# REGIONAL PROCUREMENT HUB PROGRAM – REGION 5
# SUPPLEMENTAL BID BULLETIN NO. 24-14
# FOR THE
# PROCUREMENT OF CONSIGNMENT, SUPPLY AND DELIVERY OF KWH METERS
# (PB-ITB-R5-1-2024)

In accordance with Section 4.3.2 of Annex "B" of the NEA Memorandum No. 2024-06, this Supplemental Bid Bulletin is hereby issued to clarify, modify or amend the following items for PB-ITB-R5-1-2024:

| Section/Item No. | Issue in the Bidding Documents / Technical Specifications | Clarification / Amendment |
|---|---|---|
| **Section V. Terms of Reference** | | |
| **TOR 6.1** (Detailed Technical Specifications and applicable tests for Item A) | With respect to **TOR 6.1 Current, Second Bullet,** there is a typographical error on the maximum current range which states "#A-60A" | For clarification, **TOR 6.1 Current, Second Bullet,** is hereby ***amended*** to read as follows:<br><br>"The maximum current within the range of <u>#10A</u>-60A." |
| **TOR 6.1 and 6.2** (Detailed Technical Specifications and applicable tests for Items A and B) | With respect to **TOR 6.1 and 6.2, Meter Cover,** clarification was sought on whether Polycarbonate is acceptable (in lieu of "Glass"). | Upon consultation with the Member ECs of Region 5 a **Transparent** Polycarbonate Glass Meter Cover is acceptable for Items 6.1 to 6.2.<br><br>Thus, **TOR 6.1 and 6.2, Meter Cover,** is hereby ***amened*** to read as follows:<br><br>"<u>Transparent</u> Glass or <u>Transparent Polycarbonate</u>." |
| **Section VII. Bid Forms** | | |
| Form#10 - Details of Technical Specifications | Bid Form#10 (Details of Technical Specifications) requires revisions to conform with the revisions to TOR 6.1 and 6.2 as provided above. | Bid Form#10 (Details of Technical Specifications) is ***amended*** to conform with the revisions to TOR 6.1 and 6.2<br><br>Please see revised Details of Technical Specifications Form attached herein as **Annex "A"**. |

Issued this **27th** day of September 2024 for the guidance and information of all concerned.

**ATTY. OSWALDO F. GABAT**
*Member*
*NEA RPH SBAC*

**MS. IRENE C. MARTIN**
*Member*
*NEA RPH SBAC*

**ENGR. EXEQUIEL T. EVALE, JR.**
*Member*
*NEA RPH SBAC*

(Sgd.)
**MS. ROSIE M. ALAMILLO**
*Member*
*NEA RPH SBAC*

**ENGR. RODERICK N. PADUA**
*Member*
*NEA RPH SBAC*

**ATTY. ALEXANDER PAUL T. RIVERA**
*Vice-Chairperson*
*NEA RPH SBAC*

**ENGR. ERNESTO O. SILVANO, JR.**
*Chairperson*
*NEA RPH SBAC*

Conforme:

**RENATO Z. SAN JOSE**
*Vice-President*
*Bicol Electric Cooperative Association, Inc.*

**Form#10: Details of Technical Specifications**

(Letterhead of the Bidder)

Date: _____, 2024

**NEA Special Bids and Awards Committee (NEA SBAC)**
#57 NEA Building, NIA Road,
Barangay Pinyahan, Government Center Diliman,
Quezon City

**Attention:** **Engr. Ernesto O. Silvano, Jr.**
*Chairperson of the NEA SBAC*
*for the RPH Program*

**Subject:** Details of Technical Specifications of [Name of Bidder]

| *Detailed Technical Specifications for:*<br>*Item A (Meter, kWh, 1 Phase, Class 1, 240V, 10(60) A, Bottom Connected, Electronic)* | | | |
|---|---|---|---|
| **Particulars** | **Specifications Prescribed in Bidding Documents** | **Statement of Compliance** | **Details of Added Technical Specifications (if any)** |
| **Accuracy** | • Class 1<br>• Compliance to IEC 62052-11, IEC 62053-21 | | |
| **Voltage** | • Nominal: 230V<br>• Operating Range: 0.7Un - 1.2Un (Min: 161V; Max: 276V)<br>• Power consumption: <10VA 0.2W | | |
| **Current** | • Basic current: 10A ($I_b$)<br>• The maximum current within the range of #10A - 60A | | |
| **Frequency** | • 60Hz, ±2% | | |
| **Meter Constant** | • 1600imp/kWh or 3200imp/kWh | | |
| **Measurement Modes** | • Single Phase 2 wire with optional neutral current measurement<br>• Measurement Sensor: CT/CT or CT/Shunt | | |

| | | | |
|---|---|---|---|
| **Measured Values** | • Energy: W-h<br>• Others: Voltage, Current, Line Frequency, PF<br>• Storage of last 3-6 monthly billing data (energy) | | |
| **Pulsing Output** | • Pulsing LED for energy indication, LED for communication indication<br>• Visible IR LED test pulse for energy<br>• Red LED for alarm indication<br>• The meter display should have at least two LED indicators, Pulse Energy & Reverse | | |
| **Display and LEDs** | • Large digit LCD (at least 17 x 8 mm) with optional backlight<br>• Number of digits in value field 5+1, 5+2,6+1 or 7+0<br>• Display shall be fixed at kWh | | |
| **Tamper Evident Features** | • Present | | |
| **Communications** | • Optical interface to IEC 62056-21<br>• Type serial, asynchronous, half-duplex<br>• Max. transmission rate 9600<br>• Protocol IEC 62056-21 | | |
| **Environmental** | • Temperature test IEC62053-21, IEC62052-11<br>• Temperature range to IEC62052-11<br>• Limit Operating Range of -40°C to +75°C<br>• Limit Storage Range of -40°C to +80°C<br>• Limit -45°C to +80°C<br>• Weather Proof<br>• Design to fit for Tropical Countries | | |
| **Terminal Cover** | • Transparent, Extended (Long terminal cover with aperture for cables) | | |
| **Terminal Block** | • With Brass terminals and screws suitable for #10-#6AWG wire; Block material must be specified | | |
| **Weight & Dimensions** | **Note:** Please indicate the following Weight & Dimension specifications in the third column: | | |

| | | | |
|---|---|---|---|
| | • Weight<br>• External dimensions Width<br>• External dimensions Height<br>• External dimensions Depth | | |
| **Internal Meter Loss (IML)** | • < 0.2 watts | | |
| **Back-Up Battery** | • Rechargeable, Maintenance-free Lithium Battery<br>• Battery Life at least 5 years | | |
| **Wiring Connection** | • LNNL (Live Neutral Neutral Live) | | |
| **Meter Case** | • Reinforced Polycarbonate Alloy | | |
| **Meter Cover** | • Transparent Glass or Transparent Polycarbonate. | | |
| **Voltage Divider Circuit** | • Transformer Type | | |
| **Polarity** | • Unidirectional | | |
| **Meter Holder** | • Built-in Stainless Steel | | |
| **Compliance** | • Energy Regulatory Commission Type Approved Certified (ERC Resolution No. 22 Series of 2010) | | |
| **Applicable Test and Sealing** | • To be delivered to RPH and Member ECs as inspected and sealed by the ERC or ERC Accredited Third Party Metering Shop in accordance with (ERC Resolution No. 4, Series of 2021) | | |

| *Detailed Technical Specifications for:*<br>*Item B (Meter, kWh, 1 Phase, Class 1, 240V, 5(100) A, Bottom Connected, Electronic)* | | | |
|---|---|---|---|
| **Particulars** | **Specifications Prescribed in Bidding Documents** | **Statement of Compliance** | **Details of Added Technical Specifications (if any)** |
| **Accuracy** | • Class 1<br>• Compliance to IEC 62052-11, IEC 62053-21 | | |
| **Voltage** | • Nominal: 230V<br>• Operating Range: 0.7Un - 1.2Un (Min: 161V; Max: 276V)<br>• Power consumption: <10VA 0.2W | | |
| **Current** | • Basic current: 5/10A (lb)<br>• The maximum current within the range of 60A – 100A | | |
| **Frequency** | • 60Hz, ±2% | | |

| | | | |
|---|---|---|---|
| **Meter Constant** | • 1600imp/kWh or 3200imp/kWh | | |
| **Measurement Modes** | • Single Phase 2 wire with optional neutral current measurement<br>• Measurement Sensor: CT/CT or CT/Shunt | | |
| **Measured Values** | • Energy: W-h<br>• Others: Voltage, Current, Line Frequency, PF<br>• Storage of last 3-6 monthly billing data (energy) | | |
| **Pulsing Output** | • Pulsing LED for energy indication, LED for communication indication<br>• Visible IR LED test pulse for energy<br>• Red LED for alarm indication<br>• The meter display should have at least two LED indicators, Pulse Energy & Reverse | | |
| **Display and LEDs** | • Large digit LCD (at least 17 x 8 mm) with optional backlight<br>• Number of digits in value field 5+1, 5+2,6+1 or 7+0<br>• Display shall be fixed at kWh | | |
| **Tamper Evident Features** | • Present | | |
| **Communications** | • Optical interface to IEC 62056-21<br>• Type serial, asynchronous, half-duplex<br>• Max. transmission rate 9600<br>• Protocol IEC 62056-21 | | |
| **Environmental** | • Temperature test IEC62053-21, IEC62052-11<br>• Temperature range to IEC62052-11<br>• Limit Operating Range of -40°C to +75°C<br>• Limit Storage Range of -40°C to +80°C<br>• Limit -45°C to +80°C<br>• Weather Proof<br>• Design to fit for Tropical Countries | | |
| **Terminal Cover** | • Transparent, Extended (Long terminal cover with aperture for cables) | | |
| **Terminal Block** | • With Brass terminals and screws suitable for #10-#6AWG wire; Block material must be specified | | |

| | | | |
|---|---|---|---|
| **Weight & Dimensions** | **Note:** Please indicate the following Weight & Dimension specifications in the third column:<br>• Weight<br>• External dimensions Width<br>• External dimensions Height<br>• External dimensions Depth | | |
| **Internal Meter Loss (IML)** | • < 0.2 watts | | |
| **Back-Up Battery** | • Rechargeable, Maintenance-free Lithium Battery<br>• Battery Life at least 5 years | | |
| **Wiring Connection** | • LNNL (Live Neutral Neutral Live) | | |
| **Meter Case** | • Reinforced Polycarbonate Alloy | | |
| **Meter Cover** | • Transparent Glass or Transparent Polycarbonate. | | |
| **Voltage Divider Circuit** | • Transformer Type | | |
| **Meter Holder** | • Built-in Stainless Steel | | |
| **Compliance** | • Energy Regulatory Commission Type Approved Certified (ERC Resolution No. 22 Serie of 2010) | | |
| **Applicable Test and Sealing** | • To be delivered to RPH and Member ECs as inspected and sealed by the ERC or ERC Accredited Third Party Metering Shop in accordance with (ERC Resolution No. 4, Series of 2021) | | |

**Company Name:**

_____[Name of Bidder]_____

**Authorized Representative:**

_____[Name and Signature of Authorized Representative]_____

**Contact Details:**

_____