**Clarifications for Substation Tender**

1. All Incoming ACB are EDO type 50kA, 4pole Microprocessor based with O/L, S/C, E/F protection with  415V Under voltage release, 230V AC Motor for Spring charging, 230V AC Closing and Tripping coil. Micro sw. for Common Fault Indication.

*Ans:*  *Yes confirmed and also should be draw out type*)

1. All Out going ACB are EDO type 50kA 3Pole Microprocessor based with O/L, S/C, E/F protection with 415V Under voltage release 230V AC Motor for Spring charging, 230V AC Closing and Tripping coil. Micro sw. for Common Fault Indication.

*Ans: Yes, (It is also 4 pole and should be draw out type)*

1. All Incoming ACB are Mechanical Interlock Required?

*Ans: Yes confirmed*

1. All Out going MCCB are 3Pole or 4Pole Type and breaking Capacity.

*Ans: All 4 pole with breaking capacity of 70KA.*

1. All MCCB are Thermal Magnetic release with O/L, S/C protection or Microprocessor Based release with O/L, S/C, E/F protection.

*Ans: Thermal magnetic release. The same protection applies.*

1. All MCCB are Motorized type or Manual operated Rotary handle type.

*Ans: Motorized with push buttons, not automatic.*

1. VCB Panel CT ratio required.

*Ans: It is specified in the Technical Specification part.*

1. We have considered the below relay for VCB Panel.

a.   3 phase directional over current and earth fault relay with over and under voltage protection.

b.   Master Trip relay 1Element.

c.   Auto Re-closure Relay.

d.   Auxiliary Relay for Annunciation and Tripping.

*Ans: (THIS THINGS WE WILL COMPARE WITH ALL BIDDERS SHOP DRAWINGS)*

1. Regarding LT Panel, the details of panel, mccb, acb, construction features, type testing parameters all are mentioned. But there are no details of the ratings and number of the switchgears, busbars, metering, etc (Schedule of Requirement). Without these details we won’t be able to quote.

*Ans: The LT panel and its component specs have been revised. The schedule of switchgear requirement is already mentioned in the BoQ item under LT Switchgear & Component Item No. 2). The protection, controls, busbar etc required are based on the technical specification provided under LT panel Spec. in the revised document.*

1. Altitude of location of transformer not mentioned.

*Ans: 2X2MVA distribution transformer is to be located at Paro International Airport which is about 2235m above sea level. Accordingly the altitude correction factor needs to be considered while designing transformer.*

1. Tap changing requirement:

Ans: *OCTC (Off Circuit Tap Changing). Not ‘on load or remote tap changing’.*

1. LT cable jointing

*Ans: The existing LT cable mentioned in the BoQ need to be jointed. The cable jointing set required are based on cable size which are separately mentioned in the revised BoQ. The number of runs of cable is also mentioned. Therefore, cable jointing set required is mentioned in the revised BoQ.*

1. External power source (Battery & Battery charger) details are not mentioned.

*Ans: The BoQ has been revised and external power source for control are mentioned.*