



12 February 2021

ESKOM: STATUS UPDATE

1. INTRODUCTION

South Africa is currently experiencing intermittent loadshedding, due to the aging coal powered fleet run by the country's electricity utility, Eskom. These plants are suffering from unplanned breakdowns due to poor maintenance over a long period of time. Not only is the utility dealing with a high level of unplanned breakdowns, units have also been shutdown for planned maintenance. These factors have combined to reduce the available capacity and put a strain on the system as demand outweighs supply. Thus, the utility has had to resort to scheduled loadshedding to protect the integrity of the grid. Additionally, the company is in the midst of a restructuring process as envisioned by the Roadmap for Eskom in a Reformed Electricity Supply Industry. This is to address the structure of the company, its high debt levels, its weak balance sheet, and the governance challenges facing the company.

The purpose of this paper is to highlight the challenges facing the entity, and how the company is addressing these issues. This will allow Members of the Portfolio Committee on Public Enterprises (PCPE) to interact with Eskom on what it is doing to overcome the challenges it faces.

2. ESKOM CHALLENGES

As highlighted above, Eskom is suffering from numerous challenges, particularly historical challenges, including the poor maintenance of its generation fleet, poor coal quality and high primary energy costs. In its turnaround plan, the entity highlighted five key elements which are: operational stability; improved income statement; strong balance sheet; restructuring; and a high performance culture.

2.1. OPERATIONAL STABILITY¹

Eskom's current generation plan performance still suffers from unpredictability and unreliability, due to the high number of unplanned outages and breakdowns, owing to the age of the power plants. The objective here is to improve current plant performance and reduce the need for load shedding. In this regard, the entity has implemented the following actions in order to bring about operational stability.

All coal contracts are being looked at and where coal prices are not market related, are being renegotiated. Coal quality has also been improved due to improved controls being put in place. Coal stock levels continue to improve, with average coal stock at 58 days (excluding Medupi and Kusile) at the end of September 2021. Eskom has also prioritised environmental issues.

¹ De Ruyter (2020) This section is taken from this presentation.



The entity has set aside capital expenditure in order to meet all environmental compliance issues. The Information Technology (IT) backbone of the company, its SAP system, is being improved as at the moment the entity cannot leverage its buying power due to the deficiencies in the system. The entity is also looking at procuring new sources of electricity, to augment the electricity supply.

2.1.1. NEW BUILD²

The design defects at Medupi is being addressed. Five of the six units at Medupi has been fixed at a cost of R300 million per unit.³ All Medupi units have been synchronised to the national grid with only Unit 1 awaiting commercial operation. On 5 February 2021, Eskom was forced to shutdown five generating units at Medupi as a result of the inability to get coal into the units due to the heavy rain in the Lephalale area. This necessitated the company to implement loadshedding.

The design modifications at Kusile will start in the 2021 financial year. Construction on Kusile Units 4 to 6 have been suspended due to the COVID-19 lockdown. Kusile Units 1 and 2 are on commercial operation, whilst Unit 3 is synchronised and supporting the grid intermittently averaging 500MW. On the 14th of January 2021, two generation units at Kusile tripped due to the failure of the main coal feed conveyor belts supplying coal to the units. This necessitated the company to implement loadshedding.

The current estimation to complete the effective correction of the major boiler plant defects at Medupi and Kusile is by 2023, depending on the outage availability of the units as per the Generation outage plan. The total cost to correct the major plant defects at Medupi and Kusile is R7.2 billion.⁴

2.1.2. MAINTENANCE

The entity has embarked on a reliability maintenance programme, which focuses on the long-term maintenance of the power plants. It has been implemented to improve outage planning, execution, and plant performance. There has been a reduction in partial load losses, boiler tube leaks and trips.⁵

Koeberg Unit 2 was returned to service after its refuelling outage last year, with both Koeberg units running at full capacity. Camden power station had been shutdown due to delays in the construction of the ash dams as well as due to the COVID-19 lockdown. The first Camden unit was synchronised on load towards the end of August 2020, with the remaining units returning during October 2020. Unit 3 is on outage.⁶ Units at Kendall power stations has also been

² Ibid.

³ De Ruyter (2021)

⁴ Department of Public Enterprises (2021)

⁵ Department of Public Enterprises (2021)

⁶ Eskom (2020)



shutdown due to incidents of high emissions, which are being addressed by the entity at the moment.⁷ The rebuild of Duvha unit 3 is no longer deemed economically viable. The cancellation of the project was approved by the board's investment and finance committee.

Eskom is also looking at repurposing power plants that are nearing its end of life. This will go hand in hand with a Just Energy Transition strategy, which is still under discussion. The repurposing of the plants will be in aid of supporting the community surrounding the power plant. Eskom has issued requests for proposals in order to canvas ideas on the repurposing of the power plants.⁸

With regards to the transmission and distribution systems, Eskom is dealing with ageing distribution infrastructure which often constrains new connections and overloading which requires urgent investment and refurbishment. The distribution network infrastructure is also faced with illegal connections, meter tampering, illegal vending and vandalism. The transmission network is also faced with performance risks due to the increased age of the assets and the financial constraints limiting Eskom's ability to maintain and refurbish these assets. Recovery plans have been presented to the boards on how to deal with the aging equipment.⁹ However, the solution to the aging protection systems is still in the process of being developed, as this is the heart of the system.

A substantial amount of new Transmission infrastructure will be required to integrate the potential new capacity as projected in the Integrated Resource Plan (IRP) 2019 within the next 5 years.¹⁰

Issues for Consideration:

Eskom should update the Committee on the total cost spent on Medupi and Kusile to-date, original build costs including the cost to correct the defects. What will the final cost be to have two fully operational coal-powered power stations?

Eskom should update the Committee on the maintenance programme. Which power stations are under maintenance and which have been returned to service? What is the prospect for loadshedding in the month of February 2021?

2.2. INCOME STATEMENT¹¹

In order to support the income statement, the entity has focused on efficiency on return of assets. The Chief Executive Officer (CEO) of Eskom, Mr. Andre De Ruyter has also resolved

⁷ De Ruyter (2020)

⁸ Ibid.

⁹ Department of Public Enterprises (2021)

¹⁰ Ibid.

¹¹ De Ruyter (2020) This section is taken from this presentation.



to have better and regular engagements with the National Energy Regulator of South Africa (NERSA) to resolve their differences instead of engaging in legal disputes. After the court ordered NERSA to review previous decisions, NERSA has allowed Eskom a further R6 billion on top of the original R32.6 billion. This was after Eskom applied for a review of the tariffs allowed for the 2014 to 2017 financial years as well as a supplementary revenue application for 2018/19.¹² This will see the tariff increase by just over 10 per cent for the 2021 calendar year.

COVID-19 has had a substantial impact on the utility's performance, with sales volumes down 10.3 per cent year-on-year, effectively wiping out the tariff increase of 8.76 per cent. This was due to the reduction in demand due to the national lockdown in the earlier levels. It also impacted on Eskom executing capital and major maintenance projects.¹³

Municipal debt amounted to R35.3 billion at 31 December 2020. The top 20 defaulting municipalities constitute 80 per cent of total invoiced municipal arrear debt. There are 48 municipalities with arrear debt of more than R100 million each.¹⁴ According to Eskom's CEO Mr. Andre De Ruyter they have developed a model together with the Ministerial Task Team, in which Eskom will sign agreements with distressed municipalities for Eskom to act as their agent. Eskom will then collect debt, address theft of electricity, address illegal connections, and maintain infrastructure. All revenue collected to go directly into Eskom's bank account.¹⁵ Soweto debt escalated to R13.2 billion as at the end of December 2020.

The company achieved savings of R10.7 billion against a target of R7.7 billion for the 2020/21 financial year.¹⁶ The majority of savings came from primary energy through optimising coal inventory, which positively affected working capital, as well as a reduction in other operating expenditure. Coal costs are being controlled, in particular from short- and medium-term sources, with an increase of only 4.6 per cent in the average purchase cost per ton of coal compared to March 2020.¹⁷

The entity has also reduced its headcount through voluntary severance packages of which approximately 384 managers have exited the company. Eskom is also prioritising the renegotiating of debt service costs, as well as looking at renegotiating the Independent Power Producer (IPP) contracts with the assistance of the Department of Mineral Resources and Energy (DMRE). The repurposing of older power plants will also focused on adding a revenue stream for the business.

¹² eNCA (2021)

¹³ Eskom (2020)

¹⁴ Eskom (2020)

¹⁵ De Ruyter (2021)

¹⁶ Department of Public Enterprises (2021)

¹⁷ Eskom (2020)



Issues for Consideration

Eskom should update the Committee on NERSA's decision to grant Eskom an additional R6 billion in revenue. How will this affect the entity's Income Statement?

Eskom's objective is to significantly reduce its debt balance by R200 billion, a closing cash balance of R30 billion and earnings before income tax, depreciation and amortisation (EBITDA) margin of 35 per cent to enable the entity to achieve independent financial stability. What is progress on achieving this target?

Eskom should update the Committee on the outstanding municipal debt. What has been the progress on collecting the outstanding funds?

2.3. STRONG BALANCE SHEET

In order to strengthen its balance sheet, Eskom has reduced its capital expenditure by R22 billion from an original budget of R38 billion. Although the budget has been reduced, the capital will be used to address environmental compliance and where the company will get the most value for its money. Funds has also been set aside for the decommissioning of end-of-life power stations. The entity has also reduced its inventories, especially its spares inventories which are too high. Moving towards a Just Energy Transition will also assist to reduce costs.¹⁸

Eskom states in its 2020/21 Interim financial statement that it requires a rate of return on assets at least equal to Eskom's actual weighted average cost of capital to ensure financial sustainability and remain a going concern. An adequate return will enable sufficient operational cash flows to meet liquidity requirements, service debt commitments and fund a portion of capital expenditure. In order to improve the rate of return and not rely on taxpayer support, Eskom needs to migrate to a cost-reflective electricity price. The CEO, Mr. De Ruyter, stated that they would like a cost-reflective tariff. He clarified that when setting the cost-reflective tariff, it should be benchmarked on what a reasonable, efficient cost of generating electricity is, then compensate Eskom accordingly. He did not expect Eskom to be subsidised where their costs were too high.¹⁹ The President echoed this sentiment in his State of the Nation Address on 11 February 2021.

In the absence of cost-reflective tariffs, Eskom will continue to rely on government support to service their debt commitments. However, equity support by government only improves liquidity, but does not reduce the principal debt and therefore, will not ensure Eskom's long-term financial viability.²⁰

¹⁸ De Ruyter (2020) This section is taken from this presentation.

¹⁹ De Ruyter (2021)

²⁰ Eskom (2020)



Issues for Consideration:

Eskom should update the Committee on the utility's debt programme. When does the company predict to have a loan book the company can maintain itself and not rely on government support?

2.4. RESTRUCTURING²¹

Eskom is currently implementing the restructuring of the company as per the Department of Public Enterprises Roadmap for Eskom in a Reformed Electricity Supply Industry published in November 2019. Eskom has divisionalised the business into generation, distribution and transmission which will allow for better transparency and accountability driving optimisation of the business capability. In this regards, divisional boards have been appointed, as well as divisional managers. The entity has implemented separate financial statements and a total of 8 396 employees have been relinked, with 6 773 employees moved from corporate functions to divisions. The labour engagement plan commenced and transfer pricing implemented.²²

The process of legal separation has many internal and external dependencies. These areas include licence transfers and applications, policy and regulatory reforms, as well as legal and financial dependencies. Therefore, the achievement of legal separation is dependent to a large extent on government playing a proactive and supportive role. An intergovernmental steering committee comprising DPE, Department of Mineral Resources and Energy (DMRE), National Treasury and Eskom has been established to focus on the financial, legal and energy policy dependencies to aid in the timely legal separation of the three entities.²³

In December 2020, the Minister of Public Enterprises approved an application for an approval in terms of the Public Finance Management Act for the establishment of a Transmissions Entity as a subsidiary under Eskom Holdings SOC Ltd. The legal separation of the Transmission entity is expected to be completed by December 2021, and the Generation and Distribution entities by December 2022.

With regards to the non-core assets, Rotek is undergoing a turnaround strategy refocusing on its core mandate. Its insurance business, Escap, strategy is being developed. Bids for the Eskom Finance Company (EFC) business is being considered and will be disposed of. Any profit on the sale of the business will be used to settle outstanding debt. Substantial progress has been made on concluding the sale of EFC. The sale is expected by end March 2021.²⁴

Eskom also recognises the potential in Public-Private-Partnerships (PPPs) which it will be pursuing. The CEO is aware that during the restructuring process, strong governance must be

²¹ Ibid.

²² Department of Public Enterprises (2021)

²³ Eskom (2020)

²⁴ Department of Public Enterprises (2021)



maintained, thus the Delegation of Authority (DoA) has been updated and diligently monitored to ensure everyone is compliant with the DoA and the governance structures.²⁵

The CEO stated that the Chief Restructuring Officer (CRO) was due to hand over a report to government by the end of February 2020, which was not done. He stated that there has been no engagements between the CRO and Eskom. Eskom has been making plans through its board, the department and the shareholder.²⁶

Issues for Consideration

The Department should inform the Committee on the role of the Chief Restructuring Officer with respect to Eskom. What was his terms of reference and why was the report not submitted to government?

A priority for the Eskom CEO is that during the restructuring of the entity, good governance is maintained. However, Eskom received a qualified audit for the 2019/20 financial year, with high levels of fruitless and wasteful expenditure as well as irregular expenditure. How is the company addressing the audit findings while the restructuring is progressing?

An audit finding was also made in respect of “insufficient delegation of authority”. According to Eskom, the Delegation of Authority had been updated. Why was there then a finding with respect to the delegation of authority not being adequate?

2.5. CULTURE/PEOPLE²⁷

Eskom’s people plan aims to build critical capabilities, drive a culture of performance and accountability, and increase employee productivity. In this regard, the executive committee (Exco) structure has been finalised, and critical vacancies have been filled. All plant managers have been appointed as well as the second tier of management at the power stations have been filled. A self-funding production bonus has been initiated for shop floor staff. This production bonus will be for meeting stretch targets and meeting the required efficiencies and savings. No executive will benefit from this production bonus.

The number of staff will be right-sized through the voluntary severance packages already mentioned as well as through natural attrition.

As stated above, the entity has implemented separate financial statements and a total of 8 396 employees have been relinked, with 6 773 employees moved from corporate functions to divisions. The entity has also filled all crucial executive positions.

²⁵ De Ruyter (2020)

²⁶ Ibid.

²⁷ De Ruyter (2020) This section is taken from this presentation.



Since the start of the pandemic, Eskom has tested 29 565 employees for the COVID-19 virus, with 3 218 employees testing positive and 2 572 recovering from the disease. Unfortunately, the entity lost 62 employees to the disease.

Issues for Consideration

What will the right-sized Eskom number of staff be? Over what timeframe will Eskom achieve this? What is the current number of staff at the company and the cost associated with this?

3. POLICY CONSIDERATIONS

In its attempt to balance the security of supply, Eskom is looking at procuring new sources of electricity to augment the electricity supply. The Eskom CEO has stated that he will support the IPP programme and prepare the grid for IPP connections.

Eskom applied to NERSA for the procurement of 138MW of electricity as emergency power to assist the grid, but NERSA denied their request. The Eskom CEO stated that there is a misalignment between policies. Government knows that the country is in an energy crisis and Eskom requires more capacity to meet demand. Thus, there needs to be greater policy alignment.²⁸

However, the above challenge seems to have been addressed in the President's State of the Nation address on 11 February 2021, when he stated that DMRE will soon be announcing the successful bids for 2 000 megawatts of emergency power. The President also announced that additional capacity would be procured over the next 5 years. He stated that Eskom has already started work to expedite its commercial and technical processes to allow this additional capacity onto the grid without undue delays.

The benefits for Eskom to procuring electricity from IPP's are as follows:

- It is cheaper for Eskom to procure from IPPs than use its diesel Open Cycle Gas Turbines, as NERSA does not compensate Eskom for its diesel use as they do not deem it as "prudential".
- IPPs will assist in reducing Eskom's emissions and meet the environmental standards. Eskom does not have the capital needed to invest in its power plants to make them compliant with the emission standards.
- It will also assist in creating competition in the generation system. It will create confidence with investors that South Africa is serious about restructuring its electricity sector.
- Currently, there is under investment in the transmission system, so allowing IPPs into the system will see more investment in the transmission lines.

²⁸ De Ruyter (2020)



- It would also see a more competitive tariff for electricity.
- IPP projects are more financeable than big power procurement projects, so these projects will attract more investors. Something that Eskom currently cannot do. It will also then lead to more competition in the generation system, as stated above.²⁹

Thus, it is in the utilities interest to be able to procure electricity from IPPs. The last procurement bid window was in 2015, and nothing has been approved since then. This has seen a lot of capability and skills built up over the period lost and dealt a big blow to the IPP sector. Government policy needs to be consistent over time or the capability built up will be stalled and not help grow the economy. Investors also lose confidence in these projects over time when there is no movement. This has once again been addressed by President in his State of the Nation Address. However, for investors to remain in the country, policy needs to be consistent over time.

Government also needs to provide NERSA with policy direction, as Eskom requires cost-reflective tariffs to become a self-sustainable entity. Government needs to address this policy direction going forward.

Issues for Consideration

Eskom should advise the Committee on the policy issues they need assistance with in order to provide clarity going forward.

4. CONCLUSION

Eskom has made progress with regards to improving the stability of the utility's generation capacity and addressing the five priorities in its turnaround plan. However, the power system remains unreliable and unpredictable, with the possibility of loadshedding remaining. Although progress has been made, Eskom still has a long way to go to become a self-reliant business entity.

²⁹ Creamer (2021)



5. REFERENCES

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