

## KENYA ELECTRICITY GENERATING COMPANY PLC

## KGN~TURK~004~2024

RFx: 5000014983

## TENDER FOR SUPPLY, INSTALLATION, TEST & COMMISSIONING OF FIBER OPTIC BACKBONE IN TURKWEL HYDRO POWER STATION STATION.

(Reserved for Women Enterprises)

Date: 29th April, 2024

**Clarification No.2** 

In accordance with the Tender for Supply, Installation, Test & Commissioning of Fiber Optic

Backbone in Turkwel Hydro Power Station, KenGen hereby issues Clarification No.2

NO.	Item	Unit	QTY	BIDDER'S CLARIFICATION	KENGEN RESPONSE
1	ADSS G652D, Single Mode Optic Fibre cable: Approx 12 KM Single Mode, 24 Cores, Outdoor Armored Optic Fiber Cable.	Km	12	What's the ADSS cable span length? 100meter?	<ul> <li>There was a site visit for tenderer to measure and make a proposal. KenGen approximate ground distance is at 12km. Tenderer must calculate and consider variables such as distance, loops, lags, terrain etc.</li> <li>A few tips given to tenderers during site visit.</li> <li>The present poles are 50m apart.</li> <li>Slack to be present after every 200m.</li> <li>Atleast one slack after every 4 poles.</li> </ul>

					<ul> <li>Best practice for slack is 20m.</li> <li>Incline climb to the intake is 45-60 degrees about 7km.</li> </ul>
2	Outdoor Enclosure Junctions.	pcs	8	Is the closure 24-core pole mounted? What is the diameter of the pole?	There was a site visit for tenderer to design and make a proposal. Since the new cable would follow the old cable, the proposed location of the enclosures was demonstrated mainly being along or near the old existing network cabinets e.g. at the BVC tunnel, cable tunnel, intake control room, network room etc. Other considerations include security, terrain, weather, climate, design and best practices. The poles are the standard electricity concrete poles.
3	Fiber Termination Accessories. 10 SC Pigtails, 10 LC Pigtails, One Packet of Fusion sleeves (100), 100 Cable ties (2.5mm).	Lot	1	What are the length of the pigtails? 1 meter? What is the type of the connector? APC/UPC?	This will be as per OEM specifications, design, and best practice. Therefore, it depends on the design proposal of the tenderer, however, 1m pigtails and UPC connectors are recommended.
4	Three-Meter Single Mode SC- LC Fiber Patch Codes.	pcs	20	What is the type of the connector? APC/UPC?	This will be as per OEM specifications, design, and best practice. UPC is recommended.
5	24 Ports SC- Rack Mountable Fiber Patch Panels.	pcs	7	Are connectors and pigtails included in the patch panel? What is the type of the connector? APC/UPC?	This will be as per OEM specifications, design, and best practice. UPC is recommended.
6	SC Fiber Couplers.	pcs	40	What is the type of the connector? APC/UPC?	This will be as per OEM specifications, design, and best practice. UPC is recommended.
7	Binding Wire (0.09mm Thickness)	Roll	1	What is the material of the binding wire?	Stainless-steel banding straps or aluminium straps. No areas will require bindings, however in situations where there will need binding for certain applications, only galvanised steel binding shall be accepted (due to corrosion)

8	Anchoring Clamps for Fiber anchoring on poles. Must provide	Lot	1	Which is the anchoring clamp you prefer as shown right? Are hoop clamps for pole and universal pole bracket for tension clamp included in the anchoring clamp? How many clamps you need for this project?	During the site visit, the tenderers were detailed on the security, weather, and terrain of the Turkwel area. As per the weather in Turkwel metallic clamps, tensions, harnesses and stainless-steel banding straps are proposed and tension clamps are included in the anchoring clamps such as shown below.
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## **BIDDER'S ACKNOWLEDGEMENT OF CLARIFICATION NO.2**

We, the undersigned hereby certify that the **Clarification** is an integral part of the document and the alterations set out in Addendum have been incorporated in our tender document.

Signed .....

Tenderer .....

Date .....