Tender No : TPCODL/P&S/1000000283/2022-23

Supply of Portable LT&HT Electronic Reference Standard Meter/ Testing Kit

Replies to Pre Bid Queries

| SI. No. | Clause No | Page No | Clause Details | Query | TPCODL Replies to Queries |
|---------|-----------------------------------|---------|---|---|--|
| 1 | 0.1 Accuracy ERS Specification | | Clause 10.0: Offered calibrator shall have backlit LCD display of size 6" | a) In our view, portable calibrator should have TFT (Thin-Film Technology) graphic Colour screen of size 6". For a 3-Phase portable calibrator it is very much required for easy identification of different phases: RED-YELLOW-BLUE and Neutral. | Both are acceptable |
| 2 | 0.1 Accuracy ERS Specification | | Clause 23.0: portable equipment shall draw power (VA in voltage circuit is 30VA) from the voltage input or auxiliary AC input | (a) In our view, portable calibrator should have additional DC input as well for powering the portable calibrator for at least 30 minutes. The equipment should be delivered with Lion battery pack. i) Advantages of additional DC input (1) Equipment does not draw power from PT & CT Circuit, thereby does not add any burden to PT. (2) Circuit connection / Installation check analysis is performed in a better manner, since the equipment is energized by DC and U1, U2, U3, I1, I2, I3 connections are connected, one-by-one making the connection wiring fault diagnosis easy. | Both are acceptable |
| 3 | 0.1 Accuracy ERS Specification | | b) For Auxiliary AC input, the protection should be provided for 440V AC max | i) Advantages of 440V Max (1) Sometimes users put, by mistake, Phase-Phase voltage instead of Phase Neutral for LT application, which damages the equipment. | Noted |
| 4 | 0.1 Accuracy ERS Specification | | c) The equipment should be doubly insulated, weight should be < 1.5Kg. for easy portability and small in dimensions. | i) Advantage (1) Equipment is safe due to double-insulation and the weight and small size is helpful for easy transportation to site | Noted |
| 5 | 0.1 Accuracy ERS Specification | | For both the equipment (0.1S and 0.2S), Samples should be submitted at TPCODL for evaluation: | Product functionality test should be carried out by TPCODL 2. Accuracy and metrological tests can be carried out by ERDA/IDEMI/NPL Delhi | Demonstration of the equipment shall be conducted.Sample not required. |
| 6 | 0.2S Class portable Calibrator | | Clause 10.0: Offered calibrator shall have backlit LCD display of size (is not specified) | In our view, portable calibrator should have TFT (Thin-Film Technology) graphic Colour screen of size 6". For a 3-Phase portable calibrator it is very much required for easy identification of different phases: RED-YELLOW-BLUE and Neutral. Further if portable equipment has touch function, it would be very handy at site | Acceptable |
| 7 | 0.2S Class portable Calibrator | | (a)CT Clamps for 60A and 300A | (a) The CT clamps for 60A and 300A should be autodetected by the equipment. Further it should be possible to connect any CT clamp to any equipment without change in accuracy | Acceptable |

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| 8 | 0.2S Class portable Calibrator | | (b)Accuracy in DIRECT Mode is defined as 0.2S class, while in CT clamp mode it is defined as 0.5S: | (1) Accuracy in CT clamp mode also should be defined as 0.2S for 60A clamps. (2) Accuracy in CT clamp mode should also be defined as 0.2S for 300A clamps. This is required for LT CT meters, which are of 0.5S class and the test equipment should be at least 1 class higher as per IS/IEC standards. | Acceptable |
| 9 | 0.2S Class portable Calibrator | | c) For Auxiliary AC input, the protection should be provided for 440V AC max. | i) Advantages of 440V Max (1) Sometimes users put, by mistake, Phase-Phase voltage instead of Phase Neutral for LT application, which damages the equipment. | Noted |
| 10 | 0.2S Class portable Calibrator | | d)The equipment should be doubly insulated, weight should be < 1.5Kg. for easy portability and small in dimensions. | i) Advantage (1) Equipment is safe due to double-insulation and the weight and small size is helpful for easy transportation to site. | Noted |
| 11 | 0.2S Class portable Calibrator | | For both the equipment (0.1S and 0.2S), Samples should be submitted at TPCODL for evaluation: | Product functionality test should be carried out by TPCODL Accuracy and metrological tests can be carried out by ERDA/IDEMI/NPL Delh | Demonstration of the equipment shall be conducted. Sample not required. |