Distribution Licensee

Multi-Year Price Determination (MYPD 6) Revenue Application for FY2026 – FY2028

Submission to NERSA

August 2024

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Executive Summary

This document details the Distribution Licensee revenue application for FY2026 to FY2028 that is the Distribution License of Eskom Holdings Ltd (hereinafter referred to as Distribution) and is to be read in conjunction with the submissions of the other Eskom Licensees. The Distribution application for the MYPD 6 control period is prepared as per the prescribed MYPD methodology. The table below summarises the efficient MYPD 6 allowable revenues applied for the control period.

TABLE 1: DISTRIBUTION FY2026 – FY2028 REVENUE REQUIREMENT (R'M)

Distribution Allowable Revenue (R'm)	AR	Formula	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Regulated Asset Base (RAB)	RAB		121 340	136 897	149 613	160 825	168 937
WACC %	ROA	X	4.00%	5.00%	6.00%	7.47%	9.69%
Returns			4 854	6 845	8 977	12 020	16 377
Primary energy	PE	+	24	25	26	27	28
International purchases	PE	+	13	13	14	15	15
IPPs	PE	+	-	-	-	-	-
Environmental levy	L&T	+	-	-	-	-	-
Carbon tax	L&T	+	-	-	-	-	-
Arrear debt	E	+	8 914	9 917	10 752	12 037	13 310
Employee Benefits	E	+	15 226	15 941	16 665	17 373	18 110
Maintenance	E	+	5 716	5 991	6 344	6 630	6 928
Other operating costs	E	+	8 422	8 851	9 275	9 655	10 058
IDM	IDM	+	1 798	807	653	682	712
Depreciation	D	+	6 710	6 732	6 702	6 670	6 709
Distribution Allowable Revenue			**51 676**	**55 122**	**59 408**	**65 109**	**72 246**
Add: Approved RCA/court order for liquidation	RCA		1 721	1 403	-	-	-
TOTAL Distribution Allowable Revenue	R'm		**53 396**	**56 526**	**59 408**	**65 109**	**72 246**

The salient factors underpinning the requested allowable revenues are sales volumes, return on assets, maintenance, employment benefit cost, impairments, and other costs.

Sales volumes

Eskom's sales have declined over the past years, with the outlook remaining relatively depressed in the years ahead. Eskom's projected compounded average growth rate (CAGR) is -0.9% for the MYPD 6 period. To meet the sales growth challenge, Distribution will continue to grow sales and revenue by retaining existing customers, attracting new customers by innovatively responding to customer needs, speeding up connections and collections, whilst consistently delighting customers. The forecast sales volumes are detailed in the table below.

TABLE 2: SALES FORECAST VOLUMES (GWH)

Sales Volume (GWh)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Standard customers	166 980	167 977	156 039	152 836	150 394	149 689	148 231	147 323
Negotiated Pricing Agreement	10 413	10 440	22 679	22 581	22 625	22 713	22 564	22 591
Total LOCAL sales	**177 392**	**178 416**	**178 717**	**175 417**	**173 019**	**172 403**	**170 796**	**169 914**
International sales	11 357	9 619	10 355	10 235	10 235	10 265	10 235	10 235
Total Sales (incl. Internal sales)	**188 749**	**188 035**	**189 072**	**185 652**	**183 254**	**182 668**	**181 031**	**180 149**

Return on Assets (ROA)

In accordance with the MYPD methodology, Distribution is allowed to earn a return on the installed Regulatory Asset Base (RAB) as well as on relevant capital works that are under construction. The MYPD 6 RAB values are based on an independent asset valuation study and the planned capital expenditure. The RAB value increases over the MYPD 6 period as new assets are brought into commercial operation and planned project investments are incurred.

Capital expenditure (capex)

Capital investments are key to ensuring reliable supply and the integration of Distribution Embedded Resources (DERs) including private generator and managing the change in electricity flow within the Distribution grid. The capital requested will be invested in strengthening and expanding the grid connecting new loads, generation sources and replacing assets which have reached the end of their technical life. See table below.

TABLE 3: CAPEX (R'M)

Capex (R'm)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Direct Customers	3 146	877	1 091	2 084	1 972	1 797	2 261	2 764
Strengthening	638	574	1 121	3 122	3 354	3 427	3 621	3 541
Refurbishment	575	558	1 432	8 572	7 440	4 883	1 846	1 924
Lands&Rights	(8)	39	82	123	147	142	209	170
IPPs	19	23	42	412	478	976	952	952
BESS	-	2 816	2 157	-	-	-	-	-
Direct General PP&E	163	186	726	711	458	464	320	413
Total CAPEX (Eskom Funded)	**4 533**	**5 073**	**6 651**	**15 024**	**13 849**	**11 689**	**9 209**	**9 764**
Electrification (DoE Funded)	2 352	3 165	3 307	3 455	2 763	2 570	3 489	3 663
	6 885	**8 238**	**9 958**	**18 479**	**16 612**	**14 259**	**12 698**	**13 427**

Operating expenditure (opex)

Operating expenditure includes all costs involved with the day-to-day running of the Distribution business. The opex includes employee costs, maintenance, and other expenses. The 5% average annual opex increase for the period FY2026 to FY2028 is in line with expected inflation.

TABLE 4: OPEX (R'M) EXCLUDING IDM

Operating expenditure (R'm)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Employee benefit costs	11 606	12 530	14 326	15 226	15 941	16 665	17 373	18 110
Maintenance	4 378	5 203	5 426	5 716	5 991	6 344	6 630	6 928
Other operating expenses	4 481	4 195	5 748	6 035	6 351	6 598	6 895	7 205
Corporate Overheads and Recoveries	1 396	1 654	3 064	3 380	3 532	3 743	3 876	4 019
Other Income	(890)	(588)	(526)	(523)	(538)	(544)	(569)	(594)
Total operating expenditure	**20 971**	**22 993**	**28 038**	**29 834**	**31 277**	**32 806**	**34 205**	**35 668**

Depreciation

Depreciation allows a Licensee to incrementally recover the principal of the capital invested in its assets over their lifetime. The depreciation is determined using the asset valuation as provided for in the MYPD methodology. For the MYPD 6 period depreciation will remain at similar levels over the period.

TABLE 5: REGULATORY ASSET BASE AND DEPRECIATION (R'M)

Regulatory Asset Base and Depreciation (R'm)	Decision FY2024	Decison FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Regulatory Asset Base	116 378	111 093	131 587	142 207	157 018	164 631	173 243
Depreciation	6 851	6 622	6 710	6 732	6 702	6 670	6 709

Arrear debt - Impairment costs

While Distribution has relatively good payments from large industrial, commercial and major metropolitan customers, there is need to cater for residential and municipal payment shortfalls. Municipal overdue debt has increased significantly in the past few years. The actual impairment is currently ~5% of Eskom's electricity revenue. To reduce the impact of the tariffs, Distribution has opted to limit its application to 2% of revenue that equates to a 98% collection rate, see table below.

TABLE 6: DISTRIBUTION IMPAIRMENTS (R'M)

Impairment (R'm)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Non-munics	509	948	1 428	1 226	1 299	1 351	1 405	1 462
Munics	8 677	12 350	13 277	16 387	20 667	26 319	25 987	28 396
Impairment cost based on projected overdue debt*	**9 186**	**13 298**	**14 706**	**17 613**	**21 967**	**27 670**	**27 392**	**29 857**
Arrear debt not applied for				(8 699)	(12 050)	(16 918)	(15 355)	(16 548)
Impairment costs applied for*	**9 186**	**13 298**	**14 706**	**8 914**	**9 917**	**10 752**	**12 037**	**13 310**
Non-Munics	509	948	1 428	1 226	1 299	1 351	1 405	1 462
Munics	8 677	12 350	13 277	7 688	8 618	9 401	10 631	11 848
Total*	**9 186**	**13 298**	**14 706**	**8 914**	**9 917**	**10 752**	**12 037**	**13 310**
% Of Revenue - Actuals / Proj	3.6%	4.5%	4.5%	4.8%	5.3%	5.8%	5.2%	5.2%
% Of Revenue - Applied for				2%	2%	2%	2%	2%

**Actual for FY2023 excludes interest*

The Distribution MYPD 6 application supports the Eskom mission to provide sustainable electricity solutions to promote economic growth and social prosperity for South Africa. With the appropriate levels of return and enabling the recovery of impairments, this will provide for a national distributor that not only supports reliable electricity supply but enable South Africa’s Just Energy Transition (JET).

1. Distribution Licensee context

1.1 Introduction

This section describes the role and responsibilities of the Distribution Licensee. The Licensee distributes and supplies electricity to customers in its supply areas by operating the network, as specified in the Distribution License granted by the National Energy Regulator of South Africa (NERSA).

Distribution, makes capacity available and provides non-discriminatory access to its network, connects, distributes, and supplies electricity to all customers including embedded generators and electrification end-customers as per the electrification plan. Distribution sells electricity with tariffs, prices and conditions of service as approved by NERSA and has developed a compliance universe to monitor and report on performance that includes audits and reviews.

Distribution aspires to continue to grow sales and revenue by stimulating demand, by retaining sales, attracting new customers, growing revenues by responding to customer needs innovatively, speeding up connections and collections, whilst consistently delighting customers.

During the MYPD 6 control period, Distribution will build on its traditional and new capabilities innovating and evolving to meet the needs of the changing distribution industry landscape marked by growth in DER’s. In this pursuit, Distribution whilst enabling electricity supply across South Africa, will leverage the following:

- Customer centricity with the appropriate segmented services and products to increase customer retention.
- Unbundled and cost reflective tariffs.
- Grid health for improved network performance.
- Sales and revenue growth.
- Drive to increase revenue collection and reduce energy losses.

To this end, the Distribution enablers include Zero-Harm to employees, contractors, and the environment, a focus on operating a sustainable network and continued network regulatory compliance. Distribution will build on its agile and innovative workforce, proactively partnering with all Stakeholders towards a sustainable distribution industry. Electrification remains a priority and to expedite the government’s Universal Access Program (UAP).

Our customers remain at the core of our operations. We prioritise our customers while supporting South Africa's JET and minimizing our environmental impact. Our network and customer services are evolving to embrace industry trends like virtual wheeling and smart metering, ensuring a reliable and sustainable energy future.

The Distribution Energy Trader (DET) and the evolution of the System Operator (SO) will unlock a range of capabilities that modernize the energy landscape. Flexibility services, encompassing demand response and energy storage, will empower consumers to actively participate in managing their energy consumption, contributing to grid stability and balancing supply and demand. Energy aggregation will allow smaller energy resources, like rooftop solar installations and microgrids, to pool their capacity and participate in the wholesale market, fostering a more inclusive and competitive energy ecosystem. These advancements will drive greater efficiency, reliability, and sustainability within the South African power sector.

1.2 Customers served

The Distribution service offering combines network and retail customer services provision to over 7 million customers that include over 5 million electrification connections across 9 provinces with over 300 customer network centres (CNCs). In the past 10 years, Distribution has connected more than 1.81 million customers to the grid that equates to connecting 180 000 customers per annum. Distribution continues to connect and avail offset services to small-scale embedded generators (SSEGs) over the past 5 years.

To serve customers across the country, the Distribution operating structure is organised into five clusters, made up of nine operating units, overarching 27 operating zones with execution of work through over 300 CNCs.

At the end of the FY2023, municipalities, industrial and mining customers accounted for 86% of the total sales volumes. Residential and Prepayment customers supplied by Eskom make up 98% of the number of Eskom customers but only consume 5% of the local sales volumes, see table below.

TABLE 7: NUMBER OF ESKOM CUSTOMERS

Customer segment	Actual FY2019	Actual FY2020	Actual FY2021	Actual FY2022	Actual FY2023
Distributors	800	805	804	799	799
Residential	6 358 523	6 577 905	6 720 150	6 833 928	6 944 488
Commercial	52 556	52 909	52 880	52 736	50 846
Industrial	2 705	2 684	2 649	2 601	2 560
Mining	981	961	945	926	906
Agricultural	81 303	80 451	79 115	77 692	74 608
Rail	493	475	475	471	454
International	11	11	11	11	11
Total	**6 497 372**	**6 716 201**	**6 857 029**	**6 969 164**	**7 074 672**

1.3 Tariffs

Eskom recovers sales revenues through the Distribution Licensee via standard tariffs, local/international negotiated pricing agreements (NPAs), and international utility tariffs. Standard tariffs provide pricing options to meet customers' electricity consumption patterns and service needs.

There are different standard tariffs based on supply size, complexity, geographic location, municipal and non-municipal supplies as well as generator tariffs. However, three main categories remain consistent across customer types: urban (large and industrial), rural, and residential. Importantly, these tariffs incorporate inter-tariff subsidies, ensuring affordable rates for rural and residential customers.

Standard tariff restructure

In a separate submission, Distribution will apply to the NERSA to approve tariff restructuring to be implemented in FY2026 aimed at realising the strategic direction for Eskom tariffs, that embodies:

- Improved cost-reflective tariff structures to closely match the cost structure's fixed and variable costs (within NERSA allowed revenues).
- Appropriate allocation for volume risks between Eskom and customers.
- Reasonable compensation for the use of networks by generators and loads.
- Incentives for customers to stay connected to the grid.
- Electricity sales growth with adequate recovery of costs.
- Improved demand management.

The tariff restructuring application to NERSA, that is, the Retail Tariff Plan (RTP) will be submitted during 2024 for implementation from 1 April 2025.

The outcome of the MYPD 6 NERSA decision will be reflected in the standard tariffs after the NERSA Eskom Retail Tariff Structural Adjustment (ERTSA) approval process.

Negotiated Pricing Agreements

The Department of Mineral Resources and Energy (DMRE) has amended the short term NPA framework and developed an interim long term NPA framework in accordance with the requirements of the Electricity Pricing Policy (EPP). The short term NPAs have been specifically structured to provide opportunities to sustain existing businesses that are at risk of failure and permit others that have closed production capacity in recent years, owing to their inability to compete in their markets, to restart. The rationale for the interim long-term framework is to protect vulnerable sectors, improve relative sector competitiveness and attract investment in the long-term. These two frameworks will allow for the relevant vulnerable sectors, which are impacted by the price of electricity and meet the required criteria, to be supported to allow for further contribution to economic activity of the country.

The two NPA frameworks make provision that any revenue impact to Distribution resulting from an NPA would be recovered through the applicable regulatory mechanism, either through the revenue or Revenue Clearing Account (RCA) process. NERSA allows any differential to be recovered from standard tariff customers.

Distribution currently has twelve NPAs in place with customers as approved by NERSA. NPAs sustain baseload sales they also benefit the SO with interruptibility and demand response during constrained periods.

1.4 Energy losses management

Distribution has implemented interventions to address escalating energy losses, including meter audits and fixes, disconnecting illegal connections and imposing fees, recovering revenue for unaccounted energy and preventing illegal prepaid voucher use.

Furthermore, the energy losses reduction is supported by implementing secure smart meters, conducting customer education and mobilization campaigns, prosecuting electricity theft, and introducing pricing penalties for contractual breaches.

1.5 Electrical supply networks

To meet customer needs Distribution builds, operates, and maintains more than 371 000 km high (sub-transmission), medium and low-voltage electricity supply networks (distribution and reticulation networks), over 400 000 km of low voltage lines with over 414 000 transformers and over 300 CNCs. The Distribution grid ensures a reliable, secure, and environmentally sustainable supply of electricity that meets customer expectations and supports the government’s universal access agenda and the Eskom growth strategy.

Distribution has stabilised its network performance and redressed the frequency of customer interruptions. This is to be further supported by prudently investing capital and maintaining as per plant maintenance regime.

The complexity of managing the Distribution grid is increasing sharply given the change in energy flows and density of DERs in its network. Operational configuration and equipping Distribution system operator (DSO) that has operations in each province with a complement of human and technical resources will deliver on the required levels of network performance.

1.6 Promotion of energy efficiency

Energy efficiency enables the optimised use of electricity supplied for the benefit of all electricity users. To this end, to influence customer electricity demand profiles, Distribution implements the Integrated Demand Management (IDM) for energy efficiency, demand-side management (DSM), and demand response (DR) programmes. The associated activities include developing the incentives, providing measurement and verification, marketing support and effecting targeted communications.

2. Sales volumes

For the MYPD 6 revenue application, one of the key assumptions is the latest available forecasted sales volumes. In accordance with NERSA's MYPD methodology, a revision of the forecasted sales volume to reflect the prevailing situation must be presented to NERSA for consideration. This is especially pertinent to consider the impact of the pandemic and the recovery of the South African economy.

Eskom makes every effort to at least maintain its levels of sales and to increase sales, if possible. However, as is demonstrated below, the sales volume is very much an outcome of the economy of the country. Eskom is making every effort to address its operational environment to improve its availability within the constraints within which Eskom has to operate. Thus, it is submitted that an improvement in the economic conditions in the country is a requirement for a likely improvement in the level of Eskom sales. Sales volumes cannot be improved in isolation.

The forecasted sales volumes, as provided below, refer to the FY2026 to FY2028 for all customer categories that are on standard tariffs, local NPAs, and international sales (exports). During the MYPD 6 period, the forecasted sales volume decline will be 0.9%. In this sales volume forecast, the decrease in sales is anticipated primarily from exports and standard tariffs.

The table below shows the Eskom projected sales and forecasted sales from FY2023 to FY2030, split between standard customers, the NPA, and international sales.

TABLE 8: TOTAL ESKOM SALES FROM FY2023 TO FY2030 (GWH)

Sales Volume (GWh)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Standard customers	166 980	167 977	156 039	152 836	150 394	149 689	148 231	147 323
	-5%	0.6%	-7.1%	-2.1%	-1.6%	-0.5%	-1.0%	-0.6%
Negotiated Pricing Agreement	10 413	10 440	22 679	22 581	22 625	22 713	22 564	22 591
	0%	0.3%	117.2%	-0.4%	0.2%	0.4%	-0.7%	0.1%
Total LOCAL sales	**177 392**	**178 416**	**178 717**	**175 417**	**173 019**	**172 403**	**170 796**	**169 914**
	-4%	0.6%	0.2%	-1.8%	-1.4%	-0.4%	-0.9%	-0.5%
International sales	11 357	9 619	10 355	10 235	10 235	10 265	10 235	10 235
	-14%	-15.3%	7.7%	-1.2%	0.0%	0.3%	-0.3%	0.0%
Total Sales (incl. Internal sales)	**188 749**	**188 035**	**189 072**	**185 652**	**183 254**	**182 668**	**181 031**	**180 149**
	-5%	-0.4%	0.6%	-1.8%	-1.3%	-0.3%	-0.9%	-0.5%

Eskom's sales growth has trended downwards over the past three years, with the outlook remaining relatively depressed in the years ahead. Since 2006, sales have declined by an average ~0.5% per year. The decline can generally be attributed to large power users because of low competitiveness, high ore extraction costs, and volatile commodity markets – particularly in the ferrochrome, steel, gold, and platinum industries.

It is important to emphasise that the South African economy had shown signs of significant distress prior to the onset of the pandemic and its associated lockdowns at the end of March 2020. Although South Africa is still viewed as an emerging market, several factors have contributed to the decline in underlying economic growth of the country. These include, but are not limited to, finite natural resources, low investor confidence, infrastructure bottlenecks, labour unrest, load shedding, rising local debt, and unemployment.

The impact of the COVID-19 pandemic mentioned above on Eskom's electricity sales was immediate, with the largest impact materialising during April and May 2020. As of 30 September 2020, the sales impact had been estimated at approximately 8.24 TWh. A recent United Nations Development Programme (UNDP) study has revealed that the local economy will take up to five years to recover.

Given the numerous factors above, electricity sales growth is expected to decline over the next few years. However, Eskom aims to grow sales over the medium term, supported by innovative products, solutions, and tariffs, in collaboration with customers to address their needs and aspirations.

2.1 Sales volume forecasting assumptions

The sales volume forecast is based on various assumptions reflecting the different types of customers' electricity needs and influences on diverse customer consumption profiles. There are some similar assumptions used for all customers, but with varying impacts.

Key assumptions include the gross domestic product (GDP) growth, commodity market performance and prices, demand response savings, weather conditions, customer projects, industrial action, and the impact of the leap year. The volume forecast does not include any future load shedding; it is a representation of the expected volume requirement in the market.

2.1.1 Gross domestic product

Historical trends indicate that electricity consumption grows at a slower rate than the economy. In the sales volume forecast, the gap between sales growth and GDP is widening due to lower energy-intensive sales during the forecast years and the economy migrating towards a greater service-oriented economy. In addition, several mines and large industrial customers are exploring alternative sources of energy. It is, therefore, assumed that the margin between GDP growth and electricity growth will continue to widen into the future. The figure below illustrates the anticipated gap between GDP and sales growth as explained above.

FIGURE 1: ACTUAL AND PROJECTED GDP VERSUS SALES GROWTH RATES

2.1.2 Commodity prices

In 2022, commodity prices were volatile due to a range of factors, including global demand and supply disruptions. Ferrous metal commodity prices increased sharply in 2022, which led to an increase in sales in this sector. Customers ramped up production by switching on furnaces and reducing shutdowns during this period. Some customers brought back furnaces that had previously been shut down, which had a positive impact on sales. Prices are expected to stabilise in the short term. The stabilisation of prices, coupled with customers exploring alternative sources of energy, will lead to a decline in sales in this sector.

Platinum prices made a recovery after the COVID-19 pandemic, with high prices recorded in 2021 and 2022. As a result, platinum mines increased productivity, which resulted in higher sales. Platinum prices are expected to remain high in the short term and during the MYPD 6 period. This has been incorporated in the latest sales volumes forecast.

Gold prices reached record highs in 2020, as the metal has remained a safe haven for investors. The price is expected to start stabilising in the short term. Gold mines are heavily reliant on the price, and sales in this sector are expected to decrease in the short term in line with the price of gold.

TABLE 9: COMMODITY PRICES (SOURCE: WORLD BANK COMMODITY OUTLOOK)

										Released: April 27, 2023
							Percent change from previous year		Differences in levels from October 2022 forecasts	
Commodity	Unit	2020	2021	2022	2023f	2024f	2023f	2024f	2023f	2024f
Metals and Minerals										
Aluminum	$/mt	1 704	2 473	2 705	2 400	2 450	-11.3	2.1	0	16
Copper	$/mt	6 174	9 317	8 822	8 500	8 000	-3.7	-5.9	1200	639
Iron ore	$/dmt	109.0	162.0	121.0	115.0	110.0	-5.2	-4.3	15	12
Lead	$/mt	1 825	2 200	2 151	2 100	2 000	-2.4	-4.8	200	83
Nickel	$/mt	13 787	18 465	25 834	22 000	20 000	-14.8	-9.1	1000	-708
Tin	$/mt	17 125	32 384	31 335	24 000	24 500	-23.4	2.1	2000	2243
Zinc	$/mt	2 266	3 003	3 481	2 800	2 700	-19.6	-3.6	0	-71
Precious Metals										
Gold	$/toz	1 770	1 800	1 801	1 900	1 750	5.5	-7.9	200	100
Silver	$/toz	20.5	25.2	21.8	23.0	22.0	5.5	-4.3	2.0	1.0
Platinum	$/toz	883	1 091	962	1 000	1 050	4.0	5.0	0	0

Source: World Bank (2023). Commodity Markets Outlook.

2.1.3 Furnace load reduction in winter

It is assumed that a substantial amount of furnace load will not be utilised during winter due to the high winter energy prices. As a result of the seasonal tariff, the majority of smelters usually perform maintenance on their furnaces during the winter months. Depending on trading conditions, furnace utilisation is assumed at around 90% in the summer months.

2.1.4 Integrated Demand Management (IDM)

The impact of IDM initiatives is embedded in the forecasted sales volumes, and it is, therefore, captured in the underlying historic sales volume base used in the trend analysis. The sales volume forecast assumption for IDM is that the historic IDM savings will continue during the application period.

2.1.5 Weather conditions

Residential and agricultural sales are weather sensitive by nature. As customary, average weather conditions have been applied as a key input parameter to predict the sales of all the weather-sensitive customers.

2.1.6 Leap year impact

The leap year impact has also been taken into account for 2028.

2.1.7 New customer projects

Only projects that have a high probability of start-up and have budget quotations accepted by customers are included in the sales forecast.

2.1.8 Co-generation (co-gen)

The sales forecast also incorporates the co-gen capacity of large customers that have the capability to generate and wheel energy between each of their respective sister plants. It should be noted that their respective co-gen usage is dependent on plant availability and performance.

In contrast, there are also co-gen customers that are envisaged to sell electricity to the SO. These have been excluded from the sales volume forecast, as they are regarded as Independent Power Producers (IPPs).

2.2 Forecasted sales volumes by sector

The figure below shows the percentage split per forecasted sales by sector. The distributors' (municipal) sales volume of 45% reflects Eskom's sales to all municipalities and metros. In many municipal areas, most sales are consumed by residential and commercial consumers. The industrial sector contributes 25% of Eskom sales, while mining constitutes a further 16%. The remaining sectors contribute to the residual 14% of Eskom sales. The customer categories used to derive the forecasted sales volumes are based on sectors as shown in the table below.

FIGURE 2: FORECASTED SALES BY SECTOR (FY2025)

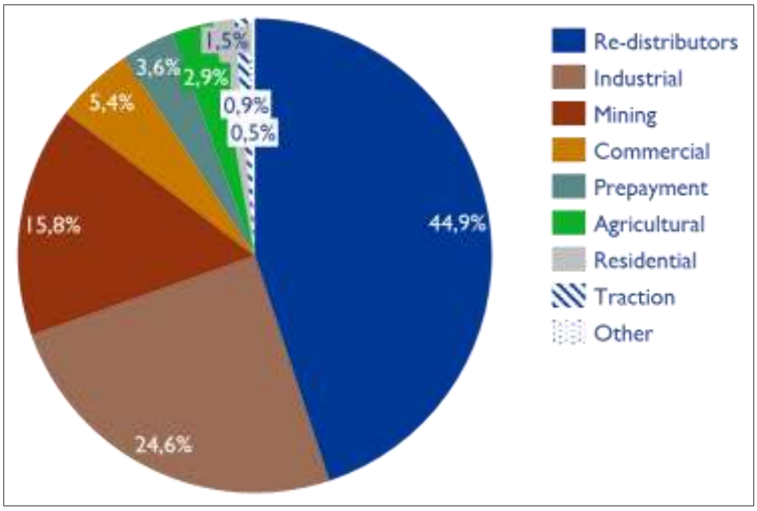


TABLE 10: MYPD 6 FORECASTED SALES PER SECTOR (GWH)

Sales Volume (GWh)	Actual FY2022	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Re-Distributors	83 831	79 480	80 122	80 266	77 905	75 695	75 093	74 104	73 506
Industrial	45 120	44 533	43 844	44 043	43 542	43 637	43 760	43 532	43 544
Mining	28 030	27 843	28 308	28 170	27 869	27 736	27 704	27 521	27 373
Commercial	9 872	9 376	9 885	9 666	9 654	9 597	9 568	9 489	9 416
Prepayment	7 312	6 342	5 886	6 413	6 379	6 350	6 328	6 294	6 269
Agricultural	5 382	4 785	5 305	5 111	5 072	5 038	5 018	4 978	4 956
Residential	2 997	2 625	2 550	2 594	2 549	2 508	2 470	2 425	2 383
Traction	2 128	1 668	1 679	1 627	1 621	1 631	1 634	1 628	1 643
Other	923	740	836	827	825	827	828	826	823
Local Sales	**185 595**	**177 392**	**178 416**	**178 717**	**175 417**	**173 019**	**172 403**	**170 796**	**169 914**
International (SAPP)	13 204	11 357	9 619	10 355	10 235	10 235	10 265	10 235	10 235
Total Eskom Sales	**198 799**	**188 749**	**188 035**	**189 072**	**185 652**	**183 254**	**182 668**	**181 031**	**180 149**

2.3 Uncertainty of the sales volume forecast

The demand for electricity is highly uncertain at the best of times. Eskom sales are expected to be negatively affected by the gradual transition to alternative energy sources as customers seek to have more stable and cleaner sources of energy. See figure below that depicts the sales forecast's cone of uncertainty indicating the levels of possible upside and downside.

FIGURE 3: TOTAL LOCAL SALES SHOWING THE CONE OF UNCERTAINTY

The uncertainty provides the factors impacting sales that are beyond Distribution's control over the MYPD period. The largest is supply constraints, which can potentially reduce sales by more than 4 TWh in the application period.

If customers invest in self-generation more aggressively, a further 3.5 TWh reduction will occur. Another significant variable that will have a negative impact on sales is lower economic growth. This could result in a 3 TWh reduction in sales. Since customers are exposed to a multitude of external factors, smaller risks are also inherent at sector level and contribute the remaining of the above risk quantity. See tables below.

TABLE 11: POSSIBLE DECREASE IN ENERGY CONSUMPTION (GWH)

Sales GWh						
Factor	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Low economic growth	(712)	(769)	(810)	(803)	(789)	(850)
Warmer winter, cooler summer, and high rainfall	(921)	(926)	(928)	(932)	(938)	(944)
Higher small-scale embedded generation (SSEG)	(171)	(216)	(243)	(268)	(290)	(296)
Higher photovoltaic (PV)	(283)	(398)	(512)	(627)	(741)	(791)
Customers downscaling/reducing load	(250)	(269)	(256)	(226)	(212)	(215)
Unplanned shutdowns	(150)	(150)	(150)	(150)	(150)	(150)
Industrial action	(62)	(62)	(62)	(62)	(62)	(62)
Higher non-technical losses	(278)	(280)	(283)	(285)	(288)	(290)
Supply constraints	(2 520)	(700)	(668)	(461)	(688)	(551)
Increased own generation	(202)	(202)	(202)	(202)	(202)	(202)
Conversions to prepaid	(29)	(28)	(28)	(27)	(27)	(26)
Total downside impact	**(5 578)**	**(4 001)**	**(4 143)**	**(4 044)**	**(4 387)**	**(4 378)**

The figures in the table below highlight the upside or positive movement of sales in relation to the MYPD 6 forecast. This refers to a potential sales increase that could arise should certain conditions materialise.

A key factor in this regard is that of new customer projects and connections that will require more consumption from Eskom. This implies that additional sales of 6 TWh could transpire should the customers' aspiration materialise and all new projects offtake from Eskom. A further favourable factor is the unavailability of own generation, which could result in 9.5 TWh additional sales.

TABLE 12: POSSIBLE INCREASE IN ENERGY CONSUMPTION (GWH)

Sales GWh						
Factor	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Higher economic growth	599	660	776	915	1 047	1 174
Colder winter, hotter summer, and low rainfall	1 157	1 158	1 160	1 164	1 170	1 176
Lower SSEG	14	60	61	63	65	67
No supply constraints	374	378	352	356	345	349
Free basic electricity (FBE)	16	21	22	22	22	22
Upscaling/New customer projects and connections	592	892	2 307	2 521	2 620	2 714
No shutdowns	200	200	200	200	200	200
Additional electric vehicles (EVs)	73	112	159	212	277	342
Ramping up Distribution (Dx) projects, including microgrid	50	45	45	45	24	24
Lower non-technical losses	231	260	299	294	355	434
Unavailability of own generation	2 392	2 392	2 392	2 392	2 392	2 392
Customer forecast materialising	527	1 100	1 100	1 100	1 100	1 100
Wheeling delays	251	1 163	1 833	1 843	1 842	1 842
Total upside impact	**6 476**	**8 441**	**10 706**	**11 127**	**11 459**	**11 836**

2.4 Sales forecasting approach

There are various influences on customers' current and future electricity consumption, determined by individual customers' need for electricity and substitutes to taking supply from Eskom. To practically capture this complex dynamic, the Eskom forecasting encapsulates differing sales assumptions by customer types that are the high-sales and lower-sales end users. For high-sales-volume customers, the sales forecasting assumptions comprise individual customer planning inputs. For the lower-consumption customers, the sales forecast is informed by historical trends, the weather, and relevant economic indicators.

Consequently, volume changes in the high-sales customer category require the application of an individual bottom-up approach in order to consider specific sales drivers, which include individual business plans, commodity prices, and the consideration of external economic factors.

The forecasting of international sales adopts the individual approach, given the country-specific drivers and the fact that the sales are exported.

Municipalities purchase in bulk from Eskom, distributing to the industrial and commercial sectors, with a greater part of supply to residential end users. Eskom bulk sales to municipalities differ from one municipality (or metro) to the next, as the purchase profile of each municipality is shaped by its individual customer-mix. Eskom, therefore, uses a combination of forecasting methodologies, combined with an individual consultation with the municipality, in line with the respective local government development plans. As municipalities, there are various aspects that have an impact on their respective electricity consumption profiles.

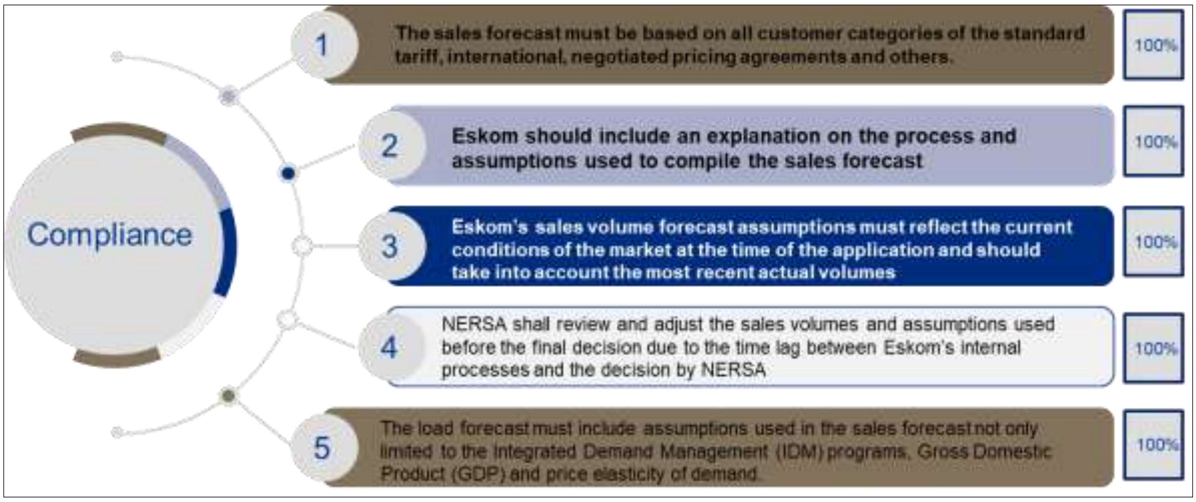
For the residential and commercial sectors, historical trends, the weather, and economic indicators are the primary indicators that inform the sales forecast.

2.5 Sales forecasting process

A five-step process, as depicted in the figure below, is followed to forecast Eskom electricity sales. This process includes the compilation of a six-year monthly detailed forecast, with a further four year period at an annual level, using trends per sector. As the diagram depicts, the sales forecast is a bottom-up derived forecast.

Each of the nine Eskom provincial operating units concentrates on its top customers in detail, while the other customer sectors are forecasted at summary level to derive a six-year projection per month, with a further four years of annual numbers. Detailed analysis and rigorous validation processes follow to ensure consensus that the derived forecast is the most likely scenario, given the current information available.

FIGURE 4: AREAS OF COMPLIANCE IN PROVIDING THE MYPD FORECASTED SALES



Each Eskom Distribution operating unit (OU) tends to the customers that account for 80% of the revenue of that OU individually in detail, engaging the customer executives and obtaining applicable information from the customers, while balancing this view with sectoral trends, the expected economic climate, and any other relevant information. It is clarified that, at this stage, the proposed price increase that NERSA will determine is not known.

3. Energy Losses

Eskom Distribution energy loss is defined as the difference between energy purchased (measured at the Transmission main substations IPP plants) and energy sold to all Distribution customers (measured or estimated). This includes both technical energy losses (also known as copper and iron losses) and non-technical energy losses; it excludes non-payment or bad debt.

The proposed distribution energy losses target in this forecast are well within the NERSA benchmark of 10% as stipulated in section 3.2.1.1 of the regulator's Cost of Supply Framework. The Cost of Supply Framework states that utilities should manage distribution losses within the tolerable range of 5% to 12%.

3.1 Energy losses forecast

The energy loss volume and percentage are derived as the difference in volumes between the purchases (from Transmission, IPPs, international imports, and Distribution-owned generators) and sales to customers.

The forecast in this application is informed by the historical performance based on the previous period. on which data analysis was performed. The forecast of energy losses for FY2026 to FY2028 are 9.56%, 9.36%, and 9.50% respectively. Note that the integration of IPPs into the Distribution grid increases the level of technical losses. See table below for the applied energy losses forecast.

TABLE 13: ENERGY LOSSES FORECAST (GWH)

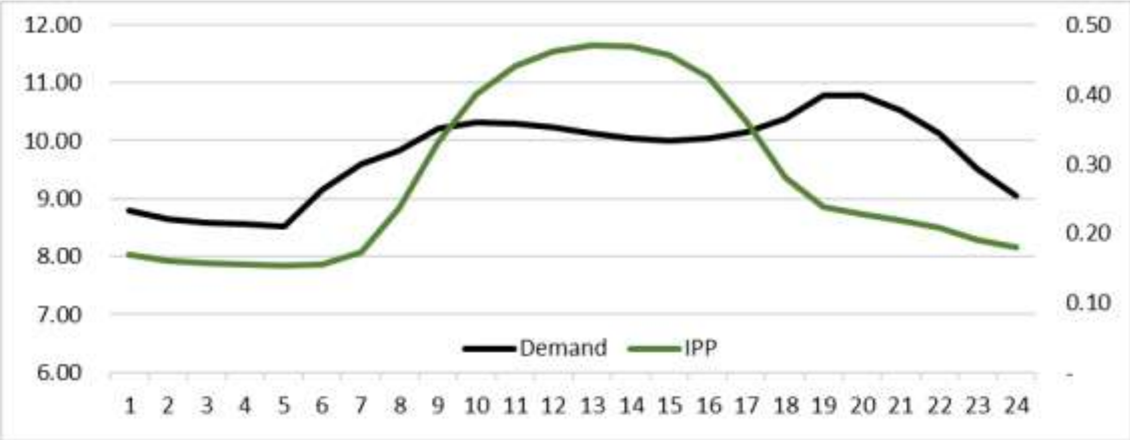
Distribution Losses	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Losses (GWh)	19 151	18 705	19 131	18 585	17 908	18 140	17 971	17 797
%	9.44	9.42	9.65	9.56	9.36	9.50	9.46	9.37

3.2 Factors influencing the losses forecast

The increase in total distribution energy losses is attributable to:

- Increase in non-technical losses from theft that is not limited to the residential customer sector, it also includes other customer segments.
- Increased technical losses due to ageing distribution network assets.
- The increase in IPP related line losses due to their long distance from loads as they seek areas with ample natural resource (solar or wind) availability; see figurebelow.

FIGURE 5: DAILY PROFILE OF IPP COMPARED TO DISTRIBUTION'S LOAD



Notes:

- *The profiles of renewable IPPs do not match the load profile.*
- *The IPPs, are mostly renewable, and are not optimally positioned for distribution load given their location.*
- *During periods when the load* demand is lower than the IPP, *energy* supply *flows* back to the transmission grid *and it is during this process that* additional technical losses are incurred in the distribution network.

3.3 Energy losses management

Eskom Distribution has implemented several interventions aimed at addressing the escalating of energy losses within its operations. The energy losses management interventions have resulted in successful benefits across different customer sectors.

The following are some of the interventions:

- Disconnection of illegal connections, meter tampers and imposition of remedial fees.
- Meter auditing and fixes of customer meter installations.
- Revision of supply group codes on prepayment meters to prevent the use of illegal prepaid vouchers.
- Reconciliation of energy delivered, and energy sold (that is, energy balancing) at the reticulation feeder level to prioritise high-loss feeders for normalisation.
- Improvement of process and data anomaly correction.
- Estimation and recovery of revenue for historical unaccounted energy. This includes tampered with, faulty, or missing metering installations.
- Implementation of technologies in the form of smart/split meters with steel enclosures to prevent access to the meters.
- Customer education, social mobilisation, and partnership campaigns to drive behaviour change (customer co-operatives).

- Investigations and prosecution of criminals/syndicates engaged in electricity theft through the sale of illegal prepaid vouchers and providing illegal electrification and meter tampering activities.
- Penalties for customers breaching contractual/Grid Code requirements at both a transmission and a distribution level.

4. Regulatory Asset Base, Depreciation and Return on Assets

The regulatory asset base is defined as assets of the regulated business used or are usable in the production of regulated services. The MYPD methodology specifies that the RAB of the regulated business' operations must only include assets necessary for the provision of regulated services. That is, based on the net depreciated value (residual value) of allowable fixed assets necessary to allow the utility a reasonable return to be financially viable and sustainable while preventing unreasonable price volatility and excessive sustainability.

Regulatory depreciation and return on the RAB provide the regulatory mechanisms under which capital investment costs are recovered is on a cost-reflective basis throughout their regulated economic life. Consequently, capital expenditure is not a separate cost item in the MYPD allowable revenue formula.

Consequently, in this revenue application, Distribution is required to apply for the following:

- Depreciation on the commissioned assets, in accordance with the method prescribed by the MYPD methodology. Depreciation is calculated on revalued assets as of 31 March 2020, assets commissioned since 31 March 2020, and asset purchases.
- The ROA is calculated on all assets as shown in the table below.

TABLE 14: REGULATORY ASSET BASE SUMMARY (R'M)

Regulatory Asset Base (R'm)	Decision FY2024	Decision FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Depreciated Replacement Costs (DRC)	93 208	86 527	80 149	74 035	68 171	62 599	57 284
Asset transferred to commercial operation post valuation date	3 741	5 335	25 937	33 603	40 583	46 784	52 456
Work Under Construction (WUC)	9 444	7 232	10 453	14 945	17 757	18 550	20 109
Net Working Capital	23 862	26 007	25 847	30 595	41 771	46 843	52 395
Assets Purchases	367	330	1 530	1 573	1 507	1 441	1 400
Assets funded upfront by customers	(14 244)	(14 338)	(12 328)	(12 544)	(12 771)	(11 586)	(10 400)
Total Regulatory asset base (RAB)	**116 378**	**111 093**	**131 587**	**142 207**	**157 018**	**164 631**	**173 243**
Average Regulatory asset base	-	113 735	121 340	136 897	149 613	160 825	168 937

4.1 Regulatory asset base components

In accordance with the MYPD methodology, the regulatory asset base consists of the following:

- **Depreciated replacement cost assets**
  These are assets in accordance with the March 2020 asset valuation. The valuation includes assets already in use as of 31 March 2020. All other assets in construction are not included in the valuation, but rather in the work under construction (WUC).
- **Assets transferred to commercial operations**

This term refers to the assets transferred into commercial operation (CO) after the 2020 asset valuation. Once commissioned, these assets are then depreciated by dividing the cost of the asset over the number of years for which the asset is to be used, that is, the useful life of the asset.

- **Work under construction (WUC)**
  In accordance with the MYPD methodology, assets that constitute the "creation of additional capacity", their capital project expenditures or WUC values (excluding interest during construction (IDC)) incurred before the assets being placed in CO are included in the RAB and earn a rate of return.
- **Net working capital**
  This includes trade and other receivables, inventory, and future trade and other payables.
- **Asset purchases**
  All movable items that are purchased and ready to be used are included in this category, for example, equipment and vehicles, production equipment, etc.

4.2 Depreciated replacement costs (DRC)

The roll forward of the depreciated replacement costs for MYPD 6 as shown below is based on MYPD 5 approved values. The depreciation is based on the remaining useful life.

TABLE 15: FIXED ASSETS – DRC VALUES (R'M)

Fixed assets - DRC Values - Distribution (R'm)	FY2024	FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Opening balance	100 187	93 208	86 527	80 149	74 035	68 171	62 599
Inflation on opening balance	-	-	-	-	-	-	-
Transfers from Work Under Construction (WUC)	-	-	-	-	-	-	-
Depreciation	(6 980)	(6 680)	(6 378)	(6 114)	(5 864)	(5 573)	(5 317)
Closing asset values	**93 208**	**86 527**	**80 149**	**74 035**	**68 171**	**62 599**	**57 284**

4.3 Work under construction (WUC)

In terms of the MYPD methodology, the criteria for the inclusion of WUC in the RAB are for those assets that create additional capacity and are defined as follows:

- **Expansion** – capital expenditure to create additional capacity to meet the future anticipated energy demand forecast.
- **Upgrade** – capital expenditure incurred to ensure that the current and future energy demand forecast is met.
- **Replacement** – capital expenditure to replace assets that have reached the end of their useful life to continue meeting the current demand.

- **Environmental legislative requirements** – this is capital expenditure incurred to ensure that the licensing condition is maintained, thereby continuing to meet the current energy demand forecast.

A WUC, in essence, refers to the capital expenditure incurred and meets the criteria referred to above for inclusion in the RAB. In terms of the MYPD methodology, the WUC balance is required to earn a return on assets but is not depreciated until assets are transferred to CO. Only on CO do these assets incur depreciation costs.

4.4 Depreciation

Depreciation is the cost of usage over the life of the asset. This is generally a proxy for the recovery of the capital portion of the investment made in the infrastructure.

As is required by the MYPD methodology, the annual depreciation allowance is determined by dividing the cost of the asset by the estimated useful life of that asset. See table below for the revenue related to depreciation during the MYPD 6 period.

4.5 Assets excluded from RAB

In terms of the MYPD methodology, assets that are funded via up-front capital contributions do not earn a return on assets, and their depreciation is not included in the revenue requirement. The negative values reflected under "Assets funded up front by customers" reduce the value and the RAB and depreciation, see table below.

TABLE 16: DEPRECIATION (R'M)

Depreciation (R'm)	Decision FY2024	Decision FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Depreciated Replacement Costs (DRC)	6 262	5 876	6 378	6 114	5 864	5 573	5 317
Asset transferred to commercial operation post valuation date	1 039	1 251	891	1 252	1 588	1 920	2 225
Assets Purchases	92	82	382	393	377	360	350
Assets funded upfront by customers	(542)	(588)	(941)	(1 027)	(1 127)	(1 184)	(1 184)
Total Depreciation	**6 851**	**6 622**	**6 710**	**6 732**	**6 702**	**6 670**	**6 709**

4.6 Return on assets

The return on assets included in the MYPD 6 application is shown in the table below. The distribution network is applying for 4%, 5%, and 6% ROA for FY2026, FY2027, and FY2028, respectively, see table below.

TABLE 17: RETURN ON ASSETS (R'M)

Return on Assets (R'm)	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Closing RAB (R'm)	131 587	142 207	157 018	164 631	173 243
Average RAB (R'm)	121 340	136 897	149 613	160 825	168 937
Real pretax WACC %	11.40%	11.40%	11.40%	11.40%	11.40%
Cost Reflective RoA (R'm)	13 833	15 606	17 056	18 334	19 259
RoA Applied for RoA %	4.00%	5.00%	6.00%	7.47%	9.69%
RoA Applied for (R'm)	4 854	6 845	8 977	12 020	16 377

The weighted average cost of capital (WACC), as determined by NERSA for the MYPD 5 period is used as a comparison for the cost-reflective return on assets; this value will likely have increased since MYPD 5. However, it allows for a conservative estimate as Eskom migrates towards a cost-reflective level.

The return on assets is being phased to allow for the smoothing of the tariff. This phasing allows the average price of electricity to migrate towards cost-reflective tariffs. In the absence of such a phasing, the price increase being requested will be significantly higher. Thus, Eskom is allowing for migration, to allow for consumers to experience a phased price increase. However, this migration is accompanied by risks which need to be managed. Should the risks materialise, a further burden is likely to be applied on the fiscus. The efficient costs do not go away and need to be funded. In essence the subsidy to all consumers continues to be provided for a longer period.

5. Operating and maintenance costs

To service its customers across South Africa, Distribution ensures that the networks performance enables continued and reliable electricity supply. Distribution's operating costs consist of employee benefits, maintenance, other costs, and impairments, see table below.

TABLE 18: DISTRIBUTION OPERATING AND MAINTENANCE COSTS (R'M) EXCLUDING IDM

Operating expenditure (R'm)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Employee benefit costs	11 606	12 530	14 326	15 226	15 941	16 665	17 373	18 110
Maintenance	4 378	5 203	5 426	5 716	5 991	6 344	6 630	6 928
Other operating expenses	4 481	4 195	5 748	6 035	6 351	6 598	6 895	7 205
Corporate Overheads and Recoveries	1 396	1 654	3 064	3 380	3 532	3 743	3 876	4 019
Other Income	(890)	(588)	(526)	(523)	(538)	(544)	(569)	(594)
Total operating expenditure	**20 971**	**22 993**	**28 038**	**29 834**	**31 277**	**32 806**	**34 205**	**35 668**

5.1 Employee expenses

Distribution employees provide network and customer services that involve operating and maintaining the electrical network. This enables Distribution to comply with its licence conditions while providing a sustainable electricity supply.

Eskom consistently benchmarks the salaries and related benefits of all levels of employees to ensure alignment with the South African market. Three main factors influence employee benefits costs and they are staff numbers, increases to employee benefits and level of remuneration.

On average, the annual growth rate for employee expenses during the period FY2023 to FY2030 is 6% and is in line with inflation.

TABLE 19: DISTRIBUTION EMPLOYEE EXPENSES AND HEADCOUNT

Employees expenses	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Employee expenses (Rm)	11 606	12 530	14 326	15 226	15 941	16 665	17 373	18 110
Headcount	15 845	16 842	17 111	16 999	17 039	17 048	17 048	17 048

Eskom has consistently benchmarked the salaries and related benefits of all levels of employees to ensure alignment with the market. The licensee has an employee complement of 15 845 as at FY2023, with 8% of employees at managerial level and 92% of employees within operations.

5.2 Maintenance

Eskom Distribution's maintenance regime includes both planned and unplanned maintenance. See table below for a summary of Distribution's maintenance costs.

TABLE 20: DISTRIBUTION MAINTENANCE COSTS (R'M)

Total Maintenance Cost (R'm)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Woodpole Maintenance	231	360	416	438	460	481	502	525
Major Maintenance	179	322	279	294	309	322	337	352
Live Work Maintenance	89	104	110	115	121	127	132	138
Vegetation Maintenance	212	243	238	251	263	275	287	300
Reliability Maintenance	165	226	231	243	255	267	279	291
Total Planned Maintenance	**876**	**1 255**	**1 274**	**1 341**	**1 408**	**1 472**	**1 538**	**1 607**
Total Unplanned Maintenance	3 502	3 948	4 152	4 375	4 582	4 873	5 092	5 321
Total Maintenance	**4 378**	**5 203**	**5 426**	**5 716**	**5 991**	**6 344**	**6 630**	**6 928**

The maintenance program aims to manage asset condition throughout their lifecycle, ensure compliance with safety, health, and environmental regulations, and achieve technical performance targets for interruptions and restoration time, as agreed with the regulator. The key drivers for the maintenance expenditure include:

- **Environmental and safety considerations:** to ensure the safe operation of the network with a minimum impact on the environment.
- **Asset base:** geographically, the distribution network and its assets spans the breadth and length of South Africa and grows by approximately 4% each year increasing planned and unplanned maintenance requirements.
- **Network performance:** networks need to perform in line with design requirements supporting compliance with technical performance KPIs.
- **Quality of service to the customer:** apart from supply availability, quality of supply parameters (voltage regulation, voltage dips, voltage unbalance, etc.) must comply with national regulatory requirements.
- **Sustainability of network infrastructure:** ageing network infrastructure with limited capital investment leads to suboptimal performance of the network.

5.2.1 Planned maintenance

Distribution maintains network infrastructure (e.g., lines, substations, transformers) as specified in the maintenance standards. The key planned maintenance activities for different asset classes include network inspections and defect clearing; substation inspections and defect clearing; on-load tap changer maintenance; breaker and isolator maintenance; power transformer and neutral earthing compensator oil sampling and analysis; substation earthing inspection, testing, and remedial work; substation infrared scanning and remedial work;

battery bank and charger testing and maintenance; protection relay testing and maintenance; telecontrol testing and maintenance; metering testing and maintenance; ring main unit maintenance; voltage regulator maintenance; and wood pole testing and replacement.

The planned maintenance activities prescribed in the maintenance standards are to ensure that the asset performs in line with the intended design. This includes frequency of interruptions and functional performance, for example, voltage regulation for on-load tap changers. Wood pole inspection and replacement of power line wooden poles ensure the safety of the public and the security of supply. Wood pole maintenance is a scheduled maintenance programme based on a set cycle (currently 10 years) to effectively manage the inspection and replacement of defective high-voltage, medium-voltage, and low-voltage wooden poles.

To ensure the safe mechanical and electrical operation of its power lines, Distribution maintains vegetation in the power line servitudes to meet its environmental obligations. All vegetation posing a risk to the lines or preventing access must be managed without interfering with the natural attributes of the environment in compliance with environmental and safety requirements.

5.2.2 Unplanned maintenance

Unplanned maintenance includes identifying, isolating, and repairing faults so that the failed equipment can be repaired/replaced. This includes restoration of the system to an operational condition within the tolerances or limits established for in-service operations.

The theft of equipment, for example, conductors, pole-mounted transformers and poles is on the increase, especially in electrification areas. Apart from the negative impact on technical performance, due to theft, resources are directed away from preventive maintenance activities to address faults resulting from vandalism and theft.

5.3 Other operating costs

Other operating expenses include insurance, fleet and travel costs, security services, telecommunications, safety equipment, and general office expenses. Other operating expenses are essential for Distribution’s operations and are contained within inflation to the extent possible. The main contributors to the “other operating” costs are outlined below.

5.3.1 Insurance

Distribution must ensure adequate insurance coverage for its growing asset base and related increased exposure to natural incidents, theft, vandalism, and public liability claims. The costs for insurance premium are driven by the replacement cost of assets and history of past claims.

5.3.2 Information technology costs

Information management systems are key to the current and future Distribution operations to support efficiency and productivity improvements as well as support decision-making. Distribution's vast and complex network requires integrated management systems for network management, dispatching, customer interface and interaction. Changing customer needs necessitate further investments in digital platforms, which require continued maintenance to support the delivery of the desired customer experience.

5.3.3 Fleet and travel cost

The Distribution network infrastructure footprint across South Africa requires employees to travel extensively to maintain the network and service all customers whilst complying with safety, regulatory and service standards.

5.3.4 Facility cost

The customer spread across the country requires Distribution to be accessible for the convenience of customers. Consequently, Distribution has establishment customer network centers, customer hubs, and local offices to meet customer needs. Distribution combines an ownership and lease approach to its properties to optimise its facility costs.

5.3.5 Vending agent commission

Service to prepaid customers is enabled through a network of vending agents that are easily accessible in proximity and through various platforms. Vending commissions are costs paid to the agents that sell electricity on behalf of Eskom e.g., supermarkets and banks.

5.3.6 Customer billing and meter reading

Meter reading agents provide Distribution with consumption meter readings for post-paid (account) customers. The meter reading agents are compensated for the actual number of customer meters read at a predetermined rate. Distribution also incurs costs for customer billing and related communication.

See table below for a summary of all other operating expenses.

TABLE 21: DISTRIBUTION OTHER OPERATING EXPENSES (R'M)

Other Operating Expenses (R'm)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Insurance	1 596	1 264	1 994	2 070	2 184	2 276	2 379	2 486
Security	408	470	531	561	586	612	639	668
Information technology costs	426	610	643	674	707	744	777	812
Fleet cost	382	302	331	365	392	400	418	437
Facility costs	448	554	567	599	635	653	682	713
Material and contractor	231	275	601	575	436	465	485	507
Customer Related:								
Vending Commission	245	249	637	674	707	739	772	807
Customer billing related expenses	85	101	134	139	146	152	159	166
Legal Fees & Debt Collection	51	32	58	47	48	39	41	42
Wheeling cost	51	32	58	47	48	39	41	42
Bank Related Costs	19	21	25	26	27	29	30	31
Other Business Related expenses	539	284	170	257	436	451	472	493
Total Other Operating Expenses	**4 481**	**4 195**	**5 748**	**6 035**	**6 351**	**6 598**	**6 895**	**7 205**

5.4 Other income

In servicing the customer and maintaining the network the business recognises the following categories of other income:

- **Insurance proceeds/recovery:** this relates to proceeds received from insurance for claims submitted for all insurable incidents as covered in the insurance policy.
- **Operating lease income:** this relates to proceeds received from operating leases.
- **Sundry income:** this is income for the management of the electrification programme from the Department of Mineral Resources and Energy and various other sundry income. See table below for Distribution's other income.

TABLE 22: OTHER INCOME (R'M)

Other income (R'm)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Insurance proceeds/recovery	(677)	(334)	(323)	(326)	(370)	(381)	(398)	(416)
Operating lease income	(11)	(12)	(10)	(10)	(10)	(10)	(11)	(11)
Sundry income	(201)	(243)	(193)	(187)	(158)	(153)	(160)	(167)
Total other income	**(890)**	**(588)**	**(526)**	**(523)**	**(538)**	**(544)**	**(569)**	**(594)**

6. Impairments and overdue debt

Distribution revenue management policies and initiatives manage debt collections across its various customer segments. However, despite these collection efforts, Distribution still faces non-payment challenges for electricity sales and services rendered.

Very few businesses are immune to a credit default as evidenced in the financial reports issued by retailers including banks and their impairment provisions have significantly increased. The mitigating factors include macro-economic challenges presented by the effects of COVID-19, high unemployment and a stagnant economy. Distribution is no exception – payment risks remain.

When Distribution is prohibited from executing its credit management processes in full, additional arrear debt results, further placing at risk its ability to sustain the level of its network and retail services to all customers. The impairment application must be seen in this light, that is, it is part of ensuring cost recovery as a risk mitigation for all customers.

6.1 Applied for impairments

Distribution applies IFRS 9 and 15 international accounting standards to calculate the impairment. An impairment of 2% of revenue, as prudent costs is being applied for, even though our actual impairment percentage is at ~5% of revenue. This implies an overall payment level of 98%, which can be regarded as an extremely high payment level compared to similar organisations in the electricity supply industry. The application is for all customer categories and not just municipal debt. The application for a lower impairment is Eskom's contribution to absorbing a huge portion resultant impairment from the municipal debt.

The 2% impairment application as part of the revenue requirement is critical in ensuring the long-term financial sustainability of not only the Distribution business but Eskom as a whole. If not granted, the critical funding for network investment to refurbish, strengthen and maintain the grid to address immediate constrained networks and security of supply in the future is being compromised.

It is prudent to include impairments costs as any business is exposed to credit risk for the various customer categories, noting that the application for only 2% is significantly lower than projected actual costs.

In the previous decade, Eskom achieved payment levels of 99%; hence a 0.5% impairment application was applied for. However, with the struggling South African economy, increase in debt levels of the average South African consumer; and municipalities struggling to be financially sustainable; a 0.5% impairment (99.5% payment level) cannot be considered as a realistic application for prudent costs.

The actual impairment percentage (excluding interest) for FY2023 is at 4% of revenue and is projected to increase to 6% over the MYPD 6 period. To reduce the impact on the tariffs, Eskom has opted to limit its application to 2% of revenue. Distribution continues to manage small power users (SPU), large power users (LPU) and the top customer sector payments at greater than 99% for most of the financial years.

See table below for a summary of the historic actual impairments and impairments applied for in this application including a split between municipal and non-municipal customers.

TABLE 23: MYPD 6 IMPAIRMENTS (R'M)

Impairment (R'm)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Non-munics	509	948	1 428	1 226	1 299	1 351	1 405	1 462
Munics	8 677	12 350	13 277	16 387	20 667	26 319	25 987	28 396
Impairment cost based on projected overdue debt*	**9 186**	**13 298**	**14 706**	**17 613**	**21 967**	**27 670**	**27 392**	**29 857**
Arrear debt not applied for				(8 699)	(12 050)	(16 918)	(15 355)	(16 548)
Impairment costs applied for*	**9 186**	**13 298**	**14 706**	**8 914**	**9 917**	**10 752**	**12 037**	**13 310**
Non-Munics	509	948	1 428	1 226	1 299	1 351	1 405	1 462
Munics	8 677	12 350	13 277	7 688	8 618	9 401	10 631	11 848
Total*	**9 186**	**13 298**	**14 706**	**8 914**	**9 917**	**10 752**	**12 037**	**13 310**
% Of Revenue - Actuals / Proj	3.6%	4.5%	4.5%	4.8%	5.3%	5.8%	5.2%	5.2%
% Of Revenue - Applied for				2%	2%	2%	2%	2%

**Actual for FY2023 excludes interest*

6.2 Customer payment levels and overdue debt impacted mainly by municipal debt

Gross arrear debt is currently projected at R74bn in FY2024 whilst year-on-year growth is R15.9bn with Metros contributing R4.7bn and non-Metros R11.3bn. The average payment level for all customers, over the past 12 months was 94.9% but Municipalities were at 88.8%. Although municipal debt has significantly grown some municipalities are settling their debt. Although Metros have increased their payments, a significant amount is still outstanding. The cumulative metro overdue debt increased from R141m at the end of March 2022, to R1 783m at the end of March 2023 and is at R6 446m at the end of March 2024. However, late payments of R2.1bn were received from these metros after the March 2024 month-end, reducing the metro cumulative arrears from R6.4bn to R4.3bn.

6.2.1 Customer payment levels and overdue debt

The projected FY2025 total payment level of 95.0% is projected to worsen to 91.7% by FY2028, impacted by the annual non-payment including interest growth. Excluding interest, the total payment level is projected to marginally decrease from 95.9% in FY2025 to 94.3%

in FY2028. The key contributors to the debt burden are municipalities, whose component of the projected overdue debt increases significantly. Without a meaningful and effective urgent intervention, the cumulative municipal overdue debt is projected to increase to approximately 35% of the total allowable revenue being applied for by FY2028 and approximately 46% by FY2030. This indicates that the initiatives to arrest the debt are not effective and require significantly more attention that addresses the underlying root causes. It is evident that this trajectory cannot be allowed to continue. The impact on other consumers and the ability for Eskom to provide a service is being severely hampered. In addition, the resultant annual cashflow shortfall of R20bn requires Eskom to compromise on essential service delivery. The extent of the challenge is demonstrated in the tables below.

TABLE 24 : SUMMARY OF PAYMENT LEVELS (%)

Payment Level %	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Non Munics Payment level %	99.5%	99.6%	99.8%	99.7%	99.7%	99.8%	99.8%	99.8%
Munics Payment level %	89.9%	89.1%	89.6%	87.4%	84.3%	82.0%	81.4%	79.9%
Total Payment level %	**95.0%**	**94.8%**	**95.0%**	**94.0%**	**92.8%**	**91.7%**	**91.3%**	**90.6%**
Total Payment level % - Excluding Interest	96.3%	95.6%	95.9%	95.4%	94.8%	94.3%	94.7%	94.8%

The municipal overdue debt is projected to increase over the MYPD 6 application period from an annual capital growth of R13 870m in FY2025 to an annual capital growth of R28 710m at the end of FY2028, assuming the current trajectory of non-payment will continue; and limited benefit to be derived from the existing debt management levers including the municipal debt relief programme.

TABLE 25: SUMMARY OF OVERDUE DEBT (R'M)

Overdue Debt (R'm)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Top Customers	456	357	703	726	750	773	796	819
Other Large Power Users (LPU)	555	689	429	497	564	631	698	765
Other Small Power Users (SPU)	1 707	1 930	1 898	1 982	2 065	2 148	2 232	2 315
Soweto (SPU)	2 230	2 191	1 725	1 231	933	631	269	94
Non-munics	**4 949**	**5 167**	**4 756**	**4 436**	**4 311**	**4 184**	**3 995**	**3 993**
Municipalities	58 512	74 512	91 345	114 036	144 996	187 123	235 853	294 485
Total cumulative overdue debt	**63 461**	**79 679**	**96 101**	**118 472**	**149 307**	**191 306**	**239 848**	**298 479**

Overdue Debt - Municipalities (R'm)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Cumulative opening balance		58 512						
New Interest raised	3 647	2 200	2 963	5 261	8 690	13 417	20 020	27 339
New Capital debt	10 111	13 800	13 870	17 430	22 270	28 710	28 710	31 294
Total annual overdue debt growth	**13 758**	**16 000**	**16 833**	**22 691**	**30 960**	**42 127**	**48 730**	**58 633**
Municipalities - Cumulative closing balance	58 512	74 512	91 345	114 036	144 996	187 123	235 853	294 485

6.3 Measure to address Municipal debt levels – National Treasury debt relief programme

In the National Budget Speech on 22 February 2023, the Minister of Finance announced Government's municipal debt relief plans to address the arrear debt, subject to certain conditions. National Treasury published Budget Circular No. 123 on 3 March 2023 and Budget Circular No. 124 on 31 March 2023, which provide further detail on the municipal debt relief plan, the application process for municipalities and the related conditions. The Municipal Finance Management Act (MFMA) Circular No.124, lists elements and stipulations of this arrangement such as debt write off, resolving non-payment, prepaid metering and municipal revenue enhancement initiatives resulting in debt write-offs by Eskom. Eskom is to write-off the municipal debt over three years, from 01 April 2024 to post 01 April 2026, subject to the municipality's compliance with the conditions. This is illustrated in the figure below.

FIGURE 6: TIMELINE OF MUNICIPAL DEBT WRITE-OFF ONCE NATIONAL TREASURY CONDITIONS ARE COMPLIED WITH

National Treasury has approved 71 Applications for the National Treasury debt relief programme, including 6 approved with additional conditions. These 71 Municipalities represent 95% of the overdue debt as at 31 March 2023 and represent the most significant contributors to the R11.3bn non-Metro FY2024 growth.

The following are the key observations:

- Six months into the programme, 24 Municipalities have shown positive moves towards reform. Note however, that many have joined the programme late and may have only a few months history of compliance.

- The concern is around Municipalities that have demonstrated their inability to pay their current accounts to remain on the programme. Attending to this would require National Treasury and other government departments to support the Municipalities to rectify the breach of National Treasury conditions.

- Delays in settling the new debt growth will result in additional interest on the new debt.

- 41 Breach notifications have been issued and 7 Municipalities have received notice from National Treasury regarding their termination from the programme.

It is submitted that this approach does not seem to be achieving the desired result. The debt burden continues to increase. Further, stricter interventions are required where the ability to pay the Eskom debt is prioritised. Where it is not possible, the underlying factors must be addressed. These underlying factors at local Government level need to be addressed holistically. It is now time for bolder and more innovative solutions that allows municipalities to move to the right path.

6.4 Measures to address Metro debt levels

Distribution's risk mitigation for metro debt include:

- Continuous monitoring metro account payment patterns.
- Metros are contacted five days before the due date to confirm payments.
- Working with Eskom Treasury for updates on planned payments.
- Proactive pursuit of metros non-adherence to contractual terms.
- Expediting requests for payment extensions.
- Continued consultations with metros on billing dates and payment terms.
- Regular engagement and maintaining open communication channels.
- Engaging metros and close monitoring of metro payments by Distribution's Clusters General Managers.

6.5 Measures to address debt of other customers

Top customers, other LPU and other SPU have good payment record. However, due to the adverse market conditions, the risk of non-payment by these customers exists and can have a significant impact even if only one of the large customers defaults. Small impairment values have been provided for Top Customers, other LPU and other SPU over the MYPD 6 period to cater for the related risk.

The conversion of post-paid (conventional) meters to prepaid has assisted with reducing non-payment in Soweto. This is supported by continued credit management enforcement for those remaining on post-paid.

6.6 Additional strategies to mitigate against the increase in impairments

To limit the growth of bad debt in the cost base, Distribution has adopted an approach to limit debt growth whilst enabling electricity sales and includes:

- **NT debt relief:** Distribution is to write off the municipal debt over three years subject to the municipality's compliance with the conditions.
- **Continuous review and enhancement of credit management policies processes:** Distribution's debt and credit management policies, processes and strategies are reviewed regularly to ensure the robust application of our credit controls to minimise the impact of escalating debt.
- **Prepaid sales:** Out of Distribution's customer base of 7.2 million (March 2024), there are 6.9 million prepaid customers (96%). The strategy is to continue to offer new customers the prepaid option and convert existing post-paid customers to prepayment. High-risk customers have been identified in all provinces and are converted to prepayment. The conversion process is in progress. Several large power accounts are also on a payment-in-advance option, to reduce the debt risk to Distribution. Prepayment for large power supplies is being investigated and will be supported through smart metering.
- **Deposits / Security:** Ensuring an increase in deposits and securities to mitigate future risk by customers identified as potential high-risk defaulters. The process to ensure adequate account security across all customer segments will be managed over time to balance this requirement and the unintended consequence of an increase in overdue debt.
- **Innovation:** Distribution has successfully piloted revenue collection for two municipalities. This included the replacement of meters in the municipality, maintenance as well as billing of large power customers. The results indicated a reduction in overall municipal losses and an increased cash for the municipality. Different operating models are being investigated to ensure viability and sustainability in the future electricity industry.
- **Municipal revenue enhancement initiatives:** The National Treasury continues to implement initiatives to address weaknesses in revenue management in municipalities. These initiatives include setting cost-reflective tariffs, developing proper budget policies to facilitate revenue enhancement and ensuring completeness of revenue. These

initiatives are supported by the Municipal Revenue Management Improvement Programme (MFIP) technical advisors. Furthermore, the National Treasury advised that a transversal tender for the smart meter solution (smart prepaid meters) will be issued to assist municipalities generate cash pre-service, rather than, post-service. Some of these elements have been linked to the National Treasury debt relief programme.

- The service delivery proposals make provision for different working arrangements with municipalities as agreed in the service delivery framework. In extreme cases, it may even be requested that Distribution take over the electricity service delivery within financially distressed municipalities. The consultative activities have included and will continue to include engagements with the respective municipal executives.
- Intergovernmental provincial meetings with all the relevant stakeholders.
- Regular National Governmental meetings including active partnering.
- Regular engagements with the National Treasury on Circular 124.

7. Capital Expenditure

Capital investments support the continued productive life of assets and the technical conditions necessary to maintain continued electricity supply to secure revenue streams and improve customer experience.

The application for capital expenditure is required to strengthen and refurbish the Distribution network, to meet future growth requirements, manage the transition of an evolving distribution landscape with increased DER integration, whilst allowing the network to maintain current performance standards.

A key priority is to ensure a reliable and sustainable power supply. The Licensee will balance the need for resolving constrained networks whilst providing the supporting infrastructure for maintenance and operating activities. Historically, the Distribution network performance gains are reflective of the investment choices made in the capital projects.

The Distribution network capital expenditure is deployed in activities based on extensive planning aligning with required network performance. A 10-year network development plan informs the capital investment programme which supports the forecasted economic load and distributed generation growth nodes.

The capital investment programme enables the establishment of the required capacity to meet the future electricity demand, whilst maintaining acceptable levels of network performance reliability, and operability.

In compliance with the Grid Code, a network development plan is formulated for the immediate 3-5year period. The MYPD 6 submission and the capital allocation are informed by the 3-5year development plan. Notable improvements are required for capital expenditure in the strengthening of IPP-related infrastructure, metering upgrades to accommodate the transition to a smart grid and to accommodate the requirements for net-billing and feed-in tariffs, and refurbishment categories. The table below indicates the planned expenditure in the various categories for the MYPD 6 period.

TABLE 26: CAPEX EXPENDITURE REQUIREMENTS (R'M)

Capex (R'm)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Direct Customers	3 146	877	1 091	2 084	1 972	1 797	2 261	2 764
Strengthening	638	574	1 121	3 122	3 354	3 427	3 621	3 541
Refurbishment	575	558	1 432	8 572	7 440	4 883	1 846	1 924
Lands&Rights	(8)	39	82	123	147	142	209	170
IPPs	19	23	42	412	478	976	952	952
BESS	-	2 816	2 157	-	-	-	-	-
Direct General PP&E	163	186	726	711	458	464	320	413
Total CAPEX (Eskom Funded)	**4 533**	**5 073**	**6 651**	**15 024**	**13 849**	**11 689**	**9 209**	**9 764**
Electrification (DoE Funded)	2 352	3 165	3 307	3 455	2 763	2 570	3 489	3 663
	6 885	**8 238**	**9 958**	**18 479**	**16 612**	**14 259**	**12 698**	**13 427**

It is important to note that:

- An acceleration of the bid rounds for the Integrated Resource Plan (IRP) is expected. As neither the location, capacity nor number of IPPs have been announced for these future rounds, the capex requirements are indicative at this stage to cater for these requirements.
- The cash upfront top-up projects relate to customer connection projects that are not on the plan and their cash upfront is less than the total project costs. This is the budget for the top-up portion which is the difference between the total project cost and cash upfront paid by the customer.
- The DMRE have approved the capex allocation for electrification up to 2025. The submission thereafter has been escalated based on business requirements as forecast for the period.

7.1 Distribution networks investment drivers

The following factors are the key drivers for the capex expenditure:

- Enabling capacity as a precursor for growth in the economy and support to government-led initiatives, including the IRP 2019, up until 2028. The plans have been aligned to reflect current developer interest in the public and private sectors, whilst the update to the IRP is processed.
- Further progressing towards meeting regulatory and statutory requirements as stipulated by NERSA.
- Ensuring commitment to a distribution landscape that is focussed on the evolution of new requirements, universal access, DER integration, and technology advances (including disruptive technologies such as battery storage and electric vehicles), whilst maintaining current network performance and reliability measures.

7.2 Capital expenditure per category

7.2.1 Direct customer connections

Direct customers are end-users supplied by Distribution. The customers in this category exclude prepayment customers who are electrified as part of the DMRE electrification programme. These customers require investment in network infrastructure funded by the capex request. Customer projects are driven by the economic growth within the country and the projected applications made by customers. Key drivers for this category are the following:

- New customer connections in the small to medium category.
- Customer willingness to pay for the required incremental load.

7.2.2 Constrained networks

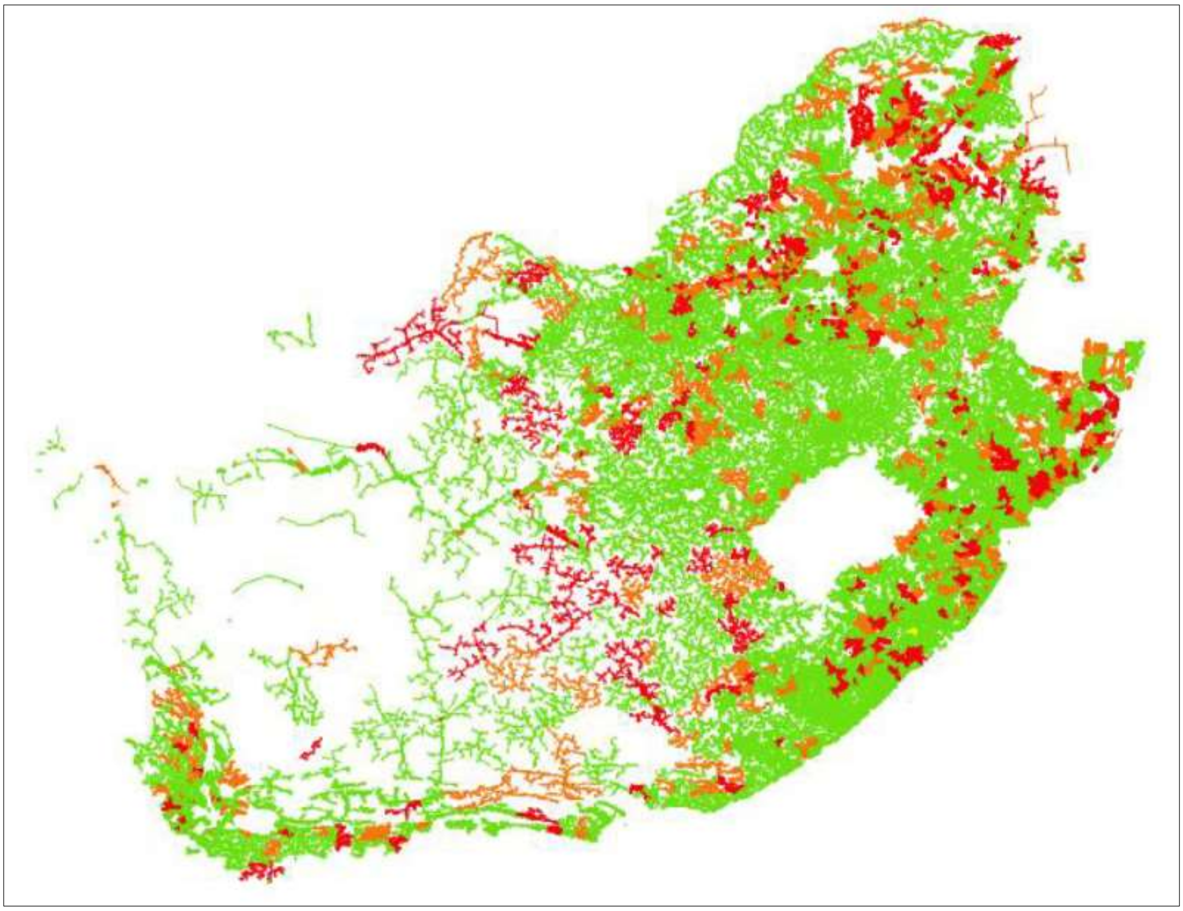
In some parts of South Africa constrained networks dilute the potential to connect new customers to the network that can support Distribution's sales growth. Distribution will continue to connect new customers to the grid within the agreed time parameters where capacity is available on the grid. The grid is continuously strengthened, based on the most recent network development plans and updated load and resource forecasts. The ensuing needs from the development plans are prioritised, and projects are then executed based on the capacity and the availability of budgetary funding.

7.2.3 Network strengthening

Network strengthening can be defined as the expansion and or upgrading of a plant to increase capacity or improve the quality of supply for a defined network or area. The strengthening programme expenditure is geared towards providing the shared network infrastructure for customers and generators as required by the Distribution Network Code. Correspondingly, the projects within this programme provide supporting network infrastructure for electrification programmes and Government-led initiatives such as the National Development Plan, the IRP 2019, and the strategic infrastructure build projects. The programme further ensures that network constraints are averted, as these could affect future load growth in these areas.

The funding is required in the short term due to a historically low strengthening spend. The number of constrained MV feeder networks in Distribution remains high, and 907 of the 8 455 MV feeders remain voltage-constrained, whilst 587 networks are currently exceeding their thermal capacity. The expenditure requirements will address some of the historical issues; and avert potential risk in accommodating existing customer requirements and regulatory standards. The figure below details the extent of MV networks that are currently thermally and voltage constrained (Note: the networks highlighted in red are currently constrained).

FIGURE 7: VOLTAGE-CONSTRAINED MV FEEDERS IN 2022



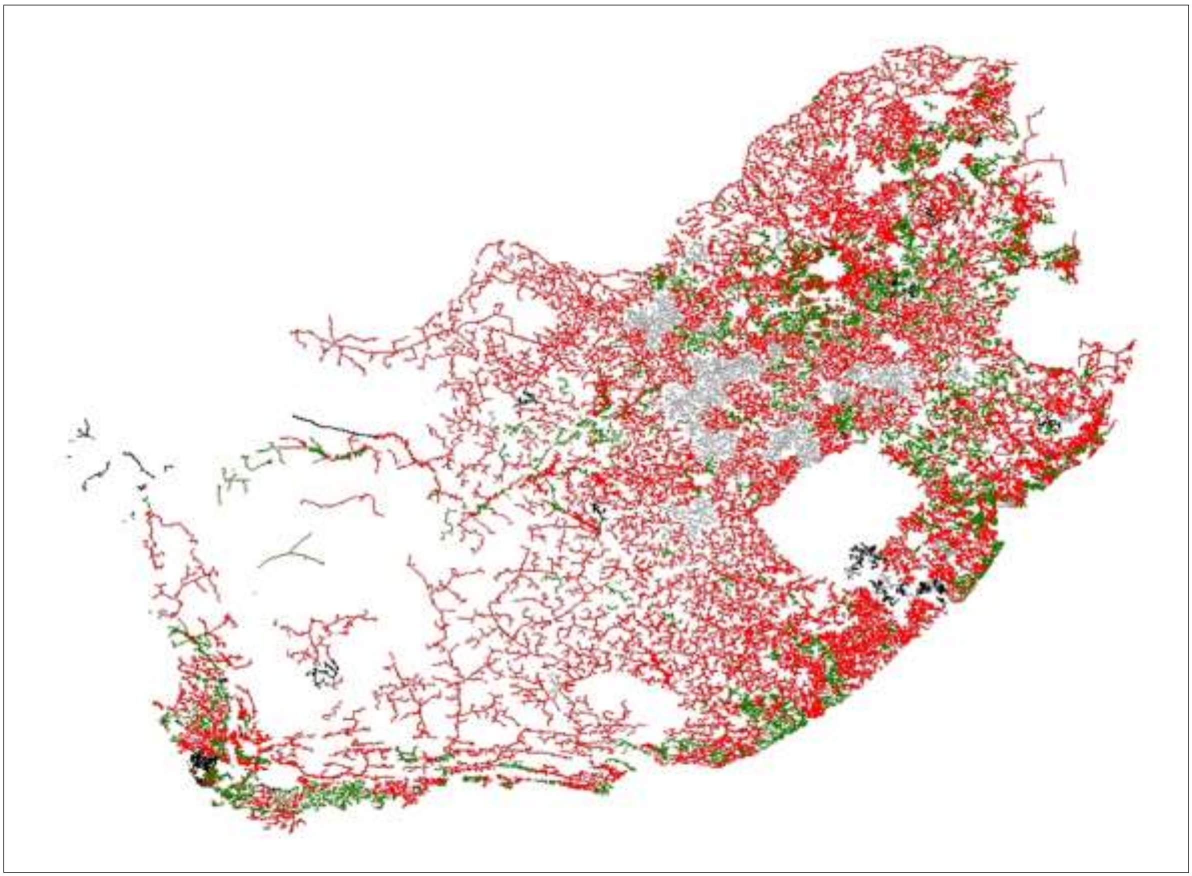
The reliability programme, as a sub-set of the strengthening programme, supports compliance to the regulatory standards, and network code compliance and aims to maintain current network performance levels. The programme is geared towards providing acceptable performance, and improved power quality within the different levels of the network infrastructure. Further improvement interventions plan to enable the reliability of networks by:

- Reducing the number of faults by addressing constrained networks and applying more robust substation and line designs.
- Limiting impacts of outages by reducing the number of customers per feeder, through splitting or adding more feeders, and implementing fuses at transformers.
- Limiting the duration of outages by automating and installing substation RTU (Remote Terminal Unit) and fault path indicators.
- Continuously improving the network visibility for operational purposes.

Should the strengthening and reliability projects not materialise the following illustrative network outlook could materialise.

The figure below illustrates the potential impact of the number of constrained feeders that could increase dramatically if the associated investment does not materialise.

FIGURE 8: ILLUSTRATIVE EXAMPLE OF THE POTENTIAL IMPACT OF AN INCREASE IN CONSTRAINED MV FEEDERS



The increase in the number of constrained feeders in the country will limit the electrification programme and reduce the potential for increased revenue as limited numbers of new customers will be able to be connected to the networks. Additionally, the network performance will deteriorate, safety-related incidents increase, whilst impacting the cost of unserved energy to the country.

Distribution will include the following technology advancements into its strengthening programme to enhance the reliability of its networks:

- The introduction of distribution automation platforms for selected networks to improve the monitoring, maintenance, and operability of the power system, considering the bi-directional flow of energy emanating from distributed generators.
- The introduction of non-wire alternative solutions, such as battery energy storage and other hybrid solutions, to assist with the evolution of network and customer requirements.

- The rollout of smart meters to customers to allow for greater visibility and control of customer installations and aligned to the strategic intent of a transition towards enabling a smarter grid.
- The introduction of a Meter Data Management System (MDMS) as part of the integration of the smart metering capability for the business. Distribution is experiencing an increase in overdue debt across all market sectors, non-technical energy losses (illegal connections) and an imbalance of supply and demand (overloading of the system). This system will enable the business to address non-payment, meter tampering, load management, online monitoring of customer usage patterns and online purchasing of electricity. It anticipates that the projected expenditure will ensure business agility and readiness in tackling illegal theft and sustaining the financial position through effective revenue collection.
- The installation of cameras, drones, and monitoring capability due to a high level of theft of equipment and an increase in the number of incidents impacting the safety of staff. This investment will improve the safety and security of personnel and secure equipment at remote locations.

7.2.4 Refurbishment

The primary objective of refurbishment is to extend the life of the assets and the maintenance of expected performance levels. Failure to refurbish assets timeously will have a negative impact on the maintenance and operations of the network and associated equipment, increased fault activity, increased maintenance resource requirements (labour, materials, fleet, funding etc.) and deteriorating technical performance metrics. Refurbishment requirements are derived from the asset base and its associated condition. Asset obsolescence and maintainability also form an input into the refurbishment plan.

"Refurbishment is a special case of maintenance, and it refers to the replacement of equipment in compliance with current technical practice, safety standards and the desired operating performance. In this case, the existing plant life is realised or even extended. Whilst maintenance focuses on supply service enhancement, refurbishment focuses on the replacement of components of particular equipment or the entire equipment. Maintenance

and refurbishment do not result in a new income stream but ensure that the original stream is secured or improved." (Davidson, 2005, p.340)[1].

The refurbishment programme deals with assets at the end of their life cycle that are replaced with new assets, to ensure that the networks continue to perform at accepted levels, whilst maintaining a supply to the current customer base, served by these assets. As stipulated by NERSA, a minimum level of performance is required on the Distribution networks, which is based on the National Regulatory Standards (NRS).

A substantive amount is required for the refurbishment of networks due to historic low spending within the refurbishment environments. The refurbishment plan aligns with a balanced approach between the existing performance of the networks, and the requirement to refurbish old and poorly performing networks.

The strategies for refurbishment projects will consider the following elements:

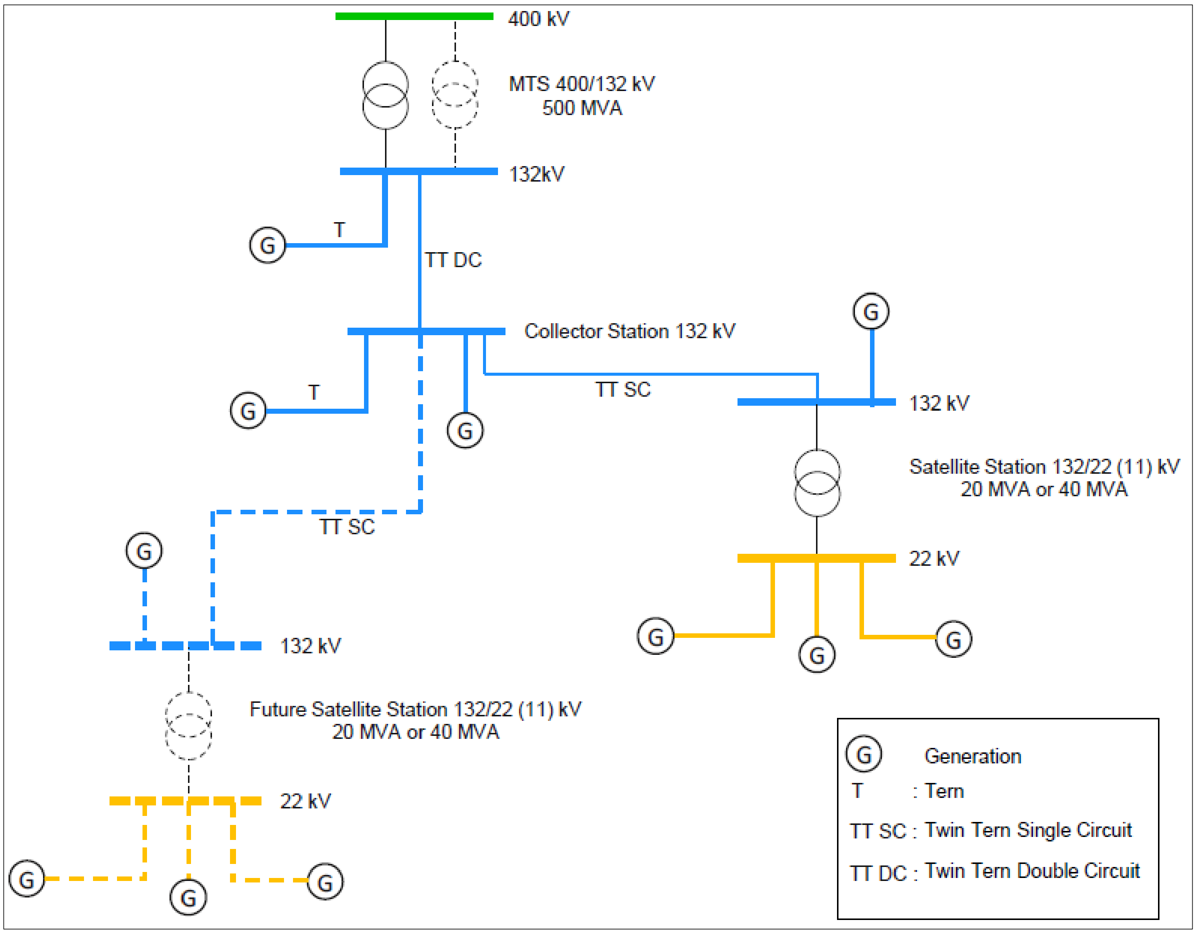
- Condition of the network classified in terms of age, maintainability/obsolescence, and safety performance of the asset.
- Reducing high failure rates and safety concerns.
- Normalisation of assets to new standards.
- Mitigating the risks associated with any unsafe networks or equipment.

7.2.5 Independent Power Producers

The Distribution capital allocation for IPPs provides for the shared network infrastructure that is to be created to allow for the evacuation of power from the IPPs on the DMRE programme and private off-take IPP developments. To cater for the expectations of the IRP 2019 programme, a series of collector stations will have to be constructed in anticipation of the IPP connections to the Distribution networks, and for the evacuation of the power into the grid. The figure below portrays a typical layout of a collector station.

[1] Utility asset management in the electrical power distribution sector; Innocent E. Davidson.; 2005 IEEE Power Engineering Society Inaugural Conference and Exposition in Africa

FIGURE 9: COLLECTOR STATION REQUIREMENTS FOR THE EVACUATION OF IPP-GENERATED POWER WITHIN AN MTS AREA (EXAMPLE)



The IPP is responsible for its network establishment cost up to the point of connection in line with its licencing requirements for the build-out of the facility. The required funding is for the related upstream strengthening projects, which are borne by the Distributor in line with the Grid Code requirements. The initial establishment cost will also have to be funded by the Distributor, to enable the aggregation of connections at the collector stations.

7.2.6 Small-scale embedded generators (SSEG)

The increased frequency of load shedding experienced in the country has escalated the rate at which customers are deploying small-scale embedded generators (< 1 MW) as part of their solution to buffer the impact of price increases and to mitigate against frequent power interruptions and load-shedding events. Capex is required to deal with any metering and network configuration changes that may be required to accommodate the significant increase in SSEG applications.

7.2.7 Battery Energy Storage System (BESS)

The following elements were considered when the final list of sites was consolidated in line with the project objectives for the Battery Storage Project:

- Proximity of the site to renewable energy sources (funder emphasis).
- Resolution of network constraint capability by using BESS.
- Charging capacity available on the network in question for the BESS.
- Suitable land availability to ensure that the project can be completed within timelines as agreed with the World Bank.
- Planning proposals were primarily shaped by the philosophy that the primary use case for the BESS installation was for peak shaving support (energy support service) for the SO during system peak periods and for the provision of ancillary services when the system would require frequency and voltage support.

The project is to be completed in two phases, and the first phase of the project is envisaged for completion in 2024. The balance will be commissioned in the ensuing years. Phase one of the project consists of six sites, and a combined 197.5 MW of BESS, with a capacity of 827 MWh is to be connected by 2024. The second phase consists of five sites, and 145.5 MW of BESS, with a capacity of 622 MWh will be connected. In addition, 60 MW of Solar PV is to be connected as part of the project.

In addition, the installation of BESS will provide ancillary support in terms of enhanced frequency control of the network, reactive power support and improved quality of supply performance near existing distributed generation renewable energy plants.

7.2.8 Asset purchases

The expenditure required for asset purchases includes the acquisition and replacement of workshop, production, and office equipment of a capital nature. This expenditure is required to expand, operate, and maintain new and existing distribution networks. These assets include amongst others test equipment, toolboxes, live-line equipment, ladders, and specialized tools for line construction.

Live-line equipment is used for the maintenance of networks while ensuring an uninterrupted supply to customers. To minimise customer interruptions, the prior acquisition of mobile substations, strategic transformers and critical spares is required. These strategic assets are essential whilst work is carried out on the network for maintenance or in the case of failures of sub-station equipment e.g., transformers. These mobile substations and critical spares are placed in strategic locations across the country for quick supply restoration essential to sustain uninterrupted supply to customers.

Additionally, the use of new technology options such as the use of drones and other extrusive maintenance techniques will be catered for to ensure that maintenance levels are optimised.

The extensive vehicle fleet used by the Distribution to operate and maintain its assets, and to service the customer requirements, must be maintained at an acceptable level. Advances in technology options available for the optimisation of fleet costs will also be made. Allowance is thus made for the replacement of vehicles that have served their useful life, and where the vehicles are no longer in a roadworthy condition to meet these requirements.

7.2.9 Electrification

Eskom continues to increase electrification connections in support of the government's objective of universal access to electricity. Funding is provided by the DMRE to meet these stated objectives for the remaining customers to be electrified. It is intended that universal access is achieved by 2028 and Distribution is currently electrifying approximately 120 000 customers per annum in line with the gazetted programme and association with the municipal electrification objectives around the country.

7.2.10 Operating technology (OT) requirements

The Licensee operating systems support the daily operations and management of the distributor's plant and equipment. Obsolescence and limited support for outdated technology require upgrades or new systems. This intends to facilitate a changing business landscape as it increasingly gravitates towards a smart and interconnected grid.

The following operating technologies will require changes during the MYPD 6 control period:

- The replacement of the distribution management system (DMS) and Supervisory Control and Data Acquisition (SCADA) with an advanced DMS (ADMS) due to obsolescence. This system of software and hardware allows the Licensee to control processes, operate, monitor, and gather real-time information on the electricity network for normal operations, outage scheduling and in cases of faults and emergencies. It will also allow for the integration of energy management systems, as required for the integration and management of technology disruptors, such as battery energy storage and electrical vehicle (EV) integration requirements via the addition of a Distributed Energy Resource Management System (DERMS).
- The small world repository upgrade to the Network Information System (NIS) system will ensure that the repository of all equipment and its associated attributes are spatially

maintained (via a geo-based location). The system includes planning functionalities, and links to all performance and maintenance requirements for reporting on various performance indicators e.g., SAIDI and SAIFI.

- The implementation of a data analytic tool, supported by an enterprise historian to acquire and store real-time analysis data, as required for the transition into the fourth industrial revolution.
- The acquisition of a forecasting tool with a short and long-term forecasting capability. This will include a capability to accurately forecast both load and DER requirements and will appropriately also allow for predictive resource forecasting, such as solar irradiation and wind speed measurement.
- The acquisition and maintenance of a power system analysis tool to ensure that the impact of increased DER integration, and the complexities associated with the flexible production from variable renewable energy resources can be managed.
- The implementation of the Meter Management Data System (MDMS) for the management of the smart meters in the field as part of the programme to manage and collect revenue, outage management and smart grid implementation.
- Due to the obsolescence of customer engagement channel systems and software, there is a need to invest in the required technology to support the realisation of the channel optimisation project aims. This will ensure the transition to customer-required digital services.
- The acquisition of suitable telecommunications and telecontrol infrastructure to service the needs for increased data communication requirements.
- The acquisition of the operational technology requirements for the transition to meet the new smart grid requirements and the energy transition.

8. Integrated demand management

In terms of section 14 of the MYPD methodology, IDM is required to implement energy efficiency and demand-side management (EEDSM) and DR programmes. The activities of IDM are to influence customers' electricity demand profiles for the benefit of the Distribution business, the entire Eskom value chain, and the country as a whole.

The MYPD 6 application includes the Distribution demand management programme (DDMP) incentive, measurement and verification, marketing support, and targeted communications programme costs. The total estimated cost for IDM over the MYPD 6 period is R3.3bn. The DDMP incentive cost is R26bn at a benchmark cost of R3m/MW to achieve accumulative 850 MW peak demand savings over the MYPD 6 period. See tables below for the IDM MYPD 6 cost, and demand savings.

TABLE 27: IDM MYPD 6 APPLICATION COST (R'M)

IDM Operating Expenditure (R'm)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
Employee Benefit Cost	20	22	23	24	25	25	26	28
Distribution Demand Management Programmme (DDMP)	41	248	1478	1500	600	450	500	520
Measurement and Verification (M&V)			150	150	60	45	50	52
Marketing - EEDSM Programme Support			-	11	13	13	11	13
Targeted Comunications Programme			70	90	90	90	90	94
Other Operating Cost			-	4	5	9	10	12
Corporate Overheads	9	9	22	20	16	22	22	22
Other Income			(1)	(1)	(1)	(1)	(1)	(1)
Total IDM	**69**	**279**	**1741**	**1798**	**807**	**653**	**682**	**712**

TABLE 28: DDMP PROGRAMME – DEMAND SAVINGS (MW)

DDMP Demand Savings (MW)	Actual FY2023	Projection FY2024	Projection FY2025	Application FY2026	Application FY2027	Application FY2028	Post Application FY2029	Post Application FY2030
DDMP Programmmes MW Savings (Dx EEDSM & DR)	-	250	500	500	200	150	167	173

Over the past 14 years, while Eskom experienced a supply shortfall, IDM focused mainly on energy use reduction and load management. It is anticipated that the risk of shortfalls in generation capacity in the short to medium term can be mitigated with IDM.

DDMP measures will also support the DSO by providing flexible services (dispatchable supply and demand) to maintain adequate operating reserve levels, reducing evening peak demand in the industrial, commercial, agricultural, and residential sectors, to manage grid stability and congestion on the local and national networks. Furthermore, DDMP measures can optimise capital expenditure on constrained networks by deferring network upgrades through localised demand-side management programmes, where feasible.

Experience has proven the valuable contribution EEDSM and DR programmes can make to stabilising the electricity system. The demand/supply situation is cyclical, and maintaining DDMP capacity is essential. More so, having DDMP capacity that uses the principle of efficient energy when required by the business to support both excess and constrained supply situations will be a considerable asset to the industry and economy.

8.1 DDMP delivery channels

Distribution's IDM is responsible for developing solutions and managing the delivery of energy and demand savings through a variety of programmes in the commercial, industrial, agricultural, and residential sectors.

Regardless of whether Eskom is in a period of excess or constrained supply, the system demand profile has a significant impact on the future supply requirements and the sources and cost of generation. The system load profile is becoming more "peaky", resulting in high production costs during peak periods and low power station utilisation during the night.

Through the DDMP, several demand management initiatives have been developed. These demand management initiatives fall into two categories, namely, EEDSM and DR. The EEDSM is based on traditional hardwired solutions that include load management (shifting and/or peak clipping) and energy efficiency projects. DR, a more flexible solution, allows for more flexibility and includes residential smart meter load limiting and mid-segment DR. It must be noted that the DDMP DR programme does not replace the Transmission DR programme, but rather complements the Transmission programme to include diversity among the customer base.

8.2 Performance contracting model (PCM).

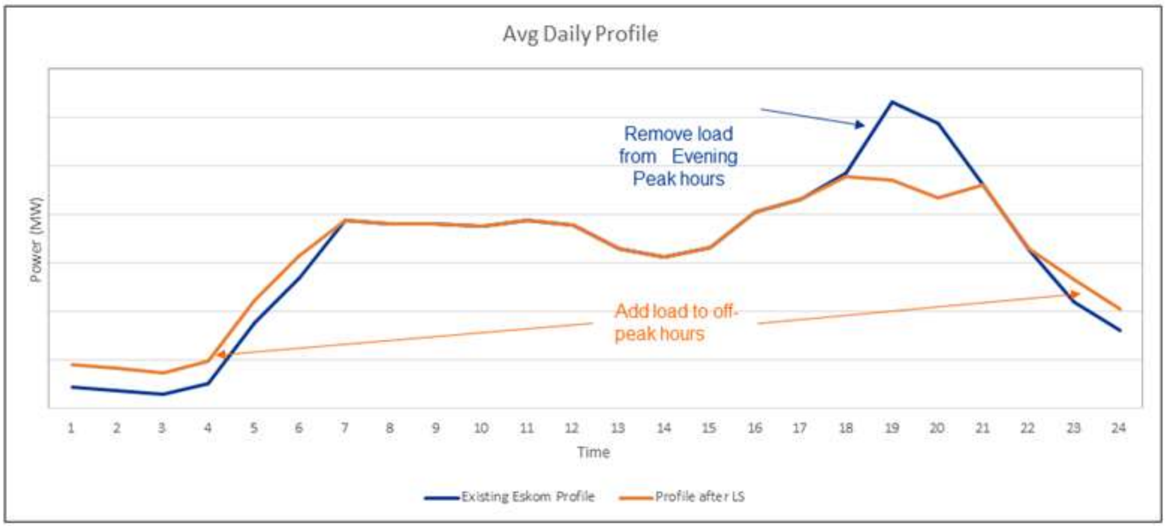
Customers who can implement greenfield EEDSM solutions submit a project proposal to IDM to participate in the incentive programme. Awarded contracts are provided with an incentive (rand/MW or cents/kWh) for achieved demand and/or energy reduction during specified periods. All approved proposals will be subject to an independent measurement and verification of the proposed baseline and their performance. Projects are financed up front by the project developer (PD) or customer. On completion, projects will be independently measured and verified quarterly against the contracted demand and energy savings.

Incentive rebates are paid quarterly (eight quarters) for the savings realised per quarter over a 24-month sustainability term. The incentive rate for all PCM programmes is funded at a standard rate of R3m/MW. Payments are capped at 100% performance; therefore, there are no payments for overperformance. No double-dipping/claiming with other incentive programmes is permitted.

8.3 PCM – industrial and commercial load management programme

The objective of implementing the load management initiatives is to reduce demand during the constrained evening peak periods. Load management projects contribute to flattening the system load profile by managing customer usage through clipping or shifting peak load. Industries would be required to manage their activities without contravening health and safety requirements to achieve demand reduction.

FIGURE 10: LOAD SHIFTING IMPACT



The figure above depicts the management of customer load profiles such that the evening peak load is shifted to off-peak periods, hence reducing open-cycle gas turbine (OCGT) utilisation in the evening peak periods.

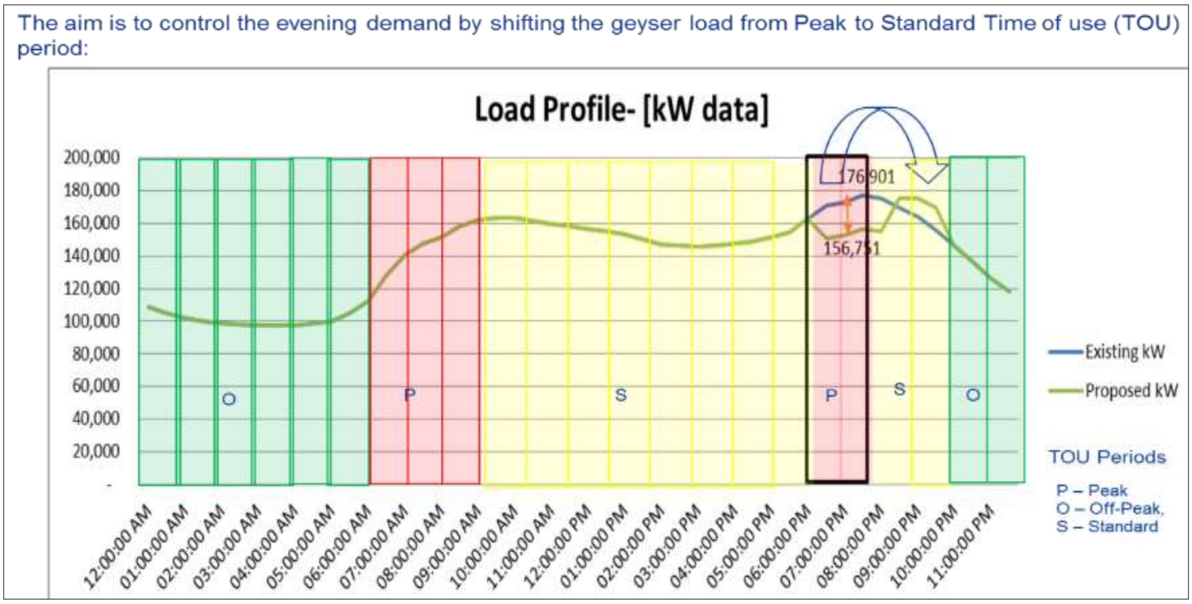
The benefits of implementing load-shifting programme projects include the following:

- Load shifting projects change the time of day during which electricity is consumed without reducing sales volumes.
- Load shifting projects have been seen to be rapidly implementable and cost-effective compared to OCGT utilisation.
- The short-term national demand-supply situation is cyclical, and maintaining capacity for future periods of supply shortage is essential.
- A flatter system load profile will reduce future generation costs and will benefit Eskom in alleviating pressure on the power system.

8.4 PCM - Residential Load Management (RLM)

Distribution plans to use residential load management smart technologies, as part of the smart grid strategy, to shift residential peak demand to off-peak through the management of residential hot water cylinders/geysers throughout South Africa in collaboration with municipalities. The smart technology will allow the introduction of flexibility and central dispatchability, as all the smart control systems could be aggregated for use by the DSOs as one of the levers to manage demand during constrained periods. By introducing flexibility in optimising the system load profile and supporting an optimal future generation mix, RLM remains a key financial and operational driver. The figure below shows a typical residential profile, with a shift of 20 MW peak demand to off-peak using a geyser control system.

FIGURE 11: A TYPICAL RESIDENTIAL PROFILE LOAD SHIFTING (GEYSER CONTROL SYSTEM)



8.5 PCM – Industrial and Commercial Energy Efficiency Programme

The energy efficiency (EE) programme is an incentive-based programme to allow customers to consider EE projects that they would otherwise not consider in the short term. The programme is designed as a win-win that offers customers the opportunity to lower their electrical energy input cost and for Eskom to address the much-needed capacity issue in the short term.

The PCM is used in the planning, implementation, and monitoring of distribution network utility activities, designed to influence customer use of electricity in ways that will produce desired changes in the load shape, which include load shifting and strategic energy-efficient load growth.

8.6 Residential mass roll-out programmes

The mass roll-out programmes are based on the targeting of customer segments through the mass installation of energy-efficient and demand management technologies to achieve savings (MW or MWh) at a scale. Depending on the commercial or procurement strategy used, Eskom would contract service providers to procure, install, technically audit, and project-manage the installation of technologies at the customer's premises. The technologies would be standard technologies that would be pre-evaluated based on Eskom specifications and aligned with the South African Bureau of Standards (SABS).

The service providers would be contracted to carry out the above-mentioned programme components in accordance with the contract scope and performance clauses and would be paid based on proof of completion of each agreed milestone. The measurement and verification (M&V) are undertaken by an independent M&V team based on the documentation and database using an accepted M&V methodology. Technologies may vary from traditional technologies such as lighting, hot water, heating, ventilation, and air conditioning to newer technologies such as smart control devices and Internet of Things (IOT) devices that manage battery energy systems to deliver savings during specified times. The design of the programme with specific technologies will be based on the needs analysis, the state of the grid, and the potential savings that can be obtained.

8.7 Demand response – load limiting using smart technology

Distribution has embarked on smart metering load limiting implemented nationally. This is a demand response capability that could assist with reducing demand at local and national network levels. It involves temporarily restricting the maximum power output and the amount of energy being consumed by the customer during specific periods (for example, from 80/60 A supply to 10/5 A, equivalent to 2.3/1.15 kW). This results in a reduction in the MW demand within a customer's premises, defined supply area, and suburb. Eskom currently has a declared internal capacity target of approximately 2 GW based on the smart metering and bulk installation of a million units across several Distribution feeders and across several customer sectors, that is, residential, agricultural, mid-segment industrial, and commercial. Load limiting is currently being used as an alternative to load shedding and allows customers to consume a limited amount of electricity and, at the same time, reduce MWs on the system.

To manage the delivery of the target MWs, Distribution requires a virtual power plant (VPP) and a metering data management system (MDMS). These are used to dispatch, analyse, automate, aggregate, and send load-limiting commands to all the smart meters via the data concentrator. The systems enable efficient deployment of the programme MW reduction; they are part of the administration and operational costs of the load-limiting programme.

8.8 Targeted Communications Programme

An aggressive media campaign aims to encourage South African citizens and sectors to initiate behavioural changes and quick hits to support the energy conservation and energy efficiency drive of the national grid. The call is for all consumers to use only what they need, and there is an urgent need for national partnerships and collaboration for the common good.

The objective is to communicate with all electricity users to alleviate the electricity system constraints caused by high demand during winter and also in other seasons when there are constraints. It, furthermore, aims to achieve widespread visibility, awareness, and reach, with a national focus on becoming more energy efficient and reducing demand.

The following marketing solutions are included to support the EEDSM objectives;

a. **Use only what you need campaign:** create a national mass media campaign to rally the country to assist in avoiding load shedding, with specific focus areas:
    - 17:00 to 21:00 period (beat the peak) – residential mass media broadcasting campaign focusing on higher LSMs (LSM 8 to 10)
    - Channels:

      Social media – Facebook, Twitter, WhatsApp, websites, etc.

      Multi-channels (radio, digital, and social media) focusing on evening drive-time (16:00 to 18:30) demand reduction by switching off and implementing saving tips, especially during constrained periods.

      Smart meter messaging.

b. **Load management technologies support campaigns**: put in place specific awareness campaigns for the industrial/agricultural/commercial markets. Campaigns should be focused on improving energy efficiency and load management in the industrial, agricultural, and commercial markets. Channels used to educate specific segments of the market include appropriate print media, appropriate events/shows, social media, short message service (SMS), and the Internet.

The aggressive media campaign will be structured taking into consideration seasonality to educate customers about the importance of their behaviour in our effort to save MW to reduce the load-shedding stages. This would have an immediate impact without requiring a large investment. To achieve a rapid turnaround in MW savings, it would also be necessary to engage with major customers and present innovative ideas.

The seasonality campaigns will be developed and implemented in collaboration with external creative, digital, public relations, and media buying agencies. The campaigns will be phased, beginning with digital media and progressing to platforms that require media buying and production services. The media and communication campaign will concentrate its efforts on large city centres (in Gauteng, Cape Town, and Durban) before expanding to other areas.

8.9 Measurement and verification

Measurement and verification involve the independent third-party measurement, verification, and tracking of demand and energy savings realised by the implementation of EEDSM projects by project developers. Eskom has contracted several measurement and verification teams to independently measure, verify, and report the verified savings. This improves the credibility and acceptability of the reporting to the various stakeholders. As and when needed, additional independent teams may be contracted.

Planning and costing for the measurement and verification function are largely dependent on the work volume received from the DDMP. These activities and expenses on DDMP projects or programmes are recovered from IDM costs and are, therefore, included in this plan.

8.10 IDM key focus areas and approach

Several key focus areas that drive the integrity and quality of the various programmes underpin IDM.

TABLE 29: IDM KEY FOCUS AREAS AND APPROACH

Key focus areas	IDM approach
Robust project management approach	IDM has built up an extensive project and contract management capacity. Where additional capacity may be required due to variations in workload, external resources will be contracted. For large projects, multifunctional project teams will be created following robust project management methodologies.
Performance contracting model	The introduction of a performance contract model by IDM ensures that the risks lie with the developer/customer and that the incentives are only paid based on the MW/MWh delivered and sustained.
Project governance and approval	Eskom governance processes will be complied with.
Ensuring that estimated savings are realised as anticipated	Measurement and verification is responsible for independent third-party measurement, verification, and tracking of demand and energy savings.
Proactively addressing potential fraud	All IDM programmes are subject to the Eskom audit requirements.
Safety	Eskom will specify compliance with safety, health, and environmental requirements and standards.

8.11 Technical and cost calculations

8.11.1 Energy and Demand Savings

The estimated demand savings in the IDM plan are based on a combination of a projection of estimated savings of the various individual projects and large-scale initiatives and the technical potential of savings that can be achieved per sector.

Maximum demand is measured at the maximum point of the load profile and is generally measured in MW. It is also the maximum electricity consumed at a given point in time. DDMP programmes target and report on peak demand and energy savings. This is based on the average demand measured during the Eskom evening peak periods (18:00 to 20:00 in summer and 17:00 to 19:00 in winter) for load management. Energy efficiency projects report on peak demand savings, energy savings, and average demand savings between 06:00 and 20:00 on weekdays. The energy efficiency mass roll-out savings are based on the period of operation for the chosen technology and may coincide with the peak, morning periods, or a defined period depending on the technology being deployed.

IDM aims to implement measurable and sustainable demand and energy reduction interventions by introducing energy efficiency and load reduction technologies and behaviours into customers' electricity purchasing patterns. If adequately funded, Eskom's current IDM initiatives can rapidly contribute to closing the foreseen energy gap. This is important because the risk of load shedding and the requirements to reduce energy consumption are crucial for ensuring the security of supply.

8.11.2 Project costs

The annual cost estimates are based on the actual historically incurred project costs from invoicing schedules and are spread equally throughout the implementation of a project. In general, costs are calculated based on the expected peak demand savings (MW) to be delivered during a financial year as well as the associated cost to deliver the demand savings. The load management and energy efficiency programmes are performance contracting models and will have an impact on the cash flow, in that project funding will be payable over a two-year sustainability period after implementation. It is assumed that all costs are incurred in the same year as the realised savings.

9. Revenue Recovery

Eskom allowable revenues are recovered through to Distribution by way of standard tariffs and non-standard tariffs, that is, NPAs and international utility tariffs. This is after the pass-through of the MYPD allowable revenues to Distribution; see table below.

In this MYPD 6 application, the existing NPAs (local and international) and international utilities revenues are escalated as per their respective contracts that were approved by NERSA. Consequently, the increase to the Standard tariffs is to recover the balance of the NERSA allowed revenues after subtracting the revenues from NPAs and international utilities. For NPA's that will be approved after the NERSA MYPD 6 decision, the differences will be recorded in the RCA for recovery upon the respective RCA's liquidation. To separate the standard tariff allowable revenues from non-standard tariff customers (NPAs and international utility tariffs) the sales revenues for international sales and local NPAs are subtracted from total Eskom allowable revenues passed through to Distribution.

TABLE 30: MYPD 6 STANDARD TARIFF REVENUE RECOVERY

Revenue recovery (R'm)	Decision FY2024	Decision FY2025	Application FY2026	Application FY2027	Application FY2028
Non standard tariff customers	18 734	17 203	37 835	46 775	49 683
Standard tariff (Incl RCA's)	334 963	334 963	407 728	448 581	487 095
MYPD6 Allowable Revenue	**353 697**	**352 167**	**445 563**	**495 355**	**536 778**

The NERSA allowable revenue decisions will be implemented prior to the commencement of each Eskom financial year of the MYPD 6 control period. The implementation will be through the applicable methodology and decisions including the RCA decisions and court outcomes, ERTSA decisions and other tariff and pricing decisions such as updates to tariff structures. The annual tariff adjustment implementation will be effective 1 April for non-municipal customers and from 1 July for municipal customers in compliance to the MFMA.

The annual MYPD allowable revenue decision is aligned to the Eskom financial year, that is, 12 months from 1 April to 31 March of the following year. The MFMA requires that electricity price increases to municipalities are only effective on 1 July, subject to the tabling of the adjusted rates in Parliament on or before 15 March in the implementation year. The Eskom directly supplied customers' (non-municipal) tariffs are therefore, effective from 1 April and the municipal tariff increase is from 1 July.

The ERTSA methodology governs the calculation of the tariff increases to be applied to the different tariff charges, and this includes a separation of municipal and non-municipal tariffs to ensure that:

- Over the 12 months of the Eskom financial year, the municipal and non-municipal tariffs annual average increases are the same.
- Because for the first 3 months of the Eskom financial year, the prior year's municipal tariffs are effective, the municipal price increase for the last 9 months ensures that for the 12 months of the Eskom financial year, the average municipal increase results in the same average increase with non-municipal tariffs as above.
- Consequently, the 1 July Eskom municipal tariff increase applied to the tariff charges may be different from the non-municipal increase, that is, could be higher or lower depending on the prior year's 1 July municipal increase and change in forecasted municipal volumes.
- The ERTSA standard tariff category increases do not result in structural changes and implementation of new tariffs as per the current (at the time of this MYPD 6 application) ERTSA methodology rule 3.2.
- During the MYPD 6 period Eskom will make applications for tariff structural changes after the allowable revenue decision. Upon the NERSA approval of the updated tariff structures, Eskom will adjust the updated tariff rates using the ERTSA methodology to reflect the implementation year's price levels.

The indicative annual standard tariff increases are as shown in the table below.

TABLE 31: INDICATIVE STANDARD TARIFF INCREASES

Customer categories	Application FY2026	Application FY2027	Application FY2028
Total Standard tariff	**36.15%**	**11.81%**	**9.10%**
Municipal - 1 July	**43.55%**	**3.36%**	**11.07%**
Eskom Direct:			
Key Industrial and urban			
Megaflex; Miniflex; Nightsave Urban; WEPS; Megaflex Gen			
* Other tariff charges	36.15%	11.81%	9.10%
* Affordability subsidy charge (where applicable)	29.58%	25.42%	22.07%
Other Urban			
Businessrate; Public Lighting	36.15%	11.81%	9.10%
Rural			
Ruraflex; Nightsave Rural; Ruraflex Gen	36.15%	11.81%	9.10%
Homelight 20A			
Block 1 (>0-350kWh)	36.15%	11.81%	9.10%
Block 2 (>350kWh)	36.15%	11.81%	9.10%
Homelight 60A	36.15%	11.81%	9.10%
Homepower	36.15%	11.81%	9.10%

10. Conclusion

Distribution MYPD 6 application supports the Eskom mission to provide sustainable electricity solutions to promote economic growth and social prosperity for South Africa. This is achieved through operating the distribution network to supply electricity to customers in its area of supply as specified within the Distribution licence.

Eskom's sales have declined over the past years, with the outlook remaining relatively depressed in the years ahead. A significant decline is attributed to large power users as a result of high ore extraction costs and volatile commodity markets, particularly in the ferrochrome, steel, gold and platinum industries. The measures that Eskom has undertaken to arrest this trend have been provided. It needs to be noted that the sales are a feature of the economy of the country and requires a concerted effort from various stakeholders.

Distribution's operating expenditure that includes employee costs, maintenance and other expenses has experienced a compound average growth rate (CAGR) of 3.8% for the period, which is below expected inflation. This has been a result of efficiency improvements since the MYPD 4 period. Prioritising capital investments to build assets that support network performance to deliver reliable network performance. Due to the phasing-in of the return on assets, the consumer continues to enjoy a subsidy.

While good payment from large industrial, commercial and major metropolitan customers has been received, the areas of major concern are certain residential and municipal debt. Municipal overdue debt has increased significantly in the past few years and remains a concern. The initiatives to arrest the debt are not effective and require significantly more attention that addresses the underlying root causes. It is evident that this trajectory cannot be allowed to continue. The impact on other consumers and the ability for Eskom to provide a service is being severely hampered. In addition, the resultant annual cashflow shortfall of R20bn requires Eskom to compromise on essential service delivery.