the cycle continues.

If you look at the detail in Table 2 of 2016/2017 RCA, the revenue component of the RCA (i.e. the difference between actual and ‘allowed’) has increased each year over the 3 year period. So the alignment that is intended to exist between ‘allowed’ and actual is getting worse.

Why should South Africans pay more for electricity in the future, simply because in the past they bought less than was predicted? This concept of incorporating the costs linked to differences in actual sales vs an allowance based on an inaccurate prediction needs to change.

If Eskom were generating the amount as per the prediction, then that is a waste of money as resources as the excess electricity is lost and this is not an efficient way to run a utility. If they were only generating exactly what is required, then what is the logic in claiming costs for a service that was never provided?

Suggestion: The allowed revenue part of the MYPD methodology must be removed, if the RCA system is to be continued to be used in the short term.

However, there is a better longer term solution. Eskom relies on coal, and this underpins their inflexibility with uncertain demand in the future, and causes the large costs if forecasts are wrong. Rather than patching the MYPD methodology, a more forward thinking solution is a systemic change in the energy system to one of small, flexible and distributed energy generators that can respond to changes in energy demand without needing to try claw back the costs for unnecessary generation. Renewable energy suit this task as small units can be build quickly in response to changing demand that does not require decade long planning horizons. Then if there is excess capacity or production (such as on very sunny or windy days), this extra power does not come at extra fuel and operating costs, and can potentially be stored.

## **2. The MYPD methodology actually contributes to the ‘utility death spiral’.**

Problem: The current methodology encourages Eskom to overestimate demand (as there is a direct link between the demand projection and the allowable revenue), as they can claim back the difference when sales are lower compared to what was allowed (as per point 1 above). The irony is that further increasing prices is likely to contribute to the further decline of Eskom:

### *Utility death spiral.*

Simply put, as utility electricity prices increase, more and more customers find alternate supplies of electricity or simply cannot afford to buy as much. This leads to a decrease in sales.

If the utility then increases prices further (to try regain what is viewed as forgone revenue), then it just pushes sales even further down.

In the context of this MYPD methodology, the fact that it allows for/encourages prices increases in a situation of declining demand, it most likely to exacerbate the utility death spiral situation.

Suggestion: As for point 1, the methodology needs to change. Dedicated resources need to be put into doing focused, forward looking research into having a tariff system that will function in a changing energy landscape, and a changing role of Eskom

### 3. How does NERSA determine what is prudent?

Problem: The methodology leaves it in NERSA's hands to decide what other expenditure (such as primary energy costs) are prudent.

Over the last few years it has become well known that there has been extensive corruption within Eskom. How can NERSA determine what costs are legitimate and which are related to corruption and inefficiency? This is very difficult or impossible for NERSA to do, as the RCA does not cover the detail needed to determine this, and if it did the task would be too onerous.

So again, the methodology seems at fault. If Eskom had competitors, then that would force them to be efficient and reduce corruption as they would lose out to better service providers. Since this is not the case, Eskom can just try to claw back money whether it was prudent or not, and if they can get away with it. In this way the RCA can be seen as a platform to try to hide the unnecessary costs among the necessary costs and leave it up to NERSA to try to work it out – which does not seem the best way to regulate the industry.

Example: Some of the capital expenditure variance (which was R636m in the RCA 2016/17 in Figure 1 above, is from cost overruns at Kusile power station that is under construction. So in the first instance electricity customers are feeling the effect of management by including this in the future electricity prices. Secondly the study by Meridian Economics showed that it would be better (and cheaper) for Eskom to not build units 5 and 6 of Kusile<sup>2</sup>. So in this light, any further spend on those units cannot be deemed prudent. Many people believe that in 2018, with all the environmental and climate change challenges we face, **ANY investment in new coal is not prudent**, and could result in stranded assets. So how does NERSA deal with this?

Suggestion: The underlying reason that NERSA must deal with prudence, is because there is no real competition for Eskom to force the utility to only have prudent expenditure. Also Eskom is reliant on coal for electricity generation, and the world needs to transition away from use of coal. So the solution to this question lies in a much larger sphere of restructuring Eskom and moving to a more equitable and sustainable energy system where questions of prudence do not need to be dealt with in this way.

### 4. Conclusion

The current MYPD methodology is flawed as it allows for, and encourages over-estimated electricity demand forecasts. Furthermore, it provides a way for Eskom to apply for increased prices simply because citizens did not buy as much in a 5-year period, compared to an estimation, which, as we noted, is encouraged to be too high.

Furthermore, drastic electricity prices are highly unlikely to increase Eskom revenue, as citizens will buy less or find alternative sources of electricity. Moreover, Eskom as an entity needs to be restructured as does pricing for electricity. Picking up on the details of the RCA ignores the larger problem of a dysfunctional methodology being applied to a utility that is no longer suited to an evolving energy landscape.

Government must urgently make plans for a Just Transition to a more sustainable energy system and NERSA together with Treasury should help develop the financial models associated with this transition. An improved energy system would go a long way to reduce the need for these types of tariff applications.

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<sup>2</sup> [http://meridianeconomics.co.za/wp-content/uploads/2017/11/Eskoms-financial-crisis-and-the-viability-of-coalfired-power-in-SA\\_ME\\_20171115.pdf](http://meridianeconomics.co.za/wp-content/uploads/2017/11/Eskoms-financial-crisis-and-the-viability-of-coalfired-power-in-SA_ME_20171115.pdf)