



## Technical Notes on Eskom's Interim Results

16 February 2021

### 1. Introduction

Eskom's operational challenges have not occurred in isolation – they are largely due to poor liquidity, exacerbated by an unsustainable financial position that arose due to the following:

- adverse revenue decisions from the National Energy Regulator of South Africa (NERSA), failing to result in cost-reflective tariffs
- unsustainable increases in indebtedness to finance its new build programme and the resultant growth in net finance cost which has not been adequately recovered through revenue
- declining sales volumes, coupled with escalating arrear debt from non-paying customers
- above-inflationary increases in operating costs, especially in the coal environment

Energy regulator Nersa has allowed Eskom to recover an extra R6-billion from consumers after the court ordered Nersa to review previous decisions. The tariffs relate to a price structure application made by Eskom for the three financial years from 2014 to 2017 as well as a supplementary revenue application for 2018/2019. Nersa had originally awarded Eskom a total R32,6-billion for recovery. Following the court order to review the amount, Nersa essentially allowed for another R6-billion to be recouped from consumers. Eskom had initially applied for R66-billion. The impact could offset Eskom price hikes in the next few months. The impact of the price hikes to the consumer should be explained to the Committee.

In the medium term, Eskom's unsustainable debt burden, arising from the abovementioned factors, presents the biggest threat to Eskom's financial sustainability. At 30 September 2020, the gross book value of outstanding debt securities and borrowings stood at R463.7 billion (September 2019: R454.2 billion). The reduction of R20 billion from the balance of R483.7 billion at 31 March 2020 is due to debt servicing as well as fair value adjustments on foreign debt, driven by the strengthening of the rand since March 2020. After accounting for derivatives and available cash on hand, net debt amounted to R420.6 billion (September 2019: R424.1 billion). Government guaranteed debt accounted for R304 billion, or approximately 66%, of the gross debt balance. It is clear that, in addition to the threat posed by electricity supply shortages, Eskom's level of debt is a systemic risk to the fiscus and the country as a whole. A debt recovery plan should be put in place and explained in terms of how Eskom will emerge from the debt trap. In its results Eskom acknowledges that, in order to improve the company's financial position in the longer term, it will require a considerable reduction in the debt profile or a sizable increase in cash flows through cost-reflective tariffs. This would result in operational cash flows that are

adequate to service finance cost, and improve cash interest cover and debt service cover ratios to acceptable levels.

## **2. Eskom Turnaround**

Eskom's turnaround strategy continues the focus on five key areas, namely operational recovery, improving the company income statement, strengthening our balance sheet, accelerating the restructuring of Eskom into three separate entities, and building a high-performance organisation through addressing the company's corporate culture by energising Eskom's employees.

### **2.1 Operational performance**

#### **2.1.1 Plant and network performance**

The performance of Eskom's generation fleet continues to be disappointing, although plant availability, unplanned maintenance in the form of breakdowns and partial load losses, and planned maintenance have all improved slightly since the previous year end. Subsequent to the end of the period, planned maintenance conducted in terms of Eskom's reliability maintenance recovery programme has ramped up significantly, to about 15% of nominal capacity at the date of release of these results.

Despite the reduced demand during the COVID-19 lockdown, loadshedding and/or load curtailment had to be implemented on 19 days during the period (September 2019: no loadshedding during the six-month period). This was due to high levels of unplanned breakdowns, combined with the need to conserve and replenish emergency reserves, while maintaining the stability of the power system.

Loadshedding is always implemented as a last resort to protect the power system, as Eskom recognise the damage that loadshedding causes to its customers and the greater economy. However, a total collapse of the grid would be far worse. Open-cycle gas turbines (OCGTs), owned by both Eskom and independent power producers (IPPs), were utilised frequently during the second quarter to support the power system, supplying 787GWh year-to-date (September 2019: 500GWh). Renewable generation continued to support the power system during the period, although wind generation is more intermittent during the winter months than during summer. Generation plant availability (EAF) decreased to 67.86% for the period (September 2019: 69.91%), well below Eskom's aspiration of 73%. Nevertheless, plant availability has improved from the 66.64% at March 2020. The decrease in EAF is largely due to a substantial increase in other load losses outside power stations' control (OCLF) against the previous year, with an increase in planned losses being offset by an improvement in unplanned losses compared to the prior year. Planned maintenance of generation plant (PCLF) improved slightly to 9.96% (September 2019: 8.86%), ramping up to about 15% by December 2020. Unplanned maintenance (UCLF) improved marginally to 18.59% for the period (September 2019: 19.81%), due to a reduction in both full and partial load losses. Peaking and nuclear generation plant continue to perform well. The reliability maintenance recovery programme has been put in place to provide intensified support to power stations. It is a centre-led programme to ensure integration

across the generation fleet, process management compliance, enhanced project controls for transparency, and risk escalation through a core team. Capital expenditure for outages for the remainder of the financial year has been approved by both Exco and the board. The ultimate aim is to improve outage performance to reduce the risk of loadshedding, thereby supporting South Africa's economy.

### **2.1.2 New build progress**

Kusile unit 2 achieved commercial operation only on 29 October 2020, as issues in the mill performance, plant failures and the COVID-19 lockdown delayed commercialisation. Kusile unit 3 is on track for commercial operation by March 2021 and Medupi unit 1 by July 2021. The construction of high-voltage transmission lines was negatively affected by the COVID-19 lockdown restrictions, with only 6.3km installed during the period (September 2019: 45.1km). The delays are expected to put the achievement of the year-end target at risk. Nevertheless, new transformer capacity of 750MVA was commissioned (September 2019: 540MVA). The availability and reliability of the synchronised units at Medupi and Kusile are steadily improving. This is a result of the continuous interventions taken in correcting major plant defects and improving operational inefficiencies. Six units at Medupi and three units at Kusile contribute energy to the national grid. Modifications to correct design defects were successfully implemented on Medupi unit 3 during the 75-day outage that ended in April 2020. In May 2020, the unit reached its full generation capacity of 793MW. The optimisation process preceding full performance testing has been completed, as well as the in-house performance test. Unofficial performance verification tests are showing positive results. Modifications were implemented on Medupi units 6, 4 and 1 during recent outages. The modification on unit 2 is in progress. The rollout of the modifications to the Kusile units in operation will start with unit 1 from mid-2021.

In April 2019, the total cost for fixing the major plant defects at Medupi and Kusile was estimated at R7.2 billion. The estimate remains the same. We have entered into a contractual consultation process with the boiler contractor to determine the liability for the required modifications to correct the defects. Following proof of liability, the liable party will be fully accountable for the costs of plant defect correction. At this stage, the defect costs are being split equally between Eskom and the contractor at both Medupi and Kusile.

### **2.1.3 Environmental performance**

Relative particulate emissions performance of 0.35kg/MWh sent out has improved markedly year-on-year (September 2019: 0.50kg/MWhSO). By September 2020, five units – four at Kendal and one at Lethabo – were operating in non-compliance with average monthly emission limits. This placed 3 153MW at risk of being shut down by the authorities. During strike action in 2018, significant damage was caused to the electrostatic precipitators at Kendal power station, leading to elevated emissions since then. Kendal initially tried to recover from the situation with short outages to repair the precipitators and dust handling plant, and unit 5 was taken off load for repairs for three months in 2019. However, when it returned to service, emissions remained above the limit. Power station water usage for the period was stable at 1.41l/kWhSO (September 2019: 1.39l/kWhSO). Generation continues to focus on improving water management

practices across the power station fleet, to prevent the occurrence of future legal contravention incidents due to non-compliance with water use licence conditions. Water management plans are in place and the implementation thereof is closely monitored through the generation environmental compliance steering committee, chaired by the group executive: generation. Regrettably, Eskom incurred 33 environmental legal contravention incidents during the period (September 2019: 23), with 91% being water-related incidents.

#### **2.1.4 People and safety**

The group headcount continued its anticipated decline to 43 795 at the end of the period (September 2019: 45 625), mainly through natural attrition, supported to some extent by the voluntary separation packages offered to managerial level staff at the end of the previous financial year. As part of the turnaround plan, Exco approved another round of voluntary separation packages at managerial level to a maximum value of around R300 million in November 2020, with successful applicants expected to leave Eskom's employ by 28 February 2021. Racial equity at senior management level has improved to 72.27% (September 2019: 70.42%), and racial equity at professional and management level has increased to 79.17% (September 2019: 76.70%). Gender equity has remained relatively stable, at 40.90% at senior management level (September 2019: 41.10%) and 38.65% at professional and middle management level (September 2019: 38.12%). Disability equity at group level has declined slightly to 2.97% (September 2019: 3.08%).

### **3. Financial performance**

Historically, Eskom's financial performance in the first half of the year is better than the second half as the winter period is characterised by higher tariffs and increased sales volumes. Additionally, less maintenance is performed in winter to ensure adequate supply to sustain the increased demand and to offset lower winter production by renewable IPPs. While we did well to achieve a profit in the first six months given the unprecedented circumstances, the seasonal nature of Eskom's revenue and spend means that there still remains considerable cost pressure in the second half of the year, due to summer maintenance requirements and costs associated with ensuring security of supply.

#### **3.1 Financial results**

Eskom recorded a net profit after tax of R83 million while navigating a very challenging operating environment (September 2019: R1.9 billion loss, restated). Revenue grew to R108.7 billion (September 2019: R107.5 billion), an increase of only 1.1%, even though we were awarded an allowed tariff increase of 8.76% for 2021, with sales volumes deteriorating significantly amid COVID-19. Although Eskom has experienced a trend of declining sales volumes of approximately 1% per annum since 2014, the decline seen during the first six months of this year was unprecedented. Sales fell by 10.3%, to 93.4TWh (September 2019: 104.1TWh), with local and international sales decreasing by 9.7TWh and 1TWh respectively, as lockdown restrictions and depressed economic conditions led to a reduction in the average demand for electricity. Sales worsened across every sector of the economy, with the industrial

sector being most severely affected by a year-on-year reduction of 17.6%. Growth in primary energy costs was stable at 4.4%, increasing to R54.3 billion for the period (September 2019: R52 billion). Primary energy costs are directly related to the volume of electricity generated from Eskom's power stations as well as purchases from IPPs and international imports. Because of the substantial decline in electricity demand during the national lockdown, electricity production reduced by 7.5% from 120.1TWh to 111.1TWh, mostly through lower coal production, which was partially offset by higher utilisation of more expensive Eskom OCGTs, IPPs and imports. As a result, the average cost of production has increased. Coal costs are being controlled, in particular from short- and medium-term sources, with an increase of only 4.6% in the average purchase cost per ton of coal compared to March 2020 (September 2019: 14.2% compared to March 2019). Eskom OCGTs were utilised frequently to support the power system, generating 496GWh at a cost of R1.4 billion (September 2019: 331GWh at R1.1 billion). Expenditure on international purchases increased to R2.5 billion, with imports of 4 474GWh (September 2019: 3 703GWh at R2 billion) due to improved supply from Hidroelectrica de Cahora Bassa, as an additional generator was made available and its maintenance plan was put on hold during the Mozambican lockdown. Expenditure on IPPs, including capacity charges, increased to R14.5 billion, with 5 842GWh energy purchased (September 2019: 5 389GWh at R13 billion), resulting in a weighted average IPP cost of 249c/kWh (September 2019: 241c/kWh). Eskom is still locked into long-term contracts from earlier IPP bid windows at higher rates than new IPP generation affords.

Eskom managed to contain employee benefit costs at R16.7 billion (September 2019: R16.4 billion, restated) through headcount reduction and sub-inflation salary increases at managerial levels in October 2019. Other operating expenditure, including maintenance, decreased to R10.4 billion (September 2019: R12.3 billion, restated).

The restatement for the prior period largely relates to the write-off of R4 billion of work under construction on potential overpayments to a number of contractors involved in the construction of Kusile power station. During the period, Eskom wrote off R1.3 billion relating to amounts incurred on Duvha unit 3 since the over-pressurisation incident on 31 March 2014, as it is no longer considered economically viable to continue with the rebuild of the unit. Altogether, these factors led to an improvement in EBITDA to R28.1 billion (September 2019: R26.4 billion, restated) along with corresponding growth in the EBITDA margin to 25.82% (September 2019: 24.58%, restated). However, EBITDA was eroded to a profit before tax of only R0.1 billion (September 2019: R2.5 billion loss, restated), mainly by depreciation of R13.8 billion (September 2019: R13.5 billion, restated) and net finance costs of R15.3 billion (September 2019: R15 billion, restated).

### **3.2 Funding**

Eskom's borrowing programme had originally targeted raising R30.8 billion during the year, of which R19.6 billion (64%) has already been secured, mainly through signed and committed funding from development finance institutions and local bond issuances. However, we are anticipating raising funding of R40.7 billion by 31 March 2021 to strengthen our liquidity position, subject to available market appetite. Despite

this increase, Eskom will remain within its overall borrowing programme target for the next five years to 2025.

According to Fitch Ratings Agency, fiscal risks from the struggling state-owned enterprise sector and other contingent liabilities have been exacerbated by the pandemic shock. Liabilities of state-owned financial and non-financial enterprises and guarantees to independent power producers and for private-public partnerships amounted to 20.5% of GDP at end-March this year. While this is not exceptionally high relative to peers, the financial performance of many of the companies, including the largest, the electricity producer Eskom, is poor. The state has had to provide substantial support since last year, but the government factors in only limited further support for the coming three years although it acknowledges the risks.

### **3.3 Managing liquidity**

Liquidity remains one of Eskom biggest short-term challenges, threatening its ability to achieve operational stability. As mentioned above, access to cost-effective funding remains restricted, while inadequate price increases granted by NERSA as well as declining sales and escalating municipal arrear debt further contribute to Eskom's liquidity constraints. To address this, our turnaround strategy focuses on five key areas, two of which are finance-related – improving its income statement, by achieving revenue certainty, cost optimisation and efficiencies, combined with strengthening our balance sheet.

### **3.4 Business separation**

The Department of Public Enterprises (DPE) released the “*Roadmap for the Reform of Eskom in a Changing Energy Supply Industry*” (the Roadmap) in October 2019. The Roadmap sets timelines for the restructuring of Eskom from a vertically integrated utility to an unbundled state with three wholly owned separate legal entities in the form of Transmission, Generation and Distribution as follows:

- divisionalisation by March 2020
- functional separation by March 2021
- legal separation of the Transmission entity by December 2021
- legal separation of the Generation and Distribution entities by December 2022

Eskom has approached the implementation of the Roadmap in a phased manner to ensure organisational stability during the transition. By and large, our timelines are aligned to those in the Roadmap. Divisionalisation has been completed, with implementation of the new operating model of the functionally separate entities progressing well for completion by March 2021. The legal separation of the Transmission entity is expected to be completed by December 2021, and the Generation and Distribution entities by December 2022.

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, 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.

Eskom has significant challenges which most of them will require government support. There are structural changes which need to be made in order for Eskom to be sustainable. The key challenge for Eskom is to focus on its core mandate which is electricity supply. Eskom has assumed a multi-faceted role in the economy which includes coal supply, logistics, construction amongst other roles which cause inefficiency in executing its mandate.

#### **4. Possible Questions**

1. What are the implications of NERSA decision on the sustainability of Eskom?
2. What are the implications of the NERSA decision on the consumer?
3. What is the major contributor of the decline in sales at Eskom?
4. Will the decision by NERSA have a bearing on the future sustainability going forward?
5. What is Eskom going to do about the R463.7 billion gross book value outstanding plan?
6. When are government guarantees reaching their expiring dates and what are the implications on Eskom borrowing going forward?
7. According to the interim results the total cost for fixing major defects at Medupi and Kusile was estimated at R7.2 billion. The estimate remains the same. Is the budget still according to the statement in the interim results?
8. What is Eskom doing about the 33 environmental legal contravention incidents with 91% being water related incidents?
9. Headcount continues to decline to 43 795. Can Eskom explain to the Committee if this is the implication of the restructuring process and what will be the right size of employees for the company.
10. R300 million was approved on voluntary separation packages at managerial level. How many people are affected by this EXCO decision?
11. Eskom OCGT were used to support the power system at a cost of R1.4 billion. Are we likely to see the use of OCGTs going forward?
11. What technical issues are relating to the Duvha Unit 3 incident?
12. How is Eskom addressing the findings and concerns made by the ratings agencies?

## **5. Source Document**

1. CONDENSED GROUP INTERIM FINANCIAL STATEMENTS for the six months ended 30 September 2020