

**Guidelines on the Procedure for
Testing the Accuracy of Metering Equipment by the Distribution Licensees
Upon a Request by a Consumer**

Introduction

In terms of Sub-section (1) of Section 1 of Schedule III of the Sri Lanka Electricity Act, No. 20 of 2009 as amended, where a consumer of electricity supplied by a Distribution Licensee is to be charged for the supply wholly or partly by reference to the quantity of electricity supplied, then unless otherwise agreed between the Consumer and the Distribution Licensee, the supply is required to be given through and the quantity of electricity is required to be ascertained by an appropriate meter or meters as the case may be.

In terms of Sub-section (1) of Section 3 of the Sri Lanka Electricity Act, No. 20 of 2009 as amended, the functions of the Commission shall be to set and enforce technical and other standards relating to the safety, quality, continuity and reliability of electricity supply services and metering services. However, the said Act, No. 20 of 2009 does not appear to specifically provide for testing the accuracy of metering equipment by Distribution Licensees if and when requested by Consumers.

The Distribution Metering Code of the Distribution Code (Section 5):

- a. Defines the responsibilities of the metering service providers (Distribution Licensees) and the Users (including customers) with respect to metering of energy and demand;
- b. Specifies the minimum requirements for energy/demand metering; and
- c. Lays down the procedures Distribution Licensees have to adopt on maintenance, validation, collection, processing and verification of metering data.

Accordingly, the Distribution Licensee, as the metering service provider, is responsible for, amongst other:

- a. Supplying, installing, commissioning, maintaining, repairing, replacing, testing and inspecting all meters and associated equipment in the Distribution Licensee's operational area in accordance with the provisions specified in the said Metering Code and applicable standards;
- b. Ensuring that meters or any associated equipment which do not meet the minimum requirements stipulated by the applicable standards are removed and replaced with the least possible delay, thus guaranteeing the integrity and accuracy of the metering function.
- c. Retaining the test certificates/records for a period stipulated by the Commission.

Consequently, the Distribution Licensee is required to maintain all metering equipment according to a planned program and keep all test results, maintenance records and sealing records in respect of all items tested/inspected. On request, relevant information is required to be made available to the Users (including customers).

When carrying out maintenance, testing or auditing, prior notice is required to be given to the Users (including customers) in accordance with the said Act, No. 20 of 2009. This will provide the opportunity for the Customer to witness the testing as well. The Customer or his authorized representative's signature is required to be obtained to certify the meter readings before and after the testing.

It is the User's (including customer's) responsibility to provide unhindered access for the Distribution Licensee to read, test and inspect the metering equipment. If any User (including customer) fails to provide unhindered access to the Distribution Licensee as agreed and if it causes the Distribution

Licensee to make additional visits to the User's (including customer's) premises, then the Distribution Licensee will be entitled to recover reasonable costs of such visits.

The Distribution Licensee is required to test each type of meter in accordance with the accepted standard international practice, publish such information in its website and make the details available to Users (including customers) on request. The Distribution Licensee is required to ensure that each meter installation is inspected and tested as given in the table below:

Installation	Inspection and Testing Frequency
Low voltage retail customer, 1-phase	Once every ten years
Low voltage retail customer 3-phase/2 phase	Once every five years
Low voltage Bulk Customer	Once every year
Medium Voltage Customer	Once every year
Embedded Generators	As stipulated in CEB Guide for Grid Interconnection of Embedded Generators, subject to a minimum frequency of once every year.

Users (including customers) are required to notify the Distribution Licensee of any suspected malfunctioning, defects, damages or any potential dangers to the metering equipment within five working days from the User (including customer) becoming aware of such situations.

The Distribution Licensee is required to repair or replace any meter or associated equipment as soon as practicable after being informed through User (including customer) notification or otherwise, that the meter is defective/ erroneous. If the Licensee can establish that a User has damaged any metering equipment or broken seals, then the cost of all such repairs shall be recovered from the User (including customer).

The Distribution Licensee may be requested by Customers to perform tests on accuracy of the metering equipment on payment of the necessary charges. Sufficient notice shall be given by the Licensee announcing the test date/time and agreement shall be reached with the Customer on the same, to enable the customer or his representative to witness testing. As soon as practicable, the Distribution Licensee shall make the test results available to the requested party

In terms of Condition 33 of the Electricity Distribution & Supply Licenses, the Supply Services Code to be prepared and approved by the Commission should set out methods for inspecting meters provided by Distribution Licensees for any evidence of deterioration which might affect its function or safety. Consequently, Section 13 of the approved Supply Services Codes state that Consumers may request the Distribution Licensee to test the accuracy of meters at any time by paying a meter testing fee approved by the Commission.

Applicability

These guidelines are applicable to Distribution Licensees, Customers and Consumers.

Objective

The objective of these guidelines is to provide guidance on the procedure to be followed when testing the accuracy of metering equipment.

Scope

Where a consumer of electricity supplied by a Distribution Licensee (DL) is charged for the supply wholly or partly by reference to the quantity of electricity supplied and the supply is given through and the quantity of electricity is ascertained by an appropriate meter or meters provided by the DL, if and when requested by the consumer the DL shall test the meter or meters by following these guidelines.

Definitions

For the purpose of these guidelines, Consumer/Customer means any person or entity, either as the owner or lawful occupier, supplied with electricity by the DL, and whose premises are for the time being, connected to the DL's Distribution System having accepted to receive the electricity supply on the terms and conditions laid down by the DL.

Application of the guidelines

1. When requesting the relevant DL to test the accuracy of the electricity meter installed at the consumer's premises, the Tariff Customer or Consumer (Applicant) shall:
 - a. Submit the request in accordance with the format given in Annex I hereto;
 - b. Subject to clause 2c. of these guidelines, pay the meter testing charge approved by the Commission applicable to the type of meter to be tested; and
 - c. If the person making the request is not the Tariff Customer, provide details of the Tariff Customer specified in Annex I.

2. Upon receipt of a request under paragraph 1, the DL shall:
 - a. Assign an intelligent reference number to the request with which the time and date of the request, identification of the DL's office where the request was made and other relevant information are readily identifiable;
 - b. Acknowledge receipt of the request by informing the Applicant of the reference number and contact details for making enquiries pertaining to the request (see Annex I);
 - c. Examine records pertaining to previous tests conducted on the same meter and ascertain whether the Applicant is required to pay the meter testing charges - the Applicant is not required to pay if the DL fails to establish that the relevant meter has been inspected and tested as per the frequency specified below:
 - i. Low voltage single phase retail consumers – during the period of past ten (10) years from the date of request for testing
 - ii. Low voltage three phase retail consumers – during the period of past five (5) years from the date of request for testing
 - iii. Low voltage bulk consumers – during the period of past one (1) year from the date of request for testing
 - iv. Medium voltage consumers – during the period of past one (1) year from the date of request for testing
 - v. Embedded generators – during a past period (as stipulated in the Ceylon Electricity Board guide for grid interconnection of embedded generators) from the date of request for testing, subject to a maximum period of one (1) year

The DL shall produce a copy of the previous test report to establish that the meter has been inspected and tested, and shall make available all test results and maintenance records to the Applicant on request

 - d. Provide a copy of these Guidelines to the Applicant in a preferred language (Sinhala, Tamil or English).

3. The DL's officer in charge of testing the electricity meter shall:
 - a. Make a prior appointment with the Applicant to conduct the test, within 5 working days from the date of receipt of the request;
 - b. Visit the Consumer's premises on the appointed date;
 - c. Explain the procedure to be followed and the formula to be used in conducting the test to the Applicant;
 - d. If the test is conducted using a series test meter:
 - i. At the time of commencing the test, complete the form given in Annex II; and
 - ii. At the time of concluding the test, complete the form given in Annex III;
 - e. If the test is conducted using electronic test equipment:
 - i. Complete the form given in Annex IV.
4. The Applicant or the representative of the Applicant may:
 - a. Witness the test;
 - b. Invite a technician/electrician to witness the test; and
 - c. Take photographs of the test, excluding persons.
5. The DL shall determine if the meter is accurate or inaccurate based on the following:
 - a. The meter is considered to be accurate, if it is proved to be within the accuracy limit of plus or minus 2.5%;
 - b. The meter is considered to be inaccurate, if it is proved to be outside the accuracy limit of plus or minus 2.5%.
6. If the meter is proved to be accurate, within 10 working days of the completion of the test, the Distribution Licensee shall:
 - a. Inform the Applicant by a letter signed by the Area Engineer of the CEB or the Branch Manager of LECO, as the case may be:
 - i. The outcome of the test including the information specified in Annex III or Annex IV as applicable, within 10 working days of the completion of the test; and
 - ii. The calculated error of the meter; and
 - b. Subject to paragraph 1.b. and paragraph 2.c. of these guidelines, retain the meter testing charges paid by the Applicant and convey the same through the letter described under paragraph 6.a. of these guidelines.
7. If the meter is proved to be inaccurate, the DL shall:
 - a. Inform the Applicant by a letter signed by the Area Engineer of the CEB or the Branch Manager of LECO, as the case may be:
 - i. The outcome of the test including the information specified in Annex III or Annex IV as applicable, within 10 working days of the completion of the test;
 - ii. The calculated error of the meter; and
 - iii. The actions to be taken in accordance with the Methodology for Estimation of Energy Supplied approved by the Commission;
 - b. Subject to paragraph 1.b. and paragraph 2.c. of these guidelines, refund the meter testing charge paid by the Applicant, and convey the same through the letter described under paragraph 7.a. of these guidelines; and
 - c. Refund to the Applicant or back - charge from the Applicant, in accordance with the Methodology for Estimation of Energy Supplied approved by the Commission.

8. If the Applicant is not satisfied with the testing of the meter he/she may lodge a complaint to the DL in writing within 10 working days from the date of receipt of the letter mentioned in either paragraph 6.a. or 7.a. of these guidelines, as the case may be (the DL shall inform the Applicant about this option in the letter mentioned under paragraph 6.a. and 7.a. of these guidelines).
9. Upon receipt of a letter as mentioned in paragraph 8 of these guidelines, the DL shall take necessary steps to resolve the complaint made by the Applicant, within 10 working days from the receipt of the letter mentioned in paragraph 8 of these guidelines.
10. If the Applicant is not satisfied with the resolution of his/her complaint by the DL, he/she may refer the dispute to the Commission in accordance with The Electricity (Dispute Resolution Procedure) Rules (the DL shall inform the Applicant of this option in the letter mentioned under the paragraph 6.a. and 7.a. of these guidelines).
11. Testing the accuracy of metering equipment on the request of the Applicant should be carried out as per the requirements of the Distribution Metering Code of the Distribution Code (Section 5). In the event of any inconsistency between these guidelines and the Distribution Code, the Distribution Code shall prevail.

Annex I

Note: This form is to be used by the Applicant when requesting the Distribution Licensee to test his or her electricity meter.

Applicant Information			
Name			
Billing Address			
Customer service Centre (If known)			
Telephone(Home).....(Office).....(Mobile)		
Email address			
Electricity Connection and Supply Meter Information			
Account number			
Date of last meter test (if known)			
Tariff Customer Information (If the Applicant is not the Tariff Customer)			
Tariff Customer's Name			
Tariff Customer's Address			
Tariff Customer's Email Address			
Tariff Customer's Telephone(Home).....(Office).....(Mobile)		
Applicant's Signature	_____	Date:	
If the meter is proved to be inaccurate, preferred mode of refund of charges for meter testing	Credit to the Electricity Account		Cheque
Acknowledgement of Request by the Distribution Licensee (To be returned to the Applicant)			
Time & Date of Receiving Request:			
Reference Number:			
Address for Correspondence:			
Telephone Number:			
Email Address:			
Name & Designation of Officer:			
Signature of Officer:			

Annex II

Note: This form is to be used by the Distribution Licensee and the Applicant at the commencement of the test where a series meter is used.

Applicant's Copy

Serial Number of Customer Meter:
Year of Manufacture of Customer Meter:
Reference Number:
Account Number:
Date:
Time of Commencing the Test:
Reading of the Test Meter:
Reading of the Customer Meter:
Signature of Distribution Licensee's Representative in Charge of the Test:
Signature of Applicant or Applicant's Representative:
National Identification Card Number of the Applicant or Applicant's Representative:

Distribution Licensee's Copy

Serial Number of Customer Meter:
Year of Manufacture of Customer Meter:
Reference Number:
Account Number:
Date:
Time of Commencing the Test:
Reading of the Test Meter:
Reading of the Customer Meter:
Signature of Distribution Licensee's Representative in Charge of the Test:
Signature of Applicant or Applicant's Representative:
National Identification Card Number of the Applicant or Applicant's Representative:

Annex III

Note: This form is to be used by the Distribution Licensee and the Applicant at the conclusion of the test where a series meter is used.

Applicant's Copy

Serial Number of Customer Meter:
Year of Manufacture of Customer Meter:
Reference Number:
Account Number:
Date:
Time of Concluding the Test:
Reading of Test Meter at the Conclusion of the Test:
Reading of Customer Meter at the Conclusion of the Test:
Date and Time of the Commencement of the Test:
Reading of Test Meter at the Commencement of the Test:
Reading of Customer Meter at the Commencement of the Test:
Signature of Distribution Licensee's Representative in Charge of the Test:
Signature of Applicant or Applicant's Representative:
National Identification Card Number of the Applicant or Applicant's Representative:

Distribution Licensee's Copy

Serial Number of Customer Meter:
Year of Manufacture of Customer Meter:
Reference Number:
Account Number:
Date:
Time of Concluding the Test:
Reading of Test Meter at the Conclusion of the Test:
Reading of Customer Meter at the Conclusion of the Test:
Date and Time of the Commencement of the Test:
Reading of Test Meter at the Commencement of the Test:
Reading of Customer Meter at the Commencement of the Test:
Signature of Distribution Licensee's Representative in Charge of the Test:
Signature of Applicant or Applicant's Representative:
National Identification Card Number of the Applicant or Applicant's Representative:

Annex IV

Note: This form is to be used by the Distribution Licensee and the Applicant at the conclusion of the test where electronic meter testing equipment is used.

Applicant's Copy

Serial Number of Customer Meter:
Year of Manufacture of Customer Meter:
Reference Number:
Account Number:
Time and Date of Conducting the Test:
Error Percentage:
Signature of Distribution Licensee's Representative in Charge of the Test:
Signature of Applicant or Applicant's Representative:
National Identification Card Number of the Applicant or Applicant's Representative:

Distribution Licensee's Copy

Serial Number of Customer Meter:
Year of Manufacture of Customer Meter:
Reference Number:
Account Number:
Time and Date of Conducting the Test:
Error Percentage:
Signature of Distribution Licensee's Representative in Charge of the Test:
Signature of Applicant or Applicant's Representative:
National Identification Card Number of the Applicant or Applicant's Representative: