CLARIFICATION 2

1 Kindly clarify for us
Way leaves permission to survey. Please confirm how you will handle it.
ANS. The employer will firm up the route to winning bidder and give a go ahead to survey.

2 Please inform what the required size for the 66KV and 33KV stay wire.
ANS: Find below

STANDARD			NEAREST EXISTING SIZE			
SIZE	GRADE	MINIMUM BREAKING LOAD	KPLC CODE	SIZE	QUALITY	MINIMUM BREAKING LOAD
19/3.55	700	131.6 kN	89739	19/10 Stay Wire	45 ton/in^2	11180 kg

3 In the Pre-bid meeting we were informed all the 33kv line, conductor will be 150mm2 ACSR.Kindly clarify because this is the updated BOQ .

ANS All 33KV lines will be done in 150mm2 ACSR conductor.

4 .From the BOQ I can see Surge Arrestors have been introduced and as per your clarification NO.14.Form the document i can't see the technical specs and the sheet for the guaranteed technical particulars.

ANS

TECHNICAL SPECIFICATIONS FOR LIGHTNING ARRESTERS

The lightning arresters shall be of the metal oxide gapless type, complying with IEC 60099-1.

For tendering purposes the lightning arresters shall have the following characteristics (the Contractor shall check the values by calculations to be approved by the Project Manager):

	66kV	33kV
(1) Continuous operating voltage (r.m.s.) (kV)	42	22
(2) Rated discharge current (8/20 ms)(kA)	20	10
(3) Rated Voltage (kV)	54	27

As all other main parts of the switchyard they shall be mounted on steel structures.
The lightning arresters shall be fitted with a pressure relief device.
Surge counters shall be supplied for each single-phase arrester for voltages above 33 kV.
The earth conductor from the arrester to the counter as well as the in-terminal of the counter shall be suitably insulated or screen protected against accidental touching.

5 As per clause no. 4.1.5.l.2 of sheet no. VI 4.1.5-106 Conductors: the conductor
shall be filled with swelling powder to stop axial ingress of moisture.
Please note that for achieving the water tightness of the conductor, the voids shall
be filled with the water swell able compounds i.e. Powder; tapes; yams; jelly.
Now days, the powder is banned in some countries due to human health reasons.
So request you to amend the clause as the conductor shall be filled with swelling
powder/ ; tapes; yams; jelly to stop axial ingress of moisture.

ANS Follow the specifications

6 As per clause no. 4.1.5.1.3 of sheet no. VI 4.1.5-106 and clause no. 4.2.5.2 of sheet
no. VI 4.1.5- 116 .Over the XLPE an extruded strippable semi-conducting layer is
required.Strippable semi con is applicable only upto the 33 kv cables. So, The insulationscreen must be fully bonded. So request you to amend, as the extruded
semiconducting layer shall be provided over the XLPE insulation should be fully
bonded.

ANS: Follow the specifications

7 As per clause no. 4.1.5.1.3 of sheet no. VI 4.1.5-106 - A watertight copper or
aluminum seal is required and a layer of earthing screen of aluminum; copper is
required. But as per clause no. 4.2.5 .3 of Sheet no. VI 4.1.5 - 117. As copper tape is
required over the insulation screen. whereas as per clause no. 4.2.7 - corrugated
Aluminum sheath is required.

As per clause no. 4.1.5.1.3 of sheet no. VI 4.1.5-106-A, The construction is
required with the aluminum or copper seal along with the copper; aluminum

wire screen. So it means that the copper wire screen is required for meeting
the current requirements and the poly-l a tape for redial water protection.
2. As per clause no. 4.2 - detailed construction, clause no. 4.2.5.3(Page No.
VI-4.1.5-1l7), copper tape is required over the insulation screen. Also as
per clause no. 4.2.7, (Page no. VI-4.1.5-117)- the seamless corrugated
aluminum sheath is required.

Please confirm that the cables required are with the corrugated aluminum sheath
only. Since alone corrugated aluminum sheath can meet the earth fault cun'ent
requirements, so copper wires/tape shall be required only if the sheath alone will
not be able to meet the specified ealih fault current requirements. Also, please
confirm the corrugated aluminum sheath shall be seam welded; seamless.

ANS: Follow the specifications

8 As per Clause no. 3. 1. 1. of, Sheet no. VI-3-1. Design data, High and medium
voltage. Item no. 5. The short circuit of earth fault current is specified is 31.5
Kamps. But duration is not specified. Please confirm the Earth fault current requirement for 66 KV Cables with the duration.

ANS 31.5kA for 3 Sec

9 As per the clause no. 4.1.5.1.3.2 of sheet no. vi 4.1.5-106. All cables shall be
armoured according to the approved manner.As per clause No. 4.2, detailed construction of 66 KV Cables, there is no armour in the corruagted aluminum sheathed cables. So please confirm that the cables shall be unarmoured cables.

ANS: Follow the specifications. The cables must be armoured

10 Packing length not mentioned in the enquiry specification.Please provide us the packing length. Packing length is required for drum, freight,Calculations.

ANS. This is a design issue and the length shall be determined for each drum aftyer design to avoid unnecessary joints at unwanted locations.

11 Will there be time extension

ANS: There will be NO Time Extension.

12 In the bidding document, in the Bid Data Sheet, ITB 20.1, “Bid shall include a bid security issued by acceptable bank to the Employer”. Kindly Clarify what this means.

ANS: The Bid security shall be issued by a bank(i.e. reputable source) from an eligible country.