

PRE- BID MINUTES FOR TENDER NO. KP1/9AA-2/OT/06-BS/16-17 FOR SUPPLY, INSTALLATION AND COMMISSIONING OF BOUNDARY METERS HELD ON 11th AUGUST, 2016 AT EXECUTIVE MEETING ROOM - STIMA PLAZA

PRESENT

Thagichu Kiiru	-	Manager, Energy Loss Management (ELM)
Maina Gatheru	-	1 st Assistant Engineer, ELM
John Owino	-	Senior Engineer, ELM
James Ndegwa	-	3 rd Assistant Supt - Customer Service
Patricia Nthenya	-	1 st Assistant Engineer, Customer Service
Alice Theuri	-	Snr. Supply Chain Asst.

Others present are as per attached Appendix 1

AGENDA

The bidders were informed that the tender documents is an E-Procurement tender opening system and they should ensure that they have read the Appendix to instructions to tenderers

The bidders were taken through the tender document and reference was made to the tender document

1. TENDER SUBMISSION

- (a) The bidders were reminded that this is e-procurement system and one documents is upload to the portal.

2. TENDER SECURITY

i) Bidders were required to note that original bank guarantee is that strictly in the form and content as prescribed in the Tender Security Form (Bank Guarantee) a copy should be uploaded together with the other document and original should be dropped in the tender box situated in 3rd floor reception in stima Plaza on or before the closing time or date.

ii Bidders should note that the validity of the tender security should be 30 days beyond the validity of the tender. ie. 150 days form the tender closing date.

3. TENDER VALIDITY

Bidders were required to note that validity of the tenders is 120 days from the date of tender opening and any tender valid for a shorter period shall be declared non responsive.

4. SUMMARY OF EVALUATION PROCESS

Bidders were required to note the evaluation process indicated in this section and note that the process is divided into the following mandatory criteria i.e.-

1. Preliminary Clause 6.1.
2. Technical Evaluation Clause 6.2.
3. Financial Evaluation Clause 6.3.

6. FORMS TO BE SUBMITTED

The following forms are to be uploaded together with the tender document fully filled signed and stamped as required.

- Declaration form duly completed and signed
- Tender form fully completed & signed.
- Confidential business questionnaire
- Tender security form
- Site visit form dully signed by authorized officer from KPLC

Bidders were notified that submission of the above forms should be strictly in the format shown in the tender document and should be uploaded together with the other documents.

Bidders were notified that the minutes will be uploaded to the portal once finalised.

TECHNICAL ASPECT

The chairperson started by explaining to the suppliers present the main purpose of the tender, which is to address energy losses in the company. The tender is meant to ensure that losses can be apportioned to any given region. This is why it has become necessary to meter all feeders that crosses one region to another. The metering solution will then be constructed at the border point of crossing of the two regions. He clarified that the solution the company is aiming at is the provision of a solution and not supply of meters only.

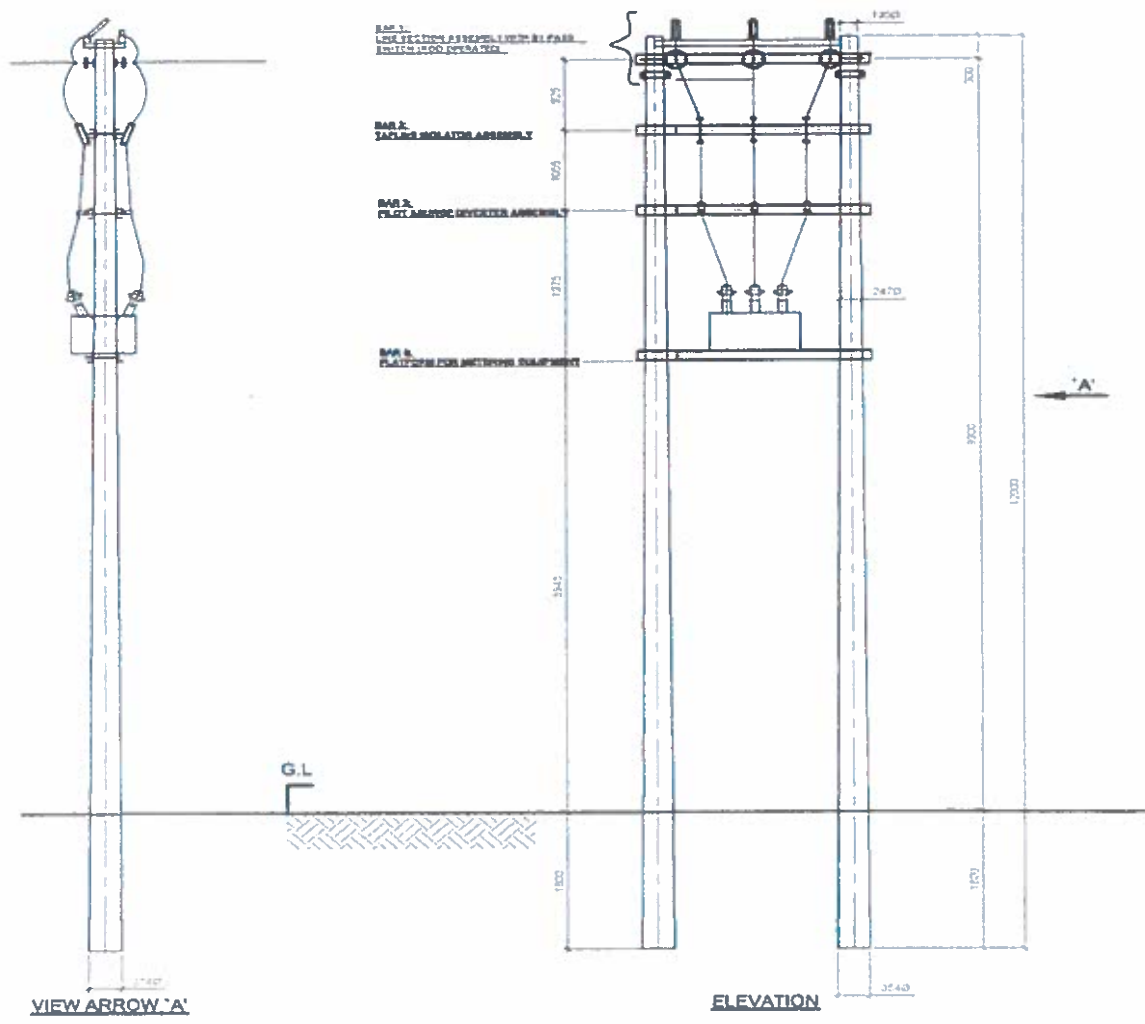
The company has identified such 71 border points for 11KV and 31 border points for 33KV lines across the country. The number of the feeders that crosses each region is as listed in the tender documents. The bidders should quote including the cost of transporting all materials to these regions.

He further explained the construction of the metering solution which will include the following items:

- a. One Integrated Metering unit (C/W accessories)
- b. 20 Pieces of HHU - To read the meter from ground.
- c. One air-break switch - 1 set of 3 pieces each.
- d. Two taplin isolators - 2 sets of 3 pieces each
- e. Two concrete poles - appropriate for each voltage level.
- f. Assorted fittings (Aluminum conductor, cross-arms, earthing, channels, clamps, insulators, bolts, washers, nuts etc.).

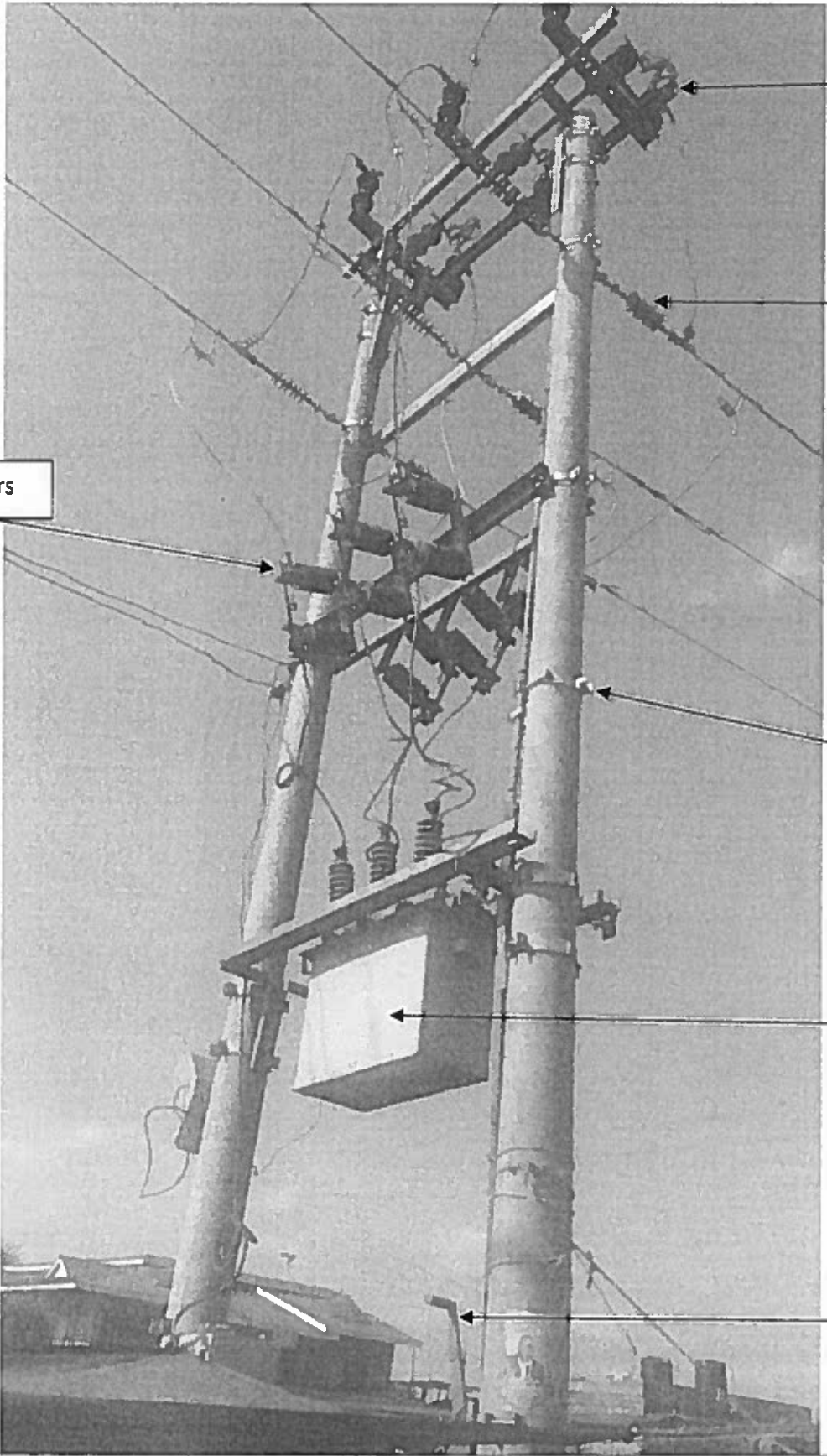
The metering unit is expected to be housing the Meter, CTs and VTs in one integrated unit which should be pole mounted. The meter must conform to the existing KPLC C&I system currently being used for large power customers AMR outdoor meters. It was made clear that the company will not invest in a metering solution with another system since the company has an existing system.

The line diagram for the metering structure is as shown below:



CHECKED BY: ENG. T. KBRU DRAWN BY: L. ANOORA DATE: 10/MAY/2016 SCALE: REFER TO DIMENSIONS	PROP GENERAL ARRANGMENT OF 11&33KV FEEDER BOUNDARY METERING ASSEMBLY ON H-POLE CONCRETE STRUCTURE	K.P.L.Co. LTD REF: G.A. DRAFT 1
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The above is expected to look similar to the picture as shown below, with the metering unit replacing the auto-recloser depicted in the picture.



Air-break

Line Insulators

Taplin Isolators

Universal clamps

Auto-reclose to be replaced by the compact/integrated metering unit

Air-break switch operation handle

The above structure is composed of two concrete poles, an air-break switch that will be used to bypass the metering unit during maintenance and two sets of taplin isolators for isolating the equipment from the power line during such maintenance as well as fitting accessories e.g. clamps, bolts, nuts, aluminum conductor etc. The specifications for items to be supplied is as per the tender documents.

A detailed explanation of the expected construction was done to the prospective bidders which meant a site visit was not necessary. The suppliers were informed that they need to capture any fitting accessories clearly in their tender documents and what is not clear, they should seek clarification from us to ensure they quote correctly.

An example of a compact/Integrated metering unit can be seen in the picture below. A physical one can be viewed along Mombasa road in the following locations:

1. Outside the gate of Bobmil Industries (Mattress manufacturers).
2. Polythene Industries (about 100m before imara daima turn-off)

Compact/Integrated
metering unit with CT,
VT and meter in one
enclosure



AOB

1. One prospective bidder wanted a clarification on the meter communication protocol to use as well as accuracy level of the CTs and VTs. The suppliers of the C&I system clarified as below:

The meter should be compatible with the current KPLC's C&I system and test successfully. The meter protocol should comply with DLMS green book 8th and blue book 12th as well as IEC 62056-53, IEC 62056-61, IEC62056-62, IEC62056-47. The DLMS protocol of the meter should support security suite 0 in DLMS/COSEM. The main description is as below:

(1) For access level, two authentication methods should be supported, which should contain LLS and HLS.

(2) For transfer security, security policy can be configured as

- all messages are encrypted
- all messages are authenticated or
- all message are encrypted and authenticated.

(3) Master key, authentication key and encryption key can be updated.

The bidder shall submit a sample for access and security authentication testing.

The bidder shall submit all the required documents (protocol details) to KPLC and should support the C&I vendor for the access testing and bear all the related administrative costs for this process.

2. A clarification was also sought on the CT and VTs accuracy.

This is supposed to be equal or higher than that of the meter i.e. 0.5 or higher.

The size of the metering unit, though not indicated, was agreed that it should fit between two poles constructed in KPLC standards.

SIGNED:



Chairperson

THAGICHU KIIRU



Secretary


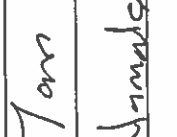




ALICE THEURI

APPENDIX I

KENYA POWER & LIGHTING COMPANY LIMITED

PRE-BID/SITE MEETING ATTENDANCE SHEET - DATE 11th AUGUST, 2016










TENDER NO. KP1/9AA-2/OT/06-BS/16-17 - FOR SUPPLY, INSTALLATION AND COMMISSIONING OF BOUNDARY METERS

NO	NAME OF FIRM	NAME OF REPRESENTATIVE	SIGN	EMAIL
1.	Shenzhen Inhemeter	Timon Tan	Timon Tan	timon@inhemeter.com
2.	11	Charles Njoroge		
3.	11	CHEN HONG	CHEN HONG	
4.	Alternative Communications Private Limited	PRASADNA V.K.		roadsomehubli@gmail.com
5.	IET LTD	Atul	Atul	atul.hirapera@iet.co.ke
6.	MBUSUMI Group	Merion		merion@mbusumi.co.ke
7.	John Jubilo	KPLC		Johnjubilo@kplc.co.ke
8.	Haxing	Zhangxiangcheng	Zhangxiangcheng	zhangxiangcheng@hxgroup.co
9.	JAMES NDEGWA	KPLC		JNDEGWA2@KPLC.CO.KE
10.	Alice Thourin	KPLC		athourin@kplc.co.ke
11.				

KENYA POWER & LIGHTING COMPANY LIMITED

PRE-BID/SITE MEETING ATTENDANCE SHEET - DATE 11th AUGUST, 2016

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BOUNDARY METERS

NO	NAME OF FIRM	NAME OF REPRESENTATIVE	SIGN	EMAIL
1.	EZEETE LIMITED	BALASI		br.balasi@ezeete.co.ke
2.	Hesing	Tony Xin Quan		TECH_114@HXGD.com
3.	Mika Granten	KPLC		ngathen.eplc.co.ke
4.	Harvey	ZAMU TAMBI		tech-19@kqgroup.co.ke
5.	Asante	Thera Karuru		karuru.karuru@kqgroup.co.ke
6.	PROFESSIONAL DIGITAL SYST. LTD	JOSHUA MAKAY		makaya@pds.ke
7.				
8.	Marcel Investments	Marcel Investments		marcel@marcelinvestments.co.ke
9.	Nkaha Jaqueline	EMERY LIMITED		jaque.liao@emery.co.ke
10.	Fuji Construction Ltd	Maichengwa Muboya		mfo@fuji.co.ke
11.	Keng a Power	PATRICIA HIRONGA	