



**Tender Addendum and Clarification No. TAC1**

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**Project: Completion of Construction of Nairobi Ring Substations**

**Tender No.: KETRACO/PT/015/2015**

**Notice to All Tenderers**

**The following amendments are made to the specified provisions of the Tender document for the Completion of the Construction of Nairobi Ring Substations.**

Save where expressly amended by the terms of this Clarification, the Principal Tender Document shall continue to be in full force and effect.

Bind the attached Tender Addendum and Clarification No. TAC1, consisting of 11 pages (including this page) into the copy of the Tender Documents. These documents should be returned along with the completed Form of Tender.

Tenderers are to confirm acknowledgement with tender submission.

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Date: 22<sup>nd</sup> June 2016

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**Tender No.: KETRACO/PT/015/2015**

Tender Addendum and Clarification No. TAC1 has been received and incorporated in the Tender Documents.

Name of Tenderer  
(in block letters): \_\_\_\_\_

Date: \_\_\_\_\_

Signed for the  
Tenderer by: \_\_\_\_\_

In the Office  
Bearer capacity of: \_\_\_\_\_

Name  
(in block letters): \_\_\_\_\_

This clarification forms part of the Request for Proposal and Contract documents, and modifies them as follows:

## 1. CLARIFICATIONS

S.No.	Clause/Paragraph/Item No.	Clarification/Query	Response
1	Section VII – Forms and Procedures  Part 1.2 – Price Schedules  Bills of Quantities	In provided price schedule, there are Transformers to quote and supply as listed below:  Athi River: 12.1 --2 sets 220kv transformer  Kimuka: 12.1--2 sets 220kv transformer  Komarock: 12.1--2 sets 220kv transformer  However, in Appendix 10 Technical Specifications for Substation, the work scope does not mention supply of transformers.  Kindly Confirm whether the supply of Transformers within contractor's work scope? If not, please renew the Price Schedule.	The 2 sets of 220kV power transformers for Athi River Substation have already been supplied and delivered to the Athi River Substation site except for its accessories which are in the warehouses in Nairobi.  The 2 sets of 220kV power transformers and accessories for Kimuka Substation have already been supplied and are currently stored at a warehouse in Mombasa.  The 2 sets of 220kV power transformers for Komarock Substation have already been supplied and are stored at Crompton Greaves, India.
2		What kind of slope protection should be adopted in all the substations?	Stone pitching.
3		Provide data for the existing Kiambere – Embakasi Transmission Line.	KETRACO has provided any data available, however the contractor shall cater for the cost of investigations to ascertain the structural strength and foundation capacity of the tension towers from which the T-off will be done. This shall be deemed

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			to be included in the contract price and will not attract any additional cost to KETRACO.
4	Price Schedules	<p>As per the tender document: "LIST OF MATERIALS AT THE WAREHOUSES IIC" -17.the quantity of POST ISOLATORS is 20, but In the Price Schedules _Nairobi Ring, the quantity of 1.7 Post insulator - Upright is 39.</p> <p>Question: Please confirm whether we should provide the lack of equipment. Besides, according to our understanding, all the equipment and materials have already been supplied by the previous contractor, so please confirm whether we should include equipment and material cost in our offer for this tender.</p>	Refer to the revised price schedule in Addendum 1.
5		According to our understanding, all the equipment and materials have already been supplied by the previous contractor, regarding to the defect liability, we understand the previous contractor will be responsible for this, please confirmed.	This is the responsibility of KETRACO for all previously purchased equipment.
6		The situation is the coming contractor doesn't have any relationship with the current manufacture, who will take the responsible for arrangement of the Manufacturer's representative during the installation.(Such as Power Transformer, DS and CB)	The winning bidder will make arrangements for the presence of the manufacturers' representatives during the installation of equipment and this cost shall be borne by the winning bidder and shall be deemed to be included in the bid price.
7	Employer's Requirements	<p>Work Scope of the transmission line for each site:</p> <p>Scope description;</p>	Refer to Addendum 1 and the revised price schedules.

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		How many towers and type?  Design, supply status;	
8		<p>Supply Scope:</p> <p>Supply status of the Power Transformer for each substation. Please provide the transportation information (weight/size/location) if there are not in the site.</p> <p>Supply status of the switchyard equipments, steel structure, secondary equipments, communication equipments, battery and panels for each substation. Whether we can assume all the equipments have been provided, and no need to consider in the tender offer.</p> <p>Supply status of the cables, conductor, hardware, earthing material and other assistant material for each substation. Please give us the clear scope in order to all the bidder can prepare the offer in the same standard.</p>	<p>Requested information for the power transformers are already in the tender document.</p> <p>For all other details refer to S. No. 1 and the revised price schedules.</p> <p>For all other details refer to S. No. 1 and the revised price schedules.</p>
9	Appendix 10 - Technical Specifications for Substations	<p>Civil part:</p> <p>In "Appendix 10 - Technical Specifications for Substations" 24.16.8, it indicates that "All structural concrete shall develop a minimum compressive cube strength (f<sub>c</sub>) of 25N/mm<sup>2</sup> at 28 days. (This shall be equivalent to a cylinder strength of 20N/mm<sup>2</sup>)."</p>	<p>Existing acceptable concrete works shall remain as originally designed. However, any new concrete works shall conform to a minimum compressive cube strength (f<sub>c</sub>) of 25N/mm<sup>2</sup> at 28 days.</p> <p>In addition, concrete design shall be in accordance with EN 1992 (Eurocode 2).</p>

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		<p>In provided drawings, it adopt C35/45 as structural concrete. Which has a minimum compressive cube strength (f'c) of 45N/mm2 at 28 days.</p> <p>Can we replace the strength of concrete when it is hard to achieve on site.</p>	
10		<p>Civil part:</p> <p>In "Appendix 16 - Audit Report (Isinya, Athi River, Kimuka, Komarock)", there are some items in the scope of work marked as "not applicable", please clarified.</p>	<p>These are items that were deemed unnecessary after the engineering design of the substations.</p>
11		<p>Civil part:</p> <p>In "Appendix 16 - Audit Report (Isinya, Athi River, Kimuka, Komarock)",the no. of plant foundations is not according with the general layout and content. such as:</p> <p>AthiRiver,line 445~451 this item should include 2-5-10、 2-5-11、 2-5-12、 2-5-18、 2-5-19、 2-5-20、 2-5-21、 2-5-22 according to the drawing. While in this form it include other no. and we can't confirm which two foundation is not supplied by IIC.</p> <p>AthiRiver,line 452~464. this item should include 2-5-1、 2、 3、 4、 5、 6、 2-5-9、 2-5-13、 14、 15、 16、 17 according to the drawing, while in this form it include other no. it says there are 2 foundations balanced, while in the content it only indicate 1 foundations(2-5-3) not completed.</p>	<p>The number of foundations in scope is as per the revised price schedule should there be any additional work payment shall be made at the rates for extra work as quoted by the winning bidder.</p>

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		The scope of most foundation is indeterminate. Please clarified.	
12	Price Schedules	Civil part:  In "Appendix 16 - Audit Report (Isinya, Athi River, Kimuka, Komarock)" it indicates that the car park needed to be done. while in price schedule it indicates that this item is not considered. Please clarified.	Refer to the revised price schedules.
13	Athi River SS	As per the tender document:  Appendix 16 - Audit Report (Isinya, Athi River, Kimuka, Komarock)  10.12 Substation road lighting  10.13 Substation compound lighting  Question:  It is remarked "no work done". Kindly confirmed whether the drawings of lighting system are approved and the materials for substation lighting are supplied. Please provide the detail material list.	The drawing for the lighting systems have not been approved and material for the substation lighting has not been supplied.
14	Athi River SS	Kindly confirmed the work scope of the cable trenches in the substation.	The bidders were taken to site and they visually inspected the condition of the trenches the bidders are expected to quote for this on a lump sum basis based on their assessment.

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15	Kimuka and Komarock	<p><b>As per the tender document:</b></p> <p>Appendix 16 - Audit Report (Isinya, Athi River, Kimuka, Komarock)</p> <p>1.3~1.5 Disconnectors</p> <p><b>Question:</b></p> <p>Please kindly be known the design of Komarock S/S should follow the design of Kimuka S/S and the count of the primary equipment should be the same too.</p>	Yes.
16	Kimuka and Komarock	<p><b>As per the tender document:</b></p> <p>Appendix 16 - Audit Report (Isinya, Athi River, Kimuka, Komarock)</p> <p>1.11 Post type current transformer (1-phase)</p> <p>1.13 Combined voltage transformer &amp; current transformer (1-phase) (High Accuracy Metering)</p> <p><b>Question:</b></p> <p>The state of the equipment shows that these CTs were wrongly stored and hence there are possibilities of damage to the insulation. Please clarify whether we should consider the possibilities of damage in the price schedules or claim as needed afterward.</p>	This shall be the responsibility of KETRACO but the contractor shall be expected to carry out the works with utmost responsibility to prevent any damage to the supplied equipment.

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17	Kimuka and Komarock	<p><b>As per the tender document:</b></p> <p>Appendix 16 - Audit Report (Isinya, Athi River, Kimuka, Komarock)</p> <p>1.14 Line trap</p> <p>Appendix 10 - Technical Specifications for Substations</p> <p>1.2.4 The existing 220 kV Embakasi-Kiambere line uses power line carrier (PLC) for the protection and control communications rather than OPGW.</p> <p><b>Question:</b></p> <p>Please clarify the line trap should be supplied or not.</p>	It should be supplied. Refer to the revised price schedule.
18	Kimuka and Komarock	<p><b>Access Road:</b></p> <p>The Komarock site is far from the existing road, where is the access road located and how long shall we consider for the bid offer?</p>	Please refer to the revised Price Schedules.
19		<p>As per technical specification, we understand that in Isinya only 400kV transmission line need to string.</p> <p>Kindly confirm.</p>	The drop in to the gantries for the transmission line from Suswa shall be done by the line contractor
20		All substations are 220kV but in bill of quantity for 400kV transmission line has given.	The Line In Line Out (LILO) into Kimuka substation shall be constructed with 400kV towers however to be operated at 220kV until



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		<p>Kindly Clarify that are 400 kV transmission lines in the scope of bidder.</p> <p>If yes, then please confirm are there any existing 400kV substation where transmission line will terminate.</p>	such a time that the 400kV station (to be done under a different project) shall be constructed.
21		<p>Please let us know the condition of materials available in warehouse including transformer. Is there any requirement of repair.</p> <p>Kindly confirm.</p>	The responsibility of the condition of the material of the warehouse shall be of the employer.
22		<p>As per civil BOQ, foundation unit has given in set.</p> <p>Kindly confirm that</p> <p>All new equipment's foundation will be made or partial work has been completed.</p> <p>Any rework required for already completed civil works.</p>	While some foundations will be constructed anew, others shall require demolition and reconstruction. The bidders were taken to site to evaluate the status of the foundations.
23		<p>Right of way issues for transmission line.</p> <p>Kindly confirm that would employer handle the same.</p>	Confirmed.
24		<p>Proper technical specification is not available in tender documents.</p> <p>Please provide the same.</p>	These are provided in Addendum 1.
25		<p>Provide the quantities of Lot items because it is very difficult to calculate the quantity of remaining items or</p>	Please refer to the revised price schedules.

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		<p>arrange the full quantities required for these substations then it will be easy. The equipments in the LOT are Conductor - Tubular &amp; Stranded , Connectors - Tube &amp; Stranded, LV Cables &amp; Accessories, Earthing &amp; Lightning Protection, Civil works etc.</p> <p>Please provide the same.</p>	
26		<p>Tower weight, drawing &amp; technical specification for transmission line is not mentioned in tender documents.</p> <p>Please provide the same.</p>	<p>Technical specifications have now been provided in Addendum 1. The winning bidder will be required to carry out design as per the employer's requirements.</p>
27		<p>Technical specification for transmission line equipments are not mentioned in tender documents.</p> <p>Please provide the same</p>	<p>Refer to Addendum 1.</p>
28		<p>In Bill of Quantity, no installation &amp; civil quantities are mentioned for stored material in warehouse.</p> <p>Kindly confirm &amp; please provide the revised BOQ with revised quantity of Installation &amp; Civil.</p>	<p>Refer to the revised price schedule.</p>
29		<p>Completion Period of substations are not sufficient it should as following</p> <p>a) Athi River- 12 Months instead of 6 Months</p> <p>b) Isinya - 18 Months instead of 9 Months</p>	<p>The conditions and timelines in the Particular Conditions of Contract, GC Clause 8.2 prevail.</p>

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		c) Kimuka & Komarock -24 Months instead of 13 Months Kindly confirm.	
30		Bid security value Euro 735,000/-. Kindly confirm that Bid security amount is applicable for both lot combined or two separate Bid securities of same value are required for both.	It is applicable for the combined lot.
31		Taxes & duties. As per our understanding taxes & duties are exempted for this project. Kindly confirm.	Please refer to the Particular Conditions of Contract, GC Clause 14.1.
32		As per technical specification, ABB, Sweden make SCADA is available. Kindly confirm.	ABB, Switzerland.
			Not applicable (N/A) in the price schedule