Tender no. - TPCODL / CCG / 26-27 / 1000009918			
Tender Description - Rate Contract - Supply of 11kV & 33kV Metering Unit at TP DISCOMs for One Year			
Sl. No.	**Tender Reference (Document name/Page no./Clause no./Clause name)**	**Pre-Bid Query raised by Bidder**	**CCG/ CEG Response**
1	**Clause (8) Table With Type Test Report** **Short Time Current** **ENG-HV-2033(A)(R1) : For 11kV MU 0.2S** **ENG-HV-2033 (R1) : For 11kV MU 0.5S** **ENG-EHV-1038(R1) : For 33kV MU 0.2S**	**As per IS2705, Part 1, Clause 9, 6.3 (Notes) -** ***the primary current rating, number of cores and its burden shall not be considered significant for this test.*** **As such there is no direct co-relation of CTR wrt appliacablity of STC test report.** Infact, STC test report applicability on various offered designs are based on - **- Thermal stress ∝ I^2_{STC} X Time** **- Mechanical force ∝ kAx2.5xCT Prim. Turns** The **maximum thermal stress and maximum mechanical force, calculated as per a given STC report, give the threshhold maximum limits of respective parameters of the various offered STC ratings and CTRs.** This is a calculation based on STC value, duration, current density of primary winding wrt STC rating, and no. of CT primary turns. **These are guidelines of IS:2705, which have been made after an in-depth study of the subject, the same should be acceptable, subject to detailed calculations provided by the manufacturers**. Since there is a wide range of requirements for STC and CT ratios among various utilities all over india, and STC test is a very costly test, it is not financially viable to conduct so many STC tests as called in this instant tender. Hence, **IS guidelines must be acceptable if a detailed calculation sheet is provided by the manufacturers towards acceptance of offered designs wrt the STC reports furnished.**	As per IS 2705 Part-1, short-time current test consists of thermal and dynamic requirements. Thermal withstand shall be justified based on rated short-time thermal current, duration, conductor material and current density, as per IS 2705 Clause 9.6.1. Dynamic withstand may be considered based on similar construction and product of primary turns and rated dynamic current, as per IS 2705 Clause 9.6.2. **Therefore, bidder shall submit valid type test report along with detailed design equivalence calculation for each offered design/ratio.**
2	Clause (8) Table With Type Test Report **Temperature Rise Test** **ENG-HV-2033(A)(R1) : For 11kV MU 0.2S** **ENG-HV-2033 (R1) : For 11kV MU 0.5S** **ENG-EHV-1038(R1) : For 33kV MU 0.2S**	Temperature Rise Test is conducted to check the thermal suitability of the CT primary winding while carrying the highest current as per the utility requirement. **The rise in temperature is proportional to the square of current, based on the principle of-** **- Heat dissipated ∝ I^2R.** Infact, the temperature rise type test requirement for individual CT ratios is not required; instead the utility needs to review the offered **temperature rise test report v/s the offered CT ratios** and then conclude the applicability of the submitted report. In general, with respect to the Temperature Rise Test, the guidelines towards acceptance of temperature rise test report must be modified as: ***"Temperature rise test report on a higher CTR validates any lower CTR".***	Kindly adhere to tender floated technical Specification
3	**Clause (8) Table With Type Test Report** **Lightning Impulse Test** **ENG-HV-2033(A)(R1) : For 11kV MU 0.2S** **ENG-HV-2033 (R1) : For 11kV MU 0.5S** **ENG-EHV-1038(R1) : For 33kV MU 0.2S**	1. This test is basically to verify the manufacturer's insulation design suitability between HV & LV circuits/ parts in a given drawing/ tank size. 2. If the offered lightning impulse value is within the type-tested value and offered drawing/ tank size is same/ bigger as compared to the type tested size, the offered design is justified by the lightning impulse type test reports; **CT ratio has no impact on the lightning impulse test.** **Note that this test is HV related test, irrespective of the current flowing through the HT CT / PT windings.** **Hence the requirement of this test of few selected CT ratios is incorrect and must be withdrawn. Further, this is again a very costly test and is is not finalcially viable to conduct so many LI tests for a given value of LI voltage on the same product.**	The type test reports for highest system voltage and current rated rating will be considered valid for other/lower ratios. However, the OEM needs to submit the technical sheet which complies the design parameters as technical specification along with the valid type test reports, ***(i.e- insulation design, highest system voltage, rated insulation level, clearances, bushing arrangement and tank construction compared to the type-tested design.)***

4	**Clause (8) Table With Type Test Report** **HV Wet PF test** **ENG-HV-2033(A)(R1) : For 11kV MU 0.2S** **ENG-HV-2033 (R1) : For 11kV MU 0.5S** **ENG-EHV-1038(R1) : For 33kV MU 0.2S**	As per IS 2705, part 1, cl 9.1.1.e (CT) & IS 3156 part 1, clause 9.1.1 (d)(note) (PT)- **If the porcelain weather casing/bushing has been subjected to this test separately, the requirements of this test shall be deemed to have been complied with.** Hence, type test reports for Porcelain bushings fulfills the requirement. In such a case, a separate test is not required on CTPT MUs. Further, there is absolutely no relevance of CT Ratio in this test. We request you to kindly review the IS guidelines, as per the clauses mentioned above and **withdraw your requirement of separate test on MUs.**	Kindly adhere to tender technical Specification
5	**MUs of CTR 5/5A - STC & CT burden** **ENG-HV-2033(A)(R1) : For 11kV MU 0.2S** **ENG-HV-2033 (R1) : For 11kV MU 0.5S** **ENG-EHV-1038(R1) : For 33kV MU 0.2S**	For 11kV & 33kV MU of ratio **5/5A, kindly confirm-** **1. STC - 3kA/1s.** **2. CT rated burden- 7.5VA**	1. STC should be minimum 3KA/1s for 11KV and upto 13.1KA/1s for 33 KV 2. CT rated burden shall be as per Technical Specification.
6	**12.0 Post Award Contract Administration** **12.1 Special Conditions of Contract** **1. Rate Contract shall be valid for a period of 12 months from the placement of the Contract. Release Order (RO) shall be placed as per the requirement of respective TP Odisha Discom. Rates shall remain firm throughout RC period**	**Under normal conditions, we can continue with the condition of Firm Prices under RC.** **However, in case of crisis in National/ International economy, wars, etc. leading to abnormal raw material price rise., PVC on the RC rates must be made applicable under Force Majeure condition. Utility must review and finalize certain guidelines towards this as it is a question of sustainabilty of small MSME units.**	Tender T & Cs shall prevail.
7	**12.0 Post Award Contract Administration** **12.1 Special Conditions of Contract** 4. The supplier shall give **Guarantee** for satisfactory functioning of material / equipment as per specification, for minimum period of 60 months from date of commissioning or 66 months from last date of receipt of material in good condition at departmental store foe each consignment whichever is earlier.	Guarantee period of 36 months from the date of supply is more than enough to judge the performance of the MUs under service. **There are other factors beyond the control of a manufacturer that lead the failure , eg. lack of periodic checks, loose contact over a period of time, lack of protection equipment like Lightning Arrestors etc.. These are beyond a manufacturer's control and defect liabilities in such cases should not be imposed on manufacturers.** Hence, guarantee period must be rationally reduced as under- **"for minimum period of 36 months from date of commissioning or 42 months from last date of receipt of material"** Kindly review and confirm.	Kindly adhere to tender technical Specification