



Nepal Electricity Authority
(Government of Nepal Undertaking)
Project Management Directorate
Power Transmission & Distribution System Strengthening Project
Kathmandu Valley Transmission Capacity Reinforcement
Project (Phase-II)



Ref No: KVTCRP-II 079/80 Cha No. 01

Date: July 24, 2022

To,
All Prospective Bidders.

Subject: **Issuance of Clarification-II**

Ref: Design, Supply, Installation and Commissioning of 132 kV underground line from Bhaktapur Substation to Thimi Substation and bay extension works at Bhaktapur Substation
(PMD/PTDSSP/KVTCRPII-078/79-01)

Dear Sirs/Madams,

In reference to the captioned Bid published on June 14, 2022, we hereby attaching the Clarification-II sought by the bidders pursuant to Clause 7.1 of the bidding documents.

It is hereby requested to acknowledge the receipt of the same.

With Regards,

(Ukesh Shrestha)
Project Manager

PRE - BID QUERIES

Design, Supply, Installation and Commissioning of 132kV underground line from Bhaktapur Substation to Thimi Substation and Bay addition works at Bhaktapur Substation.

S.NO	Volume	SECTION / CLAUSE NO.	CLAUSE DESCRIPTION	COMMENT/QUESTION OF BIDDER	NEA REPLY
1		1.1 SCOPE	This specification is intended to cover the design, manufacture, assembly, testing at manufacturer's works, supply and delivery of Modular Cable Fault Locating Equipment Suitable for Locating Fault on Low /Medium / High Voltage Power Cables up to 132 KV Complete with all materials and accessories for efficient and trouble-free operation.	This specification is intended to cover the design, manufacture, assembly, testing at manufacturer's works, supply and delivery of Fully Automatic Van Mounted Modular Cable Fault Locating Equipment Suitable for Locating Fault on Low /Medium / High Voltage Power Cables up to 132 KV Complete with all materials and accessories for efficient and trouble-free operation.	Microprocessor based centralized control for all modes of testing, DC pressure test, fault burning etc. in van mounted suitable for Locating Fault on Low /Medium / High Voltage Power Cables up to 132 KV Complete with all materials and accessories for efficient and trouble-free operation.
2	Chapter 15: TECHNICAL SPECIFICATION FOR SUPPLY OF VAN MOUNTED CABLE FAULT LOCATING EQUIPMENT T SUITABLE FOR LOW /MEDIUM / HIGH VOLTAGE POWER CABLES UP TO 132 KV	Clause 6.4 Surge Generator Unit	(a) Surge Voltage Range: 0-4kV, 0-8 kV, 0-16 kV, 0-32 kV, 0-50 kV - higher suitable voltage for 132 kV cable b) Surge Energy: Minimum 2500 Joules except 0-4kV where it should be at least 1000 Joules.	0-3kV, 0-6kV, 0-12kV, 0-25kV, 0-50kV, 0-100kV with 2000J in all steps 100kV surge will be require for testing cables of 132kV class as 50kV will only be useful to test upto 66kV Class	Any range suitable to detect the fault in 132kV cable are acceptable. However, the mentioned higher suitable voltage for detecting fault in 132 kV cable in the specification shall be ≥ 80 kV or as per design requirement, whichever is higher.
3		Clause 6.4	Impulse: in suitable steps of 0-8/0-16/0-32/50/ higher voltage suitable and each step continuously variable. Surge Energy: 2500 Joules (Min)	0-3kV, 0-6kV, 0-12kV, 0-25kV, 0-50kV, 0-100kV with 2000J in all steps 100kV surge will be require for testing cables of 132kV class as 50kV will be only be useful to test upto 66kV Class	Any range suitable to detect the fault in 132kV cable are acceptable. However, the higher suitable voltage for detecting 132 kV cable shall be ≥ 80 kV or as per design requirement, whichever is higher. For the minimum surge energy proposed, if the bidder can substantiate other than the mentioned minimum required Joules with necessary clarification/design, it shall be accepted.
4		Clause 6.4 Surge Generator Unit	Surge Generator LT or Thumper Voltage Range: 0-4kV Discharge Energy in Joules 1500J min	Not required As LT surge generator is not required when you have asked for different surge voltages in Clause number 6.4. Also, Joules asked is 1500J which is very less for a 132kV class and minimum required is 2000J at all level.	shall be finalized during DDE.
5		Clause 6.3	The unit shall be handy/Van Mounted and of rugged construction	DC Hi Pot unit shall be Van Mounted and of rugged construction, shall be operational through central control unit without the need of additional HV cables. So cables do not need to be changed again and again and it will be good for safety purpose.	shall be finalized during DDE.
6		Clause 6.2	Display should be >8" color VGA/LCD. Technical data Display: VGA/LCD display >8"	Display should be >15" color VGA/LCD. As 8" is very less and minimum 19" screen size is required to work on fault graphs.	Any screen >8" is acceptable however, the detail shall be finalized during DDE.
7		Clause 6.4 Surge Generator Unit	Fault Burning: Up to 15 kV/0.5 A DC and 60 V/110 A AC voltage	It should be ARM Burning in place of only fault burning as only fault burning is a very old manual technique. ARM burning is combination of ARM method and Burning in auto mode, current 25A @15kV. So that over burning of fault can be avoided and time can be saved. Current asked is only 0.5A which is not sufficient to burn the 132kV class cables.	The fault burning suitable for 132 kV class cable shall be proposed and details shall be finalized during DDE.
8		Clause 6.4 Surge Generator Unit	Prelocation using ARM multi-shot, ICE current pulse method	Number of multi-shot is not mentioned in TS. Min. 15 TDR multi-shot measurement is required so that in single high voltage surge fault can be identified which will save further damage to cable by injecting multiple high voltage surge pulse into cables and also save the time.	prelocation using ARM multishoot. However, the number of Multi-shot shall be decided during DDE.
9			Past Experience required or not	is OEM who has not sold or having experience of 132kV class CFL will also be accepted by NEA or OEM must have supplied same or higher rating instrument in any Govt. utilities in world.	As per the bid documents. All required documents shall be submitted during vendor finalization.



PRE - BID QUERIES

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S.NO	Volume	SECTION / CLAUSE NO.	CLAUSE DESCRIPTION	COMMENT/QUESTION OF BIDDER	NEA REPLY
10			Layout drawing of Bhaktapur Substation	We presume that the scope in this tender is to extend two bays with hybrid GIS. The drawing given is not clear how the hybrid GIS is getting connected to Bus I and II. Request to provide drawing showing clearly to estimate the material required.	Please visit the relevant sites to acquaint yourself with the site situation.
11			Layout drawing of Bhaktapur Substation	It is request to provide control room drawing showing where the control panels & communication equipment to be kept for these two bays to estimate the material required.	Please visit the relevant sites to acquaint yourself with the site situation.
12			Schedule-1 Plant and equipment Part-2A	Since at Bhaktapur substation scope is to connect hybrid switch gear to bus with conductor. Requirement of insulator strings, disc insulators, hardware, spacers requirement may not be there. Request to clarify.	Please visit the relevant sites to acquaint yourself with the site situation.
13			Schedule-1 Plant and equipment Part-2 Substation-Item no.3	Since the Bhaktapur is extension request to furnish existing Earth Mat & Lightning protection drawing to estimate the additional material required for extension.	Please Refer Clarification I
14			Chapter-1 Project specific requirement CI:2.2.6 (e)&(f)	Indicate the location of MCC and LDC.	MCC is Located at Baneshor, Kathmandu and LDC is located at Siuchatar, Kathmandu
15			Chapter-1 Project specific requirement CI : 2.2.6 (n)	Request to clarify the scope of dismantling work to be done to include in offer.	Please visit the relevant sites to acquaint yourself with the site situation.

