

**Our Ref: KP1/6A.1/PT/2/21/A76**

**30<sup>th</sup> November, 2021**

**Dear Sir/ Madam**

**CLARIFICATION NO. 2 FOR TENDER NO: KP1/6A.1/PT/2/21/A76 PROCUREMENT OF DESIGN, SUPPLY, INSTALLATION AND COMMISSIONING OF STAND-ALONE SOLAR PHOTOVOLTAIC SYSTEMS WITH BATTERY ENERGY STORAGE FOR COMMUNITY FACILITIES IN TURKANA, WEST POKOT, ISIOLO, MARSABIT, SAMBURU, MANDERA, WAJIR, GARISSA, LAMU, TANA RIVER, KILIFI, KWALE, TAITA TAVETA AND NAROK COUNTIES IN KENYA WITH 7 YEARS O&M SERVICES DATED 23<sup>RD</sup> SEPTEMBER, 2021.**

**CLARIFICATION TO BID DOCUMENT**

The following responses are made to clarifications sought on various issues in the bidding document for procurement of Design, Supply, Installation and Commissioning of stand-alone solar photovoltaic systems with battery energy storage for community facilities in Turkana, West Pokot, Isiolo, Marsabit, Samburu, Mandera, Wajir, Garissa, Lamu, Tana River, Kilifi, Kwale, Taita Taveta and Narok Counties in Kenya with 7 years O&M services.

<b>No.</b>	<b>Bidder Query/ comment</b>	<b>KPLC Response</b>
1.	<p><b>Design:</b> The solution involves two inverters (pv inverter, dc/ac inverter, charge controller and the modules /batteries. The functions of the PV inverter and the charge controller are the same. Kindly advise on the system design and expected performance with these 5 items in BOQS.</p> <p>The PV inverter performs over and above the functions of the charge controller as they already have inbuilt MPPT charging functions.</p> <p>Do we expect Grid at some point?</p>	<p>The design and expected performance shall be as per the issued bidding document.</p> <p>Grid interconnection is out of scope of the envisaged works.</p>
2.	Advise on the supply of internet facilities on site for site monitoring, remote management and billing functions during the 7 years O& M period.	Internet installation is not a mandatory requirement, however a contractor may install internet for remote monitoring and O&M purposes.
3.	Design involves the GIS and topography analysis, please advise if this is needed before or after award as the tender requirement submission is for full design and EPC.	Detailed designs will be required after tender award.

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4.	The tender requirement places the success of the solution on the contractor for the performance of the lot designs against unknown loads and a predetermined SIZING/BOQ. Kindly advise if the contractor will be allowed to review the designs in full scope after load determination and profile hours for responsibility taking away from the consultant and avoid penalties of non-performance during the 7 year O & M period.	Design aspects related to load demand are not anticipated since system capacities have already been determined for key equipment. However, specific designs to be reviewed with respect to site requirements considering growth that may have taken place over time.
5.	There is a big disparity between the size of the solar plant in kwp and the battery bank in kwhrs against expected load feed. Please share these workings with the contractor with location irradiation values to give confidence of delivery to the contractor.	The requirement shall be as per the issued bidding document.
6.	The tender requests for similar project values since 2016, kindly advise if experience before 2016 is still admissible.	The requirement shall be as per the issued bidding document.
7.	Can we still participate in the tender if we have not attended the Pre-bid meeting held on 12th Oct, 2021  Site visit was mandatory or if we want to participate, we can still visit site for their location and working conditions  If above two points are granted to us, is it possible to extend the date of submission for the tender	Pre- bid meeting and site visits are not mandatory but Bidders are advised to visit and examine the site where the Plant is to be installed and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the Bid and entering into a Contract for the provision of Plant and Installation Services. The costs of visiting the site shall be at the Bidder's own expense.  Please refer to Addendum No. 2
8.	In a case of a JV bid, whereby one member party was registered less the 5 years; Is it acceptable for such a member to submit audited financial statement of less than 5 years whereas the other party submits the required 5 years?	The requirement shall be as per the issued bidding document.
9.	Let's take Lot 1 as a sample, there're 96 systems in total, we found the quantities are wrong for Solar PV Inverter and Charge Controllers, but when we sum up the quantities of these 2 products, the quantity becomes right. Same as other Lots. So we think the Solar PV inverter actually means the Charge Controller? If yes what's the purpose for Kenya Power to write them separately?	The requirement shall be as per the issued bidding document.
10.	Please confirm all the required batteries are lead acid batteries or Lithium ION?	All are lithium ion.
11.	Does Bid for each lot comprise both supply installation and O&M for 7 years in one bid including spare parts or we apply differently after bid closes since the after bid closes the prices may not be the same due procurement process time loss.	Yes, bid is for both Supply and Installation and O&M for 7 years, as per the issued bidding documents.

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12.	Batteries warranty is normally 2 years. Can you clarify this can be achieved through 7-year O& M.	The requirement shall be as per the issued bidding document.																																																		
13.	<p>According to Table 1: Characteristics in Specification for PVC Insulated Single Phase Concentric Aluminium Cables (Low Voltage), there are too many wires in the column Concentric neutral conductor number and diameter of wires. It will lead to the result that the concentric layers cannot all be arranged in the same layer. Kindly clarify whether the area of the concentric layer can be the same with the cross-sectional area of the phase conductor or not.</p> <p><u>Table 1: Characteristics (as per KS 04-1022)</u></p> <table><tr><th colspan="3">Phase Conductor</th><th rowspan="2">Concentric neutral conductor: number. &amp; approx. diameter of wires No./mm</th><th rowspan="2">Minimum layer lengths mm</th><th rowspan="2">Thickness of oversheat hmm</th><th rowspan="2">Approximate overall diameter mm</th><th colspan="2">Maximum conductor dc resistance per 1000m of cable at 20°C</th></tr><tr><th>Nominal area mm²</th><th>No. &amp; approx. dia. of wires mm</th><th>Thickness of insulation mm</th><th>Phase ohms</th><th>Neutral ohms</th></tr><tr><td>10</td><td>7/1.35</td><td>1.55</td><td>23/1.13</td><td>146.5</td><td>1.4</td><td>12.21</td><td>3.08</td><td>1.335</td></tr><tr><td>16</td><td>7/1.70</td><td>1.55</td><td>26/1.13</td><td>155</td><td>1.4</td><td>13.34</td><td>1.91</td><td>1.808</td></tr><tr><td>25</td><td>7/2.14</td><td>1.60</td><td>29/1.13</td><td>165</td><td>1.5</td><td>14.88</td><td>1.20</td><td>1.0586</td></tr><tr><td>35</td><td>19/1.53</td><td>1.65</td><td>27/1.35</td><td>178</td><td>1.6</td><td>16.75</td><td>0.868</td><td>0.7966</td></tr></table>	Phase Conductor			Concentric neutral conductor: number. & approx. diameter of wires No./mm	Minimum layer lengths mm	Thickness of oversheat hmm	Approximate overall diameter mm	Maximum conductor dc resistance per 1000m of cable at 20°C		Nominal area mm²	No. & approx. dia. of wires mm	Thickness of insulation mm	Phase ohms	Neutral ohms	10	7/1.35	1.55	23/1.13	146.5	1.4	12.21	3.08	1.335	16	7/1.70	1.55	26/1.13	155	1.4	13.34	1.91	1.808	25	7/2.14	1.60	29/1.13	165	1.5	14.88	1.20	1.0586	35	19/1.53	1.65	27/1.35	178	1.6	16.75	0.868	0.7966	The requirement shall be as per the issued bidding document. For example, for the 10mm <sup>2</sup> cable, 23 refers to the number of strands while 1.13 refers to the diameter of each strand in mm.
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14.	<p>In page 69 of Volume I Bidding Procedures and Contract Forms, it mentioned the key personnel's positions as follows;</p> <table><tr><th>Item No.</th><th>Position/ specialization</th><th>Relevant academic qualification</th><th>Number of Personnel</th><th>Minimum General work experience (years)</th><th>Minimum Specific work experience (years)</th></tr><tr><td>1.</td><td>Resident Project Manager</td><td>Degree in Electrical or Mechanical Engineering or Renewable Engineering</td><td>1</td><td>10</td><td>5</td></tr><tr><td>2.</td><td>Design Engineer</td><td>Degree in Electrical or Mechanical Engineering</td><td>1</td><td>7</td><td>4</td></tr><tr><td>3.</td><td>Construction Engineer</td><td>Degree in Electrical or Mechanical Engineering</td><td>1</td><td>7</td><td>4</td></tr><tr><td>4.</td><td>Technician</td><td>Diploma in Electrical Engineering</td><td>1</td><td>5</td><td>3</td></tr><tr><td>5.</td><td>Solar PV Specialist</td><td>Degree/Diploma in Electrical or Mechanical or Renewable or Energy Engineering and Energy &amp; Petroleum Regulatory Authority (EPRA) Solar PV System Class T3 license or equivalent</td><td>1</td><td>5</td><td>3</td></tr><tr><td>6.</td><td>Environmental, Social, Health and Safety (ESHS) specialist</td><td>Environmental/Social/Health/Safety Degree or other relevant Degree</td><td>1</td><td>5</td><td>3</td></tr></table> <p>But the form "Contractor's Representative and other Key Personnel Schedule" mentioned another several positions, that is, Contractor's Representative, Environmental Specialist, Health and Safety Specialist, Sexual Exploitation, Abuse and Harassment Expert.</p> <p>Kindly clarify what's the key personnel's positions for this project.</p>	Item No.	Position/ specialization	Relevant academic qualification	Number of Personnel	Minimum General work experience (years)	Minimum Specific work experience (years)	1.	Resident Project Manager	Degree in Electrical or Mechanical Engineering or Renewable Engineering	1	10	5	2.	Design Engineer	Degree in Electrical or Mechanical Engineering	1	7	4	3.	Construction Engineer	Degree in Electrical or Mechanical Engineering	1	7	4	4.	Technician	Diploma in Electrical Engineering	1	5	3	5.	Solar PV Specialist	Degree/Diploma in Electrical or Mechanical or Renewable or Energy Engineering and Energy & Petroleum Regulatory Authority (EPRA) Solar PV System Class T3 license or equivalent	1	5	3	6.	Environmental, Social, Health and Safety (ESHS) specialist	Environmental/Social/Health/Safety Degree or other relevant Degree	1	5	3	The Key Personnel for the Supply and Installation phase are outlined in Section III, Evaluation and Qualification Criteria, '2.5 Contractor's Representative and other Key Personnel per lot' and repeated in Section VII, Employer's Requirements, 'Contractor's Representative and Key Personnel Per lot'								
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15.	According to the tender documents' requirements, site visits are not mandatory. Kindly clarify whether it's a must for us to fill in the form Appendix 2- Bid Response Sheet No. 2, Details of Visit to Site Performed by Bidder's Representative or not.	Site visits are not mandatory. However, Bidders are advised to fill in Bid Response Sheet No. 2 for the sites visited.																																																		
16.	We hereby forward our request to extend the submission date of the above stated tender by FOUR WEEKS as we line to complete our visits to the sites to access the challenges.	Please refer to Addendum No. 2																																																		

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17.	<p><b>1. Manufacturer Supplies Record and Details of Supplies Record. (Reference List)</b></p> <p>a. The Manufacturers are reluctant to provide these details due to contractual obligations on confidentiality especially on signed contracts. Can the employer have one option, Manufacturer Supplies Record (Reference List) and NOT Details of Previous Supply Contracts (Copies of signed contract)</p> <p><b>b. Contract Forms: (Page 110)</b>  <b>Paragraph (a)</b> "Must reflect Financial Situation of the Bidders or Member to a JV, and not sister or parent companies.</p> <p><b>c. Bidders Audited Financial Statements for 5 years: Page 110:</b>  <b>Paragraph (c):</b> The requirement for audited accounts with audit notes is tailored towards one specific standard. There are different audit reports where financial statements are prepared based in the geographical region and financial standards applicable to the region. For example, the Asian countries financial statements format is very different in terms of audit notes which are pre-defined by their countries. As such, the notes required in the RFB should factor this and accept the format prescribed by International Financial Standards (IFS) without limitations to audit notes.</p> <p><b>d. Power of Attorney</b>  The Power of Attorney referred to in page 289 Attachment 3"  I. Kindly confirm the availability of the said "<b>Power of Attorney</b>" in the RFB  II. Since there is an existing Power of Attorney in force does it mean we are required to execute a new Power of Attorney based on Employer's format?  III. If (b) is assumed to be correct position, there is need to extend the submission date because it will require about 2 weeks to register the PoA.</p> <p><b>e. Attachments: Page 289</b>  Kindly confirm these attachments are available in the RFB. Otherwise consider giving them out a.s.a.p</p> <p><b>f. Appendices and Attachments (Page 312)</b>  Kindly confirm that these documents are in the RFB as indicated in page 312 of the RFB</p>	<p>The requirement shall be as per the issued bidding document.</p> <p>Refer to Section III, Evaluation and Qualification Criteria:</p> <p><b>3.1 Financial Capabilities</b>  Submission of audited balance sheets or if not required by the law of the Bidder's Country, other financial statements acceptable to the Employer, for the last five [5] years to demonstrate the current soundness of the Bidders financial position and its prospective long-term profitability.</p> <p>Attachment 3 is the Power of Attorney to be provided by the bidder as per the issued bidding documents.</p> <p>Power of Attorney submitted to meet the requirements in the issued bidding documents.</p> <p>The requirement shall be as per the issued bidding document.</p> <p>The requirement shall be as per the issued bidding document.</p>

Yours faithfully,

For: KENYA POWER & LIGHTING COMPANY PLC.

  
ASHENE ESHITUBI

**Ag. GENERAL MANAGER, SUPPLY CHAIN & LOGISTICS**