LAINGSBURG MUNICIPALITY

ELECTRICITY DISTRIBUTION LOSSES POLICY

2025/2026

Financial Policy No.: 19
Revision: Version 2
Last Review: March 2025 (MTREF)
Effective From: 1 July 2025
https://www.laingsburg.gov.za

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1. SCOPE

The scope of this policy is to identify and describe electrical losses that are experienced on the distribution system and to find ways to keep these losses to a minimum. This policy will also describe the disclosing of electricity losses in terms of the relevant legislation. This policy should be read in conjunction with the Accounting Policy of Laingsburg Municipality.

2. OBJECTIVE

The objective is to minimize electricity losses, as they can have a significant financial impact. The municipality may end up paying for electricity that cannot be billed to consumers. This policy is aligned with industry norms, aimed to improve the municipality's collection rate, and protect municipal revenue.

3. LEGISLATION

Municipal Finance Management Act 56 of 2003

Section 125(2) - The notes to the annual financial statements of a municipality or municipal entity must disclose the following information:

(d) particulars of -

(i) any material losses

Section 64(2) - The accounting officer must for the purposes of subsection (1) take all reasonable steps to ensure—

(a) that the municipality has effective revenue collection systems consistent with section 95 of the Municipal Systems Act and the municipality's credit control and debt collection policy;

(b) that revenue due to the municipality is calculated on a monthly basis.

4. TYPES OF LOSSES

An ***electricity distribution loss*** refers to the amount of electrical energy lost during the process of transmitting and distributing electricity from the source (Eskom Bulk Purchases) to the end-users within the municipality. In other words, the difference between electricity input and the number of units sold.

The Municipality have two types of losses that can occur in the distribution of electricity.

- **Technical Losses:** These losses occur due to heat dissipation when electricity flows through the system conductors, which consist of either copper or aluminium (network/infrastructure-related losses). The condition of the infrastructure will be the key determining factor in technical losses.

- **Non – Technical Losses:** These losses occur due to theft (illegal connections, meter tampering) and incorrect metering and/or billing.

  It is not complicated to calculate distribution loss if the municipality's sales statistics, pertaining to units sold, can be considered accurate and then to be deduction from the total number of units purchased from Eskom. However, it is much more complicated to calculate a completely accurate split between technical and non-technical losses and to quantify the loss that can be attributed to either technical or non-technical factors.

5. METERING

- The municipality will progressively install **Smart pre-paid meters** in the municipal electricity distribution areas.
- Commercial and Industrial should make use of Smart metering solutions but unlike residential should not necessarily be pre-paid.
- All new meter replacements and new meter installations should be Smart meter installations as endorsed by National Treasury.
- The smart metering system to be installed must comprise an electronic smart electricity metering device or meter which communicates with a main data collector, whereby this data can then be seamlessly integrated into the municipality's billing system.
- A Smart meter is:
  - An advanced type of digital electricity meter that records when, and how much, electricity is consumed and deducts from the amount consumed from a prepaid balance loaded by the customer.
  - Smart prepayment split metering solution is made up of the meter and the Customer Interface Unit (CIU).
  - The meter and CIU communicate with each other remotely enabling the CIU to display exactly what your electricity credit balance is.
  - The smart meter allows you to view near real-time electricity usage over time and helps you manage your consumption.

- Smart prepaid meters are capable of two-way communication between the meter and municipality. This enables the municipality to read information off the meter, detect power outages and meter tampering and to send information to the meter such as programming updates.
- Automated instructions are also sent to the meter to interrupt the power supply when your prepaid account balance reaches zero, and to reconnect supply once you have loaded credit.

6. ACCEPTABLE NORM

In terms of Municipal Finance Management Act (MFMA) Circular No. 71: Uniform Financial Ratios and Norms, dated January 2014, states the following:

Electricity Distribution Losses (Percentage) – Purpose & Application

The purpose is to measure the percentage loss of potential revenue from Electricity Services through electricity units purchased and generated but not sold as a result of losses incurred through theft (illegal connections), non or inaccurate metering or wastage. It is expected that implementation of the free basic service policy is included in the calculation for sale of electricity.

Formula

(Number of Electricity Units Purchased and / or Generated - Number of Electricity Units Sold) / Number of Electricity Units Purchased and / or generated) × 100.

Norm

The Norm is between 7% and 10% and will be superseded by the sector determination.

Interpretation of Results

A ratio below the norm depicts that electricity losses are well managed. If the Ratio exceeds the norm, it could indicate various challenges, for example, deteriorating electricity infrastructure or poor management of the networks, affecting the Municipality or Municipal

Entity, which would require further analysis to determine the reasons for such losses. In addition, the root causes should be addressed.

For the purposes of **Laingsburg Municipality**, the **norm** for technical losses can be set at 8% considering the aging network with the balance to be considered non-technical in nature. The municipal norm should be reviewed annually during the MTREF budget process.

7. CONTROL AND MONITORING

- The municipality must aim to maintain electricity losses below a specified percentage of the total electricity purchased from Eskom. This can serve as a Key Performance Indicator (KPI) within the Service Delivery and Budget Implementation Plan (SDBIP), linked to the finance department. While there is a dual responsibility for managing electricity distribution losses, the primary control and responsibility lie within the financial department. Interdepartmental communication should deal with potential risks.

- To keep the technical losses to a minimum, distribution losses must be reported on a monthly basis to the Director / Manager Infrastructure.
- To keep the non-technical losses to a minimum the metering of electricity must be monitored sufficiently. The billing system must be used to detect possible cases of illegal connections (low, no consumption report / deviation or exception reporting and managing estimates as in terms of the Customer Care Credit Control and Debt Collection Policy).
- A formal system of communication should be maintained or put in place to ensure effective and efficient communication between the revenue department and the technical department. This will ensure that meters replaced, meter reset, disconnections, last readings etc. being accounted for to ensure that the municipality suffer no losses in this regard.
- If theft is detected, the electricity supply to the premises will be blocked, and a tariff will be charged according to the council-approved tariffs. This action will be dealt with in accordance with the policy governing customer care, credit control, and debt collection and if applicable criminal charges should be considered. The meter will remain blocked until the penalty is paid in full, and the root cause for the blockage is addressed. This may involve full payment of the account or entering into a payment arrangement, as dictated by the situation and in accordance with the policy.
- Formal inter-departmental communication should be formalized, and this policy should be supported by a corresponding Standard Operating Procedure (SOP) in this regard.

8. REPORTING

- Electricity Losses must be reported to the Director / Manager Infrastructure by the revenue / BTO department on a monthly basis.
- Reported on a quarterly basis in terms of section 52 of the MFMA to Council.
- Distribution losses should be reported within the Budget Steering Committee on a quarterly basis.
- The total losses that a municipality incurred for electricity must be reported and quantified in the Annual Financial Statements of the municipality.
- Electricity losses will also be reported in the Mid-Year Performance Report of the municipality.

  The electricity losses reported upon in terms of financial reporting, must clearly indicate the quantity in terms of units (kWh) lost, as well as the financial implication of the losses. Losses incurred must be disclosed and quantified as in terms of the Accounting Policy.

9. POLICY REVIEW

The content of the policy will be reviewed as and when required but at least on an annual basis during the budget process.

DOCUMENT CONTROL

VERSION AND DOCUMENT CONTROL			
POLICY NAME:	Electricity Distribution Losses Policy		
POLICY OWNER:	Technical Department		
RELATED POLICIES:	Budget Policies MBRR Reg. 7		
REVIEW:	Annually	**Budget Policy**	Yes
POLICY EFFECTIVE DATE:	01 July 2024	**Budget Policy Nr**	19

Version	**Date**	**Adoption**	**Revision**
1	April 2023	1st Adoption	
2	20 March 2024	28 March 2024	1st Revision
3	31 March 2025		2nd Revision
4			3rd Revision

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Municipal Manager J. Booysen	Mayor A Kleinbooi
Date: xx May 2025	Date: xx May 2025