



## Kenya Power

**The Kenya Power & Lighting Co. Ltd.**  
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**STIMA PLAZA, KOLOBOT ROAD**

**Our Ref:** KPLC1/6E/2/A36A/B/C /MK/jwm

22<sup>nd</sup> August, 2014

**Your Ref:**

**TO:** Bidders for the Kenya Electricity Modernization Project

### 1. PROGRAM FOR SITE VISITS

Reference is made to the Addendum issued on 8<sup>th</sup> August, 2014. The program for site visit for the following listed Tenders is as attached. Bidders are expected to make their own arrangements for transport to sites.

Contract	Sites to be Visited	Site Visit Dates	Meeting time and place
Nairobi A36A	Mwihoko, Umoja, Kitengela, Kangudo, Kiserian	12.09.14 to 13.09.14	9.00 am at Ruaraka KPLC Offices
Coast A36 B Lot 1	Bofu, Port Reitz, Mtongwe, Kwale, Kindimu	12.09.14 to 13.09.14	9.00 am at Mbaraki KPLC Offices
Coast A36 B Lot 2	Sabaki, Kaloleni, Kokotoni, Mtodia, Wundanyi	10.09.14 to 11.09.14	9.00 am at Mbaraki KPLC Offices
West Kenya A36 C Lot 1	Kisumu South, Sosiot, Mosochi	10.09.14 to 11.09.14	9.00 am at Electricity House Kisumu
West Kenya A36 C Lot 2	Endebess, Kapsowar, Moiben, Sirisia, Ortum	12.09.14 to 13.09.14	9.00 am at KPLC Offices, Eldoret
West Kenya A36 C Lot 3	Kibebetiet, Aldai, Molo, Nyamira, Kitaru	12.09.14 to 13.09.14	9.00 am at Electricity House Kisumu
Mt Kenya A36 D Lot 1	Mukurweini, Kagumo, Muriungi, Gatakaine	10.09.14 to 11.09.14	9.00 am at Electricity House Nyeri
Mt Kenya A36 D Lot 2	Kahurura, Nkuene, Kiamutugi, Mikinduri	10.09.14 to 11.09.14	9.00 am at Electricity House Nyeri

2. **CLARIFICATIONS**

Response to clarifications from bidders received by 20<sup>th</sup> August, 2014 is attached. Bidders are reminded that there shall be **No Extension of submission dates** for the all the LOTs comprising A36A, A36B, A36C, and A36D.

3. **UPDATED ATTACHMENTS**

As part of the clarifications the following documents have been revised, updated and are attached.

- Section II, Bid Data Sheets and Section III have been revised to take into account the clarifications.
- Data Sheets for equipment as per clarification requests.
- Telecommunications 4.1.6 revised.
- Soft copy of price schedules.
- SLD's revised.

Yours faithfully,  
**FOR: THE KENYA POWER AND LIGHTING COMPANY LTD.**



**ENG. MICHAEL ADHIAMBO**  
**DEPUTY MANAGER, PROJECTS DEVELOPMENT**

CLARIFICATIONS TENDER KEMP		
ITEM	QUESTION	RESPONSE
1	With regards to the Mt. Kenya Lot 1 tender , we are in the process of preparing the offer for 315KVA, 2500KVA & 7.5MVA.Kindly provide us the following details to enable us to proceed further:	315 KVA not in scope, please clarify
	Voltage ratio of each type of transformer	2.5MVA-33/11kV, 7.5MVA-33/11kV. Full details in Transformer Technical Specifications.
	Tap changing mode: Off circuit Tap Changer (or) On Load Tap Changer	7.5MVA-On Load Tap Changer 2.5MVA-Off load Tap Changer
	<b>On 11 kV FEEDER</b>	
2	The SLD shows each feeder had 1 ABS , 6 links and autorecloser	<b>See Attached Single Line Drawings. The following shall be added to The BOQ:-</b> <b>In ALL 33/11kV S/S - 11kV VT's = 7 No.( i.e 2 x 3ph &amp; 1 x 1ph)</b>
	Under clause 4.2.5.2 The description has 1 ABS we assume it is located from busbar before CT and an Auto recloser set also has its bypass ABS should this be the one with earth switch	
	The BOQ decription 11kV Auto Recloser in Feeder Bay complete with	
	By-pass Air Break Switch (1), Isolating Links (6)	
	Could the drawing, the BOQ and description be harmonised	
3	With regards the Automation , there is one panel for 11kV Feeders Control Panel, confirm that we in this one panel need bay control units equal to the number of feeders ( so each feeder has its own BCU) , and in the same panel include the metering	<b>For the 7.5MVA &amp; 2.5MVA S/S - 1.</b> Control & Relay Panel for the Transformer Bay. <b>2.</b> Control panel for the 11kV fdrs (Auto Reclosures) <b>3.</b> Metering panel for 33kV & 11kV Circuits. Check the BOQ. The Control panels shall not have BCU's but Mimic Diagram with Discrepancy switches and Measuring Instruments for all the 11kv Bays.
	<b>The project is CIP or DDP Base.</b>	
4	In the ITB 17.5(a) the bid is base on DDP to Defined Location in Lot, but in the GC 14.2 state the Employer will bear	DDP to Defined Locations in Lots as per BDS
5	All customs and import duties for the plant specified in Price Schedules No. 1.	<b>Contractor shall bear all Taxes, Duties and Levies including VAT. Bidder to consult their Tax Experts on applicable Taxes in the Country.</b>
	Other domestic taxes such as, sales tax and value added tax(VAT) on the Plant specified in Price Schedules No. 1 and No.2 and that is to be incorporated into the Facilities, and on the finished goods, imposed by the law of the country where the Site is located.	
	Please clarify which party should bear the Custom& Duty? If employer will bear the Custom & Duty, how many day he will accomplish the relevant work? If Contract will bear the Custom & Duty, a list of duty ratio or an official reference web will be prefer to provide.	
	As per the (b), employer will bear all domestic taxes please inform us your normal operation method for VAT exemption in previous project, does the VAT is mandatory quotation in the bidder total price?	

6	Please clarify the bidder's profit tax for offshore (outside of the Kenya) portion will be levied in Kenya or not? Please clarify the bidder's profit tax for onshore portion will be exemption in Kenya or not?	Bidder to Consult their Tax Experts
<b>In the ITB10. Istate that any translation shall be done by an Authorized Institution.</b>		
7	Can you provide an explicit explanation on the Authorized Institution, Viz. what kind of Authorized, from an official translation institution, or from a public notify?	Official Translation Insitution, with details for verification.
8	Could you provide an editable version Price Schedules for A36A bid?	Shall be availed but in case of conflict the Original hardcopy version shall prevail.
Section II. Bid Data Sheet With reference to ITB 11.1.1(K)		
9	Project completion certificates must be provided as a proof of past project performance. Ask: Please kindly clarify this requirement is for Main contractor itself instead of local subcontractor. Nomination and assignment letters for the local subcontractors signed by both parties for: a) Civil subcontractors b. Electrical Subcontractors	See revised Section III, attached to the clarification
10	Please kindly clarify that in one contract main contractor should only assign one subcontractor who is play the role of both civil subcontractor as well as Electrical installation subcontractor.	No. Bidder to decide.
11	.Please kindly clarify both 66/11kV S/S & line can be done by one same subcontractor.	Yes
Section III. Evaluation and Qualification Criteria- Without Prequalification		
12	International bidders shall nominate locally owned civil and electrical installation subcontractors. The local contractor must have successfully completed at least on similar project. The local subcontractors shall have a maximum of two(2) sites at a time.	See revised Section III, attached to the clarification
13	Please kindly clarify our nominated subcontractor could also bid as a main contractor for the local tender package.	Yes.
14	Due to the requirement of local subcontractors shall have a maximum of 2 sites at a time Please kindly clarify if in package, for instance, KP1/12A-2/PT/4/14/A36A/1 Design, Supply, Installation and Commissioning of Substation and Medium lines(Mwihoko, Umoja, Ketengela, Kangundo and Kiserian) need at least three(3) subcontractors?	See revised Section III, attached to the clarification
15	Please kindly confirm the contract payment for the local portion will pay to the main contractor or directly pay to local subcontractor?	Contract payment for local Civil and Electrical subcontractors shall be assigned by the main contractor. Payment for <b>assigned</b> amounts shall thus be paid to subcontractors when progress have been verified by Main contractor and Employer.
<b>Altitude for insulation coordination:</b>		
16	Refer to specification: clause 3.1.1 (page.27), All High and Medium Voltage equipment shall be designed for installation at 2200m above sea level. But clause 3.1.5 (page.28) shows the altitude with the max 2200m and the min below 1000m.	All designs for installation at 2200m above sea level



17	Please kindly indicate the detail altitude of each substation or we just correction comply with the 2200m above sea level.	All designs for installation at 2200m above sea level
	<b>66kV Earthing switch quantity:</b>	
18	Refer to attached single line diagram and BOQ of the substation. (Clause 4.2.22, page 201~page 210) No earthing switch is required for 66kV bus bar and transformer HV side.	Yes
19	Please kindly clarify, do we need to supply these earthing switches for maintenance or not.	As per BOQ
	<b>66 kV Voltage Transformer quantity:</b>	
20	Refer to attached single line diagram, only 8 sets of 66kV voltage transformer are required, 6 sets for line feeder and 2 sets for busbar. But 12 sets are required in BOQ for each substation. (Clause 4.2.22, page 201~page 210)Please kindly clarify	Correction: Busbars VTs are 3 Phase VTs. Hence a Total $4*3=12$
	<b>11kV Capacitor bank</b>	
21	In Section VI Employers Requirement, Refer to BOQ, (clause 4.2.22, page 201~page 210) 2 sets of 11kV switchboard panel for capacitor banks are required for each substation. Please kindly clarify, do we need to supply 11kV capacitor bank or not. If required, please inform the detail requirement of the capacitor bank.	No, do not supply capacitor banks. Just spare panels
	<b>For substation extension</b>	
22	Refer to BOQ, (clause 4.2.22, page 201~page 210) complete 66kV bay is required for each opposite substation, but the Schedules of Rates and Prices is not inducing those scope.	This is included in the bidding forms as Incomer Source Equipments
23	Please clarify whether the extension 66KV bay in the opposite substation includes in this project? If the extension work is required, please kindly provide the related single line diagram, substation plan and section drawings for reference.	This is detailed design to be done later
	<b>MV power cable</b>	
24	Refer to BOQ, (clause 4.2.22, page 201~page 210). MV Power Cables between transformer and switchgear, S/C 630mm Sq Cu are required. Can we calculation according to the cable sizing based on the specification or just comply with the requirement?	Design Calculations will have to be done by the bidder to justify use of this cable or any other size
	<b>66kV Line protection</b>	
25	Refer to the specification, (clause 4.1.2.6.2.1 66kV Line Protection, page 79), the auto reclose relay is required. Can we integrate the auto-reclose function into the distance protection relay, Please kindly clarify.	Yes
	<b>Control and Protection Panel</b>	
26	In the Section VI Employers Requirement 4.1.2.1.2.1 it mentions that "outdoor switchgear shall have a control and relay panel in the control room with facilities for local control" but in the	For 33/11kV s/stns, See ITEM No. 3
27	Schedules of Rates and Prices the control panel and protection panel is independently for 66KV Trafo and OHL bay. Please clarify which type of panel is your desire.	For 66/11kV s/stns, the panels to be independent
	<b>Creepage Distance</b>	
28	In the Section VI Employers Requirement 3.1.1, it mentions that the creepage distance shall not be less than 31 mm/kV line voltage in Coast and industrial area and 25 mm/kV for inland installations. Please clarify each one of five should adopt 25MM/KV.	Coast, Nairobi 31mm/kV, Mt Kenya and West Kenya 25mm/kV

	<b>Overhead lines</b>	
	<b>Poles</b>	
29	Refer to the specification: clause 5.2.1, page 274. Concrete poles shall be used in all cases, and refer to clause 5.1.10, page 285, the network shall be supported on wood poles, however alternative supports such as concrete and steel structures may be considered. Please kindly clarify which one we shall comply, wood poles is acceptable?	Concrete Poles Only
	<b>Lightning protection of overhead lines</b>	
30	Please kindly specify the lightning protection angle requirement of overhead lines.	Bidders Responsibility, Detailed Design
	<b>Strand conductor</b>	
31	For 300mmsq strand conductor, please kindly clarify which kind of conductor we shall comply with, ACSR or AAAC.	AAAC
32	Reference to the tender, in part II of employer specifications you have indicated that all 66kV & 33kV lines shall have 25mm shield wire. In areas where the OPGW is also required, we propose to use OPGW only as an earth wire & Fibre optic at the same time rather than having OPGW + Shield Wire. Please confirm whether this is acceptable	Agreed, Use OPGW both as an earth wire and FO
33	In regard to tender no. KP!/12A-2/PT/4/14/A36C/1 - Design, supply and installation of substation and lines (West Kenya Region Lot 1), please provide us with the technical details of the OPGW and ADSS cable. For example, the RTS, Short Time Current, Supporting Cross Section, Span, and so on.	Bidders Responsibility, Detailed Design as per specifications
34	Referring to my yesterdays mail on the tap charger this is the statement in the tender doc The tap changers for transformer with higher capacity than 7.5 MVA shall be of the vacuum type, whilst lower capacity transformers may have conventional oil type.	The falls under the latter category - ordinary tap changers.
35	We therefore seek your clarification ,Since 7.5 MVA transformer is not less than 7.5MVA, also not higher than 7.5 MVA. There are remote stations to be connected to the new station eg source of line In the BOQ for example 33kV Line Control & Protection Panel (Remote Stns-Kiganjo 132/33kV S/S) Will this remote bays be automated? If the will how is it envisaged for implementation	All source bays shall be automated. It is in scope of supply
36	Kindly also confirm if the control relay should be IEC 61850 compliant for integration to SAS or it only requires close , open and position status signal by hard wiring to BCU ?	61850 Compliant
37	Please clarify who will implement bush clearing on site?	Contractor
38	In Section III. Evaluation and Qualification Criteria.-1.1 Technical evaluation, "e." is missing, and "2" above 1.2 Economic Evaluation is missing. Please clarify whether some contents are missing there.	See revised Section III attached.
39	Please clarify whether the owner designate subcontractor for civil works and installation works.	No, The Bidder will appoint his own Civil Subcontractor as per qualification criteria
40	In the Form of Bid Security, does it need to indicate the address of the beneficiary? Please clarify.	As per Bid Doc
41	The shipping terms in BDS 17.5(a) and ITB 17.5(a) are different, whether it is DDP or CIP, please clarify.	DDP

42	Please provide network layout clarifying the distances between substations	Bidders to access sites during site Survey for their preferred LOT.
43	Please provide fiber cable interfaces at each terminal	Bidder to clarify what is meant by "fiber cable interfaces at each terminal"
44	Please provide the required coverage area concerning VHF scope	VHF power output as per specifications.
45	Please provide SLD for BOFU S/S & Port Reitz S/S	23 MVA 33/11kV SLD Attached.
46	As per the addendum dated 7 <sup>th</sup> August, the pre-bid meeting was postponed till 11 <sup>th</sup> September, which means that the site visit will be conducted after the pre-bid meeting. Usually projects with such size and complication, site visit represents a back bone for the scope of work needed and a major source to collect all the needed information. Accordingly, the bidders will have only around 14 days after the site visit to prepare their proposal. Accordingly, we would like to suggest to make the site visit earlier to give the bidders the needed time to provide professional proposals meeting your expectations	<b>No Extension, deadline for bid submission remains the same</b>
47	Kisumu South 23MVA Transformer(KSMS-001) and 33kV OH line in 150 sq. mm(KSMS-201) - Sir it seems to me that the prescribed 150 sq mm ACSR incomer will be operating well beyond its current carrying capacity if it is to serve as the incomer to the 23MVA power transformer.	Detailed design calculations
48	Please provide the Guaranteed technical particulars for the following equipment ;	
	· Surge arrestors	Attached
	· Isolators	Attached
	· Air break switches	Attached
	· Insulators	Attached
	· Auto reclosure	Attached
49	Switchboard panels	Attached
	As per Addendum no. 1 received, the tender security is to be at <b>148 days</b> . Please clarify whether the Bid validity period as mentioned in ITB 19.1 remains to be <b>180 days</b> .	180 days. See revised BDS
50	Please clarify on the required completion period for the project because in ITB 13.2 it's mentioned as <b>18 months</b> whereas in PC 8.2 it is <b>24 months</b> .	18 months
51	Clarification is required on letter of credit (LC); will it be opened to the bidder/contractor or will the opening be made to the approved suppliers bearing in mind this tender is open to local contractors only.	LC will be issued to main contractor
52	Confirm whether this tender is exempt from duties and taxes	No, it is not Duty Exempt
53	In the BDS in ITB 1.1 It's mentioned that bidders are not allowed to bid for more than one lot, at the same time in ITB 35.1 under the BDS it's mentioned that Conditional discount on award of more than one Lot will be considered. Please clarify on how many lots/ contracts a bidder is allowed to quote.	One Lot only. See Revised BDS
54	<b>Preparation of Bids</b>	
	ITB 10.1 The language of the bid is: <b>English</b>	
	Question:	

55	Please give a more detailed interpretation for the Authorized Institution. How shall we understand the word "Authorized" hereby? What organization / institution shall be deemed to have such an authorization?	See ealier response
56	Is it acceptable if a bank guarantee is directly issued to KPLC by Bank of China, which is based in China, instead of through a Kenya based correspondent financial institution or bank? Is such a bank guarantee acceptable if the bank guarantee is not endorsed or confirmed or verified by a local institution or bank?	No.
57	Please kindly provide the tender documents in WORD or any other editable formats to facilitate documentation. For instance, is it possible to provide the price schedules in the EXCEL format?	Provided Excel sheet price schedules soft copy to be updated to include all items listed in clarifications by bidder.
58	With regards to SCADA and telecommunication tools-Item 4.1.6.9 can list of tools and brand name be provided ( as price of tools depended on the brand) -Item 4.1.2.4 can list of spares and tools required be provided	See attached specifications 4.1.6
59	Can detailed signal lit be provided so that he correct devices with adequate I/O be provided	Detailed Signal list part of detailed design and is derived from scope of works.
60	Meters communication clause 4.1.2.7.1 can it allow energy meter to communicate to control system in addition or alternatively by RS485 or Ethernet Port.	Meters shall be integrated to the SAS using IEC protocols.
61	We are interested in Lot 1 for which we have found only two drawings: (1) Single line Diagram (2) Lay out of telecomm system.It seems to me that these are very few drawings. We were expecting to find also the layout of substation, civil works drawings, protection schematic--etc. kindly confirm if there are other drawings to be issued for this project.	Detailed design drawings are the responsibility of bidder.
62	Can we propose different manufactures for different major equipments example: HV-MV switchgear: one manufacturer, Control and Protection: one manufacturer, Instrument Transformer: one manufacturer	See Revised Section III
63	Clarify that a bidder can be authorised to be a subcontractor in any of the contracts though they have bid for other lot (s) independently or on a JV Basis	Bidder can bid independently or as a JV and also bid as a subcontractor for another Lot. Bidders allowed to bid as JV in only one LOT
64	Due to the requirement of local subcontractors shall have a maximum of 2 sites at a time Please kindly clarify if in package, for instance, KP1/12A-2/PT/4/14/A36A/1 Design, Supply, Installation and Commissioning of Substation and Medium lines(Mwihoko, Umoja, Ketengela, Kangundo and Kiserian) need at least three(3) subcontractors?	See Revised Section III
65	Which Iranian banks are verified by the employer to issue Bid Security?	Requirements for Bid Security as per bid document.
66	Could we have the list of clarification answers probably raised in the pre-bid meeting? (E.g. discrepancy between items in schedule No.1, page 13, section 4 and voltage rate mentioned for Lot 2. *66 kv > 33 kv*)	Clarifications sent to All bidders
67	Can we ask for 2 weeks of extension added to mentioned submission date?	No.
68	It's notable that Tejarat Bank (Iranian Bank) is more plausible to be probably chosen, since receiving the guarantee through the mentioned bank could be processed faster.	See earlier response



69	In our understanding, OPGW will be installed on the 33kv lines and the lengths are therefore matching with the 33kv lines. Kindly clarify for us where the ADSS will be installed given that its length is substantial in both Sasiat and Mosocho.	OPGW will be installed with new lines, However, due to need to connect new station with fibre, ADSS will be installed on existing lines to reach the source station, where fibre already exists.
70	In Kisumu south S/S, we have two 33kv lines i.e KSMS-201 10kmtrs and KSMS-206 10kmtrs whereas the OPGW is 10kmtrs. Kindly confirm that only one of the lines will have OPGW	
71	Is there a schedule for the site visits after the pre-bid meeting?	Attached
72	Are cadastral plans and route maps or co-ordinates available for the proposed sites of the substations	Bidders to get site details during the site visit.
73	On specific experience 2.4.2 KP1/12A-2PT/4/14/A36A and KP1/12A-2PT/4/14/A36B/1, please clarify transformer capacity of 23 MVA is correct or it's a typographical error.	See revised Section III
74	In the given bill of materials for KISUMU SOUTH S/S, equipment to be provided at Remote S/S – KISUMU 132/33kV & Kisumu East are also listed. Whether modification work at Remote S./S KISUMU 132/33kV and Kisumu East to be considered or not ?In case this is to be considered then please forward the layout, SCADA / Tele protection details of existing sub-stations.	Modifications works for Kisumu 132/33 to accommodate new station is in scope of supply. No Tele-protection in scope. Existing SCADA equipment at Kisumu 132 is using RTU 560 and SCADA.
75	Plot plan of new KISUMU SOUTH S/S	Bidders will be shown the site during the site visit.
76	In Part 1 Sect III, Evaluation and Qualification Criteria, 2.7, sub-contractors , the requirement is " must have been in service for at least 5 years outside country of manufacture, please clarify which kind of document shall be provided for supporting the point.	Reference letter(s) and references submitted by bidder, which are verifiable shall be provided.
77	As part of Sect IV Bidding Forms, Schedule No. 1 Plant and mandatory Spares supplied from abroad - Lines Item MWHK-204, UMOJ-204, KITE -204, KANG - 204 and KISE 204, the ADSS qty is empty, Please confirm.	Where ADSS Qty is not indicated please quote only unit price, with Qty Zero.
78	As Part of 2, Sect VI 4.2.23.2, for substations the items Tools, Laptops 2, SCADA and Telecoms, Set 1 and Secondary Test set, cannot be found in Price schedules, please clarify,	Include in price schedules.
79	As Part of 2, Sect VI, bidding forms schedule 4 installation and other services, there are five separate forms for five substations, (Mwihoko, Kitengela, Kangundo, and kiserian), we can see the first substation is Mwihoko in the form but the last substation is the same Mwihoko, Please clarify.	Corrected forms attached.

