



ZIMBABWE ELECTRICITY TRANSMISSION & DISTRIBUTION COMPANY

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OUR REF:..... FN/ec

YOUR REF

WHEN CALLING WITH REFERENCE
TO THIS LETTER PLEASE ASK FOR

..... F. Nyamakambo.....

12 February 2024

To All Bidders

Dear Sir/Madam

CLARIFICATION NO. 5 FOR TENDER NO. ZETDC/INTER/06/2023 FOR THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF 20MVA, 132/88/11KV POWER TRANSFORMER AT GLENVILLE 88/11KV SUBSTATION

The above subject matter refers.

Attached herewith is **CLARIFICATION NO. 5** for Tender No. ZETDC/INTER/06/2023 for the Supply, Delivery, Installation and Commissioning of 20MVA, 132/88/11kV Power Transformer at Glenville 88/11kV Substation in response to queries raised by participating Bidders.

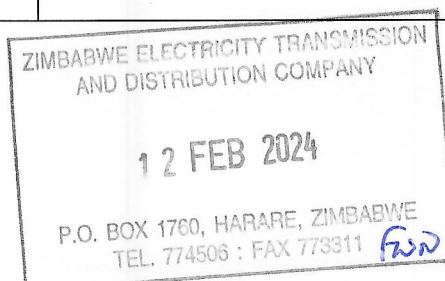
Yours faithfully

F. NYAMAKAMBO
SUPPLY CHAIN MANAGER

TENDER NO. ZETDC/INTER/06/2023 FOR THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF 20MVA, 132/88/11KV POWER TRANSFORMER AT GLENNVILLE 88/11KV SUBSTATION

CLARIFICATION NO. 5

Item	Description/Query from Bidder(s)	ZETDC Response
1.	Clarify the quantities for 3 Core cable and 1 Core cable (Item No. 9 page 1 of 6 of Statement of Requirements)	Total length of 185mm ² 3core Cu XLPE cables is 1,500m N.B. The description of Item No. 9, page 1 of 6 of the Statement of Requirements that was provided has been corrected to read 3 Core only, i.e. Single Core has been deleted from the description. See revised Statement of Requirements under Addendum No. 6 to the Standard Bidding Document (SBD).
2.	You provided the Technical Specification for Current Transformers rated up to 132KV in Addendum No. 5 but they are not included in the Statement of Requirements. Please confirm if these are required?	Yes they are required. The item has now been included in the revised Statement of Requirements under Addendum No. 6 to the SBD.
3.	Please provide the Technical Guarantee Schedule for the Termination Kits from item No. 10 to 14.	Attached under Addendum No. 7 to the SBD.
4.	Kindly clarify the difference between Item 3 (pg 1 of 6) and Item 17 (pg 2 of 6) – Statement of Requirements.	It is the same thing only that in Item 3 it's expounded
5.	Is Item i) under Section 3.0 in the Technical Specification for RTU required i.e. 1 x Project Laptop for configurations?	Yes please
6.	Kindly provide specifications for item 16 – 50V 500AH Battery Bank and Charger on page 2 of 6.	Attached under Addendum No. 7 to the SBD.
7.	May you also provide specifications for items 18 to 26 on page 2 of 6?	Attached under Addendum No. 7 to the SBD.
8.	11 KV Indoor Switchgear Technical Specification: While reviewing the tender document, we observe that Technical specifications for the following are missing. 1. 100 KVA 11 kV Earthing Transformer 2. Protection and Control Panel C/w main, backup protection and all indications 3. 50 V 500 AH Battery Bank and Charger Please provide the technical specification for the above	Attached under Addendum No. 7 to the SBD. Attached under Addendum No. 7 to the SBD. Attached under Addendum No. 7 to the SBD.
9.	132KV Circuit Breaker: From the 132KV Breaker Specifications, the requirement for the breaker type (Single Pole Operated/Three Pole Operated) is not clear. Please confirm the required type.	Three pole operated



10	Kindly clarify, there is no technical guarantee schedule for earth transformer and battery bank.	Refer to response under Item 8 above.
11	Should the insulating medium for 11kV switchgear be strictly SF6, a potent greenhouse gas with potential for global warming? Is air insulation which is more environmentally friendly accepted considering that using air as an insulating medium is better than using SF6 in terms of environmental impact, cost, and safety?	Either SF6 or vacuum
12	Since the statistical metering panel is allowed to have a maximum height of 2260mm, can the other 11kV switchgear panels have this height as well?	No
13	Due to the technical advantages of having a lower CT burden in 11kV switchgear, such as improvement in the accuracy and reliability of the CT, confirm that the stated 20VA burden is the maximum acceptable and lower burden is acceptable. A lower burden also reduces the power losses and heating in the secondary circuit, which can extend the life of the CT and the connected devices.	20VA is maximum acceptable.
14	11KV Cables: The cable conductor material is not specified in the specification. Please confirm whether the conductor material is copper conductor or aluminium conductor.	Copper
15	Conductor water absorbing material. Conductor The Conductors shall be of compact circular stranded copper conductor or Aluminium as specified in the schedule of requirements, in accordance with IEC228, clause 2. <u>A water absorbing powder shall be provided between the conductors and semi conductive screen. (7.2 and 7.1)</u> Water absorbing powder is used in the conductor water absorbing material in the specification. Please confirm whether the water-absorbing tape process can be adopted.	Yes, water-absorbing tape process can be adopted

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12 FEB 2024

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16	<p>Conductor water absorbing process</p> <p>The XLPE shall not be steam vulcanised. It shall be dry-vulcanised cables, steam vulcanised XLPE insulation are not acceptable. The insulation shall consists of an extruded layer of cross-linked polyethylene (XLPE) complying with IEC 502. <u>A water absorbing tap or powder shall be placed between the XLPE Insulation and non-metallic insulation screen.</u></p> <p>The specification requires that a water absorbing tap or powder shall be placed between the XLPE insulation and n-n-metallic insulation screen.</p> <p>Our medium voltage cable insulation core production process is conductor screen, insulation, insulation screen three-layer co-extrusion process, which cannot add water absorbing tap or power between XLPE insulation and non-metallic insulation screen.</p> <p>So this specification cannot be met. Please confirm whether our process is acceptable?</p>	Refer to response under Item 15 above.
17	<p>Technical specification of 600V cables</p> <p>The specification lacks the technical specification of 600V cables, and we can't confirm the specific model and the execution standard of 600V cables.</p> <p>Please kindly provide detailed technical specifications for 600V cables</p>	Attached under Addendum No. 7 to the SBD.
18	<p>Part 2 of the Statement of Requirements Item 9</p> <p>185mm² 11KV 3 Core and Single Core XLPE Cables</p> <p>Please confirm whether it is single core or three core.</p>	3 core

