

TERMS OF REFERENCE

FOR THE PROCUREMENT OF RECERTIFICATION OF A) THREE PHASE ELECTRIC WATTHOUR METER REFERENCE STANDARD, B) SINGLE PHASE ELECTRIC WATTHOUR METER REFERENCE STANDARD, AND C) REFERENCE INSTRUMENT TRANSFORMER TESTER

A. RATIONALE

The Consumer Affairs Service (CAS) is primarily responsible in handling consumer complaints and ensuring the adequate promotion of consumer interests pursuant to Section 41 of the EPIRA or Republic Act No. 9136. It is also responsible in ensuring the accuracy of watthour meters used by all distribution utilities under the jurisdiction of the Commission pursuant to Section 16 (d), (e), (f) and (g) of Commonwealth Act No. 146 otherwise known as the Public Service Act, to wit:

(d) To fix just and reasonable standards, classification, regulations, practices, measurements, or service to be furnished, imposed, observed and followed thereafter by any public service.

(e) To ascertain and fix adequate and serviceable standards for the measurement of quantity, quality, pressure, initial voltage and other condition pertaining to the supply of the products or service rendered by any public service, and to prescribe reasonable regulations for the examination and test of such product or service and for the measurement thereof.

(f) To establish reasonable rules, regulations, instructions, specifications, and standards, to secure the accuracy of all meters and appliances for measurement.

(g) To compel any public service to furnish, safe, adequate and proper service as regards the manner of furnishing the same as well as the maintenance of the necessary material and equipment.

Presently, the Commission's Meter Division is maintaining a Reference Three Phase Watthour Meter Standard with limited error of five thousandth percent (0.005%) to ensure the optimum accuracy of test of three-phase (3 ϕ) or Polyphase meters and test equipment being used by Distribution Utilities and other regulated entities. This high accuracy of three-phase (3 ϕ) meter test will ultimately provide

commercial and industrial consumers protection in terms of accuracy on kilowatt-hour registration of their electricity consumption.

In addition, the Commission's Meter Division is maintaining a Single Phase Electric Watthour Meter Reference Standard with a maximum error of two hundredth percent (0.02%) to ensure the optimum accuracy of test of kwhr meters and other equipment being used by regulated entities. This high accuracy of meter test will ultimately provide consumer protection in terms of accuracy on kilowatt-hour registration of their electricity consumption.

Further, the Commission's Meter Division is also maintaining a Reference Instrument Transformer Tester with an error of two hundredth percent (0.02%) to ensure the optimum accuracy of test of instrument transformers being used by regulated entities. The traceability of this high accuracy instrument transformer test will ultimately provide confidence to the regulator since consumer protection in terms of accuracy on kilowatt-hour registration of their electricity consumption is guaranteed.

However, the effectivity of the calibration certificates of the said equipment will expire in July 2022. To guarantee the maintenance of these accuracies, these equipment needs to be sent annually to an internationally-accredited calibration laboratory to maintain its record of traceability and accuracy.

B. OBJECTIVE

The Recertification of the Commission's Reference Three-Phase (3 ϕ) Watthour Meter Standard is in compliance with the requirement of Section 5.5.2 of the ANSI C12.20-2015 which states that:

“For polyhase loading, the meter shall be tested with voltage and current phase angles similar to actual service installations. Polyphase loading will be mandatory for testing of polyphase meters effective January 1, 2020.”

Likewise, Philippine Grid Code Section 9.2.5.3.2 states that:

“Only measuring and testing Equipment with certified calibration records and unexpired calibrations may be used for the testing of meter accuracies.”

Distribution Utilities' meter shops, Third Party Meter Shops and other entities are required to maintain the required accuracy of their testing equipment. To maintain the said accuracy limit, DUs, Third Party Meter Shops are required to submit to the Commission their testing equipment for re-certification and to be traceable to ILAC-MRA in accordance with ERC Resolution No. 12, Series of 2009.

The Recertification of the Commission's Single Phase Electric Watthour Reference Meter Standard is intended to adhere to the unbroken chain of traceability and accuracy of meter standards. Maintaining the accuracy of the Reference Standard translates to confidence that the test equipment of the distribution utilities' meter shops are accurate, which eventually redounds to a truthful and precise measurement and recording of the electricity consumption of the end-user.

The Recertification of the Commission's Reference Instrument Transformer Tester is in compliance with the requirement in Section 9.2.4.2 of the Philippine Grid Code (PGC) which states that:

“The Metering Service Provider shall also operate and maintain a measurement assurance system, consisting of procedures, meter calibration standards and testing equipment and a central meter calibration laboratory in accordance with ERC regulations. All test to be performed on revenue metering instrument transformers shall be done with the use of measuring and testing instruments with un-expired calibration and an established traceability to national and/or international standards of measurements.”

Distribution Utilities' meter shops and other entities bring their Instrument Transformer Testers to the Commission for re-certification, and to be traceable to the ILAC-MRA.

C. RESPONSIBILITIES OF THE WINNING BIDDER

The following are the responsibilities/obligations of the winning bidder:

1. It shall be responsible for the re-certification and calibration of the Test Equipment by a certifying laboratory which is recognize by the regional calibration body and a holder of an Accreditation Certificate traceable to ILAC-MRA;
2. Secure from the Commission the necessary documentation for the release, transportation and take custody of the Test Equipment;
3. Pick-up the Test Equipment from the Energy Regulatory Commission, Main Office, FAS-GSD located at the 14th floor, Pacific Center Building, San Miguel Avenue, Pasig City or Exquadra Tower Building, Exchange Road, Ortigas Center, Pasig City (subject to written notice in case of transfer);

4. Responsible for any damage and/or loss of the test equipment while in transit from the ERC to its point of destination and vice versa; and
5. Deliver/return of the three (3) re-certified equipment, including the Certificates of Calibration is required to be completed within seventy-five (75) calendar days from receipt of the Notice to Proceed (NTP).

D. RESPONSIBILITIES OF THE ERC

1. Prepare pertinent documents for the release of the Equipment and to acknowledge receipt of the same upon return, taking note of details such date and condition of the item received;
2. The ERC Technical Property Inspection Committee (TPIC) shall conduct Acceptance procedure to the Recertified Equipment; and
3. Prepare payment due to the Winning Bidder after completion of the delivery of the Equipment to the Main office, including its Calibration Certificate.

E. SCHEDULE OF DELIVERY

The Winning Bidder should deliver/return of the three (3) re-certified Equipment, including the Certificates of Calibration is required to be completed within seventy-five (75) calendar days from receipt of the Notice to Proceed (NTP).

F. DETAILS OF THE THREE PHASE ELECTRIC WATTHOUR METER REFERENCE STANDARD SUBJECT OF RECERTIFICATION

Brand / Type : ZERA / COM 5003
 Serial Number : 070000585
 ERC Property No. : REF STD - 07
 Error Specification : 0.005%
 Last Calibration Date : July 21, 2021

G. DETAILS OF THE SINGLE PHASE ELECTRIC WATTHOUR METER REFERENCE STANDARD SUBJECT OF RECERTIFICATION

Brand / Type : Radian / RD 21 – 212 Dytronic Portable Standard
 Serial Number : 200966
 ERC Property No. : WRS - 061

Error Specification : 0.02%
Last Calibration Date : July 22, 2021

H. SPECIFICATIONS OF THE INSTRUMENT TRANSFORMER TESTER

Brand / Type : Red Phase / 590J – V2
Serial Number : 7705
ERC Property No. : MTC – EQPT - 20
Error Specification : 0.02%
Last Calibration Date : July 21, 2018

I. MODE OF PROCUREMENT

The procurement shall be undertaken through Public Bidding pursuant to RA No. 9184 and its 2016 Revised IRR.

J. FUND SOURCE and APPROVED BUDGET FOR THE CONTRACT

1. The fund for this engagement shall be sourced through the Government of the Philippines (GOP) Continuing Appropriations for the Fiscal Year 2021 and Current Appropriations for the Fiscal Year 2022 of the ERC.
2. The Approved Budget for the Contract (ABC) for the project is **ONE MILLION SEVEN HUNDRED NINETY-EIGHT THOUSAND PESOS (PhP 1,798,000.00)**, inclusive of Calibration Fees, courier service, and government taxes and all other fees and charges.

K. PAYMENT SCHEME

1. The Total Contract Price which should not exceed the ABC of **ONE MILLION SEVEN HUNDRED NINETY-EIGHT THOUSAND PESOS (PhP 1,798,000.00)**. Payment shall be released within thirty (30) days after final acceptance of the three (3) re-certified equipment, including the Certificates of Calibration issued by the calibration laboratory.
2. Since the above payment shall be subject to the usual government accounting and auditing requirements, the Winning Bidder is expected to be familiar with the Government Accounting and Auditing Manual (GAAM).

L. ACCEPTANCE/REJECTION PERIOD

Testing/Inspection and Acceptance or Rejection: Within 15 calendar days from the actual delivery date, the ERC authorized representative shall test and inspect the equipment and indicate in the Inspection and Acceptance Report that equipment is

in accordance with the required specifications, or if not, indicate in the said Report that there are parts or functionalities that need to be replaced or adjusted. The supplier shall be given a reasonable number of days to make the necessary replacement or adjustment. After which, the ERC authorized representative shall test and inspect the equipment again and either issue an Inspection and Acceptance Report stating that the equipment is in accordance with the specifications, or Reject the equipment if it is not found compliant with the required specifications.

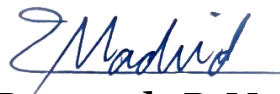
M. LIQUIDATED DAMAGES

1. Where the service provider refuses or fails to satisfactorily complete the work within the specified contract time, plus any extension time duly granted and is hereby in default under the contract, the service provider shall pay ERC for liquidated damages, and not by way of penalty, an amount, as provided in the conditions of the contract, equal to one tenth (1/10) of one percent (1%) of the cost of the unperformed portion for every day of delay. The maximum deduction shall be ten percent (10%) of the amount of the contract, of which ERC shall have the discretion to terminate the contract without prejudice to any other action or remedy it may take to recover the losses incurred as a result of the service provider's failure/non-performance, including but not limited to forfeiture of performance security and/or blacklisting of the latter.
2. Entitlement to such liquidated damages, ERC need not prove the damages actually incurred. Said damages in any amount shall be deducted from any money due or which may become due the service provider under the Contract and/or collect such liquidated damages from the retention money or other securities posted by the service provider at the ERC's convenience.

N. RESERVATION CLAUSE

The Energy Regulatory Commission (ERC) reserves the right to reject any and all bids, declare a failure of bidding or not award the contract at any time prior to contract award in accordance with Section 41 of R.A. 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.

Prepared by:



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