

Attention: NERSA

13.10.2017

mypd@nersa.org.za

Submission by Project 90 by 2030 relating to Eskom Revenue **Application for 2018-19**

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.

In August 2017 Eskom submitted their revenue application for 2018-19 to the National Energy Regulator South Africa (NERSA). NERSA published a call for submissions soon thereafter.

Project 90 by 2030 puts forward the following submission for NERSA's attention. While this submission will look into a number of selected technical and overarching issues we picked up in Eskom's application, we would also like to use this opportunity to remind Eskom as well as NERSA of their mandate and work with the existing realities in South Africa. These are energy poverty, energy planning that is not completely transparent and players 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.

Eskom's mandate given by the South African government is to "provide electricity in an efficient and sustainable manner"¹. Therefore its mission is to "provide sustainable electricity solutions to grow the economy and improve the quality of life of the people in South Africa and the region." 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"².

In the text below, all page numbers refer to the 'Eskom Holdings Revenue Application FY2018/19', unless otherwise stated, and Figure 14 and 19 are from the same document.

¹ http://www.eskom.co.za/OurCompany/CompanyInformation/Pages/Business_Vision.aspx

² National Development Plan (2011)

Board of Governors: Lorna Fuller (Director), Glen Tyler (Chairperson),
Clifford Nxomani, Mpumelelo Ncwadi, Mark New, Zunaid Moolla and Benita Moolman

Physical and postal address: 2A Baronrath Road, Harfield Village, Kenilworth, 7708, Cape Town
Contact us: 021 674 5094/5 | info@90by2030.org.za | www.90by2030.org.za

NPO number: 123-630
Project 90 by 2030 is an 18A registered PBO



1. What is Eskom doing to cater for the poor and improve the quality of life of the people in South Africa and the region?

Problem: Over the past 10 years, Eskom has been granted a number of tariff increases by NERSA. The increases have been in excess of 300% over the period 2007 to 2015, which is more than six times the inflation rate for the same period³. Furthermore, in 2012 the Department of Energy (DoE) estimated that 47% of South Africans are energy poor as they spend more than 10% of their income on energy needs⁴. Energy-poor households often struggle to access sufficient energy services to meet their basic needs, and furthermore their ability to choose safe and reliable energy alternatives that are not damaging to human health and the environment is limited⁵.

We welcome that Eskom points out in their application on pg 34 that “poor households are particularly vulnerable to high increases in electricity tariffs”. However, the solution that Eskom suggests puts all responsibility into other institutions’ hands. Also on pg 34, “targeted subsidies, with a transparent cross-subsidy structure aligned with a national cross-subsidy framework to be developed for the country,” is a clear shift of responsibility of catering for the poor to national and local governments.

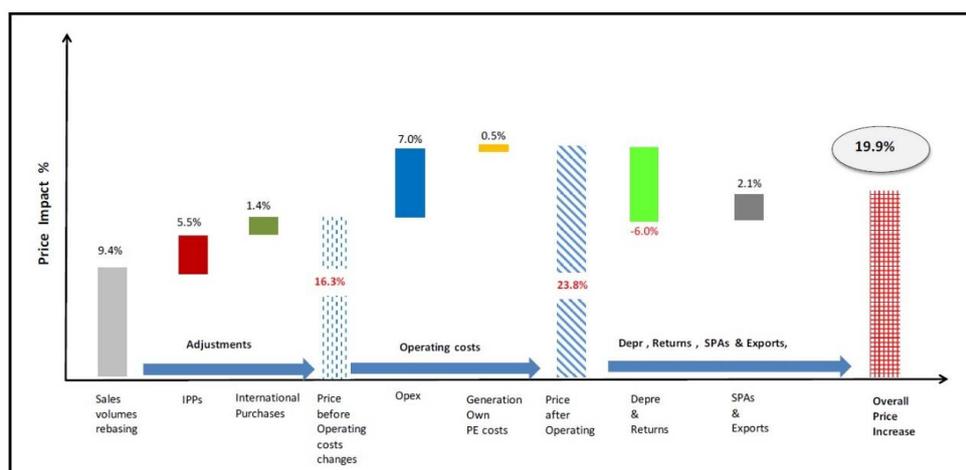
Suggestion: While there is much work to be done on how to alleviate energy poverty, Eskom can contribute by ensuring they operate in a manner that gives the lowest possible prices.

2. The concept of ‘sales volume rebasing’ with retrospective financial compensation is counterproductive: it does not encourage operational efficiency and prudent expenditure.

Problem: The outcome of using the current MYPD methodology is that when Eskom sells less electricity than was expected over a past period, they can try may the difference up by increasing the price of future sales. On p. 30: “Over the entire MYPD3 period Eskom’s sales volumes have been significantly lower than the assumption made in the MYPD3 decision. / The net impact of this sales volume rebasing is a 9.4% price increase being required..”

This 9.4% proportion is shown in the furthest left column in Figure 14 below.

FIGURE 14 : FACTORS IMPACTING ON PRICE INCREASE



³ <http://www.poweroptimal.com/infographic-eskom-tariff-increases-vs-inflation-since-1988-projections-2017/>

⁴ <http://www.energy.gov.za/files/media/Pub/Survey%20of%20Energy%20related%20behaviour%20and%20perception%20in%20SA%20-%20Residential%20Sector%20-%202012.pdf>

⁵ http://www.cityenergy.org.za/uploads/resource_85.pdf

As Figure 19 shows, over a 5 year period the forecasts (made at the start of the 5 year period) indicated an increase in demand each year, but actual sales decreased. So it is understandable that Eskom should 'rebase' its forecast in line with the current demand for electricity in South Africa. **However, it does not make sense to try claim this difference (as a cost equivalent) back as one is actual sales and the other was just a prediction.**

FIGURE 19: ESKOM SALES VOLUME GAP OVER MYPD3



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. As can be seen in Figure 14, this component alone results in a price increase well over inflation, before any further adjustments are made.

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?

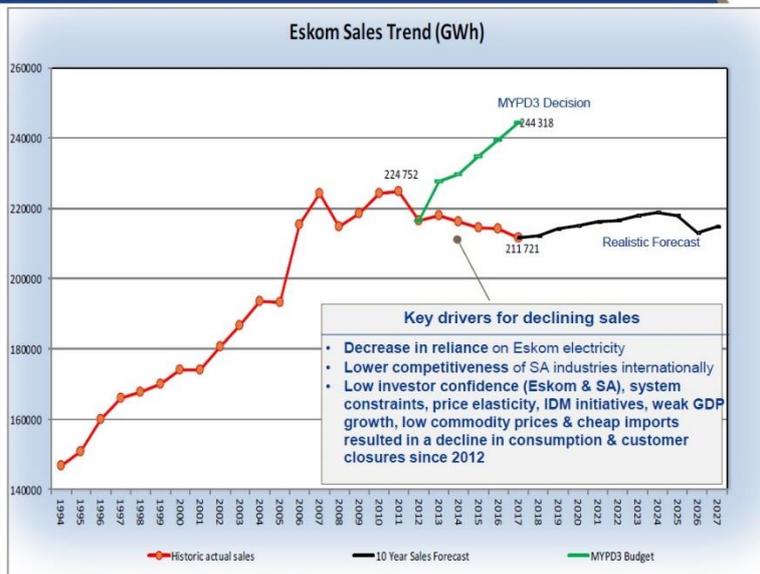
Suggestion: The methodology needs to change. It does not suit the energy space we find ourselves in at present. Forecasts should be made, put for planning on how to manage the electricity infrastructure and not how much money can be clawed back through inaccurate estimations. We recommend that in addition to changing the methodology, this 9.4% allocated to this component of the current application be removed.

3. The MYPD methodology rewards and encourages overestimated energy demand forecasts and contributes to the 'utility death spiral'.

Problem: The current methodology includes an 'allowable revenue' against which actual sales are compared after the MYPD period. The inherent problem with this set up is that it encourages Eskom to overestimate demand, as there is a direct link between the demand projection and the allowable revenue.

If we look at Figure below from the Eskom 2018/19 Revenue Application Stakeholder Discussion, we see how inaccurate the MYPD projection (green line) for the period was, and the irony is that the more overestimated the projection, the more Eskom can try claim this back by making the prices higher in the future. An obvious omission in this figure, is that under the list of "Key Drivers for declining sales" should be that the recent electricity prices increases, which have been way above inflation since 2008⁶.

⁶ <http://www.poweroptimal.com/infographic-eskom-tariff-increases-vs-inflation-since-1988-projections-2017/>



Source: Forecasting consolidation.

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.

4. Electricity prices increase way over inflation are not going to increase sales and help Eskom’s financial situation

Problem: From points 1 and 2 above, we see there are problems with the MYPD methodology in the current energy context in South Africa. In addition to these contributing to the very large increase of 19.9% being requested, quite simply, a massive tariff hike like this (or a series of them of 5 years) is very unlikely to help Eskom’s financial situation.

The underlying assumption that price increases will somehow help Eskom’s balance sheet is flawed. As described above, this proposed 19.9% increase (at over 3 times inflation) will contribute to a utility death spiral where Eskom is the utility in question. Price increase will drive energy efficiency, off grid solutions, go-generation and direct purchases for IPPs. This is good for South Africa, but will not help Eskom.

On p. 46 “Eskom is making every effort to maintain the current sales volumes and to grow sales volumes into the future.” – What, by suggesting and increase that translates to a 27% increase for municipal customers? How will this grow sales?

However further on in the application they note on p. 141 “Eskom accept that the increase in electricity prices in the last few of years had partial impact on the decrease in sales”.

Suggestion: Eskom is in real trouble. Not just financially but in terms of management, corruption and operating in a monopoly fashion when energy production worldwide is moving toward decentralised generators. As noted on p. 135 “It is accepted that there is a world-wide phenomenon for migration to self-generating options.”

Evidently there needs to be a drastic change in Eskom’s structure, its role in the electricity sector and plans going forward. This is what research by independent bodies should focus on.

These ever escalating requests for higher prices show that something fundamental must change. Eskom tries to function as a business on one hand, and a provider of a public service on the other, and it struggling with both. Yearly increases like the one in this application are not a viable solution.

As noted on pg 123 “It is also clear that substantial support provided by government to Eskom over the past 10 years both in the form of equity and guarantees has contributed meaningfully to the deterioration in Government’s overall debt metrics (and subsequent credit rating downgrades)”. This is why is crucial that the underlying issues at Eskom are fixed, or that entire entity restructured, rather than focusing of trying to regain revenue through unrealistic price hikes.

5. Inadequate information, particularly for Independent Power Producers (IPPs) costs.

Problem: If we look again at Figure 14, there are increase of 5.5% and 1.4% listed for IPPs and International sales respectively. However, there is not adequate explanation given for these in terms of where the figures came from. Especially with the IPPs, there is much uncertainty which of the bid windows have been included, as since July 2016 Eskom has refused to sign the power purchase agreements (PPAs). Despite a recent announcement by the Minister of Energy sighting the end of October 2017 as being when some of the outstanding agreements may be signed, there is no satisfactory resolution to this situation. There was suggestion of a price cap on the PPAs, this may be challenged in court, and so there is much uncertainly how this will play out.

Suggestion: Until proper explanation and details are provided on the 5.5% and 1.4% price increases (as per Figure 14) then they should be excluded from the application.

6. Contradictions and short sighted thinking regarding renewables

On p. 141 Eskom state that “Stopping the RE procurement process now would result in the continued payment of the “school fees” and the painful legacy of these rounds but no alleviation from cheaper RE that would follow”.

This is true. RE is now the cheapest form of new build electricity in South Africa, and so brining more RE online will lead to lower electricity prices in the long term.

Therefore it is highly distressing to read elsewhere in the application, on p. 113 that “current estimate of the required tariff is based on the assumption that Eskom will not purchase any additional renewable energy capacity from IPPs (beyond that which is has already committed to)”.

If this is an indication that there are plans to halt the large scale renewable energy program, then this is an urgent issue NERSA must address, as it is not acceptable in climate change, environmental and economic terms.

Suggestion: The Department of Energy, along with NERSA and Eskom must ensure through proper planning that we move towards a sustainable energy future. This will include a large component of renewable energy, so any attempts to sabotage the large scale RE programme must be stopped.

7. Other issues

a) Single year application does not help with continuity and planning.

On p. 16: "On 31 October 2016, Eskom requested NERSA that only a single year application is to be made".

Granting this request has meant that the planning horizon is very short – we need to see how Eskom plans to manage prices in the medium term, not one year at a time.

b) Having the MYPD separate from the RCA does not help us understand the full picture

We are concerned that not having the RCA at this stage will make it harder for NERSA to determine how that will affect prices for the same time period as this MYPD application.

c) Flawed logic

On p.125 "In conclusion, it would be ill-advised for NERSA to continue to limit Eskom's tariff increases below cost reflective levels".

On p. 135: "It is critical for Eskom to re-base the sales volumes for 2018/19 to make sure that the average price that is determined will indeed recover the allowed revenue if applied to a much lower sales volume; otherwise one will again sit with the same situation of Eskom not recovering the required revenue".

We do not believe what is being described here is a cost reflective tariff, and as discussed in points 1 to 3, this argument by Eskom does not make sense, and appears to be a misdirected attempt to turn around their financial situation.

8. Conclusion

Quite simply, putting electricity prices through the roof is highly unlikely to increase Eskom revenue, and therefore it will not help the utilities financial situation and it certainly will not help South Africa and its citizens.

The 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 as estimation, which as we noted, is encouraged to be too high.

It is enormously worrying to see suggestions that the large scale RE project may stop. This is incredibly short sighted and as the regulator, NERSA must ensure that in fact the opposite happens. South Africa must move towards low carbon and sustainable energy sources.

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.