

Notice to all Bidders.

TENDER ADDENDUM AND CLARIFICATION No. 4 (TAC 4)

RE: Procurement of Plant Design, Supply, and Installation Services for Extension of Existing 132/33 kV Narok and Bomet Substations (KETRACO-PT-001-2024-LOT 2B)

The following amendments are made to the specified provisions for the bidding documents for procurement of Plant Design, Supply, and Installation Services For Extension of Existing 132/33kV Narok and Bomet Substations (KETRACO-PT-001-2024-LOT 2B).

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

Find herein Tender Addendum and Clarification No. 4, consisting of fourteen (14) pages into the Principal Tender Documents as attached. This document should be returned along with dully filled Form of Tender.

All other terms and conditions of the Bidding document remain the same.


CAROLINE KIARA
Ag. SENIOR MANAGER, SUPPLY CHAIN

Tender Addendum and Clarification No. 4 of KETRACO/PT/001/2024-Lot 2B has been received and incorporated in the Tender Documents.

**Name of Tenderer (in _____
block letters):**

Signature: _____

Date: _____

**Signed for the Tenderer
by (Name in block letters):** _____

**In the office bearer
capacity of:** _____



A. Tender Clarification No. 4 (TAC 4)

Sr. No.	Reference	Subject	Bidder's Specific Query	KETRACO Response
1.	Section VI. Employer's Requirements- A Technical Data Sheets	j) LOW VOLTAGE DC SYSTEM	It requires draw-out type for the new supplied AC and DC panels in the Employer's Requirements- B - Specifications. In Technical data sheets, for DC MAIN AND DISTRIBUTION PANEL item 2.2 Type of cubicles construction, it requires Single Front/ Compartmented/ Fix. Please confirm Fix type of cubicles construction for DC panels is accepted.	Fixed type is acceptable, however this is an EPC contract, and this will be based on the bidder's design in compliance to the scope of work and technical requirements subject to Employer's / Employer's representative approval.
2.	Technical Data Sheets	m) SDH AND MULTIPLEXER	For telecommunication, it only requires modification works in the existing panel in the working scope and BOQ. However, in the technical data sheets, it requires new panel and SDH. We understand these data sheets need not to be filled in TDS. Please clarify.	Confirmed
3.	Technical Data Sheets	i) FAULT MONITORING SYSTEM	In the Employer's Requirements- B - Specifications, it mentions Fault Monitoring System (FMS) shall be provided at new build substations and FMS is not included in the BOQ. We understand the FMS data sheets need not to be filled in TDS. Please confirm.	Confirmed
4.	Technical Data Sheets	h) PROTECTION, CONTROL AND METERING	In the Data sheets, there are some devices which are not needed to be supplied as the technical specification, such as Fuse Failure relay, Close Relay, Pole Discordance Relay, Time Delay Relay, Double voltmeter, Double voltmeter, Double frequency meter, Synchro-scope meter, Ammeter (Separate from MC), Voltmeters (Separate from MC), PF and Freq. meters (Separate from MC), MW and MVAR meters (Separate from MC), Measuring center, Transducer, other Auxiliary Relay and so on. We understand those devices' data sheets need not to be filled in TDS. Please confirm.	The data sheets are to be filled as indicated.

5.			In BOQ-Schedule_1_SS-2.1, the short circuit current of the 33kV circuit breaker is 31.5kA, but the parameter table requires 25kA. Please confirm the short circuit current of the 33KV circuit breaker.	Short circuit rating of the 33 kV CB shall be 25KA.
6.	Section IV- Price Schedules -Narok 132-33kV SS - rev 2	13.20 Rehabilitation and spot improvement of any damaged sections of existing external access road to bituminous standard complete with drainage facilities and culverts as necessary suitable for heavy machine's traffic and subject to Client's approval	From the Price Schedules,it mentions 1 kM external access road,but the actual length of the access road from the main gate to the main highway is much less than 1kM.We suggest using the actual access road length to give quotation,Please confirm.	This line item (Price Schedules, Section IV-item 13.20) will not be required for Narok Substation.
7.			Please confirm the capacity of new batteries is 400Ah.	Rating shall be 400 Ah as per schedules of technical info.
8.		Data Sheet _ Cable	In datasheet, for low voltage power cables , inner & outer sheath is mentioned as PVC. But in clause 15.23.1 cables shall be halogen free acc. to IEC 60754-1 and low smoke as per acc. to IEC 61034-1/2. To meet this requirement sheathing material shall be LSZH material. Kindly confirm the sheathing material for the power cables. (Please note – For PVC outer sheath smoke density shall be as per ASTM D 2843).	XLPE material is required for the sheath. Refer to the revised schedules of technical information in TAC 2
9.		Cable Specification	Kindly confirm conductor class for the control cables. Class 2 or class 5 ?	Control cables shall satisfy the requirements as indicated in the technical requirements. The choice of class 2 or class 5 is dependent on the design.
10.		Cable Specification	Kindly confirm the insulation material for the control cables – PVC or XLPE ?	XLPE is required. Refer to the revised schedules of technical information in TAC 2.



11.	Cable Specification	In technical specification it is mentioned that – control cables shall have an overall screen with an optical covering $\geq 85\%$. From this we understand that the screen shall be ATC wire braided screen with coverage of min. 85%. However, in the datasheet screen material is mentioned as lead or copper. Kindly confirm the actual requirement for the design.	There is no contradiction between the technical specification and the data sheets requirement. The requirements as indicated in the technical specifications can be met using the material indicated in the data sheet.
12.	Cable Specification	In specification it is mentioned – “For control cables with screens both sides earthed shall have necessary ampacity”. Kindly elaborate this statement and its significance for the design as it is not clear about the actual requirement from this clause.	The control cable shall have the required ampacity notwithstanding the number of earthed points used.
13.	Cable Specification	In technical specification it is mentioned that for control cables outer covering shall be preferably High-density polyethylene. But, in datasheet it is mentioned as PVC. Kindly confirm the material for outer sheath and also mention if any specific fire properties are required.	Refer to response in TAC 2 Clarification item no. 152
14.	Cable Specification	Kindly confirm whether mark of conformity to Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS) is mandatory or not ?	Confirmed.
15.	Transformers	Please provide the details of existing transformers especially the impedances at maximum, minimum & rated taps, as it is mandatory to make parallel operation possible between two Transformers. Hence the transformer manufacturer's need this details to design the transformer.	Refer to response in TAC 2 Clarification item no. 113
16.	Specification, Section VII Employer's requirements-B- Specifications Cl no. 14.8, Pg no. 308/452	We presume that vibration tests are not applicable for Transformers. Also there is no recommendation in IEC for the same. Please confirm.	Confirmed



17.		Specification, Section VII Employer's requirements-B- Specifications Cl no. 14.8, Pg no. 308/452 High purity cellulosic Kraft Paper shall be used for the principal conductor insulation	As per the clause, High purity cellulosic Kraft Paper shall be used for the principal conductor insulation. We propose that for LV winding: Netting tape epoxy CTC & HV winding: Kraft paper shall be used for conductor insulation. Kindly note that for better thermal design we have considered netted tape for LV winding. Kindly review & confirm.	Not accepted. Specification as in the technical specifications shall apply.
18.		Specification, Section VII Employer's requirements-B- Specifications Cl no. 14.8.17, Pg no. 319/451	Please confirm whether 2 temperature indicators are required for each winding i.e. conventional & electronic for HV winding and also conventional and electronic for LV winding or in total two are required ?	2 temperature indicators ie conventional and electronic are required for each winding.
19.		Specification, Section VII Employer's requirements-B- Specifications Cl no. 14.12.11.10, Pg no. 329/451	Tank deflection measurement is practically not possible with all accessories (radiators, conservator etc) mounted. We are offering Tank deflection (pressure & vacuum) measurement at fabricator end. The radiators shall be tested for leakage by applying air pressure 2 Kg /cm ² during which no leakage shall occur, measurement shall be offered at supplier stage. Separate pressure test on tap changing compartment is not needed. Please confirm.	Not accepted. Tests shall as per indicated in the technical specification.
20.		Specification, Section VII Employer's requirements-B- Specifications Cl no. 14.12.11.11, Pg no. 329/451	As per IEC, All tanks and oil filled compartments shall be completely filled with oil at the ambient temperature and subjected to a pressure equal to normal head of oil plus 35 kN/sq.m (5 psi) measured at the base of the tank. This pressure shall be maintained for a period of not less than 12 hours for oil and 1 hour for air during which no leakage shall occur. Separate pressure test on tap changing compartment is not needed.	Not accepted. Tests shall as per indicated in the technical specification.



			The radiators shall be tested for leakage by applying air pressure 2 Kg /cm ² during which no leakage shall occur, measurement shall be offered at supplier stage. Kindly review & confirm.	
21.		Data sheet	As per our understanding, correction due to altitude & ambient temperature at site has been already considered while deciding the temperature rise values. Therefore any other correction factor is not required. Kindly review & confirm.	Confirmed
22.		Specification, Section VII Employer's requirements-B- Specifications Cl. No 14.9, Pg no. 322/451	Capitalisation rates mentioned in specification: \$ 9000 (nine thousand US Dollar) for no-load losses (Po) \$ 4000 (four thousand US Dollar) for load losses (Pk), Whereas, Capitalisation rates mentioned in documents "Transformer capitalisation / Section III - Functional guarantees": CLn = The cost per kW of no-load losses, that is 900,000 KES/kW; CLL = The cost per kW of load losses, that is, 500,000 KES/kW. Kindly confirm which capitalisation rates needed to be followed, among the two.	USD 9000/kW for no load losses and USD 4000/kW for load losses shall apply. Refer to TAC 2, Addendum no 2, Item 4
23.		Section VIII: General Conditions of Contract Clause 10.8	We kindly request you to modify the clause as under: In the event that the Employer shall be in breach of any of his obligations under this Clause, the additional cost- plus reasonable profit incurred by the Contractor in consequence thereof shall be determined by the Project Manager and added to the Contract Price.	Not accepted

24.		Section VIII: General Conditions of Contract Clause 13.3.3 Performance Security	We propose that the rate of liquidated damages shall be 0.5 per cent per week or part thereof only on such portion of the Work, for which the Contractor fails to perform within the agreed time. Further no LD should be levied in case the Contractor is able to achieve the overall completion of the Project in a timely manner. Please confirm.	Not accepted
25.		Section VIII: General Conditions of Contract Clause 29 Patent Indemnity	We kindly request you to modify the clause as under: The Contractor shall, subject to the Employer's compliance with GCC Sub-Clause 29.2, indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, direct claims, demands, losses, damages, costs, and reasonable expenses of whatsoever nature, including attorney's fees and expenses, which the Employer may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract by reason of: (a) the installation of the Facilities by the Contractor or the use of the Facilities in the country where the Site is located; and (b) the sale of the products produced by the Facilities in any country.	Not accepted
26.		Section VIII: General Conditions of Contract Clause 37 Force Majeure	We kindly request you to modify the clause as under: (d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, Pandemic , quarantine and plague Further, we suggest that the Bank Guarantee shall not be invoked/enforced by the Employer during the subsistence/continuance of the Force Majeure event. Please confirm.	Not accepted



27.		<p>Section VIII: General Conditions of Contract Clause 40.4 Extension of Time for Completion</p>	<p>We kindly request you to modify the clause as under: In all cases where the Contractor has given a notice of a claim for an extension of time under GCC 40.2, the Contractor shall consult with the Project Manager in order to determine the steps (if any) which can be taken to overcome or minimize the actual or anticipated delay. The Contractor shall thereafter comply with all reasonable instructions which the Project Manager shall give in order to minimize such delay. If compliance with such instructions shall cause the Contractor to incur extra costs and the Contractor is entitled to an extension of time under GCC. 40.1, the amount of such extra costs plus reasonable profit shall be added to the Contract Price.</p>	Not accepted
28.		<p>Section VIII: General Conditions of Contract Clause 41 Suspension</p>	<p>We kindly request you to insert a new sub - clause 41.5 as under: If the suspension has continued for more than 20 (twenty) days, the Contractor may request the Employer's permission to proceed. If the Employer does not give permission within 10 days after being requested to do so, the Contractor may, by giving notice to the Employer, treat the suspension as an omission of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 42.3 [Termination by the Contractor].</p>	Not accepted



29.		Section VIII: General Conditions of Contract Clause 41.3	We kindly request you to modify the clause as under: If the Contractor's performance of its obligations is suspended or the rate of progress is reduced pursuant to this GCC Clause 41, then the Time for Completion shall be extended in accordance with GCC Sub-Clause 40.1, and any and all additional costs or expenses plus reasonable profit incurred by the Contractor as a result of such suspension or reduction shall be paid by the Employer to the Contractor in addition to the Contract Price, except in the case of suspension order or reduction in the rate of progress by reason of the Contractor's default or breach of the Contract.	Not accepted
30.		Section VIII: General Conditions of Contract Clause 42.1 Termination for Employer's Convenience	We kindly request you to modify the clause as under: The Employer may at any time terminate the Contract for any reason by giving the Contractor a notice of termination that refers to this GCC Sub-Clause 42.1. The termination shall take effect 28 days after the later of the dates on which the Contractor receives this notice or the Employer returns the Performance Security. The Employer shall not terminate the Contract under this Sub-Clause in order to execute the Facilities either on its own, or by engaging other third-party contractors.	Not accepted
31.		Section VIII: General Conditions of Contract Clause 42.3.4 Termination by Contractor	We kindly request you to modify the clause as under: 42.3.4 If the Contract is terminated under GCC Sub-Clauses 42.3.1 or 42.3.2, the Employer shall pay to the Contractor all payments specified in GCC Sub-Clause 42.1.3, and reasonable compensation for all loss, except including loss of profit, or damage sustained by the Contractor arising out of, in connection with or in consequence of such termination.	Not accepted



32.		Transformers	As per Specification, Online DGA is required for 100MVA and above rating, Bidder understand that for 23MVAc transformer Online DGA is not required. Please confirm	Confirmed
33.		Cl no. 14.8, Pg no. 308/451	Noise level (Sound Pressure) limits are based on NEMA TR1 which are generally assessed as high for modern construction, consequently the limit for this specification has been reduced by 5 dB(A). But , As per the details given in data sheet,cl. No. 28 noise pressure level shall be ≤ 74 dB(A) (No load+ fan operation). Please Confirm the Noise Level.	The value based on NEMA TR 1 shall be used.
34.		Transformer Data sheet	As per datasheet OLTC manufacturer is MR Germanay, Can we propose Hitachi make or other reputed manufacturers also. Please confirm.	OLTC manufacturer shall be MR. Germany. Requirement as indicated in the schedules of Technical Info in section d, clause 11.2 shall apply
35.		Section ITB 10.1 NCA1 Registration:	EPC Contracting does not fall within the understanding of NCA Criteria which is essentially in Building Services and Domestic Installations which are not EPC. Unless it is just to provide Funding to NCA. Ketraco needs to look at International practice eg Europe and see whether introduction of NCA is adding value. Would NCA eg be required if Kenya Airways is buying Boeing 787? Or a Ship OR building Gitaru 210MW Station? Or SGR. Even if it were to be the case, what would be the Class of NCA for this Project: Building, Civil, Electrical, Control, Transmission?	These are statutory requirements as per the laws of Kenya.



36.		Subcontractors Section 3.4:	<p>Example Civil is NCA 3. What value will a Civil Contractor NCA3 bring to an EPC Contractor who already qualified for the Project: Is it Finance? Design Capability?</p> <p>Note that the client Ketraco is the one paying the EPC Contractor. The EPC is the one providing all securities.</p>	<p>These are statutory requirements as per the laws of Kenya.</p>
37.		Section 3.2: Turnover:	<p>You have asked for Turnover of US\$ 15 Million (KShs 2 Billion) average over 5 Years</p> <p>That Turnover automatically rules out Local EPCs since we do not have those many Projects for one to Execute, Invoice over 1 year each year for 5 Years for relevant Works. This amount is high even for a Company like Ketraco or KPLC or Kengen</p> <p>The value of the Project Narok Bomet is far below that Shs 2 Billion.</p> <p>High Turnover does not necessarily mean Profit and even if there is, it will not be enough to finance a Project.</p> <p>From the Payment Terms, Banks can offer facilities which are more important than Turnover.</p> <p>It will never be possible to reach Turnovers of US\$ 15 Million by way of being a Subcontractor.</p>	<p>The works for this project are funded by the African Development Bank and Korean Exim Bank.</p> <p>The procurement guidelines used for these works in line with the financing agreements are those of the African development Bank.</p> <p>The turnover is calculated in line with the procurement guidelines of the African Development Bank.</p>



38.		Specific Experience Section 4.2 (a) US\$ 12,500,000	<p>The Technical Complexity of such a Project is no different for a similar Project of a Quarter of that value. And Financial Volume is not a measure of complexity.</p> <p>1 Project is enough for experience, a2nd one is duplication.</p>	The bidders to comply with requirements as provided for in the bid document.
39.		General	<p>As Kenyans, we need to grow Local Capacity. KPLC had done a lot in this regard bringing up Local EPCs between 205 and 2015 but it has since been eroded.</p> <p>It is great for the Country if the Money we get as Loans could be retained in the Economy. As subcontractors, less than 10% remains here. This Tender is not improving matters.</p> <p>This is a simple Project well within reach of Locals.</p> <p>By building Local capacity, the eventual beneficiaries will be KETRACO Staff should there be any eventuality that someone Retires OR gets Retrenched. Otherwise Professionals will end up as Peasant farmers and knowledge will be wasted</p>	This clarification does not address any part of the bid.
40.		Turnover	If Turnover is always emphasized, I can guarantee that no one will grow Turnover capacity in his/her lifetime. Some of our companies grew up when Turnover requirements were waived.	<p>The works for this project are funded by the African Development Bank and Korean Exim Bank.</p> <p>The procurement guidelines used for these works in line with the financing</p>



				<p>agreements are those of the African development Bank.</p> <p>The turnover is calculated in line with the procurement guidelines of the African Development Bank.</p>
41.		General	<p>NCA and EBK Requirements are being crafted by people form another Engineering Industry (Civil/Building) which whill block Local Companies from growing.</p> <p>Bodies like NEMA, EPRA and NCA were formed to regulate the Domestic Sector which lacked Professional capacity. But they were not meant for a the high tech Engineering like Energy. The idea is not just to collect Levies BUT also to lend expertise. KPLC had earlier exempted its Projects from these bodies but seems like it has been forgotten.</p> <p>The eventual losers are we players (including Ketraco Staff) in this imdustry.</p> <p>The eventual losers are we players (including Ketraco Staff) in this imdustry.</p>	<p>These are statutory requirements as per the laws of Kenya.</p>
42.		Request for Extension	<p>We request your esteemed office to please postpone the date of submission of bids from the present due date of 21st June 2024 by at least 2-3 weeks.</p>	<p>Not accepted</p>
43.		Request for Extension	<p>We along with our suppliers need some more time to offer equipment in-line with the tender specification. In order to make necessary changes as specified in clarification</p>	<p>Not accepted</p>



			response and to submit a complaint, competitive & comprehensive bid the current deadline seems too tight. In view of the above, we request you to kindly extend the bid submission date by at least 6 weeks from current bid submission date.	
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