

# METERING CODE FOR EXEMPTED PARTIES

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**Public Utilities Commission of Sri Lanka**  
**January 2019**

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# 1. METERING CODE FOR EXEMPTED PARTIES

## 1.1 INTRODUCTION

This Metering Code (MC),

- (a) Defines the responsibilities of the metering service providers (Exempted Party) and the Users with respect to metering of energy.
- (b) Specifies the minimum requirements for Energy metering
- (c) Lays down the procedures Exempted Parties have to adopt on maintenance, validation, collection, processing and verification of metering data.

## 1.2 APPLICABILITY

Metering Code for Exempted Parties applies to all for Exempted Parties, all system Users and all parties who are connected to a for Exempted Party's Distribution System.

## 1.3 OBJECTIVES

Objectives of the MC are to ensure that,

- (a) The Exempted Party as well as the metered Users are aware of their responsibilities in respect of the metering services.
- (b) Metering of the Energy on the Exempted Party's Distribution System are done in accordance with the requirements specified in the MC.
- (c) Appropriate procedures are followed in providing metering data for billing and settlement
- (d) A dispute settlement process is in operation for resolving any billing and payment disputes quickly and satisfactorily.
- (e) The Energy metering function is done in a just, fair and an unbiased manner

## 1.4 DEFINITIONS

Act	Sri Lanka Electricity Act, No. 20 of 2009 as Amended.
Agreement	Tariff agreement between the Exempted Party and the Customer to supply electricity
Certificate of Exemption	A Certificate issued by the Commission with a Gazette notification, exempting any person or category of persons from the requirement of obtaining a license for the distribution of electricity, in Accordance with the Section 10 of the Act.
Commission	Public Utilities Commission of Sri Lanka
Customer	Means a Tariff Customer
Energy	Quantity of electrical Energy measured in units equal to one kilowatt hour (kWh) or multiples thereof such as: 1000 Wh = 1 kWh 1000 kWh = 1 MWh 1000 MWh = 1 GWh
Exempted Party	Any person or category of persons who has been exempted from the requirement of obtaining a license for the distribution of electricity, in Accordance with the Section 10

	of the Act.
Meter	Equipment used to measure electricity consumption during a particular period, including the current transformers, voltage transformers, power transformer, connection wires and Meter mounting
Service Connection Amperage	Maximum current (A) agreed to be supplied by the Exempted Party as stated in the tariff agreement
User	Person or entity that uses the Exempted Party's Distribution System.

## 1.5 RESPONSIBILITIES

### 1.5.1 EXEMPTED PARTY

The Exempted Party, as the metering service provider shall be responsible for,

- (a) Supplying, installing, commissioning, maintaining, repairing, replacing, testing and inspecting all meters and associated equipment in the Exempted Party's operational area in accordance with the provisions specified in this Metering Code and the applicable standards.
- (b) Ensuring that meters installed in retail customer installations have been tested by the meter manufacturers in accordance with the applicable standards.
- (c) Ensuring that all meters, associated equipment and accessories are installed in a manner preventing unauthorized interference
- (d) 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.
- (e) Retaining the test certificates/records for a period stipulated by the Commission
- (f) Providing all necessary information on the preparation needed at the customer end for the installation of the metering equipment.
- (g) Informing the User of the meter reading dates, cumulative Energy usage, for the billing period.

### 1.5.2 USERS

Users shall,

- (a) Ensure the safety of the meters and associated equipment installed in their premises and shall provide unrestricted access to authorized representatives of the Exempted Party at all times. Where metering equipment has been installed in a restricted area, the User shall agree on a procedure for the Exempted Party to gain access to the same.
- (b) Notify the Exempted Party of any suspected malfunctioning, defects, damages or any potential dangers to the metering equipment within five working days from the User becoming aware of such situations.
- (c) Not tamper or permit tampering of any meters or related equipment.

## **1.6 METERING EQUIPMENT**

Metering equipment supplied by an Exempted Party under Clause 1.1 shall

- (a) Be capable of measuring and recording the consumption of electricity on the premises of the customer in accordance with the applicable tariff or other charging arrangements agreed between the Exempted Party and the User
- (b) Be sealed
- (c) Have appropriate protective devices,

and, the Exempted Party shall,

- (d) Keep records signed by both parties on the removal or replacement of the seals
- (e) Take all pragmatic measures to prevent and detect interference by unauthorized parties.

### **1.6.1 DESIGN REQUIREMENTS**

The Exempted Party shall ensure that the design of all meters and the related equipment are in compliance with the applicable standards. It shall also ensure that burden requirements of the current and voltage transformers are correctly determined and used in a manner to enhance accuracy of the measurements

### **1.6.2 ACCURACY OF METERS**

Prescribed limits of accuracy for the customer installations shall be as follows:

#### **1.6.2.1 Low Voltage Retail Customers**

All meters at the connection point shall be Class 2.0 (IEC) watt-hour meters or higher. If electronic meters are used then the display shall have the facility of displaying the readings even when electricity is not available.

If pre-paid meters are used, it shall have the same accuracy or higher.

### **1.6.3 METERING EQUIPMENT MAINTENANCE**

#### **1.6.3.1 Maintenance, Testing and Auditing Program**

The Exempted Party shall maintain all metering equipment according to a planned program and shall keep all test results, maintenance records and sealing records in respect of all items tested/inspected. On request, relevant information shall be made available to the User.

When carrying out maintenance, testing or auditing, prior notice shall be given to the Users in accordance with the Condition 21 of the Certificate of Exemption. If the meter is not installed in the premises of the User, prior notice shall be given to the Users before carrying out maintenance, testing or auditing. This will provide the opportunity for the Customer to witness

the testing as well. The Customer or his authorized representative's signature shall be obtained to certify the meter readings before and after the testing.

As explained in Section 1.5.2, it is the User's responsibility to provide unhindered access for the Exempted Party to read/test/inspect the metering equipment. If any User fails to provide unhindered access to the Exempted Party as agreed and if it causes the Exempted Party to make additional visits to the User's premises, then the Exempted Party will be entitled to recover reasonable costs of such visits.

The Exempted Party shall test each type of meter in accordance with the accepted standard international practice. The Exempted Party shall publish such information in its website or notice board as applicable and shall make the details available to Users on request. The Exempted Party shall ensure that each meter installation shall be inspected and tested as given in the Table 1.1:

Table 1.1- Frequency of Meter Testing

<b>Installation</b>	<b>Service Connection Amperage</b>	<b>Inspection and Testing Frequency</b>
Low voltage retail customer	15A or 30A	Once every ten years
Low voltage retail customer 3-phase	30A or 60A	Once every five years

### **1.6.3.2 Announced Testing of Metering Installations**

The Exempted Party 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 Exempted Party 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 Exempted Party shall make the test results available to the requested party. If the tests show that the meter is defective or erroneous, then procedures developed as detailed in Section 1.6.4 shall be followed.

### **1.6.3.3 Unannounced Testing of Metering Installations**

The Exempted Party may be required to test a metering installation due to suspected tampering of the metering equipment. The Exempted Party shall consider all such unauthorized tampering as a cause for damaging the equipment, fire, injuries or even loss of human life due to electrocution.

### **1.6.3.4 Metering Data during Tests/Audits**

The Exempted Party shall ensure that proper coordination exists between the department

responsible for carrying out the testing/auditing and the department responsible for billing, and all necessary measures have to be taken to guarantee the integrity of the meter data.

### **1.6.3.5 Repairs of Meters and Associated Equipment**

The Exempted Party shall repair or replace any meter or associated equipment as soon as practicable after being informed through User notification or otherwise, that the meter is defective or erroneous (section 1.5.2).

If the Exempted Party 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.

### **1.6.4 REMOVAL AND REPLACEMENT OF METERS**

No person other than a person authorized by Exempted Party shall remove a meter from a User installation or replace a meter at a User installation. A meter or any associated equipment may be removed due to any of the following reasons:

- (a) Findings during an audit
- (b) Request by a User
- (c) Information provided by a User
- (d) Findings during unannounced testing

The Exempted Party shall develop procedures on the removal/replacement/surcharges/fines where applicable and make such information available to the Users.

### **1.7 READING OF METERS**

All meters, other than pre-paid meters may be read manually or remotely by the Exempted Party according to a scheduled program. The manual reading program shall be prepared giving due consideration to route efficiency. The Exempted Party shall decide on the frequency of meter reading, which may be equal to or more than the time stipulated in the Methodology for Tariffs for Persons Exempted from the Requirement to Obtain a License to Distribute and Supply Electricity issued by the Commission.

The Exempted Party shall make all Users aware of the frequency of meter reading.

#### **1.7.1 MANUAL READING OF METERS**

Meter reading has to be carried out by an authorized representative of the Exempted Party, who shall be suitably qualified and trained to carry out the task. The Exempted Party shall decide on the qualifications of the representative according to the meter reading tasks entrusted to them.

At the time of reading the meter, it shall be the responsibility of the Exempted Party's authorized representative for reading the meters to carry out all necessary checks for ensuring the security of the metering installation and report any evidence that may affect the normal functioning of a meter to a responsible officer, which shall include the following:

- (a) Ascertaining whether meter identification number on the meter is the same as that of the bill/schedule
- (b) Meter seals are intact
- (c) Any damages to the metering installations
- (d) Any tampering with the wiring
- (e) Any other actions that prevent/hamper the normal operation of the meter
- (f) Abnormal variations of consumption, which the User cannot explain
- (g) Meter alarms

#### **1.7.1.1 Data Delivery and Storage**

The Exempted Party's representative shall deliver the data so collected according to the procedures laid down by the Exempted Party, to be stored in a secure and a well maintained database.

All data collected manually shall be transferred to the database within seven days from the reading of the meters. However, the Exempted Party shall propose and implement programs to transfer such data electronically, which will enable the updating of the database on the same day the meters are read.

In the event that the Exempted Party arrives at a decision that the meter data is inaccurate/erroneous, data may be substituted by estimation according to a declared procedure. The User shall be informed of the substitution and the basis on which the substitution is made. User meter data is confidential and shall not be released to third parties without obtaining written consent from the User.

### **1.8 DISPUTES**

The Exempted Party shall take all efforts to resolve disputes on matters related to metering and reach agreement with the User. However, if the User is not satisfied with the solution offered, the matter can be placed before the Commission for resolution.