

RESOLUTION NO. \_\_\_\_\_, Series of 2017

**A RESOLUTION ADOPTING THE RULES AND PROCEDURES FOR ACCURACY TESTING OF INSTRUMENT TRANSFORMERS**

**Article I. GENERAL PROVISIONS**

**Section 1.** These Rules/Guidelines shall be *known* as “A Resolution Adopting the Rules and Procedures for Accuracy Testing of Instrument Transformers.”

**Section 2. Objectives.** – These Rules aim to set the rules and procedures to ensure the accuracy of instrument transformers before their installation in the consumers’ premises and while they are still in-service.

**Section 3. Applicability.** – These Rules shall apply to the following:

1. All distribution utilities; and
2. All types of consumers

Section 4. Definition of Terms.

**American National Standards Institute (ANSI)**

A private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States.

**Captive Market**

Refers to electricity end-users who do not have choice of a supplier of electricity, as may be determined by the ERC in accordance with the EPIRA.

**Contestable Market**

The electricity end-users who have a choice of supplier of electricity, as may be determined by the ERC in accordance with the EPIRA.

**International Electrotechnical Commission (IEC)**

A worldwide organization comprising of all national electrotechnical committees.

**Instrument Transformers**

High accuracy class electrical devices used to isolate or transform voltage or current levels.

**National Institute of Standards and Technology (NIST)**

An agency under the U.S Department of Commerce, which has the assigned function of taking custody, maintenance, and development of the national standards of measurements and the provision of means and methods for making measurements consistent with the ANSI standards

**Watt-hour Meters**

An energy measuring device at specific time.

**Article II. INSTRUMENT TRANSFORMER TESTS**

**Section 4. Pre-installation Stage**

Instrument transformers shall be tested before being placed in service to determine their compliance with the International IEC or ANSI Standards, or their equivalent.

Testings during the pre-installation stage includes visual inspection, transformer ratio and secondary burden tests shall be conducted by the ERC in the presence of the concerned DU, supplier and/or customer.

**Section 5. Visual Inspection**

- Compare equipment nameplate data with drawings and specification.
- Inspect physical and mechanical condition.
- Verify the unit is clean.
- Verify that all required grounding and shorting connections provide contact.

**Section 6. Transformation Ratio Test**

Instrument transformers shall be tested of their accuracy transformation ratio which should not exceed plus or minus three tenths percent ( $\pm 0.3\%$ ). ERC stickers shall be attached to the instrument transformers by the ERC as warranty that they are acceptable to be used in service.

**Section 7. Secondary Burden Test**

The burden in each phase of the instrument transformer shall not exceed its specified burden. Instrument transformers shall be connected only to a revenue meter with a burden that will not affect the accuracy of the measurement. The marking of the leads should be checked by a polarity test.

### **Section 8. In-Service Stage**

All instrument transformers must be inspected regularly by the concerned DU. They should remain accurate while in service.

Whenever the meter of the customer is inspected, the DU shall likewise conduct visual inspection of all instrument transformers connected thereto.

If the outward appearance shows evidence of physical damage, discolored terminals that may be due to overload, or change in texture or appearance of the insulation of the bushings, the instrument transformer/s shall be subjected to accuracy testing by the DU.

### **Section 9. Accuracy Errors**

Instrument transformers found to have an error of more than the allowable limit of plus or minus three tenths percent ( $\pm 0.3\%$ ) may be replaced immediately.

Correction factors shall be used while they are still un-replaced, provided, however, that the non-replacement shall not exceed a period of six (6) months after its discovery.

### **Section 10. Tampered and Damaged Instrument Transformers**

Tampered shall be replaced immediately. Replacement of damaged instrument transformers, without any evidence of tampering shall be subject to provisions of Section 9 hereof.

## **Article III. FEES AND CHARGES**

**Section 11.** The new instrument transformer testing fees are shown in Table 1.

**TABLE -1 .FEES AND CHARGES**

<b>INSTRUMENT TRANSFORMER</b>	<b>PHP 290.00 PER TAP</b>
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**Article IV – FINAL PROVISIONS**

**Section 12. Imposition of Fines and Penalties.** Violation of any of these Rules shall be subject to the imposition of fines and penalties in accordance to the “Rules to Govern the Imposition of Administrative Sanctions in the Form of Fines and Penalties Pursuant to Section 46 of Republic Act No. 9136, As Amended.”

**Section 13. Exception Clause.** Where good reason appears, the ERC may allow an exception from any provision of these Rules, if such exception is found to be in the public interest and is not contrary to law or any other pertinent rules and regulations.

**Section 14. Separability Clause.** If any of the foregoing amendments is declared unconstitutional or invalid, the other provisions which are not affected thereby shall remain in force and effect, unless such declaration would render the whole rules unenforceable or non-implementable.

**Section 15. Repealing Clause.** All Rules and Guidelines, or portion thereof, issued by the ERC, which are inconsistent with these Rules are hereby repealed or modified accordingly.

**Section 16. Effectivity.** These Rules shall take effect fifteen (15) days after its publication in a newspaper of generation circulation in the country.