



**Government of Liberia**  
**MILLENNIUM CHALLENGE ACCOUNT LIBERIA**

**RESPONSES TO REQUEST FOR CLARIFICATION**

**Supply and Delivery of Three Phase 4 Wire LT CT Connection  
Smart Meters for Liberia Electricity Corporation (LEC)**

Ref. No. 4A30/PSD/004

Following the issuance of the Request for Quotation (RFQ) document for the **Supply and Delivery of Three Phase 4 Wire LT CT Connection Smart Meters for Liberia Electricity Corporation (LEC)** on October 17, 2019, Suppliers were provided the opportunity to request clarifications related to the RFQ document in writing.

The requests for clarifications received from Suppliers and responses are indicated below:

**QUESTIONS & ANSWERS**

#	Suppliers' Queries	MCA-Liberia's Response
1	<b>The scope of supply:</b> the scope includes the meter itself only, do we need to supply the meter with LT CTs, metering panel, terminal box, and connection cable inside the panel?	<p>Yes. It's a complete solution. The prepaid meter, TTB, CT's and auto-breaker are to be provided and pre-wired inside the high security cabinet (metering panel).</p> <p>It should be noted that as per LEC requirement, all LV CT meters are to be prepaid meters with the ability to switch to post-paid functionality when required in the present future.</p> <p>Please refer to <b>Addendum #1</b>.</p>
2	<b>In the meter specification:</b> Is the accuracy 0.2 or 0.5? There is a big gap with these two types of meters, please give further clarification which type is preferred at this time?	The preferred accuracy is 0.2
3	<b>The communication of the meter:</b> In Page12/52, the communication type listed include: PLC, RF for local communication and GSM, GPRS, WIFI, Ethernet for remote. Which kind of communication is preferred for this particular meter at this time?	<p>The preferred means of communication is GPRS. The meter should be able to communicate 2 way.</p> <p>RF is required to be used for the Hand-held Unit communication and these hand-</p>

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		held units, (at least two) are to be provided in this complete package. We should be able to get information from the meter without physically connecting to it when carrying out meter field audits on these prepaid meters.
4	In page 36/52, table 3, quotation price, Item 1, in normal practice the "whole current" meter is "5/100A" LT meter, but not LT CT meter, please give more information about this item.	<p>The rating for this meter is Ib 5A, I<sub>max</sub> 100A. They are not CT meters but direct connected meters for customers that can't be place on normal 3-Ph meter nor can the customer be placed on 100/5A CT metering.</p> <p>Please refer to <b>Addendum #1</b>.</p>
5	<p>Asked meters are 3phase LTCT and rating we are meaning to get ampere ratings, like 100A etc.</p> <p>As it is not mentioned in first line item so please clarify for first line item how much amp meter is required i.e. 5-100A, 5-60A, 10-60A, 10-100A etc.</p>	<p>5(100)A With disconnect feature.</p> <p>Accuracy class 1</p> <p>To be provided also with a high security cabinet and a breaker pre-wired.</p> <p>As for the CT meters, the ratings are:  100/5A  200/5A  300/5A  500/5A</p> <p>The CT's to be provided along with each prepaid meter <b>MUST</b> match the CT rating programmed into the meters.</p>
6	<p><b>Clause 34:</b> Internal Relay's connection and disconnection:</p> <ol style="list-style-type: none"> <li>1. Please confirm if disconnection facility is required in meters.</li> <li>2. Please note that as current shall be high, internal relays cannot be used for disconnection. Meters can provide signal for external breaker to trip. Please confirm</li> </ol>	<p>Yes, it is required because it's going to be a prepaid meter.</p> <p>The meter will not be performing the disconnect per say. A disconnect signal will be sent from the prepaid meters internal relay to the breaker to cut off the customer from supply when their credit has been exhausted.</p> <p>If in the future it is decided that this meter is to be used in the post-paid metering mode, the meter should be able to receive a disconnect signal sent from the central system when a customer defaults on paying his/her bills thus effecting a disconnection of supply.</p>

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7	<p><b>Scope of supply:</b> Please confirm that Bidders' scope under this procurement shall be limited to Meters and CTs</p> <p>Supply of enclosure/cubicle and breaking mechanism is not included. Please confirm.</p>	<p>The bidder's scope MUST cover all items most especially the cabinet which must be of high security and tamper proof and be prewired internally with test block, prepaid meter, breaker and CT's of required sizes.</p> <p>Please refer to <b>Addendum #1</b>.</p>
8	<p><b>General requirement:</b> we presume that submission of sample meter is done post award. Please confirm.</p>	<p>Yes, for testing.</p>
9	<p><b>Clause 32:</b> Modular communication modem for LAN and direct connection from meter to central system (Clause 32.3):</p> <p>As the meter shall be installed at physically distant location, communications with DCV's via PLC/RF would not be appropriate due to distance. Would recommend using GPRS modem with every meter and having point to point communication. Please confirm.</p>	<p>Yes.</p> <p>GPRS is the preferred communication method between the meter and the central system. A communication modem is to be retrofitted in each meter cabinet.</p>
10	<p><b>Technical Requirement:</b> Basic meter reading software will be supplied and not the Server - Client application. The same is done considering optimization of cost considering quantity. Kindly confirm.</p>	<p>The server-Client (AMI) application needs to be purchased as well as the basic meter reading software. These items are very important.</p> <p>Please refer to <b>Addendum #1</b>.</p>