NATIONAL ENERGY REGULATOR OF SOUTH AFRICA

DECISION AND REASONS FOR DECISION

ESKOM HOLDINGS SOC LIMITED:

ESKOM'S MYPD4 REGULATORY CLEARING ACCOUNT (RCA) APPLICATION FOR THE 2022/23 FINANCIAL YEAR

REASONS FOR DECISION

NATIONAL ENERGY REGULATOR OF SOUTH AFRICA

In the matter regarding

Eskom's Fifth Multi-Year Price Determination (MYPD5) Year 1 (2022/23) Regulatory Clearing Account (RCA) Application

By

ESKOM HOLDINGS SOC LIMITED ('ESKOM')

RECOMMENDATIONS

Based on the available information and the analysis of the Regulatory Clearing Account (RCA) application for the 2022/23 financial year, the Energy Regulator, at its meeting held on 27 March 2025, decided as follows:

1. The Energy Regulator approves Eskom's RCA balance of -R232m for the 2022/23 financial year, as per Table 1 below.

Table 1: RCA balance for 2022/23 financial year

RCA for FY2023	Decision FY2023	Actuals FY2023	Variance	RCA Adjustments	RCA FY2023	NERSA Adjustment	NERSA Decision
Regulated Assets Base (RAB)	702 931	769 067	66 136	-		-6 032	42 008
Return on Assets (ROA)	1,08%	1,08%			-	1,08%	1,08%
Return	7 557	8 268	711	-	711	-65	646
Expenditure	62 513	78 448	15 935	-15 742	193	-178	16
Primary Energy	80 496	100 040	19 544	12	19 556	-	19 556
Independent Power Producers (local)	43 130	43 534	404	-	404	-	404
International purchases	4 589	6 459	1 870	-	1 870	-	1 870
Depreciation	42 321	45 151	2 830	-	2 830	-	2 830
Levies & taxes	7 132	7 033	-99	-	-99	-	-99
Carbon Tax	2 714	-	-2 714	-	-2 714	-	-2 714
Revenue	250 452	259 541	-9 090	-13 734	-22 824	-	-22 824
SQI	-	-	-	-	-	-	
FY2023 RCA Balance due to Eskom					**-74**	**-242**	**-315**
Nuclear decommissioning from RCA 2013/14 decision liquidated over 10 years - (10th year of 10 years)					83		83
Total RCA balance (R'm)					**9**		**-232**

2. The RCA balance of -R232m is to be payable to the standard tariff customers, local Special Pricing Arrangement (SPA) customers and international customers.

3. The Reasons for Decision (RfD) will be published once the applicable requirements, including, but not limited to, the confidential treatment of some information, have been finalised.

4. An implementation plan for the 2022/23 RCA balance has been developed for approval by the Energy Regulator.

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ABBREVIATIONS

BER	Bureau for Economic Research
Capex	Capital expenditure
CPI	Consumer Price Index
DAB	Dispute Adjudication Board
DMP	Demand Market Participation
DMRE	Department of Mineral Resources and Energy
DSLI	Demand Supply Loss Index
DSM	Demand Side Management
Dx	Distribution
EAF	Energy Availability Factor
EEDSM	Energy Efficiency and Demand Side Management
ELS	Electricity Subcommittee
ER	Energy Regulator (NERSA board)
ERA	Electricity Regulation Act
ERTSA	Eskom's Retail Tariff Structural Adjustments
EUF	Energy Utilisation Factor
ERI	Eskom Rotek Industries
FY	Financial Year
GDP	Gross Domestic Product
GLF	Generation Load Factor
GWh	Gigawatt hour
Gx	Generation
HV	High Voltage
IAS	International Accounting Standard
IDM	Integrated Demand Management
IPP	Independent Power Producer
IRP	Integrated Resource Plan
km	Kilometre
kWh	Kilowatt hour
MIRTA	Minimum Information Requirement for Tariff Application
MW	Megawatt
MWh	Megawatt hour
MYPD	Multi-Year Price Determination
NERSA	National Energy Regulator of South Africa
NPA	National Prosecuting Authority
OCGT	Open Cycle Gas Turbine
Opex	Operating expenditure
PAJA	Promotion of Administrative Justice Act
PPA	Power Purchase Agreement
PPE	Property Plant and Equipment
RAB	Regulatory Asset Base
RCA	Regulatory Clearing Account

REC	Regulator Executive Committee
REIPP	Renewable Energy Independent Power Producer
RfD	Reasons for Decision
SADC	Southern African Development Community
SAPS	South African Police Service
SARS	South African Receiver of Revenue
SIU	Special Investigation Unit
SOC	State-Owned Company
Tx	Transmission
UoS	Use-of-System
WUC	Work Under Construction
UCLF	Unplanned Capacity Load Factor

1. LEGAL MANDATE

1.1 The National Energy Regulator of South Africa (NERSA) is a juristic person established in terms of section 3 of the National Energy Regulator Act, 2004 (Act No. 40 of 2004) ('the NERA'). The Energy Regulator (ER), in accordance with section 4 of the NERA, is mandated to regulate the electricity industry and perform the powers and functions set out in section 4 of the Electricity Regulation Act, 2006 (Act No. 4 of 2006) ('the Act').

1.2 In executing its mandated functions, the ER is required to ensure objects set out in section 2 of the Act are achieved, namely:

a) the efficient, effective, sustainable and orderly development and operation of electricity supply infrastructure in South Africa.
b) the interests and needs of present and future electricity customers and end-users are safeguarded and met, having regard to the governance, efficiency, effectiveness and long-term sustainability of the electricity supply industry within the broader context of economic energy regulation in the Republic.
c) investment in the electricity supply industry is facilitated.
d) universal access to electricity is facilitated.
e) the use of diverse energy sources and energy efficiency is promoted.
f) competitiveness and customer and end-user choice are promoted.

1.3 In terms of section 14(1) of the Act, the Energy Regulator may make a licence subject to conditions relating to '(d) the setting and approval of prices, charges, rates and tariffs charged by licensees'; and '(e) the methodology to be used in the determination of rates and tariffs, which must be imposed by licensees'.

1.4 Section 15 of the Act sets out the 'Tariff principles' and confirms that a licence condition determined under section 14 relating to the setting or approval of prices, charges and tariffs and the regulation of revenues '(a) must enable an efficient licensee to recover the full cost of its licensed activities, including a reasonable margin or return'.

1.5 In order to exercise this mandate, NERSA developed the Multi-Year

Price Determination (MYPD) Methodology ('the Methodology'), which consists of the principles of rate of return, as well as incentives for efficient performance. The Methodology ensures that each of Eskom's businesses is given efficient expenditure and compensated for the cost of providing services to the customers. The Methodology consists of the allowed revenue requirement formulas for generation, transmission, and distribution. These formulas are used to calculate the allowed revenue in each of these business units.

1.6 The use of the Methodology is imposed as a licence condition on Eskom's generation, transmission, and distribution licences.

1.7 The decisions of the ER must comply with section 10 of the NERA, read with the provisions of section 4 and 5 of the Promotion of Administrative Justice Act, 2000 (Act No.3 of 2000) ('PAJA').

1.8 The publication of the 2022/23 Regulatory Clearing Account application has ensured that the affected stakeholders were afforded an opportunity to provide oral and written comments. This is important part of the decision-making process which ensure that the decisions of the Energy Regulator are compliant with the provisions of the NERA and PAJA.

2. THE APPLICANT

2.1 Eskom Holdings SOC Limited, registration number 2002/015527/06, is a schedule 2 South African state-owned enterprise in terms of the Public Finance Management Act, 1999 (Act No. 1 of 1999), wholly owned by the South African Government. Eskom Holdings is regulated under licences granted by the Energy Regulator to generate, transmit and distribute electricity (three licences) in terms of the ERA.

2.2 Eskom generates, transmits and distributes electricity to industrial, mining, commercial, agricultural and residential customers, as well as other distributors. It also buys electricity from and sells electricity to the countries of the Southern African Development Community (SADC).

2.3 Through its subsidiary Eskom Enterprises (Pty) Limited, Eskom is also active in local unregulated markets and various African countries. These activities include the provision of electricity-related services to countries connected to the South African grid.

3. BACKGROUND AND INTRODUCTION

3.1 The Regulatory Clearing Account (RCA) is an account (for the purpose of determining the pass-through and/or claw-back) that consists of the variance between the actuals for the full financial year and what was allowed in the Multi-Year Price Determination (MYPD) decision of the Energy Regulator. This account is evaluated on a year-by-year basis after an application by Eskom to the Energy Regulator for adjustment and shall be based on audited financial statements.

3.2 The RCA is permitted in terms of section 17 of the fourth MYPD (MYPD4) Methodology. The MYPD Methodology was developed as a guide to NERSA in the regulation of the electricity supply industry in a manner that could be deemed rational and would result in predictable and stable prices. It forms the basis on which NERSA will evaluate the price adjustment for Eskom over a multi-year period and corresponding RCAs.

3.3 Eskom's MYPD5 RCA for the 2022/23 financial year (FY) application has been developed using the MYPD4 Methodology published by NERSA in October 2016.

4. THE DECISION-MAKING PROCESS

4.1 Eskom submitted its MYPD5 Year 1 RCA application (see Annexure A) on 24 January 2024.

4.2 The Electricity Subcommittee (ELS) meeting to approve the publication of the applications and indicative timelines took place on 9 April 2024.

4.3 Eskom's RCA application, together with the consultation paper, was published on 12 April 2024 to solicit written comments from affected stakeholders.

4.4 The closing date for the submission of comments was 31 May 2024 at 16:00.

4.5 NERSA did not receive any written comments from stakeholders during the period for which the Eskom application was published.

4.6 NERSA had planned to conduct public hearings in all nine provinces of South Africa (MS Teams) on 1 August 2024 in order to solicit comments from interested and affected stakeholders. However, no stakeholders registered to make oral representations.

4.7 It is anticipated that the Energy Regulator will make its decision in November 2024.

5. LIST OF STAKEHOLDERS WHO COMMENTED ON THE APPLICATION

5.1 No comments were received from stakeholders.

6. SUMMARY OF THE APPLICATION

6.1 As a claw-back mechanism, the key purpose of the RCA, other than its risk-management function, is to ensure that both the industry and consumers are treated fairly and are not subjected to unfair gains or losses as a result of incorrect forecasting, inaccurate information and system shocks.

6.2 Table 2 below shows that the RCA balance is R9m as applied for by Eskom.

Table 2: Eskom's MYPD5 Year 1 RCA application (2022/23)

RCA for FY2023	Decision FY2023	Actuals FY2023	Variance	RCA Adjustments	RCA FY2023
Regulated Assets Base (RAB)	702 931	769 067	66 136	-	
Return on Assets (ROA)	1.08%	1.08%			-
Return	7 557	8 268	711	-	711
Expenditure	62 513	78 448	15 935	(15 742)	193
Primary Energy	80 496	100 040	19 544	12	19 556
Independent Power Producers (local)	43 130	43 534	404	-	404
International purchases	4 589	6 459	1 870	-	1 870
Depreciation	42 321	45 151	2 830	-	2 830
Levies & taxes	7 132	7 033	(99)	-	(99)
Carbon Tax	2 714	-	(2 714)	-	(2 714)

RCA for FY2023	Decision FY2023	Actuals FY2023	Variance	RCA Adjustments	RCA FY2023
Revenue	250 452	259 541	(9 090)	(13 734)	(22 824)
SQI	-	-	-	-	-
FY2023 RCA Balance due to Eskom					**(74)**
Nuclear decommissioning from RCA 2013/14 decision liquidated over 10 years - (10th year of 10 years)					83
Total RCA balance (R'm)					**9**

6.3 Eskom's RCA submission is driven substantially by revenue variance, primary energy, operating costs and international purchases. The allowable revenue has been analysed for evidence of prudent and efficient spending by Eskom.

6.4 The application is driven by the following major line items:

a) Primary energy
b) Independent Power Producers (IPPs)
c) International purchases
d) Revenue variance
e) Depreciation
f) Operating expenditure (Opex).

7. ANALYSIS OF ESKOM'S 2022/23 RCA APPLICATION

7.1 Revenue Variance

Summary of the application

7.1.1 Eskom has applied for a revenue variance of R22 824m in favour of customers for the 2022/23 financial year, as shown in Table 3 below.

Table 3: Electricity Revenue Variance

Revenue Variance (R'm)	Decision FY2023	Actuals FY2023	Variance	Cumulative Revenue Variance
Total Eskom Revenue (AFS)	250 452	259 541	(9 090)	(9 090)
Add/(deduct): RCA adjustments		13 734	(13 734)	
IFRS 15 adjustment reversed (Unrecognised Revenue)		8 210	(8 210)	(17 300)
Internal electricity costs		842	(842)	(18 142)
Demand Response & Power buy back reallocated to PE		298	(298)	(18 440)
Non electricity revenue		(1 430)	1 430	(17 010)
Capitalised revenue		-	-	(17 010)
Capitalised costs associated with capitalised revenue		-	-	(17 010)
RCA liquidation included in the Actual Revenue		(13 926)	13 926	(3 084)
Power buy back		-	-	
Load shedding (13477 GWh @ 146,48 average c/kWh)		19 740	(19 740)	**(22 824)**
Electricity Revenue Variance	**250 452**	**273 276**	**(22 824)**	

7.1.2 Eskom indicated that for the period 1 April 2022 to 31 March 2023, there were a total of 280 days of load-shedding and load curtailment. The load reductions were primarily due to the following conditions:

7.1.2.1 Shortage of generation from Eskom and IPPs

7.1.2.2 Increased unplanned unavailability

7.1.2.3 Limited fuel availability at peaking stations

7.1.2.4 The need to conserve and replenish depleted emergency resources

7.1.2.5 Poor coal and compromised emissions performance.

7.1.3 Load-shedding is implemented to restore and retain power system stability and avoid total collapse of the power system due to inadequate capacity to meet the demand and the need for restoration of dam levels at Hydro Pump Storage Power stations and recovery of OCGT level. As results, the OCGTs are being run at extremely high load factors especially during the weekend.

7.1.4 Eskom further indicated that sales variance is also affected by seasonal demand profile. The summer load profile is much 'flatter' than the winter profile. In winter there is a higher probability of problems over the peak periods. Peaking plant is required for many more hours during the day in summer than in winter due to the high maintenance of base load units during the summer months and the flat load profile.

7.1.5 For FY2023, Eskom indicated that the initial amount of energy to be sourced from IPPs, as determined by the Government Departments in 2021, was approximately 36TWh. This was then dropped to

approximately 25 TWh in 2022 by Government Departments once it was realised that certain IPP programmes would not materialise. To accommodate this drop, significant adjustments to Eskom's Open Cycle Gas Turbine (OCGT) and coal plant were made. Thus, the lack of sufficient generating capacity in the country is a root cause of the production plan not being able to meet the country demand.

NERSA Analysis

7.1.6 This section will deal with the factors that affected sales volumes form the supply and demand side.

Supply-side issues

7.1.7 The plant availability continues to decline to unprecedented low levels, year after year. Figure 1 below shows the prior year's performance figures for the Eskom fleet. Observing from FY2018/19, plant performance has been on a downward decline, driven by the constant increase in Unplanned Capacity Load Factor (UCLF).

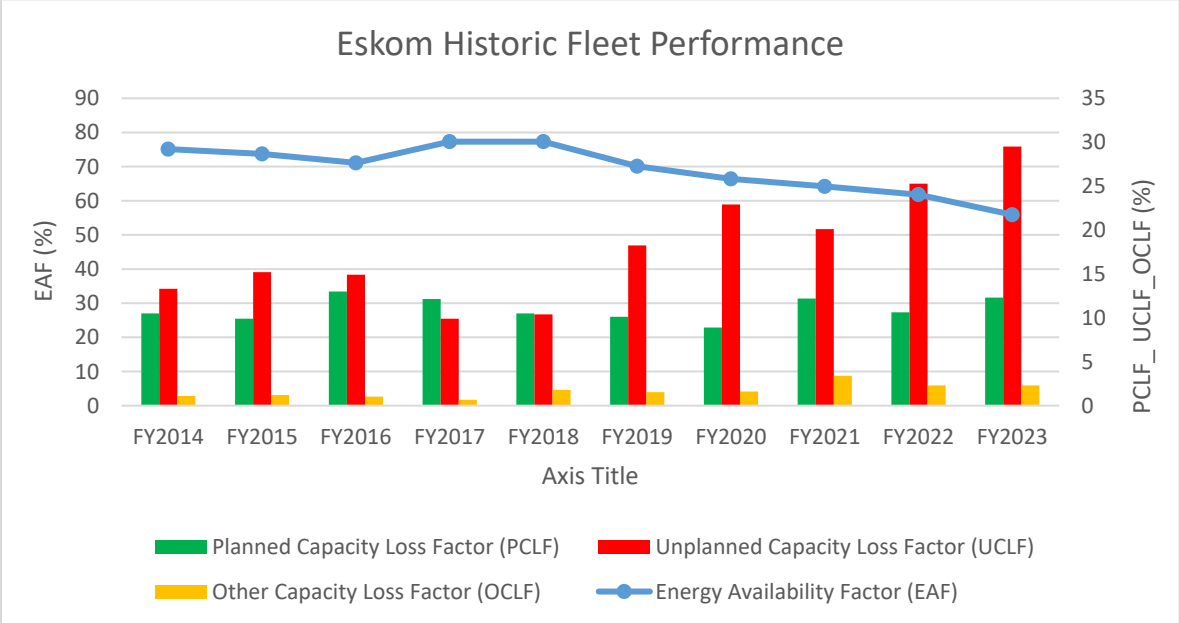


Figure 1: Eskom Fleet Historic Plant Performance

7.1.8 Figure 2 below shows that the decrease in Energy Availability Factor (EAF) is largely due to an increase in UCLF of 32% in 2023FY, as compared to 25% in 2022FY.

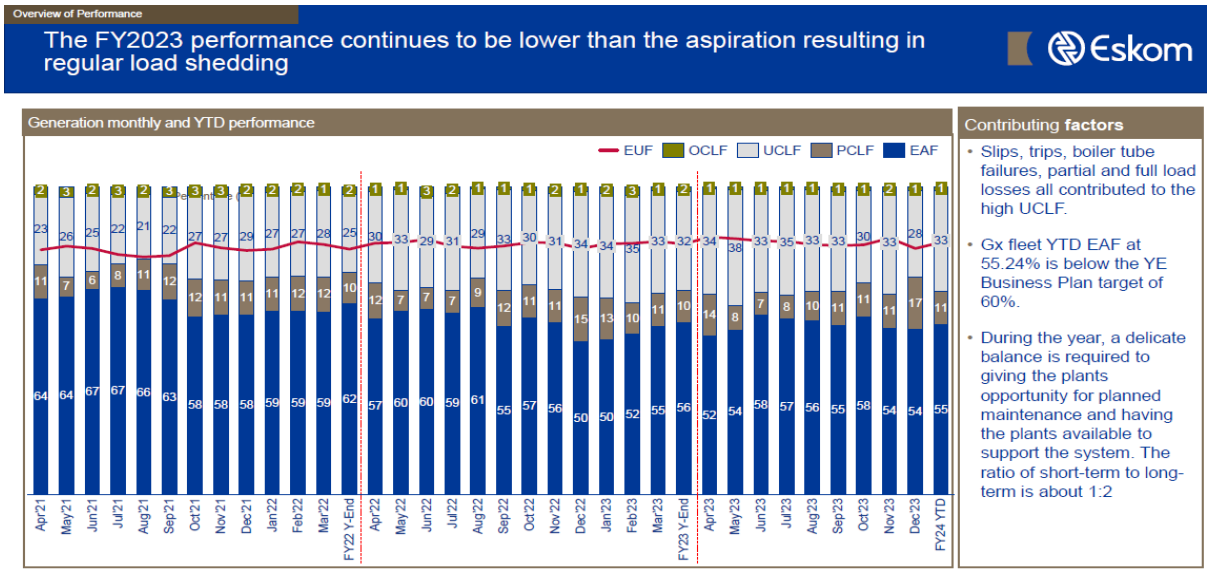


Figure 2: Monthly Eskom Fleet Performance from FY2022 to FY2024 YTD
Source: Eskom data

7.1.9 Eskom's coal fleet's performance continues to decline, resulting in frequent load-shedding at higher stages, on average, than in the preceding years.

7.1.10 The load-shedding figures are trending upwards in line with the increasing UCLF and OCGT utilisation, resulting in high stages of load-shedding. Figure 3 below shows the volumes of load-shedding since 2018.

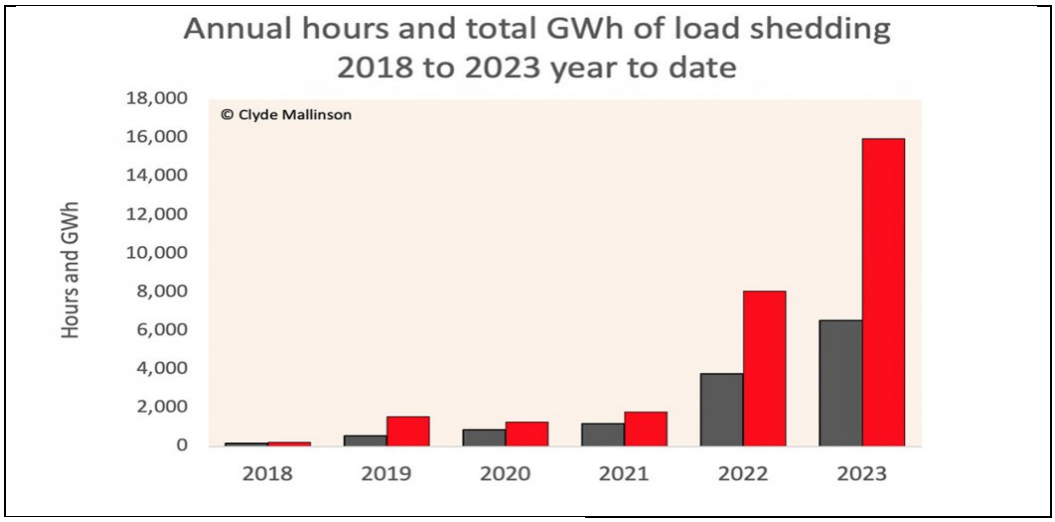


Figure 3: Load-shedding hours since 2018
Source: https://www.engineeringnews.co.za

7.1.11 Table 4 below shows a decline from the targeted energy produced per technology in the Eskom fleet, resulting in a shortfall of 3 835GWh. It is noted that most of the categories of generators underperformed. This resulted in the need for increased use of peaking, OCGT and hydro plants.

Table 4: Actual energy generated by the Eskom Generation Fleet (GWh)

Production plan	Decision	Actual	Variance
Eskom Coal	177 853	171 131	- 6 722
Nuclear	10 567	9 803	- 764
OCGT	733	3 018	2 285
Hydro	970	3 060	2 090
Pumped storage	4 707	4 081	- 626
Wind	312	214	- 98
Eskom Total	**195 142**	**191 307**	**- 3 835**

7.1.12 It must also be noted that the supply constraints can also be attributed to the unavailability of energy from the IPP programme, where approximately ~5TWh did not materialise.

7.1.13 However, due to supply side constraints, load-shedding/load curtailment was implemented to the extent of 13 477GWh, over 280 days during 12 months of the financial year. This resulted in a total revenue loss of R19 740m that was removed from the revenue variance in the RCA application.

7.1.14 The reasons cited for the implementation of load reduction include the following:

a) Shortage of generation from Eskom and IPPs
b) Increased unplanned unavailability
c) Limited fuel availability at peaking stations
d) The need to conserve and replenish depleted emergency resources
e) Poor coal and compromised emissions performance.

Demand-side issues

7.1.15 Eskom's sales have been declining for most of the MYPD3 and MYPD4 periods, and the first year of the MYPD5 period. However, Eskom's capacity constraints have contributed to the slow economic

growth, with the impact of load-shedding being one of the major contributors.

7.1.16 A study commissioned by Eskom to NOVA economists found that load-shedding reduced the South African Gross Domestic Product (GDP) by R35 billion between 2007 and 2019, with the agricultural sector, utilities and manufacturing sector being the most affected.

7.1.17 In its application, the decline in sales was seen across every sector, Prepayment and Agriculture had the highest negative variances; Eskom sold 1 438 GWh and 1 071 GWh respectively less than the decision.

7.1.18 Agriculture is an energy-intensive industry and is adversely affected by load-shedding due to its heavy reliance on electricity for irrigation and refrigeration. Some Operating Units noted Small-Scale Embedded Generator (SSEG) customers contributing to the decline in sales, which is expected to increase as the number of SSEG applications are received.

7.1.19 Re-distributors also had a positive variance of 175 GWh. Although this sector is heavily affected by load-shedding, higher commodity prices led to higher sales. This is mainly due to some industrial customers that are supplied by re-distributors.

Approach/methodology used

7.1.20 Section 17.2.4.1 of the MYPD4 Methodology states that ‘variances between the forecast and actual sale volumes shall be assessed and analysed to determine the cause of the variance, then the Energy Regulator will make a decision on whether to allow such variances’. The approach followed is to assess Eskom’s contribution towards the decline in sales.

NERSA adjustments and reasons

7.1.21 Although the provision in 17.2.4.1 is found in the MYPD4 Methodology, the Methodology does not prescribe the approach for allowing/disallowing revenue variances. This lack of clarity in the Methodology poses a limitation to what the Energy Regulator can do to adjust for revenue variance. NERSA has previously sought to

allow a revenue variance that will allow the recovery of fixed costs only to the exclusion of variable costs, in instances where Eskom has contributed to the decline in sales. This approach has been successfully challenged in court by Eskom. No adjustment is therefore made to the Sales Revenue variance; Eskom is therefore granted revenue variance as applied for as shown in Table 5 below.

7.1.22 This approach is in line with the NERSA decision of 30 July 2024 on Eskom's 2021/22 RCA where Eskom was granted sales variance amount as applied for due to lack of clarity in the Methodology posing a limitation to what the Energy Regulator can do to adjust for revenue variance.

Table 5: Revenue variance decision

Sales Varaince	NERSA MYPD 5 (FY2023) Decision	Actual FY2023	Variance	RCA Adjustment	RCA FY2023	NERSA Adjustment	NERSA RCA Decision
Revenue Variance (R'm)	250 452	259 541	-9 090	-13 734	-22 824	0	-22 824

Stakeholder comments

7.1.23 None.

Conditions for approval

7.1.24 None.

7.2 Regulatory Asset Base (RAB)

7.2.1 Eskom applied for an additional return of R711m, which is based on a closing RAB value of R682 780m (actual return: R8 268m) for the 2022/23 financial year when compared to the MYPD4 decision for the 2022/23 financial year for a closing balance of R550 508m and a return of R7 557m.

7.2.2 The RAB RCA has the following aspects:

a) Depreciated Replacement Cost (DRC), which is the Modern Equivalent Asset Valuation (MEAV) times (the remaining economic life of a plant divided by the total economic life of the plant).
b) Asset Purchases (New Investments), which include items such as acquisition of vehicles, IT equipment, workshop and furniture equipment, among others.
c) Work Under Construction (WUC), which is the Capital Expenditure that consist of material and direct labour and any cost directly attributed to creation of an asset, if the construction period will be for the duration of more than twelve months.
d) Working capital, which refers to trade receivables, reasonable incurred future fuel less trade payables required for the operation of the regulated business.
e) Assets funded by customers upfront, which are assets that are excluded from the RAB because they are funded upfront via customers' contributions and some by the Department of Mineral Resource and Energy (DMRE).

7.2.3 Table 6 indicates the total breakdown of the 2022/23 RCA application against the actual RAB approved by the Energy Regulator for the MYPD5 period.

Table 6: RAB

RAB and RoA	Decision FY2023	Actual FY2023	Variance
Depreciated Replacement Costs (DRC)	427 093	427 093	-
Completed assets after FY2016	17 353	126 134	108 781
Asset purchases	1 779	2 010	231
Work Under Construction (WUC)	59 143	87 359	28 216
Working capital	59 736	52 621	(7 115)
Assets funded by customers upfront	(14 596)	(12 437)	2 159
Closing RAB values	**550 508**	**682 780**	**132 272**
Average RAB Values per Table 1 of the RfD	702 931	769 067	66 136
Percentage Return on Assets	1.08%	1.08%	
Return	**7 557**	**8 268**	**711**

Approach/methodology used

7.2.4 The return application was assessed in line with section 17.2.6 and 25.1.3 of the MYPD4 Methodology, which stipulates that Eskom's RCA application will be assessed against the Energy Regulator decision. Any over-expenditure deemed prudent by the Energy Regulator will be allowed/added to the RAB to allow Eskom to recover additional returns. The opposite scenario where an under

expenditure is recorded will be treated similarly, by deducting it from the RAB value to earn a lesser return.

NERSA Analysis

7.2.5 Eskom applied for an additional return of R711m. This is based on a closing RAB value of R682 780m (average R769 067m) and a return on assets of 1.08%. It is NERSA's decision to allow an additional return of R646m, which is a result of adjusting the additional R711m return downwards by R65m as shown in Table 7 below.

Table 7: Return calculation

RAB Summary (R'millions)	NERSA 2021/22 decision	Eskom actual 2022/23	Variance	NERSA Adjustment	NERSA RCA 2022/23 decision
Depreciated Replacement Costs (DRC)	427 093	427 093	0	0	0
Completed assets after FY2016/ transfers from WUC	17 353	126 134	108 781	0	108 781
Asset purchases	1 779	2 010	231	0	231
Work Under Construction (WUC)	59 143	87 359	28 216	(12 064)	16 152
Working capital	59 736	52 621	(7 115)	0	(7 115)
Assets funded by customers upfront	-14 596	(12 437)	2 159	0	2 159
Closing RAB	**550 508**	**682 780**	132 272	**-12 064**	120 208
Average RAB (A)	**702 931**	**769 067**	66 136	**(6 032)**	60 104
Return on Assets (ROA) (B)	1,075%		1,08%		1,08%
Return after Government assistance (E) = (C) + (D)	**7 557**	**8 268**	**711**	**-65**	646

7.2.6 The adjustments to the elements making up the closing RAB are not revenue adjustments, but adjustments contributing to the recalculated return. The only NERSA adjustments were on work under construction (WUC).

Work Under Construction (WUC)

7.2.7 Eskom applied for a WUC of R87 359m when compared to the NERSA MYPD4 decision of R59 143m. This results in a variance of R28 216m in favour of Eskom. It is NERSA's decision to allow a WUC of R16 152m.The difference is driven by adjustments to capital expenditure as detailed below.

Table 8: Eskom capital expenditure per division

Table 50: GTD capital expenditure (excludes asset purchases, DoE funded assets and IDC)

Capital expenditure excl. Asset purchases, DoE Funded and future fuel	Decision FY2023	Actual FY2023	Variance
Generation	41 044	21 851	(19 193)
Transmission	10 542	3 370	(7 172)
Distribution	8 279	4 562	(3 717)
Total	**59 865**	**29 783**	**(30 082)**

Generation Capital Expenditure

7.2.8 Included in the WUC is Generation capital expenditure of R21 851m when compared to the NERSA MYPD4 decision of R41 044m. This results in a variance of R19 193m in favour of the customers. Table 9 below is an extract from Eskom's application and provides a breakdown of this expenditure.

Table 9: Eskom Generation capital expenditure application

Table 51: Summary of Generation Capex for FY2023

Generation Capex (R'm)	Application FY2023	Decision FY2023	Actuals FY2023	Variance
New Build and Major Projects	18 611		7 581	
Outage Capex	13 236		8 422	
Tech Plan Capex	9 156		3 642	
Renewables Capex	15		-	
Land & Rights			-	
Other			2 207	
Total Capex WUC	**41 018**	**41 044**	**21 852**	**(19 192)**
Nuclear future fuel	971		1 157	
Coal and water future fuel	2 230		1 704	
Asset Purchases	182		556	
Total Generation Capex	**44 401**		**25 270**	

7.2.9 It is NERSA's decision is to disallow R8 422m and R3 642m for outage and technical plan Capital Expenditure (Capex) respectively, because these are expenditures relating to maintenance and is defined as the replacement of assets to ensure network stability; it is not a creation of additional capacity. Section 9.6.4.1 of the MYPD4 Methodology states that: 'The WUC projects to be included in RAB are with respect to the creation of additional generation, transmission and distribution capacity.'

7.2.10 In this regard NERSA maintains its decision detailed in Paragraph 7.2.13 of the 2021/22 RfD on Eskom RCA application where Generation Capex was disallowed because expenditures relating to maintenance and is defined as the replacement of assets to ensure network stability.

Transmission Capital Expenditure

7.2.11 Eskom applied for a Transmission capital expenditure of R3 370m when compared to the NERSA MYPD4 decision of R10 543m, as shown in Table 13 below. This results in a variance of R7 172m in favour of the customer. Table 13 below is an extract from Eskom's application and provides a breakdown of this expenditure.

Table 10: Eskom Transmission capital expenditure application

Table 52: Transmission capital expenditure

Transmission: Capex (R'm)	Application FY2023	Decision FY2023	Actual FY2023	Variance
Strengthening and Expansion	10 410	10 410	1 899	(8 511)
Asset Replacement	1 127	-	1 407	1 407
EIA and servitudes	132	132	64	(68)
Total Capex for WUC	**11 669**	**10 543**	**3 370**	**(7173)**
Asset Purchases	47	47	173	126
Total Transmission Capex	**11 716**	**10 589**	**3 543**	**(7 047)**

7.2.12 It is NERSA's decision to allow Transmission capital under-expenditure as applied for by Eskom. The details have been provided below.

Strengthening and Expansion Capex

7.2.13 It is NERSA's decision to allow the strengthening and expansion Capex of R1 899m as applied for by Eskom Transmission. The Capex was allowed because it met the requirements of section 9.6.4.4 of the MYPD4 Methodology, as Transmission provided disaggregated Capex with full details on the activities to be undertaken. This aligns with the decision made by the Energy Regulator on 30 June 2024 on Eskom's 2021/22 RCA and is detailed in paragraph 7.2.16 of the 20221/22 RfD.

7.2.14 More pointedly, Eskom Transmission provided a list of completed and commissioned assets during this period that include a total of 326.1 kilometres (km) of line and did not indicate the installed transformer capacity at Transmission substation, but indicated the actual spend of R432m.

7.2.15 A prudency assessment was conducted for Transmission's line assets Capex, as indicated in Table 11 below.

Table 11: Prudency assessment for Transmission's line assets Capex

Prudency Assessment for Transmission Strengthening & Expansion		
Transmission Strengthening & Expansion Capex		RCA FY2023
Line asset Capex (R'm)	**A**	**1 467**
Assets planned to be constructed:		
Lines Assets (km)	B	326.1
Average Asset Creation Costs:		
Average cost per km of line (Rm)	C	4.316
Total average Asset Creation Costs:		
Lines Asset Creation Cost (Rm) = B*C		1 407
Total Average costs for Srengthening & Expansion Capex (R'm)	**B**	**1 407**
Variance (A - B)		**60**

7.2.16 The prudency assessment results revealed that the Transmission line asset Capex completed and commissioned was above the average values by R60m, as A is greater than B in the prudency assessment results, which is shown as the variance. However, this was accepted because it can be attributed to various factors, such as difficult terrain to build lines on, which may require the use of a helicopter.

Refurbishment Capex

7.2.17 Section 17.2.6.3 of the MYPD4 Methodology was used as a yardstick to evaluate the Transmission Capex. Section 17.2.6.3 of the MYPD4 Methodology states that Eskom's actual Capex will be assessed against the MYPD assumptions. As part of the submission of its Capital Expenditure Programme, Eskom will detail the reasons for the variance, after which the Energy Regulator will assess these for prudence.

7.2.18 In the actual MYPD5 decision for FY2023, refurbishment Capex of R1 127m was disallowed because Eskom Transmission failed to demonstrate which assets would have reached the end of useful life so that they can be removed from the RAB for purposes of earning depreciation.

7.2.19 However, in the RCA application, Eskom Transmission demonstrated how it removed assets that have reached the end of useful life as part of refurbishment and thereafter included new assets with a new useful life under refurbishment Capex in the asset base to create additional Transmission capacity.

7.2.20 As a result, refurbishment Capex totalling R1 407m was allowed because it satisfied the requirements of section 9.6.4.1 of the MYPD4 Methodology, which states that Work Under Construction (WUC) projects are to be included in the RAB if those projects are with respect to the creation of additional Transmission capacity.

EIA and Servitudes

7.2.21 Environmental Impact Assessment (EIA) and Servitudes amounting to R64m was allowed as applied for by Eskom because it was greatly dependent on negotiation agreements between Eskom and the affected landowners. Out of the R64m, R63m was used to acquire servitudes for lines and R1m was used to acquire land for substations.

Distribution Capital Expenditure

7.2.22 Eskom applied for a Distribution capital expenditure of R4 562m when compared to the NERSA MYPD4 decision of R8 279m. This results in a variance of R3 717m in favour of the customers, as shown in Table 8 above. Table 12 below is an extract from Eskom's application and provides a breakdown of this expenditure.

Table 12: Distribution capital expenditure application

Table 55: Distribution Capex

Total Capex (R'm)	Application FY2023	Decision FY2023	Actual FY2023	RCA FY2023
Direct Customers	1 282	1 282	1 137	(145)
Strengthening	1 857	1 857	717	(1 140)
Refurbishment	1 424	1 424	587	(837)
Land & Rights	39	39	-8	(47)
IPP Connections	430	430	19	(411)
BESS	3 247	3 247	2 109	(1 138)
Total Capex for WUC	**8 279**	**8 279**	**4 562**	**(3 717)**
Asset Purchases	564	564	150	(414)
Eskom funded	**8 843**	**8 843**	**4 712**	**(4 131)**

7.2.23 The Distribution Capex was analysed in terms of section 17.2.6.3 of the MYPD4 Methodology, which states that Eskom's actual capital

expenditure will be assessed against original MYPD assumptions. As part of the submission, Eskom will detail the reasons for the variances, after which the Energy Regulator will assess them for prudency.

7.2.24 Having analysed the different aspects of Distribution Capex, there were no major deviations from the NERSA MYPD decision of FY2023 and Eskom Distribution provided detailed reasons for the variances. It is NERSA's decision to allow this under-expenditure as applied for by Eskom.

7.3 Operating Expenditure

Summary of the application

7.3.1 Section 17.2.7.1 of the MYPD Methodology states that 'In determining over- and under-expenditure, the Energy Regulator will consider controllable and non-controllable elements of the operating costs. This is to ensure that Eskom minimises the costs that are under its control, as well as encourage it to reduce those that are not under its control'.

7.3.2 Allowable expenses relate to all expenses that are incurred in the production and supply of electricity. These costs include normal operating expenditure, maintenance (excluding refurbishment costs that must be capitalised), manpower or labour costs, and overheads (centrally administrative and general expenses allocated) that are normally recovered within one financial year. This excludes Integrated Demand Management (IDM), which is treated separately for RCA purposes.

Table 13: Eskom's application

Allowed operating costs (R'm)	Decision FY2023	Actual FY2023	Variance	RCA adjustments	RCA FY2023
Employee benefits (GTD,Cx,SAE&DSM)	26 833	28 207	1 374	-	1 374
Maintenance	20 195	22 045	1 850	-	1 850
Other Opex	11 996	17 365	5 369	(3 073)	2 296
Arrear Debt	-	12 774	12 774	(12 595)	178
Corporate Services (excl. EE benefits)	4 763	1 971	(2 792)	(74)	(2 866)
Other income	(1 173)	(3 914)	(2 742)	-	(2 742)
Less: Corporate Social Investment	(102)	0	102	-	102
Total Allowed Opex	**62 513**	**78 448**	**15 935**	**(15 742)**	**193**

7.3.3 Table 13 above captures the summary of Eskom's application for operating costs. The overall operating cost variance in is favour of Eskom. All elements of the operating costs, with the exception of Corporate Services and other income, illustrate variances in favour of Eskom.

7.3.4 Operating expenses were 25% higher than what was approved by NERSA before adjustments made by Eskom. The main drivers of this over expenditure is other operating costs followed by maintenance which will be scrutinised and checked for efficiency and prudency in the sections below

7.3.5 Even within the employee benefits category, the number of employees has decreased over the financial year. This is an area where further efficiencies have been achieved over the financial year. However, due to both the nature of the original employee benefit revenue decision as well as collective bargaining agreements over multiple years with Eskom's bargaining unit employees, the resulting employee benefits costs did not see a concomitant alignment. Maintenance variances in favour of Eskom were driven by primarily variances within the Generation and Transmission divisions. This will be discussed in the maintenance section below.

Employee Benefit Costs

Summary of the application

7.3.6 The employee benefit costs comprise direct remuneration (salary, pension, medical aid, bonus and overtime) and indirect remuneration

(training and development, remuneration of temporary and contract staff).

Table 14: Summary of employee costs

R'm	2023 Decision	Actual	Variance
Employee Costs	26 833	28 207	1 374

7.3.7 Within the employee benefits category, Eskom indicated that the number of employees had decreased over the financial year. This is an area where further efficiencies have been achieved over the financial year. However, due to both the nature of the original employee benefit revenue decision, as well as collective bargaining agreements over multiple years with Eskom's bargaining unit employees, the resulting employee benefit costs did not see a concomitant alignment.

NERSA Analysis

7.3.8 In FY2022/23, the Energy Regulator decided on an amount of R26,8bn to be allowed for employee costs for the three businesses, including cooperate services. NERSA has observed Eskom's performance under employee benefit costs as per Table 15 below for the past five years. The cost has increased by 8.75% when compared to the 2021/22FY. When comparing 2020/21FY actual costs with 2021/22 FY a decline in cost was realised.

Table 15: Costs per business

	Emplyee costs	Actual	Actual	Actual	Actual	Actual
	Years	2018/19	2019/20	2020/21	2021/22	2022/23
Busness	Generation R'm	9 873	10 283	10 705	10 595	11 792
	Transmission R'm	1 561	1 729	2 059	2 134	2 699
	Distribution R'm	10 799	11 317	11 481	11 268	11 606
	Total Emplyee cost	22 233	23 329	24 245	23 997	26 097
			4,93%	3,93%	-1,02%	8,75%

7.3.9 Table 16 below demonstrates the number of employees for each business, the contribution of each business to the total business and the percentage change when comparing the actual and application amounts. The number of employees has increased by 5% when compared to the 2021/22 FY.

Table 16: Number of employees per business

Staff Complement	Actual 2016/17	Actual 2017/18	Actual 2018/19	Actual 2019/20	Actual 2020/21	Actual 2021/22	Actual 2022/23
Generation	12 940	12 986	11 939	11 685	12 580	12 010	13 237
Transmission	2 169	2 182	2 111	2 084	2 523	1 851	3 077
Distribution	19 424	19 032	18 250	17 358	17 254	16 841	15 863
Total Headcount Exl Corporate	**34 533**	**34 200**	**32 300**	**31 127**	**32 357**	**30 702**	**32 177**
% increase/ drecrease		**-1%**	**-6%**	**-4%**	**4%**	**-5%**	**5%**

NERSA adjustments and reasons

7.3.10 Inflation adjustment has been used in line with the requirement of the methodology.

Approach/methodology used

7.3.11 Section 10.4.2 of the MYPD4 Methodology states that 'manpower costs should be allowed in accordance with the allowable revenue; any additional expenses over and above what was allowed will be at Eskom's expense, excluding inflationary charges.

7.3.12 As shown in Table 17 below, NERSA has decided to allow an amount of R28 207m for the 2022/23 FY as applied for by Eskom. There is therefore no need to allow for inflation adjustment, as the adjusted amount of R28 738m is above the applied for amount of R28 207m. The amount of R28 738m was adjusted by 7.1% actual inflation according to the Bureau for Economic Research (BER) as at March 2023. This is to align with the Methodology requirement that any additional expenses over and above what was allowed will be at Eskom's expense, excluding inflationary charges.

7.3.13 This is the approach adopted by NERSA in the 2021/22 RCA decision of 30 July 2023 where Eskom was only allowed inflationary adjustments inline with the requirements of the MYPD4 methodology.

Table 17: Employee costs decision based on inflation adjustment

Employee benefits costs(R'm)	Eskom Application(a)	NERSA Allowed(b)	NERSA allowed inflation adjuste	Variance between Eskom Application and NERSA decision	NERSA decision Inflation Adjusted
Inflation adjustment	28 207	26 833	28 738	-	28 207
Decision	1 374			-	1 374

Stakeholder comments

7.3.14 None

Conditions for approval

7.3.15 None

Maintenance Costs

Summary of the application

7.3.16 The RCA application for maintenance includes maintenance for generation, transmission and distribution and in total; the amount applied for is R1 850m to the benefit of Eskom, as shown in Table 18 below.

Table 18: Maintenance costs

Maintenance costs (R'm)	Decision FY2022	Actual FY2022	Variance
Generation	14 029	16 581	2 552
Transmission	982	1087	105
Distribution	5 184	4378	-806
Total	**20 195**	**22 045**	**1 850**

7.3.17 As usual, generation has the largest variance of R2 552m, as it was allowed R14 029m and its actual was R16 581m. Transmission has a variance of R105m; NERSA's decision was R982m, however the actual for transmission came to R1087m. Distribution maintenance costs came down, as its variance amounted to R802m to the benefit of the customer.

Generation

7.3.18 According to the applicant, the high generation maintenance costs are due to challenges faced by the generation fleet because it is old and was operating at performance levels [both for EAF as well as Energy Utilisation Factor (EUF)] in line with or exceeding the benchmark performance levels of the European-based VGB association of electricity plant operators.

7.3.19 Its three reasons for its inability to meet the country's electricity demand consistently that have led to load-shedding and high open-cycle gas turbine (OCGT) usage are:

- inadequate installed capacity nationwide – which is mainly due to the IPP programmes not materialising as planned;
- increased levels of EUF due to inadequate installed capacity nationwide and deferring maintenance outages; and
- insufficient funds to perform the required maintenance due to the sub-cost-reflective revenues.

7.3.20 The applicant claims that according to the international approach of measuring an entity's maintenance spend relative to the underlying assets' new replacement cost, it performs much better because of the benchmark measure advocated by leading maintenance bodies (including the Society of Maintenance Reliability Professionals in the United States) and being used by other maintenance intensive organisations in the local industry. This is because its generation maintenance replacement costs are lower than that of the benchmark.

7.3.21 Maintenance activities on the plant are also carried out to ensure that the plant is available and that continuous assessment of the plants are done to determine maintenance necessities. To ensure costs for maintenance are contained, targets are set, the scope is contained and it is ensured that contracts are set at market related prices.

Transmission

7.3.22 For transmission there is a maintenance cost variance of R105m, for the benefit of Eskom. This translates to 11% variance and is mainly due to higher expenditure with regard to line servitude and transformer maintenance. In the previous financial year, transmission did not do all maintenance due to contracts not being in place. Therefore, major catch-up maintenance had to be done and a general increase in maintenance expenditure was required.

Distribution

7.3.23 Distribution has a variance of R806m, for the benefit of the customer. This is the second financial year that distribution has underspent on

its budget. The reason mentioned is that the execution of maintenance was negatively impacted by the timeous conclusion of contracts and the availability of materials, as well as the cancellation of outages due to less load-shedding, theft, vandalism, and staff unavailability.

NERSA Analysis

7.3.24 Performance levels both for EAF as well as EUF are said to have been in line with or in exceedance of the international benchmark performance levels. If this is the case, there should not be a lack of maintenance, hence customers should not be expected to pay more for maintenance catch-up.

7.3.25 However, at the same time, the applicant uses the reason for higher maintenance as increased EUF and deferred maintenance outages. This is in contradiction with the reason discussed above. Eskom must provide the real reason for over expenditure.

7.3.26 It is understood that there is inadequate installed capacity nationwide, but increasing EUF will result in increased maintenance costs. However, if the EUF and EAF were in line with international benchmarks, then there should be room for maintenance instead of running units until break down, which is a costly maintenance philosophy.

7.3.27 The reasons provided for over-expenditure in transmission do not make sense, in that in the previous financial year, Eskom had to defer maintenance due to contracts that could not be placed because of procurement processes. Distribution reasons for returning funds is also understood due to procurement processes, however, this is the second year in a row, which means that it will soon find itself having to request funds for differed maintenance. Ensuring that maintenance is carried out timeously must be made a priority.

Approach/methodology used

7.3.28 Section 10.3 of the MYPD Methodology states that:

Costs related to Operation and Maintenance (O&M) will be allowed. The reasonableness of such expenses will be determined by the Energy Regulator on a case-by-case basis.

7.3.29 Section 10.4.3 states that:

Expenses must be incurred in the normal operations and supply of electricity, including an acceptable level of repairs and maintenance costs.

7.3.30 NERSA uses these two clauses from the MYPD Methodology for the reasons stated below.

NERSA adjustments and reasons

7.3.31 The maintenance costs for generation and transmission are higher, but not unreasonably high. However, there is still room for improvements of the reliability of the plants and the EAF. Therefore, further maintenance costs for generation and transmission are allowed in order to improve or maintain a better level of maintenance that will ensure that plant maintenance is not deferred.

7.3.32 Table 19 below indicates the decision for the RCA for FY 2023.

Table 19: Maintenance decision RCA FY 2023

Maintenance costs (R'm)	Decision FY2022	Actual FY2022	Variance	RCA Adjustment	RCA FY2023
Generation	14 029	16 581	2 552	0	2552
Transmission	982	1087	105	0	105
Distribution	5 184	4378	-806	0	-806
Total	**20 195**	**22 045**	**1 850**	**0**	**1851**

Other Costs Section

Summary of the application

7.3.33 Operating costs include all costs involved in the day-to-day running of the business. The Licensee's operating costs have taken into account the importance of driving cost curtailment in line with the turnaround plan to reduce Eskom's cost base. These initiatives are expected to contribute to Eskom's overall financial sustainability.

7.3.34 Eskom is applying for other costs variance of R2 296m, as shown in Table 20 below. This amount includes the three regulated businesses, namely Generation, Transmission and Distribution.

Table 20: Other costs

Other Costs(R'm)	Decision FY 2023	Actual FY 2023	Variance	Variance	RCA Adjustment	RCA FY 2023
Other Costs	11 996	17 365	5 369	5 369	3 073	2 296
Total	**11 996**	**17 365**	5 369	5 369	3 073	2 296

Source: Eskom application

Generation Business

Contractor costs

7.3.35 The appointment of contractors is governed in terms of the Eskom Procurement Procedure and must comply with the constitutional requirements of section 217. The full details are outlined below.

7.3.36 When an organ of state in the national, provincial, or local sphere of government, or any other institution identified in national legislation, contracts for goods or services, it must do so in accordance with a system that is fair, equitable, transparent, competitive and cost-effective.

7.3.37 In compliance with this constitutional imperative and other applicable supplementary legislation, Eskom has put in place a procurement process that is fair and equitable when procuring goods, works and services, including contractors.

7.3.38 The process is governed by various policies and procedures, the overarching procedure being the 'Eskom Procurement and Supply Chain Management Procedure'. It provides detailed instructions/guidance to be followed when undertaking any procurement and/or supply chain management processes.

Internal Electricity Revenue Consumption

7.3.39 Where a generating unit is technically available but not required by the System Operator (SO) to produce electricity, it is considered to be in cold reserve. A unit that has been shut down or placed on standby for cold reserve, needs its auxiliaries to still run for lubrication purposes, so that the unit's equipment does not get rusty. The station

has been designed in a such a way that when a unit is off/shut down, it is able to draw the power/electricity from the other running unit, or in a case where all the units at a station are off, it is able to draw power/electricity from the grid so that auxiliaries can still run.

Net Insurance Expense

7.3.40 Maintenance and asset renewal are good measures to treat the risk of failures due to an ageing plant. The net insurance expense could increase, considering the ageing generation fleet and postponed maintenance activities, as these increase plant risk.

7.3.41 Considering the severely constrained system (capacity and financial), Eskom cannot execute all the outages required to significantly improve the plant condition and, thus, performance. Eskom utilises a capacity planning process that optimises the planned outages continually based on the prevailing constraints and outage priority.

7.3.42 All statutory maintenance required in the 12-month planning period is accommodated in the plan. Due to the capacity constraints, this leaves little to no room to move, extend or add outages, or accommodate outage delays or major incidents/events. Outage delays on certain large machines can result in significant pressure on the system, and ultimately result in higher levels of load-shedding.

Operating Lease, Consulting and Travel Costs

7.3.43 Travel expenses include local and international business travel undertaken by employees for the operational course of business, or to attend training or meetings on behalf of Eskom.

Fleet Management Services (FMS)

7.3.44 The Fleet Management Services is a single, centrally managed entity within the Eskom Shared Services Division that takes ownership of the total Eskom Fleet and integrates the total fleet management process within Eskom Holdings Ltd. Fleet Management Services operates on a break-even basis and recovers costs from clients (i.e. users).

Environmental Expenses

7.3.45 This relates to costs incurred in cleaning up the environment, waste management and removal, emptying and removal of bins from site and monthly analysis of water and effluent.

Transmission Business

7.3.46 Transmission continues to embark and promote operational cost efficiencies. Other operating costs are fixed in nature, therefore increases are due to inflation. In FY2023, operating costs (excluding abnormal costs) were 28% less than in the MYPD5 application, largely owing to travel and fleet expenses as well as insurance and telecommunication costs.

Fleet and Travel

7.3.47 This includes both the local and international business travel undertaken by employees for the operational course of the business, as well as to attend training and meetings on behalf of Eskom. There has been a considerable decrease in travel expenses due to a high number of business engagements and meetings being conducted via virtual platforms.

7.3.48 Furthermore, the decrease in expenditure is due to the classification of most fleet costs as maintenance expenses. Transmission vehicle fleet is almost exclusively used by employees to access different sites for plant maintenance and repairs.

Facilities

7.3.49 These costs are to service and maintain buildings and facilities. The costs incurred are for rates and taxes, municipal services, maintenance, repairs, cleaning services and related items. The transfer of properties from Eskom Real Estate to line division has contributed to increase of facility related costs such as municipal rates and taxes.

Leases

7.3.50 This is primarily for the rental of office space, aircraft hangars and storage areas where Eskom does not own sufficient facilities, as well as for telecommunication infrastructure site sharing.

Information Technology (IT) expenses

7.3.51 Information Technology (IT) expenses are mostly driven by the number of users and the number of applications used. Charges associated with infrastructure services; end-user computing and help desk services are based on the monthly quantities of the various service items included in the contracts. Software annual licencing and support costs are charged proportionally based on the number of personal computer users.

Distribution Business

7.3.52 The increases in the other costs are linked to inflation and fixed in nature. Where possible, the licensee has implemented cost saving measures while improving operating efficiencies.

7.3.53 Distribution other operating cost drivers are as follows.

Insurance cost

7.3.54 The business must ensure that there is adequate insurance cover in place to manage its increasing asset base and exposure against insurable incidents such as natural occurrences, theft, vandalism and public liability claims. The market prices for the premium are hugely driven by replacement cost of assets and past claims history. Insurance covers risk beyond the maximum tolerance levels for the business.

Security cost

7.3.55 Many of the Distribution sites are designated national key points. These assets and people must be safely guarded according to the legislation. There has been an increase in theft and vandalism of equipment, which warrants the need to safeguard assets for continuity of operations. Security related activities are preventative in nature to safeguard assets, property and employees.

Information technology costs

7.3.56 Information management systems are key to the current and future business operations to support improvement in efficiency, productivity and decision making. The vastness and complexity of network infra-structure requires a number of integrated management systems for network management, outages, dispatching and customer interface and interaction. The information systems enable optimal and efficient network operating, optimal customer billing and revenue collection. The changing customer needs necessitate investment in digital platforms, which require continued maintenance to support delivery of the desired customer experience and service delivery.

Fleet and travel cost

7.3.57 The Distribution network infrastructure footprint is across South Africa mainly in deep rural areas. Employees are required to extensively travel to provide a service to all customers. This involves operating, maintaining and repairing networks to comply with regulatory and service standards. Key to the cost is employee recoveries of travel costs for business related activities and associated subsistence allowances. The employees are reimbursed at the SARS travel rates and the Eskom policy aligned to National Treasury Directive on cost containment.

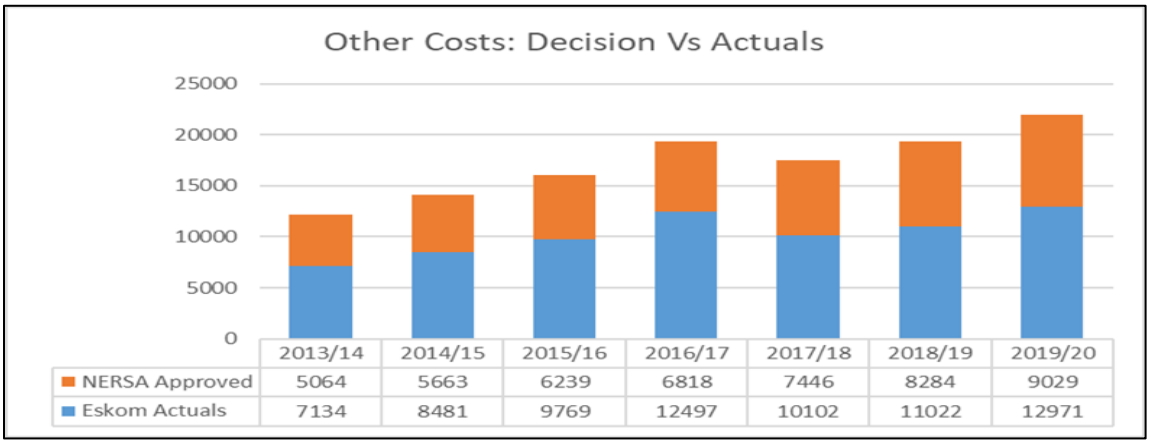
Facility cost

7.3.58 The geographical customer spread across the country, accessibility, convenience to the customer and the business value proposition to meet customer expectations required the establishment and maintenance of customer network centres, hubs and local offices in close proximity to the customer locations. These properties are either owned or leased and the business carries all associated service costs. The driver of the facility cost relates to rentals, water, electricity, rates, taxes and maintenance.

NERSA Analysis

7.3.59 Figure 4 below shows that Eskom's expenditure is not in line with NERSA's decision. It is evident that from FY2013/14 to FY2019/20,

Eskom consistently spent more than the NERSA decision. Eskom states that the reason for the over-expenditure is that NERSA's decision could not be considered as a base, because Eskom's business model was not taken into
account. However, NERSA considers all elements when assessing the application before the final determination is made.



	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
NERSA Approved	5064	5663	6239	6818	7446	8284	9029
Eskom Actuals	7134	8481	9769	12497	10102	11022	12971

Figure 4: Operating actual costs compared to NERSA's decisions

Approach/methodology used

7.3.60 Section 10.4.8 of the Methodology states that other expenses that are not related to the core business of supplying electricity will also be disallowed, and section 10.4.10 further states that other expenses referred to under other costs must be unbundled.

7.3.61 There was no deviation from the Methodology.

Stakeholder comments

7.3.62 No comments were raised by the stakeholders.

NERSA adjustment and reasons

7.3.63 The Licensee has implemented cost-saving measures, while improving operating efficiencies. Therefore, what they are applying for is allowed, as per Table 21 below. The expenditure has been verified through the annual financial statements (AFSs) and regulatory financial reports (RFRs).

Table 21: NERSA final decision – other costs

Other Costs(R'm)	NERSA 2022/23 decision	Eskom actual 2021/22	Variance	Eskom Adjustment	NERSA Adjustment	NERSA decision
Other Costs	11 996	17 365	5 369	- 3 073	-	2 296
Total	11 996	17 365	5 369	- 3 073	-	2 296

Arrear Debt

Summary of the application

7.3.64 Arrear debt is the amount accrued from the date on which the first payment was due. Eskom has applied for a variance of R178m in the financial year under consideration, as seen in Table 21 below. Eskom indicated that the R178m arrear debt applied for relates to Southern African Energy (SAE) and that this amount was not expressly excluded and/or the decision was not made by NERSA in the MYPD5 revenue application.

Table 22: Arrear Debt

Arrear debt calculation	Decision FY2023	Actual FY2023	RCA FY2023
Electricity revenue	250 452	273 276	
Less: Revenue from international customers	8 799	10 587	
Less: Load shedding (1605 GWh @ 133.64 average c/kWh)	-	19 740	
Revenue from local customers	241 653	242 949	
Arrear debt	-	-	-
Arrear debt allowed in FY2023 decision expressed as a % of allowed revenue from local customers	*0.00%*		
SAE arrear debt	-	178	178
Total RCA claim	-	178	178

Source: Eskom Application, pg. 142

7.3.65 SAE is an electricity trader in the Southern African Development Community (SADC) and acts as Eskom's interface in the region. It manages the cross-border trading portfolio (electricity imports and exports), both long-term and short-term, including the Southern African Power Pool (SAPP) markets with the aim of ensuring that Eskom's position is protected and maximised, and that all associated risks are appropriately treated.

7.3.66 Eskom further indicated that it considered the NERSA MYPD5 decision, which disallowed arrear debt and did not include the actual arrear debt of R12 774m in the RCA application.

NERSA Analysis

7.3.67 In the past years, NERSA has been implementing a 0.5% allowance as a provision for arrear debt. This means that the Energy Regulator expects Eskom to have a 99.95% revenue collection rate, which is considered reasonable.

7.3.68 Eskom has struggled to collect 99.95% of its revenue from its customers in the past, however, in this RCA application, Eskom is applying for arrear debt for the benefit of Eskom.

NERSA adjustments and reasons

7.3.69 In the MYPD5 Y1 revenue application, Eskom did not indicate that the application included SAE but rather, the application was split by Municipal debt, Soweto debt, Large Power Users, Small Power Users and Top Customers.

7.3.70 In its determination for 2022/23 Eskom's revenues NESRA had indicate he following under paragraph 8.6.108 " In the NERSA revenue decision for FY2023, no allowance was made for arrear debt on the basis that paying customers should not be burdened by debt not recovered by Eskom. For this application, Eskom, indicated that it is adopting the NERSA decision for the FY2023 and thus, resolved to not include any arrear debts in the updated submission. NERSA is in agreement with this Eskom approach" .

7.3.71 Considering the above, in its decision to disallow arrear debt, NERSA could not expressly exclude and/or make a decision relating to the SAE arrear debt as NERSA was not furnished with the relevant information.

7.3.72 Therefore, NERSA disallows the applied arrear debt for the following reasons:

a) Paying customers will be penalised for the sins of non-paying customers if this is allowed.
b) Efficiency and effectiveness with regard to debt collection will not be promoted by allowing this amount.
c) Lastly, Eskom indicated that it has procedures in place to minimise the impact of non-payment. By allowing this amount, Eskom will

not have to face the normal challenges that a business faces in respect of bad debts.

7.3.73 NERSA disallows the variance of R178m as illustrated in Table 23 below

Table 23: Arrear debt decision

	Eskom Application R'm	NERSA Adjustment	NERSA Decision
Arrear Debt	178	-178	0
Total	**178**	**-178**	**0**

Other Income

Summary of the application

Table 24: Eskom Other Income

Other Income	Decision FY2023	Actual FY2023	Variance
Generation	(427)	(2 875)	(2 448)
Transmission	(107)	(150)	(43)
Distribution	(509)	(890)	(381)
Corporate services[1]	(130)	-	130
Total	**(1 173)**	**(3 914)**	**(2 741)**

7.3.74 In the course of Eskom's operations in FY2023, Eskom generated total other income of R3914m, which is shown in Table 24 above.

NERSA Analysis

7.3.75 Eskom could not have reasonably estimated such additional revenue at the time of the application, as other income value per the application was done based on historical trends. Other income is difficult to forecast with any reasonable degree of accuracy.

7.3.76 Other income for Generation was mainly due to proceeds from insurance.

7.3.77 Under the Transmission division, other income was R150m compared to the NERSA determination of R107m. The main reason for the variance is insurance proceeds, which are not planned, as the pay-outs on insurance claims cannot be determined upfront. Another

reason was less sundry income, mainly due to termination of customer contracts (Broadband Infraco) owing to non-payment of long-overdue debt.

7.3.78 Under the Distribution division, other income is R381m higher than the decision of R509m. The highest contributor to other income is Insurance Proceeds/Recoveries, resulting from more insurance work due to adverse weather conditions. Reconnection fees has been reclassified as other revenue.

Corporate Services

Summary of the application

7.3.79 Table 25 below shows that the three major categories of NERSA's determination for the Corporate Division comprised a determination of R3 560m on employee benefits, R3 969m on operating costs and depreciation of R292m, which totals to R7 821m. This, contrasted against the actual spend for the year under review of R4 332m (which includes net impairments), reflects a R3 489m negative variance.

Table 25: Corporate Services Operating costs

Operating costs (R'm)	Decision FY2023	Actual FY2023	Variance	RCA adjustments	RCA FY2023
Employee benefits	3 560	2 069	(1 491)	-	(1 491)
Maintenance		-	-	-	-
Other Opex	3 969	2 071	(1 898)	(74)	(1 971)
Arrear debt	-	-	-	-	-
Other income	(130)	(460)	(330)	-	(330)
Depreciation	292	192	(100)	-	(100)
Total	**7 691**	**3 873**	**(3 818)**	**(74)**	**(3 892)**
Add: Net finance costs	632	167	(465)	-	(465)
Total Corporate costs (incl EB costs)	**8 323**	**4 039**	**(4 284)**	**(74)**	**(4 357)**
Less: other income	(130)	-	130	-	130
Less: Corporate social investments	(102)	-	102	-	102
Total operating costs	**8 091**	**4 039**	**(4 052)**	**(74)**	**(4 125)**

7.3.80 In preparation for the divisionalisation or ring-fencing of Eskom, some of the operational level services that formed part of the approved spend, have been relinked to the line divisions, namely Generation, Transmission and Distribution. Group Technology has been relinked from a central corporate role to Generation. Hence all costs associated with these services now reside within the relevant line division.

7.3.81 Services including finance, security, procurement, fleet services and revenue management within the remaining corporate functions, which are considered to be better managed within the licensees, have also been relinked.

Corporate Employee Benefit Costs

7.3.82 The NERSA determination on employee benefits is based on Eskom's applied application employee costs and manpower. Table 26 below illustrates the actuals in comparison to the NERSA decision.

Table 26: Corporate Employee benefit costs

Corporate Employee costs	Decision FY2023	Actual FY2023	Variance
Employee Costs (R'm)	3 560	2 069	(1 491)
Employee number	2 868	2 242	(626)

NERSA Analysis

7.3.83 The year-end actual employee number of 2 242 is 626 employees less than the determination. This is mainly due to the higher staff turnover and the challenge with respect to attracting suitably qualified staff.

7.3.84 Employee benefit cost has a variance of R1 491m for the benefit of the consumer. This is due, in part, due to the same reason stated above. Group IT has a variance (R161m) in favour of the consumer due to lower annual increases to employees, lower staff complement, and stricter control on overtime. Procurement & Supply Chain Management Department, Strategic functions and Group Financial controller have a variance of R119m, R307m and R365m, respectively, also in favour of the consumer, mainly due to high staff turnover and the inability to attract suitably qualified staff.

7.3.85 There has also been a re-determination of the pension benefit obligation with respect to the whole organisation that resulted in a variance of R484m for the benefit of Eskom.

Corporate Other Opex

7.3.86 Other operating expenses has a variance of R1 898m. The variance is due mainly to the following.

7.3.87 Group Finance Controller has a variance of R1 424m in favour of the consumer due to a significant reduction in consulting fees and travelling. Certain short- to medium-term strategic initiatives being placed on hold or abandoned resulted in a variance of R198m in favour of the consumer.

7.3.88 There was less travelling post COVID-19, as well as savings achieved through a deliberate savings drive throughout corporate services (R276m).

7.3.89 Finance income had a variance of R445m in favour of the consumer. R700m is finance income not allocated to the other divisions in actual mode compared to the application, net off by an unfavourable R211m resulting from a pension fund actuarial revaluation.

Corporate Other Income

7.3.90 Planned income had a variance of R330m primarily due to unexpected dividends from Montraco (R160m) and management fee income from Eskom Finance Company (EFC), resulting a favourable variance of R170m.

Approach/Methodology used

7.3.91 The Methodology under section 10.4.2 states that ‘manpower costs should be allowed in accordance with the allowable revenue; any additional expenses over and above what was allowed will be at Eskom’s expense, excluding inflationary charges’.

7.3.92 Furthermore, section 10.3 of the Methodology states that costs related to Operation and Maintenance (O&M) will be allowed. The reasonableness of such expenses will be determined by the Energy Regulator on a case-by-case basis.

7.3.93 There was no deviation from the Methodology.

7.3.94 Table 27 below provides a summary of the operating costs decision.

Table 27: Overall Operating Costs Decision

R'm	Eskom Application RCA 2023	NERSA Adjustment	NERSA Decision
Employee Benefit Cost	1374	0	1374
Maintenance	1850	0	1850
Other Opex	2296	0	2296
Arrear Debt	178	-178	0
Corporate Services	-2866	0	-2866
Other Income	-2742	0	-2742
Less IDM, R&D and corporate social investment	102	0	102
Operating costs Excl IDM	**192**	**-178**	**14**

7.4 Depreciation

Summary of the application

7.4.1 Eskom is applying for a depreciation variance amounting to R2 830m in its favour. The positive variance is due to higher than anticipated transfer of assets to commercial operations in Generation, in as much as Transmission and Distribution recorded lower than anticipated depreciation, as shown in Table 32 below.

Table 28: Depreciation

Depreciation	Decision (2023 FY)	Actual (2023 FY)	Variance
Fixed assets – DRC Values	41 642	41 642	0
Fixed assets – Transfers to CO	980	3 878	2 898
New Investments (Asset purchases)	445	503	58
Assets funded by customers upfront	(746)	(872)	(126)
Total	**42 321**	**45 151**	**2 830**

7.4.2 In the 2022/23 financial year determination, Eskom applied for a total regulated depreciation of R45 151m which was mainly on fixed assets, mostly for Eskom Generation. Eskom also applied for depreciation from transfers to commercial operation of R3 878m,

new investment (asset purchases) of R503m and finally a reduction of R872m from assets funded upfront by customers.

Analysis of the application

7.4.3 NERSA had determined and anticipated that no (R0m) transfers to commercial operation in Generation would occur in the financial year under review. However, Eskom transferred a net amount of R29 242m to its RAB, which came mainly from Generation (R41 613m). Both Transmission and Distribution's transfer to commercial operation recorded an amount of R5 204m and was lower than the decision of R18 333m. The negative variance was R13 129m.

The approach/methodology

7.4.4 Section 17.2.6 of the MYPD4 Methodology, as detailed in the paragraph above, provides the RCA process. Section 9.2 of the MYPD4 Methodology, which references the basis of valuation of the RAB, was used in the analysis and adjustments of the regulatory assets base. Section 9.2.1 states:

Policy position 1 (a) of the Electricity Pricing Policy (Electricity Pricing Policy GN 1398 of 19 December 2008) states that: The revenue requirement for a regulated licensee must be set at a level which covers the full cost of production, including a reasonable risk adjusted margin or return on appropriate asset values. The regulator, after consultation with stakeholders, must adopt an asset valuation methodology that accurately reflects the replacement value of those assets such as to allow the electricity licensee to obtain reasonably priced funding for investment; to meet Government defined economic growth. In addition, the regulatory methodology should anticipate investment cycles and other cost trends to prevent unreasonable price volatility and shocks while ensuring financial; viability, continuity, fundability and stability over the short, medium and long term assuming an efficient and prudent operator."

Adjustments and Reasons

7.4.5

7.4.6 Table 29 below shows the depreciation adjustments for Eskom's 2023 FY. Section 9.3.1 on regulatory depreciation and return on the RAB provides the regulatory mechanisms under which capital investment costs are recovered on a cost-reflective basis over the

course of its economic/regulatory economic life. Section 9.3.2 states 'In line with the EPP, full cost reflectivity with respect to depreciation and return on assets cost recovery will be implemented over a reasonable period to allow Eskom reasonably priced funding for investment'.

Table 29: Depreciation decision

Depreciation	Decision (2023 FY)	Actual (2023 FY)	NERSA Adjustment(s)	Variance	NERSA RCA Decision
Fixed assets – DRC Values	41 642	41 642	0	0	0
Fixed assets – Transfers to CO	980	3 878	0	2 898	2 898
New Investments (Asset purchases)	445	503	0	58	58
Assets funded by customers upfront	(746)	(872)	0	(126)	(126)
Total	**42 321**	**45 151**	**0**	**2 830**	**2 830**

7.4.7 It is therefore NERSA's decision to grant Eskom the R2 380m RCA balance for depreciation for the 2022/23 financial year. A variance in corporate depreciation for the benefit of the consumer of R100m is primarily due to delays in capital project execution resulting in delays in transferring planned assets under construction to commercial operation.

7.5 Primary Energy

Summary of the application

7.5.1 Primary energy is one of the key areas of the FY2022/23 RCA application, with a total RCA amount of R19 016m in favour of Eskom, as shown in Table 15 below. Primary Energy (PE) was overspent on by approximately 25% of what was approved by NERSA. This is a high variance and will require that the actual costs be scrutinised for efficiency to ensure that Eskom incurred PE costs prudently before these can be allowed.

7.5.2 The main driver of the high cost of PE is OCGT fuel cost, which was overspent on by nearly 470%, amounting to a variance of R17 602m, followed by start-up oil and gas, overspent on by 140%, amounting to a variance of R5 121m. Of note is also international purchases, which were over-purchased by 41%.

7.5.3 A variance of R19 556m in favour of Eskom is summarily applied for under primary energy, which excludes variances in environmental levy, IPPs and international purchases, as shown in Table 30 below. When IPPs, international purchase, carbon tax and environmental levy are added, the variance applied for is R19 016m.

Table 30: Total primary energy comparison and RCA

Primary Energy (R'm)	Decision FY2023	Actual FY2023	Variance	RCA Adjustment	RCA
Coal usage	65 151	63 069	(2 082)	12	(2 070)
Water usage	3 138	2 332	(806)	-	(806)
Fuel procurement service	288	274	(14)	-	(14)
Coal handling	2 408	2 293	(115)	-	(115)
Water treatment	610	669	59	-	59
Sorbent usage & Handling	279	192	(87)	-	(87)
Gas and oil (coal fired start-up)	3 686	8 807	5 121	-	5 121
Nuclear	751	674	(77)	-	(77)
Coal and gas (Gas-fired)	10	7	(3)	-	(3)
OCGT fuel cost	3 753	21 355	17 602	-	17 602
Demand Response (DR)	381	298	(83)	-	(83)
Demand Response - power alert	40	59	19	0	19
International Purchases (Dx)	-	12	12	-	12
Other	1	(2)	(3)	-	(3)
Primary Energy	**80 496**	**100 040**	**19 544**	**12**	**19 556**
Independent Power Producers (IPPs)	**43 130**	**43 534**	404	-	404
International Purchases (SAE)	4 589	6 459	1 870	-	1 870
Environmental levy	7 132	7 033	(99)	-	(99)
Carbon tax	2 714	-	(2 714)	-	(2 714)
Total primary energy	**138 061**	**157 066**	**19 005**	**12**	**19 016**

Coal burn RCA variances

Summary of the application

7.5.4 The total coal burn costs variance amount to R 2 082m in favour of customers. The total amount of coal burnt compared to the MYPD5 revenue decision per contract type is depicted in

7.5.5 Table **31** below.

Table 31: Coal burn RCA variances breakdown

Coal Burn (R'm)	Decision FY2023	Actuals FY2023	Variance
Cost Plus	19 918	19 585	(333)
Fixed Price	16 708	17 103	395
Medium Term	28 525	26 381	(2 144)
Total Coal Burn Cost	**65 151**	**63 069**	**(2 082)**

7.5.6 Eskom indicated that coal burn costs and volumes are derived from coal purchases. The coal purchases as per the revenue application are compared to the actual FY2023 coal purchases. Total coal purchases volumes were 4 232 kiloton (kt) less than what was assumed in the Eskom application. The lower volumes were due mainly to lower energy sales from the Eskom fleet. The volumes on the short term (ST)/medium term (MT) purchases were 14% lower, with the ST/MT purchase cost also being 14% lower.

7.5.7 The coal burn performance, variances and attributed reasons for the FY2023 are as follows:

i. The coal-fired power stations generated approximately 1 552 GWh (including pre-commissioning energy) less than what was assumed in the Production Plan during application stage.
ii. The R/ton coal price was 11% lower, on average, than the price in the application, as a result of the mix of coal purchases between the contract types. The lower Fixed Price R/ton were offset partially by higher prices on the Cost-Plus purchases. The average price Eskom pays for coal is determined by the volume of coal procured from each type of contract (Cost-Plus, Fixed-Price and ST/MT) and the price of coal from each type of contract.
iii. The Cost-Plus mines provided approximately 34% of the coal procured against the assumption in the application of 32%. The volume of coal purchased was 62 kt higher than the volumes assumed at the application stage. The total spend was R 3 744m lower and the average R/ton was R114/ton lower.
iv. The Long-Term fixed contracts sourced approximately 30% of coal procured against an assumption of 28%. The volume of coal purchased was 1 505 kt more than what had been assumed. The total spend was R2 682m lower and the average R/ton was R123/ton lower.
v. The ST/MT contracts supplied approximately 36% of the coal procured against the assumption of 40%. The volume of coal purchased was 5 799 kt less than what had been assumed. The total spend was R4 076m lower, and the average R/ton was marginally lower than expected, i.e. R3/ton.

NERSA Analysis

7.5.8 As per the FY2023 RCA Reasons for Decision, the sourcing of more coal from the Cost-Plus and Long-Term fixed contracts is welcome, as these contracts are cheaper than the short-term and medium-term contracts. The use of less ST/MT contracts versus the plan is also

welcome, as these contracts are more expensive, which indicates that less coal is being purchased at spot price.

Coal transport

7.5.9 Transportation of coal via conveyor belts remain the cheapest mode of transport. Cost-Plus and Fixed-Price mines use this method and are located close to the Eskom power stations. The transportation of less coal by means of road is welcome, as this mode of transport tends to be expensive. The least used transportation mode is rail. Rail use is significantly less, which is concerning. Not all suppliers have access to a rail facility; hence, these contracts resort to the use of road.

7.5.10 According to

7.5.11 Table **32** below, most of the coal was acquired on Long-Term fixed contracts and 1 567 kt more coal was transported via conveyor transport mode. The least coal was acquired on ST/MT contracts and 5 190 kt less coal was transported via rail as a result of Transnet Freight Rail's lack of capacity.

Table 32: Coal transported (kt)

Transport mode	Application FY2023	Decision FY2023	Actual FY2023	Difference (Actual - Application)
Conveyor	61 590	No breakdown in RfD	63 157	1 567
Rail	7 678		2 487	(5 190)
Road	33 379		32 771	(608)
Total	**102 647**		**98 415**	**(4 232)**

7.5.12 The total volume of coal transported was 4 232 kt less than assumed in the Eskom application. The lower volume was mainly due to lower sales. Purchases were lower on the Cost-Plus and Medium-Term contracts.

Coal qualities

7.5.13 Eskom concludes that coal quality has improved at most of the coal-fired power stations, which has resulted in minimum coal-related Other Capability Loss Factor (OCLF) at Kriel, Tutuka, Kendal, Arnot and Grootvlei.

7.5.14 Eskom also observed that enormous pressure has been put on coal-fired power stations to meet the demand during the FY2023, where 2 588 kt more coal volumes were burnt, yet the anticipated

generation was 1 552 GWh less than assumed in the Eskom application.

7.5.15 Therefore, NERSA concludes that there are still inefficiencies in the system. This is as a result of boilers' reduced efficiency over the years and can be attributed to the poor quality of maintenance and poor quality of coal used. The consequence of the deteriorating efficiency is that more coal is required to produce a unit of electricity. This phenomenon is illustrated in

7.5.16 Table **33** below.

Table 33: Approved vs actual coal burn rate

NERSA approved Energy 2023 (GWh)	NERSA approved coal burn 2023 (Mt)	Burn Rate (kg/kwh)	Eskom Actual Energy 2023 (GWh)	Eskom Actual coal burn 2023 (Mt)	Burn Rate (kg/kwh)	Burn Rate difference (%)
178	103	0,578651	171	102	0,596491	3,08%

7.5.17 NERSA approved 178 GWh of electricity to be produced from coal-fired power stations, with 103 Mt of coal. This translates to a burn rate of 0.58 kg/kWh. However, 171 GWh of electricity was produced with 102 Mt of coal, which translates to a burn rate of 0.59 kg/kWh. This is an increase of 3% in the amount of coal burnt to produce a unit of electricity.

7.5.18 During the FY2021/22, the burn rate difference was approximately 6% and the reduction observed the FY2022/23 is welcomed. It confirms that the strategies employed are yielding results.

7.5.19 The issue is not what coal South Africa has, but what coal Eskom chooses to buy and use. Eskom has purchased coal containing 1.5% sulphur from the Exxaro-Grootegeluk mine, which is well above the specified limit of 1.3% sulphur. Although the higher sulphur content will not affect the boilers negatively, production will have to be limited to avoid environmental impact.

7.5.20 Other aspects of coal quality have previously come to light, with reports that some of the coal supplied to Eskom had even been mixed with sand and rocks to increase the weight of what is sold. The fact that such sub-standard products manage to make it into Eskom's boilers reveals a management lapse on Eskom's side.

Coal stock

7.5.21 The closing stock days were 65 for the coal-fired power stations, except Medupi and Kusile, which declined to 29 days. NERSA's view is that the stock levels are acceptable, as it is maintained above the grid code target of 20 days. However, Eskom must take cognisance of the coal handling costs, as these are likely to increase.

Approach/methodology used

7.5.22 The MYPD Methodology states that the Energy Regulator will approve the coal benchmark price (i.e. average R/ton) per contract type (cost-plus, fixed-price, medium-term and short-term) and Alpha for each contract type in the final MYPD decision (MYPD Methodology, paragraph 12.2.1).

7.5.23 The Energy Regulator determines the coal benchmark price to be used in comparison with the actual coal cost for determining pass-through costs. The coal benchmark price will be compared to Eskom's actual cost of coal burn (R/ton) using a Performance-Based Regulation (PBR) formula. The PBR formula is the maximum amount to be allowed for pass-through, calculated by applying the following formula per contract type:

PBR cost (Rand) = (Alpha x Actual Unit Cost of Coal Burn + (1 – Alpha) x Coal Burn Benchmark price) X Actual Coal Burn Volume.

NERSA adjustments and reasons

7.5.24 The variance that Eskom is applying for is R2 070m favour of customers. Eskom highlighted in its application that it used more coal from cost-plus and long-term mines, which meant that less coal from short-term and medium-term contracts was used. This move is welcomed, as coal costs from short-term contracts tend to come at a higher price. NERSA has been encouraging Eskom to go this route over the years.

7.5.25 As it is demonstrated that Eskom is taking the recommendation made by NERSA into account and making decisions that result in reduced spend for the benefit of the customer, no adjustment is being made to the Eskom application. The variance is therefore allowed as applied, as set out in Table 34 below.

Table 34:Coal RCA decision

Primary Energy	Decision FY23	Actual FY23	Variance	RCA Adjustments	RCA FY23	NERSA RCA Adjustments	NERSA RCA Decision
Coal	65 151	63 069	-2 082	12	-2 070	0	-2070

Stakeholder comments

7.5.26 No stakeholder comments were received.

Other Primary Energy
Water usage costs
Summary of the application

7.5.27 NERSA granted Eskom R3 138m for water costs in the FY2022/23 revenue determination. The actual expenditure is R2 332m, resulting in under-expenditure of R806m for the benefit of the costumer when compared to the NERSA decision. Table 35 below breaks down the costs associated with water usage.

Table 35: Components of water usage costs (R'm)

Water Cost (R'm)	Decision FY2023	Actual FY2023	Variance
Total Generation water cost	3138	2332	806

NERSA Analysis

7.5.28 According to the MYPD5 determination it was envisaged that water-related costs would increase by 6% to 8%. However, the costs increased at a lower rate than envisaged. The components of the water related cost such as Capital Unit charge on the Moloko Crocodile Water Augmentation Project (MCWAP), Vaal River Transfer and the pumping cost were lower than expected.

7.5.29 The largest contribution to the variance is due to amortisation operations and maintenance, waste discharge charge and operational risk transfers. The amortisation adjustment was a result of the external auditor's recommendation that water assets be reclassified from Future Fuel to Fixed Assets.

7.5.30 This recommendation proved to be effective even while the water consumption per unit was high at 1.39litres/kWh at coal-fired power stations compared to the approved amount of 1.34litres/kWh per unit in the MYPD5 determination.

7.5.31 This variance, which is in favour of customers, can be further attributed to usage of water for Flue-Gas Desulfurization (FGD). It was anticipated that both Kusile and Medupi would use water for FGD, however FGD was not implemented in Medupi.

7.5.32 Although the coal-fired stations produced less energy than assumed in the production plan, actual water consumption per unit of electricity was higher at most stations than was assumed, resulting in a total increase in water used.

7.5.33 The overall water performance at coal-fired power stations for FY2023 was 1.39 l/uso. The stations consumed 28 287 million litres more than expected, despite generating fewer energy volumes. Ageing water infrastructure and lower production at dry cooled stations such as Kendal, Majuba, and Kusile Power Stations, resulted in the rate of consumption being higher.

Approach/methodology used

7.5.34 The pass-through of prudently incurred primary energy costs was allowed as per section 12 of the Methodology.

7.5.35 Section 12.8 of the MYPD Methodology states that:

12.8.1 Eskom must:

12.8.1.1 determine the costs per station for the water to be procured and highlight the amounts of water that will be designated for each process per plant;

12.8.1.2 demonstrate (detailed calculation) how the costs were determined; and

12.8.1.3 provide the assumption considered when determining the costs.

NERSA adjustments and reasons

7.5.36 As shown in Table 36 below, NERSA granted Eskom R3 138m for water costs in FY2021/22. The actual expenditure was R2 332m, resulting in a variance of R806m for the benefit of consumers. No further adjustments have been made by NERSA.

Table 36: Water costs

Revenue Variance R'm	NERSA MYPD5 Decision	Actual FY2023	Variance	Adjustment	NERSA Decision
Water Cost	3138	2332	806	0	806

Stakeholder comments

7.5.37 No stakeholders' comments were received.

Fuel procurement

Summary of the application

7.5.38 These expenses are incurred to run the Primary Energy Procurement department, apart from decommissioning and rehabilitating mines, the remaining costs are for manpower. Manpower includes sourcing, technical, environmental, and operational staff who manage coal purchase and supply from source to destination. Fuel procurement expenditures are listed separately from Generation's operational expenditure.

7.5.39 In FY2023, Eskom filled critical department vacancies after multiple years of the recruitment process being frozen. This increased manpower to R178m with a variance of R11m in favour of Eskom. For FY2023, the actual legal fees expenditure was R28m against R68m planned. This resulted in an under-expenditure of R14m, as shown in Table 37 below.

Table 37: Fuel Procurement

Fuel Procurement (R'm)	Application FY 2023	Decision FY2023	Actual FY2023	Variance (Actual - Application)
Manpower	167	167	178	11
Consultation fees	9	9	2	(7)
Legal fees	66	66	28	(38)
Travel and subsistence	4	4	1	(3)
Other	42	42	65	23
Total	**288**	**288**	**274**	**(14)**

NERSA analysis

7.5.40 The notable underspending in legal fees has significantly contributed to a surplus when comparing the Eskom MYPD5 application and the actual expenditures, despite an overspending on man hours due to the unfreezing of the recruitment processes. Overall, the entire amount of R14m is in favour of the customer.

Approach/methodology used

7.5.41 The pass-through of prudently incurred primary energy costs was allowed as per section 12 of the Methodology.

NERSA adjustments and reasons

7.5.42 NERSA had approved R288m, but Eskom's actual expenditure was R274m, which was R14m less than the approved amount. Given that the reasons for overspending of some line items is reasonable, no adjustments are being recommended for the Fuel Procurement costs, as shown in Table 38 below.

Table 38: Fuel Procurement Revenue Variance R'm

Revenue Variance R'm	NERSA MYPD5 Decision	Actual FY2023	Variance	Adjustment	NERSA Decision
Fuel Procurement	288	274	(14)	0	(14)

Stakeholder comments

7.5.43 No stakeholder comments were received.

Coal Handling Costs

Summary of the application

7.5.44 Coal handling refers to all the activities that are necessary to get the coal to the boiler once it has been delivered to the power station storage facilities and coal stockyards via a dedicated mine conveyor belt, road and/or rail.

7.5.45 The main cost components of coal handling include labour, machinery and vehicles (such as articulated dump trucks, tipper

trucks, bobcats, bulldozers, etc, which are known as white and yellow plant) and maintenance (e.g. conveyor maintenance, travelling chutes, tripper cars, etc). The diesel/fuel for the white and yellow plant is also a significant cost driver.

7.5.46 Eskom in its application has highlighted that the cost of coal handing is mostly fixed and does not necessarily vary with increase in production. However, coal handling costs may vary should there be challenges such as lack of delivery from the mine resulting in a need for the creation of a strategic stockpile due to coal shortages. This may call for the increased use of machinery and more labour, including overtime. Furthermore, Eskom cited the following drivers for variances in coal handling costs:

7.5.52.1 Coal supply constraints
7.5.52.1 Contract type
7.5.52.1 Conveyor spills
7.5.52.1 Type if coal transport
7.5.52.1 Weather conditions.

7.5.47 Eskom is applying for a coal-handling cost variance of R115m in favour of customers, for the 2022/23 financial year, as shown in Table 39 below. Eskom cited that a variance of R115m in favour of the customers arose due to the movement of coal within certain power stations being less than was originally envisaged.

Table 39: Summary of Coal Handling Costs

Coal Handling (R'm)	Application FY2023	Nersa Adjustment	Decision FY2023	Actuals FY2023	Variance
Coal handling	2 480	(72)	2 408	2 293	(115)

NERSA Analysis

7.5.48 NERSA has assessed the overall costs for coal handling as applied for by Eskom. Furthermore, NERSA notes the significant over expenditure at Kusile Power Station, as well as all variations from the different stations.

7.5.49 Eskom cited that the reason for the increase in costs at Kusile Power Station was due to the addition of Unit 4 and 5. It further highlighted that Unit 4 had been brought into commercial operation on 31 May 2023 and Unit 5 had been synchronised on 31 December 2023.

However, due to the under-spending in other stations, the net impact is the variance of R115m in favour of customers.

Approach/methodology used

7.5.50 The pass-through of prudently incurred primary energy costs was allowed as per section 12 of the Methodology.

NERSA adjustments and reasons

7.5.51 In assessing the reasons advanced by Eskom for the variance, NERSA has found them to be reasonable due to the increase in coal being moved at Kusile Power Station, as Eskom had synchronized Unit 5 at Kusile Power Station to the national grid on 31 December 2023.

7.5.52 It is therefore recommended that the coal handling costs be allowed as applied for by Eskom, as shown in Table 40 below.

Table 40: Coal Handling decision

Coal Handling (R'm)	NERSA Decision FY 2022/23	Eskom's Actual FY 2022/23	Variance	RCA Adjustment	RCA FY 2022/23
Coal Handling	2 408	2 293	-115	0	-115

Stakeholder comments

7.5.53 No stakeholder comments were received.

Water Treatment Costs
Summary of the application

7.5.54 NERSA granted Eskom R610m for water treatment costs in the MYPD5 decision for the FY2022/23. The actual expenditure was R669m, resulting in an over-expenditure of R59m compared to the decision, as shown in Table 41 below.

Table 41: Summary of water treatment costs

Water treatment (R'm)	Decision FY2023	Actuals FY2023	RCA FY2023
Water treatment	610	669	59

NERSA Analysis

7.5.55 The variance can be attributed to factors such as:

7.5.55.1 demineralisation of the water;
7.5.55.2 deterioration quality of the water;
7.5.55.3 treatment of cooling water systems;
7.5.55.4 leaks in the auxiliary cooling systems; and
7.5.55.5 chemical properties of the water to and from the ash dam.

7.5.56 Demineralisation of water production is influenced by the feed water quality, the condition of the membranes and the efficiency of the cleaning process. The unavailability of locally manufactured caustic soda during some months of the year, due to failures at the supplier's manufacturing plant, resulted in some of the caustic soda used at the stations being imported. This increased the cost of demineralised water production and condensate polishing.

7.5.57 Some of the stations have experienced a deterioration in the quality of the raw water and/or quality of the feed water. This has led to the use of more chemicals than had been budgeted for.

7.5.58 The main cooling water systems are treated by means of clarification, lime treatment, desalination and/or acid treatment. The type of treatment used at the station impacts the water treatment expenditure of the station. Clarification and lime treatment comprises a significant portion due to the significant volume of chemicals dosed. Desalination is only applied for the treatment of cooling water at Tutuka, Lethabo, Grootvlei and Komati. Desalination has the highest treatment cost due to the number of chemicals used.

7.5.59 The leaks in the auxiliary cooling systems resulted in increased chemical dosage at most sites, which increased the cost of auxiliary cooling water treatment. The causes of leaks have been identified and are being addressed.

7.5.60 The chemical properties of the water from the ash dam cause scale formation in the pipeline. To combat this, chemicals are dosed into the ash water return pipelines. Stations that operate wet ashing systems include Arnot, Camden, Duvha, Grootvlei, Hendrina, Komati, Kriel and Matla.

Approach/methodology used

7.5.61 Section 12.9 of the MYPD Methodology states that:

12.9.1 Eskom must determine the costs per station, particularly the cost of chemicals, electricity usage and labour.

12.9.2 Eskom must demonstrate (in a detailed calculation per station, highlighting the costs mentioned above) how the costs were determined.

12.9.3 Eskom must provide the assumption considered when determining the costs per station.

NERSA adjustments and reasons

Table 42: Water Treatment Decision

Revenue Variance R'm	NERSA MYPD5 Decision	Actual FY2023	Variance	Adjustment	NERSA Decision
Water Treatment Cost	610	669	59	0	59

7.5.62 As shown in the table above, NERSA granted Eskom R610m for water treatment cost in FY2023. The actual expenditure was R669m, resulting in a variance of R69m in favour of Eskom.

7.5.63 No adjustments are being recommended for this cost item, based on the contributing factors such the increased cost of demineralisation, deterioration quality of water, treatment of cooling water systems, leaks in the auxiliary cooling systems and chemical properties of the water to and from the ash dam. Therefore, Eskom will be granted the variance of R59m.

Stakeholder comments

7.5.64 No stakeholders' comments were received.

Sorbent Usage and Handling variance
Summary of the application

7.5.65 Sorbent is used in the flue gas desulphurisation (FGD) to catch the acidic sulphur compounds from the flue gas, thereby reducing the sulphur emissions.

7.5.66 NERSA has granted Eskom R277m for sorbent usage costs in the MYPD5 decision for FY2022/23. The actual expenditure was R192m, resulting in an under expenditure of R86m compared to the decision, as shown in Table 43 below.

7.5.67 The actual expenditure for sorbent usage is R186.5m and R5.8m for sorbent handling.

Table 43: Sorbent usage and handling variance

Sorbent Usage & Hadling	Decision FY 2023	Revenue Application	Actual FY 2023	Decision vs Actual
Kusile (R'm)	277	277	192	-86
Kusile (kTon)	280	280	201	-79

NERSA Analysis

7.5.68 The utilisation of sorbent is related to the quantum of energy produced at Kusile Power Station. Due to the variance in the energy, the sorbent utilisation was lower than originally envisaged, 201 kt were used instead of the 280 kt approved in the MYPD5 FY2022/23.

7.5.69 Eskom paid R955.22 per ton for sorbent compared to the R989.29 per ton that was planned. The unit price for sorbent per unit sent out is the same at R0.21 per unit sent out for both planned and actual unit cost.

Approach/methodology used

7.5.70 Section 12.7 of the MYPD Methodology states that:

12.6.1 Eskom must:

12.6.1.1 determine the costs;

12.6.1.2 demonstrate (detailed calculation) how the costs were determined; and

12.6.1.3 provide the assumption considered when determining the costs.

NERSA adjustments and reasons

Table 44: Sorbent Usage and Handling Decision

Revenue Variance R'm	NERSA MYPD5 Decision	Actual FY2023	Variance	Adjustment	NERSA Decision
Sorbent Usage and Handling	277	192	86	0	-86

7.5.71 NERSA granted Eskom R277m for sorbent usage and handling costs in FY2022/23. The actual expenditure was R192m, resulting in a variance of R86m for the benefit of consumers, according to the application. No further adjustments have been made by NERSA.

Stakeholder comments

7.5.72 No stakeholders' comments were received.

Start-Up Gas and Oil Costs

Summary of the application

7.5.73 Fuel oil stabilises combustion in coal-fired boilers during transient conditions, often due to sudden load changes, plant defects, or out-of-specification coal properties. The most significant consumption occurs during a cold start-up after over 36 hours of off-duty operation. In FY2022/23, there were 736 automatic trips because of plant equipment unavailability and reliability issues, and the trips were higher than those in FY2021/22.

7.5.74 High fuel oil usage is influenced by several factors, including ageing equipment, spares obsolescence, unexpected plant breakdowns and other operating conditions that require planned maintenance. The aspects that contributed to trips were the mills, electric feed pumps, boiler combustion and other variables related to control or instrumentation equipment,

7.5.75 Table **45** and Table 46 outlines the projected costs and volumes of the start-up gas and oil.

7.5.76 The volume and prices of the start-up oil and gas make up to R5 121m in favour of Eskom. A summary of the calculation variables is indicated in

7.5.77 Table **45**, and Table 46

Table 45: Summary of start-up gas and oil costs

Start-up Gas & Oil (R'm)	NERSA Decision	Actuals FY2023	RCA FY2023

Start-up gas & oil	3 686	8 807	5 121

Table 46: NERSA Decision vs Actual volumes (litres) and price (R/litre*)*

Start-up Gas & Oil Average R/Litre	Decision	Actual FY2022/23
Start-up gas & oil	9.00	14.21

Table 47: NERSA Decision vs Actual volumes

Start-up Gas & Oil Consumption Volumes (Litres)	Decision FY2022/23	Actual FY2022/23
Start-up gas & oil	409 555 556*	619 737 575

**** Note**: According to NERSA RfD for FY2023, the decision price (i.e. R9.00) multiplied by the decision volume (i.e. 400 000 000 litres) does not equal to decision amount of R3 686m. Hence, the decision volume was assumed to be 409 555 556 litres to balance decision amount of R3 686m.*

NERSA Analysis

7.5.78 The start-up gas and oil price is derived from the international commodity prices measured in US Dollars, which is then converted to South African Rand. The NERSA decision was R9 per litre. However, the actual oil price was at R14.21 per litre as per Table 46 must be noted that the commodity price and the Rand/Dollar exchange fluctuate regularly, making prices unstable.

7.5.79 Furthermore, due to the unit's performance and changing weather conditions, especially during the rainy season, the start-up gas and oil usage becomes hard to predict, increasing the probability of exceeding the planned quantities.

7.5.80 The primary causes of high fuel oil usage are monitored regularly, and power stations are requested to report on a regular basis on progress updates of fuel oil reduction plans and their execution plans. This creates an audit trail for all on-site fuel oil deliveries, which is the human factor and contributes to the supplied quantity and the quality of the start-up gas and oil during a procurement process.

Approach/methodology used

7.5.81 Section 12.6 of MYPD Methodology states that:

12.6.1 Eskom must:

12.6.1.1 determine the costs;

12.6.1.2 demonstrate (detailed calculation) how the costs were determined; and

12.6.1.3 provide the assumption considered when determining the costs.

NERSA adjustments and reasons

7.5.82 NERSA granted R3 686m on MYPD5, but the actual expenditure increased significantly to R8 807m in FY2022/23, resulting in a R5 121m difference.

7.5.83 The reasons advanced for the increase in fuel oil use include an increase in the grade 3 fuel oil used. An increase in start-ups is another driver of the rise in fuel oil use. No adjustments are recommended to the amount applied for by Eskom, as shown in Table 48 below.

Table 48: Start-up Gas and Oil Decision

Revenue Variance R'm	NERSA MYPD5 Decision	Actual FY2023	Variance	Adjustment	NERSA Decision
Start-up Gas & Oil (R'm)	3686	8807	5121	0	5121

Stakeholder comments

7.5.84 No stakeholder comments were received.

Nuclear Fuel Cost
Summary of the application

7.5.85 The nuclear fuel used at Koeberg Power Station is wholly imported, and, as such, all costs for fuel are passed through. Nuclear fuel procurement costs depend on market prices and the ruling exchange rates.

7.5.86 Table 49 below shows the application for the FY2022/23 RCA.

Table 49: Nuclear Fuel burn

Nuclear fuel burn R'million	Decision FY2022/23	Actuals FY2022/23	Variance
Nuclear fuel burn (Units 1+2)	560	513	(48)
Nuclear Spent Fuel	110	109	(1)
Nuclear Fuel Other	81	53	(28)

Total nuclear fuel burn costs	**751**	**674**	**(77)**

7.5.87 As shown in the table above, the decision for the total nuclear fuel costs was R751m. However, the applicant's actual came to R674m. The variance is R77m due to the customers.

7.5.88 The reason for the variance is that nuclear fuel costs were based on the issued production plan, version 72. The production plan has been revised to version 74. Therefore, Outage 126 on Unit 1 was delayed and had an extended outage duration of 185 days. Also, Unit 2 outage was over by 106 days.

7.5.89 This meant that Outage 126 write-off was moved to the next financial year, and there was less fuel write-off than planned. In addition, due to the availability of the plant and foreign resources, fuel assembly repair could only be done in the current financial year instead of the previous financial year as initially planned.

NERSA Analysis

7.5.90 The applicant states that the plant's outage has been postponed and delayed due to the revised outage plan, which caused less production. This led to the low amount of nuclear fuel spent, ultimately resulting to planned maintenance being deferred to the next financial year.

7.5.91 Furthermore, this deferred maintenance resulted in less fuel write-off than planned, hence less nuclear fuel costs. Because less costs mean no further costs to the customers, this variance benefits the customer, so the adjustment will be by the variance, R77m, as indicated in the table above.

Approach/methodology used

7.5.92 Clause 12.4 of the Methodology states how the nuclear cost must be dealt with. The clause states:

12.4 Nuclear
12.4.1 Eskom must:
12.4.1.1 determine the nuclear operation costs;

12.4.1.2 demonstrate (detailed calculation) how the costs were determined; and
12.4.1.3 provide the assumption considered when determining the costs.

7.5.93 According to the application, the applicant has demonstrated these points and can be regarded as compliant with the Methodology.

NERSA adjustments and reasons

7.5.94 There is no adjustment proposed for the nuclear fuel because the nuclear fuel cost is a pass-through cost, and there are no major changes that require costing outside of the normal operation of the plant.

Stakeholder comments

7.5.95 No comments were received on the nuclear fuel costs.

Conditions for approval

7.5.96 No conditions are needed for nuclear fuel cost.

Open Cycle Gas Turbines (OCGTs)

Summary of the application

7.5.97 Eskom cited that the System Operator has dispatched OCGTs in accordance with the NERSA MYPD Methodology. The variances between the assumptions in the decision and actuals for FY2022/23 illustrate the need for using OCGTs – both Eskom and IPP OCGTs – to the extent required to minimise the impact of load-shedding on the South African economy. The overall economic impact of load-shedding has thus been minimised.

7.5.98 The current year's volumes exceed those assumed in the MYPD decision. According to the MYPD Methodology, gas turbine usage should be allowed as it was incurred to ensure security of supply and was done so as a last resort before the implementation of load-shedding.

7.5.99 In its application, Eskom highlights that the root causes of the reduced availability of the Eskom fleet were capacity and financial

constraints requiring high utilisation factors of coal plants, in particular over a prolonged period, more than a decade, leading to high wear and tear on systems and components. This demonstrates that if OCGT had not been used, the extent of load-shedding would have been significantly worse.

7.5.100 Eskom is applying for OCGT cost variance of R 17 602m, which translates to a variance of 2 285GWh for the 2022/23 financial year, as shown in

7.5.101 Table **50** and

7.5.102 Table 51 below.

Table 50: Summary of OCGT fuel costs

OCGT cost (R'm)	Decision FY2023	Actuals FY2023	Variance
Ankerlig		9 288	
Gourikwa		11 936	
Acacia		0	
Port Rex		27	
Ankerlig storage & demurage		72	
Gourikwa storage & demurage		32	
Total	**3 753**	**21 355**	**17 602**

Table 51: Energy Production by OCGT

OCGT production (Gwh)	Decision FY2023	Actuals FY2023	Variance
Ankerlig		1 332	
Gourikwa		1 681	
Acacia		1	
Port Rex		3	
Total Gwh	**733**	**3 018**	**2 285**

Approach/methodology used

7.5.103 The analysis of the OCGT costs is based on following principles:

- 7.5.103.1 Sections 12.3.1 and 17.2.9.4 of the MYPD4 Methodology
- 7.5.103.2 Section 8 of the Scheduling and Dispatch Rules – Generation Maintenance Outage Coordination
- 7.5.103.3 Section 4.1 of the System Operation Code – The Operating Reserves.

7.5.104 Section 12.3.1 states that:

Gas turbines are provided to operate during peak periods and emergencies. Subject to the conditions set out in the MYPD Methodology, gas turbine generation costs will be allowed as a full pass-through cost but limited to the volumes allowed by the Energy Regulator, except where such

use was necessary to ensure the security of supply due to events outside management's control.

7.5.105 The MYPD decision limited the use of OCGT due to the high declared availability of the Eskom coal fleet, for which Eskom is compensated via appropriate depreciation and return on assets allowed as part of the MYPD decision. At the time of approval, the assets were considered used and usable for electricity generation or should have been available for use. Eskom had to make extensive use of OCGTs because of supply constraints on the part of Eskom, as well as a 2 008GWh shortfall in supply from IPP volumes and a 951GWh shortfall from SADC volumes.

7.5.106 The MYPD Methodology further indicates that the capacity constraints shall be mitigated by gas turbine generation as a last resort. For clarity, this means that gas turbine generation should be employed before the implementation of load-shedding activities. It is evident that OCGTs were not only used to prevent load-shedding or for emergency purposes but were also deployed as mid-merit Closed Cycle Gas Turbines (CCGTs), which explains the high utilisation and the resultant excessive cost of diesel.

7.5.107 Under the system operation code, OCGTs are classified as emergency reserves and ought to be used as such (for emergencies). These should be used when the Interconnected Power System (IPS) is not in a normal condition and to return the IPS to normal conditions while slower reserves are activated. The System Operator can use these reserves for supply and demand balancing, network stability and voltage constraints. These reserves shall be activated, on request, within ten minutes and shall be sustainable for two hours. The fact that Eskom had a higher number of units that were not available for dispatch compromised the sequence of dispatching the operating reserves (instantaneous reserve, regulating reserve and ten-minute reserve), as shown in Figure 5 below.

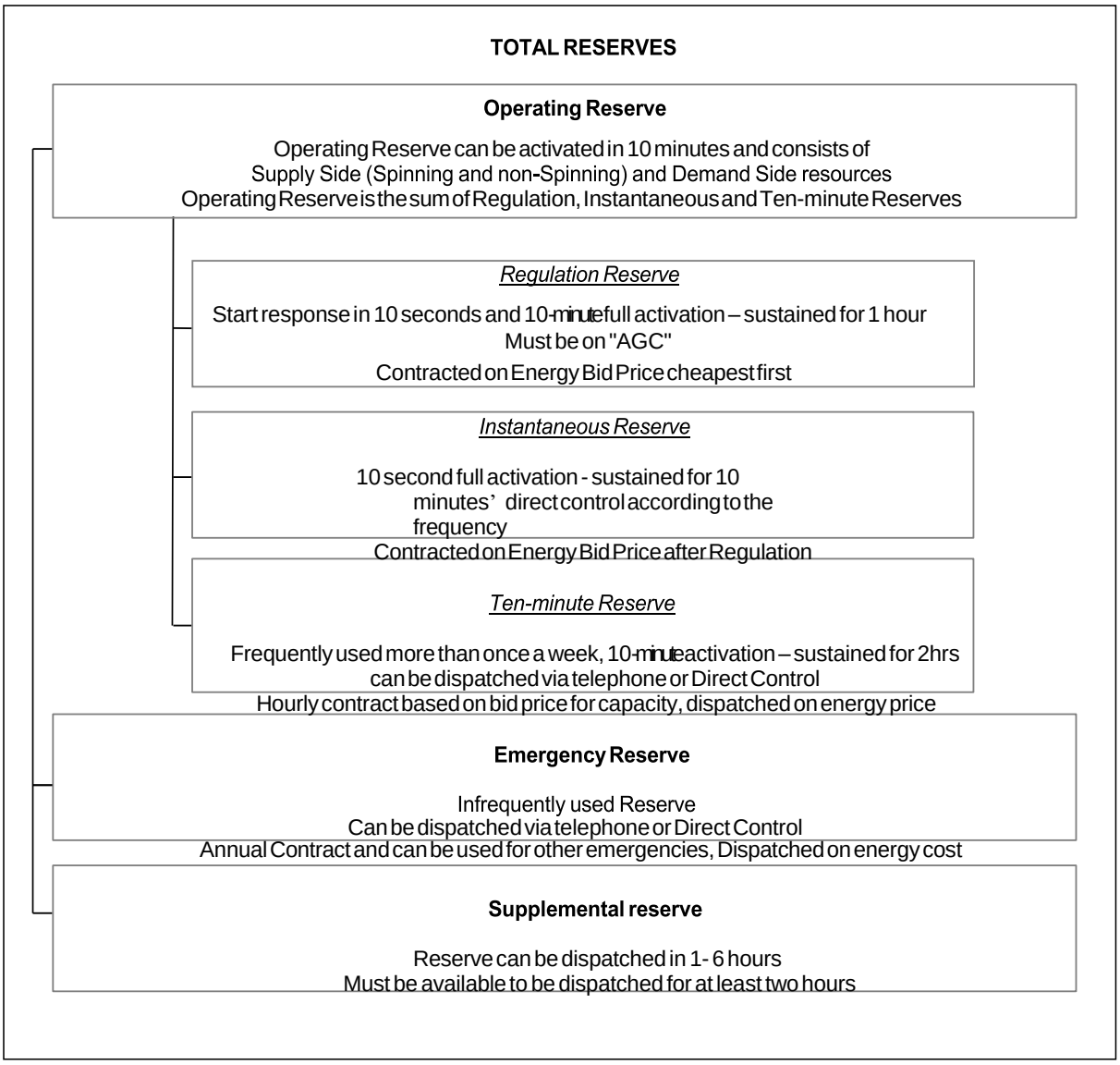


Figure 5: Total reserves

7.5.108 In light of section 12.3.1, while it may have been technically justifiable for Eskom to run OCGTs excessively to prevent load-shedding, the fact that the excessive use was due to inefficiencies in Eskom's management of its generation fleet cannot be overlooked. The generation fleet for FY2023/24 had an EAF of 56.6%.

7.5.109 Lastly, section 17.2.9.4 states the following:

Usage of OCGT above the MYPD approved levels will be recovered through the RCA at the average cost of Eskom's plant that should have been available according to the production plan submitted to the Energy Regulator, if the Energy Regulator assessment shows that the unavailability was within Eskom management's control. For example, if coal generation

availability resulted in higher than planned use of the OCGT generation, the additional OCGT energy will be recouped at the coal average cost.

7.5.110 The Methodology enables the Energy Regulator to assess the reasons for the variance between planned and actual diesel volumes and decide at what level that variance will be allowed.

7.5.111 According to Eskom, there are three important reasons for the inability to meet the country's electricity demand consistently, which have led to load-shedding and high OCGT usage:

a) The first is inadequate installed capacity nationwide – which is mainly due to the IPP programmes not materialising as planned.
b) The second is the above-mentioned performance of the Generation coal fleet, evidenced by the low energy availability factor (EAF). The second is, in fact, a consequence of the first, with inadequate national capacity occurring from around 2003 onwards and has not yet been restored to acceptable levels. The inadequate national generating capacity inevitably results in the existing fleet having to create 'virtual capacity' in order to close the supply-demand gap. Eskom started doing this from 2003 onwards by initially increasing the EUF levels, and when additional 'virtual capacity' was required from 2008 onwards, it was created by deferring maintenance outages. Predictably and inevitably, this eventually results in reducing technical performance levels, which started manifesting from 2012 onwards, creating a vicious circle of further reducing the national generating capacity, thus compelling a further increase in EUF and further deferral of maintenance outages.
c) A third major factor started increasingly manifesting from approximately 2014 with the MYPD3 revenue cycle, namely insufficient funds to perform the required maintenance due to the sub-cost-reflective revenues.

NERSA adjustments and reasons

7.5.112 The OCGT allocation in FY2023/24 production plan was 733GWh. However, the actual utilised energy far exceeded this, reaching 3 018GWh. This resulted in a variance volume of 2 285GWh.

7.5.113 The total volumes used for peaking and emergencies were verified using actual hourly data and amounted to 1 546GWh, resulting in an

allowable spend of R10 939bn. The excess volumes then become 1 472GWh, which would ordinarily be allowed at the cost of coal. To generate the excess OCGT volumes using the coal fleet would have cost the utility R667m.

7.5.114 The shortfall to meet the actual demand was partially out of the Eskom management control for those volumes totalling 2 959GWh from the REIPP and SADC energy shortfall. This energy shortfall (2 959GWh) is higher than the excess volumes of OCGT (1 472GWh). Therefore, Eskom is allowed to recover the whole actual total variance of the OCGT costs for the financial year. The total variance on the OCGTs is allowed, as shown in Table 52.

Table 52: OCGTs decision table

OCGTs (R'm)	NERSA Decision	Eskom Actual	Variance	RCA Adjustment	RCA FY 2022/23
	3 753	21 355	17 602	-	17 602

Stakeholder comments

7.5.115 No stakeholder comments were received.

7.6 Independent Power Producers

Summary of the application

7.6.1 Eskom's application indicates an expenditure of R43 534m for buying power from renewable energy (RE) IPPs and the Department of Energy (DoE) Peaker IPPs (Avon and Dedisa plants) against the approved amount of R43 130m.

REIPP Costs

7.6.2 Eskom spent R33 479m against the approved amount of R37 898m for REIPPs.

DoE OCGT costs (Avon and Dedisa)

7.6.3 The actual OCGT cost is R10 055m against the NERSA decision of R4 946m. This is attributed to lower output from the REIPPs, where only 16 859GWh was produced versus the planned amount of 19

370GWh. This resulted in OCGTs being used more to produce 1 098GWh versus the planned 596GWh. The budgeted R286m network pass-through cost was not used.

7.6.4 Table 53 below shows the costs applied for by Eskom.

Table 53: Eskom IPPs 2022/23 RCA application

Independent Power Producers	Cost (R'm)			Volumes (GWh)			Average costs (R'm)		
FY2023	Decision	Actuals	Variance	Decision	Actuals	Variance	Decision	Actuals	Variance
Renewable IPP Programme	37 898	33 479	(4 419)	19 370	16 859	(2 511)	1 957	1 986	29
DoE Peaker	4 946	10 055	5 109	596	1 098	503	8 305	9 156	852
Total IPP's	**42 844**	**43 534**	**690**	**19 965**	**17 957**	**(2 008)**	**2 146**	**2 424**	**278**
Network pass-through	286	-	(286)	-	-	-	-	-	-
Total IPP's	**43 130**	**43 534**	**404**	**19 965**	**17 957**	**(2 008)**	**2 160**	**2 424**	**264**
Less: current year provisions raised			-						
Add: Reveral of prior provisions			-						
Total IPP cost for RCA			**404**						

NERSA Analysis

Approach/principle used

7.6.5 The review of IPP costs is guided by section 13 of the MYPD4 Methodology. Section 13.3 of the Methodology provides for all Power Purchase Agreement (PPA) costs, including energy payments, capacity payments and any other payments, to be allowed as a full pass-through cost.

7.6.6 However, section 13.9 of the Methodology requires each pass-through cost item to be evaluated to ensure that it was incurred efficiently and in compliance with the terms and conditions of the contracts.

Analysis of the application

7.6.7 Renewable Energy IPPs were procured by the Department of Mineral Resources and Energy (DMRE), and Eskom was determined to be the buyer in accordance with section 34 of the Act.

7.6.8 Under this programme, Eskom is entitled to recover the PPA costs from the tariffs.

7.6.9 The DMRE, IPPs and Eskom negotiated the PPA to ensure that it is bankable. NERSA then approved the terms and conditions of the PPA. The costs incurred by Eskom under this programme, therefore, qualify to be treated as pass-through costs, provided they were incurred in accordance with the terms and conditions of the PPA.

7.6.10 Eskom's RCA application cost for REIPPs is R33 479m for the procurement of 16 859GWh. This is against NERSA's decision of R37 898m for the procurement of 19 370GWh. Eskom attributed the lower amount of energy procured from REIPP to delays in reaching commercial operation dates (CODs) by the Bid Window 4 (BW4) and Bid Window 5 (BW5) projects. Eskom states that the delays were caused by the COVID-19-induced global lockdown measures that had a negative impact on the production and procurement of the parts and equipment required for the completion of the construction of the projects, among other factors.

7.6.11 To compensate for lower energy deliveries by REIPPs, Eskom bought 1 098GWh from the more expensive DOE Peaker OCGTs against the budgeted 596GWh to lessen the effects of load-shedding during peak periods.

7.6.12 Based on the facts above, the applied RCA should be allowed because the over-utilisation was caused by lower REIPPs due to the BW4 projects' delay in reaching the COD, which is beyond Eskom's control.

7.6.13 Table 54 below shows that a total of R404m is in favour of Eskom.

Table 54: Allowable RCA cost

Independent Power Producers 2022/23	Cost (R'm)		
	RCA Application	NERSA Adjustment	NERSA RCA Decision
Renewable Energy IPPs	-4 419	0	-4 419
DoE Peaker	5 109	0	5 109
Pass throgh costs	-286	0	-286
Total IPPs for RCA	**404**	**0**	**404**
FY2019 RCA Variance	**404**	**0**	**404**

7.7 International Purchases

Summary of the application

7.7.1 In the application submitted to NERSA, Eskom indicated that some energy was sourced from neighbouring countries, resulting in purchases of R6 459m, which generated energy inflows during the financial year. The details of the variance between the actuals and the NERSA decision are outlined in Table 55 below.

Table 55: International Purchases

International Purchases (R'm)	Decision	Actuals	Variance
	FY2023	FY2023	
International Purchases	4 589	6 459	1 870

7.7.2 As with the past years of the MYPD, the majority of cross-border purchases are from Hidroelectrica de Cahora Bassa (HCB), a hydro electrical plant in Mozambique. Eskom indicated that during FY2021/22, HCB performed better than its historical trend as used in the MYPD application.

7.7.3 Eskom also indicated that when HCB consistently performs higher than its Contractual Maximum Demand (CMD) of 1 150MW, the energy cost and reliability premium costs, as per the bilateral contract, increase. In addition, Eskom indicated that, in line with the contract, it pays a higher rate to HCB for any excess power supplied. In summary, the improved performance resulted in higher volumes being purchased at a higher rate than in the application, hence at a higher overall cost to the contract.

7.7.4 Lastly, the application also indicated that the contract provides for a five-year tariff reset based on the avoided cost of Eskom generation and transmission. The calculation is based on the most recent Eskom AFS, whose outcome could not be reasonably determined at the time of the application. The new tariff was effective 1 January 2023, covering a portion of the above period.

NERSA Analysis

Approach/principle used

7.7.5 Cross-border IPP purchase costs are guided by section 13 of the MYPD4 Methodology. Section 13.3 of the Methodology provides for all PPA costs, including energy payments, capacity payments and any other payments, to be allowed as a full pass-through cost.

7.7.6 However, section 13.9 of the Methodology requires each pass-through cost item to be evaluated to ensure that it was incurred efficiently and in compliance with the terms and conditions of the contracts.

Analysis of the application

7.7.7 Eskom submitted the invoices of HCB indicating energy and costs associated with the contracted energy purchases. In addition to the invoices, the energy wheel data indicating actual energy purchases was also submitted.

7.7.8 The total energy imported during FY2022/23 was about 8 654GWh, priced differently, depending on the applicable contractual tariff rate, i.e. high rate and low rate.

7.7.9 The source of energy from international purchases (mainly from HCB) is baseload. It is consistently preferred over energy from other local baseload IPPs or intermittent renewable energy IPPs, due to its competitive nature.

7.7.10 The power received, at competitive prices, from external countries was beneficial to South Africa during the periods of constrained power supply and load-shedding.

7.7.11 Given the positive benefit of international energy purchases highlighted above, the variance of R1.870 billion is allowed for Eskom to recover the variance in FY222/023. .

7.7.12

7.7.13 **Table 56** summarises the allowable variance for FY2022/23.

Table 56: International Purchase decision

	Cost (R'm)

International Purchases (FY2023)	NERSA MYPD5 (FY2023) Decision	Actual FY2023	Eskom RCA Application	NERSA Adjustment	NERSA RCA Decision
Purchases (R'm)	**4 589**	**6 459**	**1 870**	**0**	**1 870**

7.8 Demand Response and Power Alert

Summary of the application

7.8.1 Demand Response (DR) was allocated R381m and R298m was spent on the programme cost. Eskom is applying for an RCA amount of R83m in favour of the customers, as shown in

7.8.2 Table 57 below.

Table 57: Demand Response (DR) RCA FY2022/23 Application

Demand Response (R'm)	Decision FY2023	Actual FY2023	Variance
Instantaneous (Rm)	-	141	-
Supplemental (Rm)	-	126	-
Programme Admin cost	-	31	-
Total programme costs	**381**	**298**	**(83)**

7.8.3 Power Alert was allocated R40m and R59m was spent on the programme cost. Eskom is applying for an RCA amount of R19m in favour of Eskom, as shown in Table 58 below.

Table 58: Power Alert RCA FY2022/23 Application

Power Alert (R'm)	Decision FY2022/23	Actual FY2022/23	Variance
Total programme costs	**40**	**59**	**19**

NERSA Analysis

7.8.4 The Demand Response programme provides the System Operator with flexibility and reliability to maintain adequate daily operating reserve margins to cater for unforeseen circumstances that could affect the stability of the supply. Factors that could affect the stability of the electricity supply include, among others, the system constraints caused by severe weather and/or power line issues and generator malfunctions.

7.8.5 The Instantaneous Reserve from Demand Response is consumer-load contracted to respond to a reduction in frequency. The purpose

of Instantaneous Reserve is to arrest the frequency at acceptable limits following a contingency, for example a generator trip. The Supplemental Demand Response is a tool used by the SO to balance the supply and demand constraints. Eskom is applying for the Demand Response RCA amount of R83m in favour of the customer, as per

7.8.6 Table 57 above.

7.8.7 The Power Alert programme entails Power Alert meters that will give an indication of the strain on the electricity supply network and will urge the public to switch off avoidable appliances should the need arise. The Power Alert meter creates real-time awareness and voluntary reaction by the public when broadcast. Eskom is applying for a Power Alert RCA amount of R19m in favour of Eskom, as per Table 58 above.

Approach/methodology used

7.8.8 Demand response programme costs are analysed in line with the MYPD4 Methodology.

NERSA adjustments and reasons

7.8.9 The amount of R83m not spent on DR programmes will be returned to the consumer in line with the MYPD4 Methodology. NERSA has not made any adjustments, as shown in Table 59 below.

Table 59: Demand Response FY2022/23 NERSA RCA Decision

Demand Response (R'm)	NERSA Decision MYPD5 (2022/23)	Eskom's Actuals	Variance	Adjustments	NERSA Decision
Demand Response Programme (R'm)	381	298	-83	-	-83

7.8.10 The amount of R19m for the Power Alert programme will be credited to Eskom, in line with the MYPD4 Methodology. NERSA has not made any adjustments, as shown in Table 60 below.

Table 60: Power Alert FY2022/23 NERSA RCA Decision

Power Alert (R'm)	NERSA Decision MYPD5 (2022/23)	Eskom's Actuals	Variance	Adjustments	NERSA Decision
Power Alert (R'm)	40	59	19	-	19

Stakeholder comments

8.1.2 No comments were received from stakeholders.

Conditions for approval

7.8.11 No conditions.

7.9 Service Quality Incentives

Summary of the application

7.9.1 Eskom has applied for a total of R69m for its performance levels achieved in the service quality incentive (SQI) targets set by NERSA for Distribution and Transmission during the 2022/23 financial year. Distribution achieved an SQI of R69m and Transmission an SQI of R0m.

NERSA Analysis

Distribution elements of the SQI

System Average Interruption Duration Index (SAIDI)

7.9.2 Eskom Distribution achieved a SAIDI of 35.36hrs, which is within the deadband, therefore there is no penalty or reward.

System Average Interruption Frequency Index (SAIFI)

7.9.3 Eskom Distribution achieved SAIFI of 12.34 interruptions per customer, which is in the incentive band of R69m.

High Voltage Supply Loss Index (HSLI)

7.9.4 Eskom Distribution achieved HSLI final value of 12.83 minutes, which is within the deadband, therefore there is no penalty or reward.

Table 61: Eskom Distribution SQI Summary

Measure	Performance	Incentive/Penalty(-) (Rm)

SAIDI	35.36	0
SAIFI	12.34	69
HSLI	12.883 minutes	0
Total		69

Transmission elements of the SQI

System Minutes (<1)

7.9.5 Eskom Transmission achieved System Minutes of 2.88, which is within the deadband, therefore there is no penalty or reward.

Number of Major Incidents (SM>1)

7.9.6 Eskom Transmission had two major accidents, which is within the deadband, therefore there is no penalty or reward.

Line Faults/100 km

7.9.7 Eskom Transmission achieved line faults/100km of 2.56, which is within the deadband, therefore there is no penalty or reward.

Table 62: Eskom Transmission SQI Summary

Measure	Performance	Incentive/Penalty(-) (Rm)
System Minutes	2.88 minutes	0
Number of Major Incidents	2	0
Line Faults/100km	2.56 faults	0
Total		0

Approach/methodology used

7.9.8 Eskom Distribution SQI is based on a target setting of statistical analysis of 10 years' performance data for each measure.

7.9.9 Eskom Transmission SQI measures will be based on the following:

a) System Minutes of less than 1 minute
b) Major incident to be 1 fault for the financial year
c) Line faults/100km should be 1 fault.

NERSA adjustments and reasons

7.9.10 Adjustments will be done after confirmation of extra information that has been requested from Eskom.

Conditions for approval

7.9.11 No condition.

7.10 Environmental Levies

Summary of the application

7.10.1 The Government imposes certain taxes and levies, which are payable by Eskom.

7.10.2 The environmental levy rate has been 3.5c/kWh since July 2012. These are actual payments to SARS, determined by the true metered generated volumes. For this submission, Eskom indicated that the production plan, which measures energy sent out as measured after the high voltage transformer, was used to derive the assumed cost. This derived generated volume is then charged at the applicable environmental levy rate for that period to obtain the forecast cost per power station. It is assumed that no further rate increases will occur in the planning period.

7.10.3

7.10.4 Table 63 below shows that Eskom was allowed R7 133m for the environmental levy. However, it spent R7 033m and claimed a variance of R100m in favour of the customers.

Table 63: Environmental Levy costs (R'm)

Environmental Levy	Decision FY2022	Actuals	Variance
Total Non-Renewable energy sent out (GWh)	188 153	183 952	-4 201
Add: Auxilliary volumes (GWh)	15 634	16 990	1 356
Generating Volumes	**203 787**	**200 942**	**-2 845**
Rate in c/kWh	3,5	3,5	3,5
Generation Environmental Levy Cost	7 133	7 033	-100

Approach/methodology used

7.10.5 Section 16.4.1 of the MYPD4 Methodology states that taxes and levies will be treated as a pass-through cost in the MYPD, which requires that under-expenditure be for the benefit of customers in the RCA calculation. Furthermore, section 16.4.2 clearly indicates that taxes and levies should be treated as a separate account in the Eskom revenue determination.

7.10.6 When making the MYPD5 determination, NERSA adopted an approach as stated in section 16.4.4 of the Methodology, which requires that any over- or under-recovery be adjusted through the RCA mechanism.

NERSA adjustments and reasons

7.10.7

7.10.8 Table 64 below shows that Eskom claimed a variance of R100m in favour of the customers for the 2021/22 financial year. The RCA Methodology caters for the taxes and levies as a pass-through item, which requires that under-expenditure be for the benefit of customers in the RCA calculation.

7.10.9 The amount of R7 033m claimed by Eskom as actual expenditure on environmental levies corresponds with the Regulatory Reports. NERSA has independently verified the environmental levy amount through the RFRs and Annual Financial Statements (AFSs). Therefore, the variance of R100m due to customers is allowed as applied for.

Table 64: Environmental Levy costs: NERSA Decision

Environmental levy	Decision F2022	Actuals F2022	Variance	Adjustments	NERSA Decision
Total Non-Renewable energy sent out (GWh)	188 153	183 952	-4 201	0	-4 201
Add: Auxilliary volumes (GWh)	15634	16 990	1 356	0	1 356
Generating volumes	**203 787**	**200 942**	**-2 845**	**0**	**-2 845**
Rate in c/kWh	3,5	3,5	3,5	0	3,5
Generation levy cost (Rm)	**7 133**	**7 033**	**-100**	**0**	**-100**

Stakeholder comments

7.10.10 No comments were received from stakeholders.

Conditions for approval

7.10.11 There will be no conditions of approval as the levies are policy issues enacted by the government.

7.11 Carbon Tax

Summary of the Application

7.11.1 The National Treasury has introduced an additional tax that affects the electricity price. The Carbon Tax Act, 2019 (Act No. 15 of 2019) came into effect on 1 June 2019. This act provides for the imposition of a tax on the greenhouse gas emissions of a company [expressed in carbon dioxide equivalents (CO2eq)] and matters connected therewith.

7.11.2 NERSA approved R2 714m for carbon tax liability as applied for.

NERSA Analysis

7.11.3 The introduction of carbon tax was delayed and not introduced. Therefore, an amount of R2714m is due back to the consumers.

8. ECONOMIC IMPACT

Summary of the Application

8.1. In terms of the 2022/23 RCA application submitted by Eskom, there is no section looking at the economic impact of the inclusion of the RCA balance in future Allowable Revenue (AR). However, Eskom has indicated that the electricity sales during the period under review reflect a challenging macro-economic environment. The application indicates other reasons for the negative variance related to severe load-shedding, poor economy, and in some instances severe floods, as well as the increased price of the fuel compared to the NERSA decision. Eskom has also indicated that the overall impact of load-shedding has been minimised due to OCGTs having been dispatched in accordance with the NERSA regulatory rules and codes. Although the application does not have a line item looking into the economic impact, Eskom does acknowledge the difficulties faced by the economy, which have an impact on electricity.

NERSA Analysis

8.2. The energy sector has been and continues to be, a driving factor in the South African economy. Electricity prices impact several economic agents and macroeconomic factors. To be specific, the electricity industry plays a

significant role in the economy, as it forms part of the production process of various key economic sectors.

8.3. The South African economy is made up of various energy-intensive industries, such as mining, iron and steel, as well as other metals, among others. Any electricity price increase would undermine economic growth and poverty reduction. It is crucial to note that the decision by the Energy Regulator on Eskom's RCA application for the 2022/23 financial year is taken at a time when the country is facing several economic and political challenges.

8.4. The South African economy managed to escape a technical recession with two consecutive quarters of 0.2% quarter-on-quarter contractions in the middle of 2023. Although this was followed by a slight quarterly expansion in the fourth quarter of 2023, unfortunately in the first quarter of 2024, it contracted to 0.1% quarter-on-quarter (q-o-q). According to the BER (July 2024), the contraction resulted from contractions in most industries, as well as the plunge in domestic demand compared to the fourth quarter of 2023.

8.5. The continued crumble in private sector investment has become a frustrating factor, with the capex now measuring at pandemic lows (about 25% lower than pre-pandemic level). Furthermore, this crumble is being felt across board, with the exception of the machinery and equipment sectors, which has been championed by the rise in renewable energy-solar-investment. Private fixed investment is expected to decline by 2% in 2024 before recovering to 5.4% in 2025.

8.6. The absence of load-shedding for a sustained period of time is expected to have a positive impact on trade, production and, if sustained, sentiment and investment spending in the coming years (BER, July 2024). If sustained, and further local rail and port disruptions are alleviated, some trade benefits should be seen and should spill over to faster growth going into 2025. Further positive effects of no load-shedding have been as follows:

a) **Industrial activity** – manufacturing production jumped in April [5.2% month-on-month (m-o-m); 4.9% year-on-year (y-o-y)], however, it retracted in May (3.2% m-o-m; 0.6% y-o-y) despite the absence of load-shedding. The jump and subsequent drop in mining output was less prominent (0.8% m-o-m increase in April and 0.6% drop in May). The drop in mining output is likely resulting from the lingering of Transnet rail and port issues while prevailing low Platinum Group Metals (PGM) prices were not conducive to ramping up production (BER, July 2024). A

sustained improvement in Eskom's coal-fired generation plants could have a positive impact on coal production.

b) **Consumer spending** – according to the BER (July 2024), a previous study by Discovery Bank and Visa showed that load-shedding increases spending on restaurants and on takeaways. While the absence of load-shedding has the opposite impact on consumer spending, the other reason could also reflect a consumer under pressure and opting to make food at home.
c) **Sentiments** – the absence of load-shedding has the ability to positively impact sentiments. However, it will take a while for trust and confidence to rebuild.
d) **Profitability** – businesses that are dependent on diesel generators for power to escape load-shedding should have seen a decline in costs. However, the question is whether this filters through to higher profitability or translates to slower price increases (and thus lower inflation) for consumers. Households as well as businesses that have switched to solar energy may experience additional benefits resulting from lower electricity bills (depending on the financing of the initial solar installation).
e) **Net trade dynamics** – less usage of OCGTs, lower diesel imports as well as reduced private sector diesel generator usage should benefit net trade dynamics. Exports should also benefit from a sustained period of no load-shedding and a higher EAF.

8.7. On the political front, according to the BER (July 2024), the Government of National Unity (GNU) has given South Africa hope for the future. Given the current political certainty and the expectation of some positive steps on the policy front, the GNU should assist in improving consumer and business sentiment in the second half of the year. The improved sentiment can lead to lower inflation, as well as a decline in borrowing costs, which may boost growth in the coming quarters.

8.8. In terms of unemployment, an increase of 158 000 in unemployed persons was recorded in the second quarter of 2024, following an increase of 330 000 in the first quarter of 2024 (Statssa, July 2024). Unfortunately, this is the third consecutive increase from the fourth quarter of 2023. The official unemployment rate has increased to 32.9% in the first quarter of 2024, from 32.1% in the fourth quarter of 2023.

8.9. Real household consumption slowed further, in annual growth terms, from 0.7% year-on-year in the third quarter of 2023 to a mere 0.3% year-on-year

in the fourth quarter of 2023. Final consumer spending is expected to increase by 0.6% in 2024, followed by increases of 2% and 2.1% in 2025 and 2026, respectively. This outlook is based on the expectation of an improvement in consumer confidence leading to willingness to spend in the second half of 2024.

8.10. In addition, a moderation in food inflation and an increase of R20 (5.7%) in the Social Relief of Distress (SRD) Grant should pave the way for food and beverage sales to improve during 2024. This increase in the SRD grant is the first increase since it was initially introduced at a monthly rate of R350 in the year 2020. Over the course of a year, the 9.2 million recipients of the SRD grant will receive an additional R2.2 billion in their pockets thanks to the rise to R370 per month.

8.11. The start to 2024 was uncertain, with inflation outcomes worse than expected, which led to repricing of rate projections. However, recent developments have been slightly positive. South Africa's inflation exhibited a new trajectory, with the annual headline inflation rate advancing to 5.6% in February (increasing from 5.3% in January) followed by a decrease to 5.3% in March. This was followed by another decrease to 5.2% in April and May (which has remained constant). The declining trend continued further between June and July with 5.1% and 4.6%, respectively.

8.12. In July 2024, the SARB considered the inflation forecast risks to be broadly balanced following the slightly better than expected CPI performance since March. Following this, the SARB revised the inflation projection to 4.9% (revised from 5.1%) for 2024. The consumer price index (CPI) is now expected to drop below the 4.5% midpoint over the coming months due to lower food and fuel prices as well as the stronger rand. To be exact, the CPI is expected to average at 4.8% in the third quarter of 2024 and 4.1% in the fourth quarter of 2024 (BER, July 2024). Furthermore, it is expected that the CPI will average at 4.6% and 4.5% in 2025 and 2026, respectively. While inflation expectations do not yet reflect the 4.5% midpoint objective over the medium term, they are certainly moving in the right direction. Achieving the 4.5% midpoint objective will assist in improving the economic outlook and reducing borrowing costs.

8.13. The SARB has identified additional measures that can further improve the economic conditions, as follows:

a) keeping real wage growth in line with productivity gains

b) lowering administered price inflation
c) improving the functioning of network industries
d) reaching a prudent public debt level.

8.14. The exchange rate of the rand has been particularly volatile since March, as it has traded in the range of R19.32 per US$ (April 19) to R18.05 per US$ (May 22) (SARB, May 2024). It briefly appreciated to a 10-month high against the dollar towards the end of May 2024, however, remained roughly unchanged in July. The rand is driven by inflation and the interest rate differentials between South Africa and the United States and has scope to strengthen further once the US Fed starts easing. The rand is expected to appreciate to R18.33 in 2024 (from R18.45 in 2023) and R17.82 in 2025. However, a depreciation of between 1.2% and 1.7% year-on-year can be expected between 2026 and 2029. A stronger rand supports a favourable inflation outlook, although high global interest rates still present a risk to the currency.

9. FINANCIAL IMPACT

9.1 A detailed financial impact analysis on Eskom's ability to service its debt and interest expenses, as well as the impact on customers, will be presented in the implementation plan. In addition, such a plan will detail how the approved RCA balance will be recovered.

10. CONFIDENTIALITY

10.1 All figures are confidential until the RfD has been approved for publication.

11. CONCLUSION AND RECOMMENDATION

11.1 From a conspectus of the facts and evidence presented to the Energy Regulator, it is appropriate to consider the review of Eskom's RCA application.

End.