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South Africa's troubled power utility is being reset: CEO sets out how

By Anton Eberhard

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Eskom, South Africa's state-owned power utility, is facing a litany of challenges. The Conversation Africa asked Professor Anton Eberhard, director of the Power Futures Lab at the University of Cape Town's Graduate School of Business, to pose questions to the power utility's CEO, André de Ruyter.

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Anton Eberhard: The performance and availability of Eskom's power stations has declined from above 90% in the early 2000s to an average of 64% in the 2021 financial year. Is this long-term, historical trend inevitable as Eskom's kit ages? Obviously, Eskom should do all it can to improve operations, but what is a realistic expectation of future performance? Will we see energy availability factors above 75% again, or will average power plant availability now remain in the 60s%?

André de Ruyter: Eskom's fleet of coal-fired power stations, excluding Medupi and Kusile, are on average 41 years old. These power stations have been run far harder than international norms, and have not been maintained as they should have been. In addition, the new generation plants, Medupi and Kusile, have design defects that will take time and money to address. We, therefore, have a generation system that is challenging to operate.

As one would therefore expect, the long-term trend in energy availability factor has been downward. In January 2020, when I had just started, we took the decision to embark on a campaign to ramp up our maintenance in order to increase the energy availability factor. At the time, we made it clear that catching up on the maintenance backlog would mean an increased risk of load shedding, as we took units down for outages, typically lasting up to 100 days each. The energy availability factor, therefore, has been even more depressed than one would expect by extrapolating the long-term trend, because planned maintenance is deducted from the energy availability factor.

We have recently seen some major units returning to service after long outages at Duvha and Tutuka, which have played a significant role in alleviating the pressure caused by the incidents at Medupi 4 and Kendal 1. In the medium term, we should, therefore, expect some recovery in the energy availability factor as our planned maintenance returns to a more typical level. We are working hard to get the energy availability factor above 70%, but given the age of the fleet, it would be unrealistic to expect a sustained performance above 75%. This is the reason why we have welcomed policy interventions to increase the available generation capacity for the country as, ultimately, we need more power to enable South Africa to grow.

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Anton Eberhard: Declining power station performance is one reason for load shedding and power cuts which South Africa experienced in 2007, 2008, 2014, 2015 and every year since 2018. But you have pointed out that South Africa is also short of power. These shortages will increase as old power stations reach their end of life. You said recently that 22GW will need to be decommissioned by 2035. The Integrated Resource Plan 2019 indicated around 33GW of new power generating capacity has to be added by 2030. That will require well over a trillion rand (over $68bn) in new investment. In a number of speeches you have made the point that because of Eskom's high levels of debt, and a fiscally constrained state, most of this investment will need to come from the private sector. It's unprecedented for an Eskom CEO to speak in this way, effectively encouraging private competition, but I guess you are alerting us to the urgency and the magnitude of the challenge if we are to keep the lights on. Can you elaborate on what needs to be done to restore electricity supply security?

André de Ruyter: Eskom has publicly stated that the country currently has a generation capacity deficit of 4,000MW. And that is at the current levels of economic activity and available generation capacity. This gap will obviously increase should economic activity rise without commensurate investments in generation capacity, which result in increased load shedding. This need not be the case. South Africa should never have been forced to choose between protecting Eskom and having electricity.

We are pleased that, today, everyone acknowledges the solutions to South Africa's electricity deficit cannot be left to Eskom and the government alone. It is as much in private capital's interest to increase available generation capacity as it is in the government's interests. While the state has a very limited ability to make any further significant investments, the private sector has indicated its willingness to invest in generation capacity to solve the single most important factor holding back the country. And that is electricity. In this context, we were very pleased with the lifting of the licensing requirement from 1MW to 100MW, as we believe that this step will enable substantial new capacity to be added in the short term.

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Anton Eberhard: I've been interested to see that you have been floating the idea that Eskom should start investing in renewable energy. In many ways this makes sense. Solar and wind energy are now the cheapest grid connected sources of energy. And as the CEO of Eskom, you need to offer an alternative vision and future for Eskom staff as the old coal fleet comes offline. But how will Eskom be able to raise finance for new power generation with your current unsustainable levels of debt and limited headroom for further state guarantees? I know there are discussions around concessionary climate-related finance leading up to Cop26 (the 2021 United Nations climate change conference), but surely even these funders would be worried that Eskom is currently technically insolvent?

André de Ruyter: Eskom continues to explore its funding options. It is important to separate the legacy debt that Eskom carries from its growth opportunities, not only in generation, but also in vital investments in transmission and distribution, to enable private investors in generation to access the grid. For this, we need to borrow new money – these investments are inevitable and will have to be made regardless. We are in regular engagements with the key financial stakeholders, including developmental financing and multilateral institutions. These entities have expressed a keen interest to enable and assist the accelerated decarbonisation of the SA electricity supply industry by making highly concessional funding available to Eskom.

Various funding methods are being explored. One thing we do not repeat often enough is that the solution to the country's energy problems does not belong to Eskom and the government alone. Everyone has a stake in the solution. We, therefore, have to find ways to energise the private sector to roll up its sleeves and get involved. For this to happen, investors need a decent return on investment, while assuming an appropriate degree of risk, just as any investor would do when building a factory. This could be a win-win solution: investors get their return – which increases the tax pool for the government – and the country regains energy security and grows job opportunities. It's a no-brainer.

For Eskom's part, within its ability, we have started with a pilot programme to repurpose the Komati power station, which has reached the end of its operational life. This will allow Eskom to use the existing infrastructure and save some jobs for the local community, instead of leaving behind a ghost town. We have three other power stations on which we have invited investors to give us partnership proposals to repurpose the stations. We can all share the responsibility, and harvest the fruits together.

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Anton Eberhard: We've alluded to Eskom's high debt levels, currently sitting at around R400bn (over $27bn). In financial year 2021 you managed to reduce gross debt by R81.9bn, in part because you received a government bailout of R56bn. I calculated that between 2008 and 2021, Eskom has received a total of R220bn in bailouts. Given the state's worsening fiscal and debt situation, and all the other social needs that need to be met, is this sustainable? Indeed, should infrastructure utilities not be financially viable on their own? But Eskom's debt service cover ratio sits at 0.3 – that is, it generates less than a third of the cash it needs to service the interest of its debt and principal repayments. What is your strategy for restoring Eskom's financial sustainability? Cost cutting? More government support? Higher tariffs? Refinancing of Eskom's debt with concessionary loans linked to more rapid decarbonisation of the generation fleet? All of these?

André de Ruyter: It is indeed correct that Eskom cannot rely on the government bailout forever. We are well aware that we are not entitled to a cent of taxpayers' money. That is why Eskom has embarked on the reforms and corporate savings so it can achieve operational and financial stability in a short space of time. That is the reason we have aggressively tackled procurement corruption, operational inefficiencies and cost-cutting across the board through prudent management of resources and a reduction in headcount. These we can do internally; they are within Eskom's scope of activity.

The National Energy Regulator of South Africa also needs to come to the party with electricity tariffs that reflect the cost of producing the power. Even with a 20% annual increase in the tariff, the reality is that Eskom prices will still be at the bottom third of comparable international electricity prices. This does not make too much sense, particularly for our export sector, which consumes electricity to produce commodities priced in US dollars, and compete with companies who pay in US dollars for their electricity input. In addition to the very real need for cost-reflective tariffs, we also need to address the thorny issue of non-payment for electricity by defaulting municipalities, particularly in the Free State. The ever-growing outstanding debt to Eskom is now at about R39bn, or roughly 10% of Eskom's debt.

Our active partnering approach to capacitate and enable municipalities to improve their distribution systems to enable them to pay us has found favour with a number of municipalities. Unfortunately, there are one or two intransigent municipalities where we are forced to take legal action and strictly apply nominated maximum demand limitation, which causes significant and regrettable disruption to daily life in those towns.

The last element of our balance sheet restructuring involves a one-off injection of between R150bn and R200bn in order to enable us to have a reasonable net debt service cost. Current equity injections from National Treasury are applied by and large to paying interest, and as such do not fundamentally address the issue of legacy debt. Discussions in this regard are ongoing, albeit more slowly than we would have liked.

Anton Eberhard: Recent regulatory reforms have removed ministerial and National Energy Regulator permissions for power market access and we are likely to see a flood of new privately funded and developed power generation projects. The focus will now shift to grid constraints. You have highlighted that around R180bn needs to be spent on transmission and distribution. How will Eskom in its current form be able to raise this finance? Will the new transmission subsidiary company of Eskom Holdings not still be exposed to the credit ratings and financial contagion of the Eskom Group? You have said that sophisticated governance arrangements can be put in place to ensure the independence of the transmission subsidiary company. But why stick with this option? Transmission comprises only 10% of Eskom's assets. It is entirely possible to negotiate with lenders and over the next few years move the Independent Transmission System and Market Operator outside Eskom, with the prospect of migrating back to investment grade and accessing competitively priced debt. One hundred and six countries around the world have gone this route, which also enables a fair and transparent platform for contracting and dispatching least cost power. So what are the advantages of keeping the Independent Transmission System and Market Operator within the Eskom group?

André de Ruyter: Eventually, the Independent Transmission System and Market Operator may operate outside of the Eskom fold, which will be a policy decision. Legal separation of transmission could be seen as the first step on that road. I am mindful at the moment that we need to contain cost. Setting up an entirely independent new entity will inevitably lead to an increase in functional cost by duplicating services currently rendered by Eskom corporate. For the moment, we are therefore content to proceed with legal separation, with appropriate governance structures to ensure independence in decision-making by the Independent Transmission System and Market Operator, while keeping costs down. Nothing that we are doing rules out a completely independent entity, and when the time comes, we will be ready to implement upon the instruction of our shareholder.

ABOUT THE AUTHOR

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