

**WBSEDCL****West Bengal State Electricity Distribution Company Limited****(A Govt. of West Bengal Enterprise)****Division Office, Bishnupur Division****Administrative Building, Kurchibon, Bishnupur, Bankura-722122****NIT No: BSPD/1 (2022-2023)**
Memo No: DM/BSPD/ Admn/N-11/48

Date: 07/04/2022

TENDER NOTICE

TO

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Sealed tenders with the firm's own seal are invited by the undersigned for supply and delivery of following items as per prescribed specification WBSEDCL. Last date of submission of tenders is 19/04/2022 at 1pm and date of opening of the same is on the same date at 01:30 pm in presence of attending tenderers at the chamber of the Divisional Manager, Bishnupur Division.

Material Code	Description of materials	Rate	Quantity	Total
0408011141	High Voltage Detector (Details of Specification attached as Annexure-A)		15 Nos	

Terms and Condition: -

1. Reference number of enquiry, details of the materials and due date of submission of the tender should be prominently written on the envelope.
2. The detector should be as per prescribe specification & works flawlessly in all voltage class up to 33 KV.
3. Valid Mobile No & E-mail address should positively in written on the offer letter for easy communication.
4. The rate to be offered should be net and firm including transportation, excise duty etc. but exclusive of GST as applicable.
5. GST will be paid extra, as applicable. Also GSTIN No. must be incorporate in tender
6. Total amount should be given in figure and in words and price offer should remain valid for 90 days.
7. All the material must be passed through specification standardization checking, as well as performance checking from the Zonal /Central Testing, WBSEDCL, at their own cost if applicable.
8. The above material should be delivered at Zonal/Central Testing within 15 days from the date of placement of Forma Order falling which penalty will be imposed on you as per norms of WBSEDCL.
9. The minimum time of delivery should be strictly adhered to.
10. There shall be minimum one-year warranty for aforesaid material.
11. No conditional tender/ incomplete tender will be accepted.
12. The Company reserve the right to reject or accept any or all tenders without assigning any reason what so ever.

DE & Divisional Manager
Bishnupur (D) Division**Registered Address: Vidyut Bhavan: Block-DJ, Sector-II, Bidhannagar, Kolkata-91:****Corporate Identity Number: U40109WB2007SGC113473****Website: www.wbsedcl.in**

TECHNICAL SPECIFICATION FOR HIGH VOLTAGE DETECTOR

1.0 The High Voltage Detector (HVD) shall be suitable for detection of liveness of electrical infrastructure including overhead bare conductor distribution lines. The HVD shall start annunciation with flashing Red LED display and buzzer beeps indicating that the line / infrastructure is LIVE and, not safe to earth and/or carry out any operation. Sensing distance shall have to be at least 3 M for 33 kV and 1 M for 11 kV lines and 5" for 415 V lines.

2.0 SERVICE CONDITION:

The High Voltage Detector to be supplied as per this specification shall be capable of detecting live lines on bare conductors under hot, tropical and dusty climate and shall be suitable for satisfactory operation under the following tropical conditions.

- Maximum Ambient Air Temperature in shade: 50°C
- Minimum Ambient Air Temperature: (-) 5°C
- Maximum Relative Humidity : 95 %(non- condensing)
- Minimum Relative Humidity: 10%
- Maximum Rainfall: 2000 mm
- Maximum wind Pressure: 150Kg/Sq.mm
- Climatic condition: Moderately hot & humid tropical climate

3.0 SYSTEM CONDITIONS:

The High Voltage Detector is intended for use in LT & HT Distribution System. Distribution System is 1Φ2W / 3Φ3W / 3Φ4W and has the following data:

System Voltage Level	Nominal System Voltage	33 kV	11 kV	415 V
	High System Voltage	36 kV	12 kV	440 V
	Line to Earth Voltage(Nominal)	19.05 kV	6.35 kV	230 V
Insulation Level (Lightning Impulse Voltage)		170 kV	95 kV	1.1 kV
Power Frequency withstand Voltage		70 kV	28 kV	NA
Rated Frequency		50 Hz		
Insulation Resistance		Greater than 100MΩ		
Sound Pressure		90dB/Metre ± 10dB/Metre		

4.0 POWER SUPPLY:

- Dry Battery with suitable Voltage Ratings
- Commercially available everywhere

- c) Current Consumption: 30 mA (maximum)
- d) Easily replaceable at field level
- e) Battery Low Indication

5.0 SELF DIAGNOSTIC FEATURE:

The High Voltage Detector shall be capable of performing complete self diagnostic check in off-line mode with buzzer & flashing LED to ensure the working of the probe before taking on site.

6.0 APPLICABLE STANDARDS:

- 6.1 The HVD Probe shall conform to IS 2071(Part-I) / IEC 61243-1
6.2 The Telescopic Rod pieces shall conform to IS 13770(1993) / IEC Pub 855(1985) / IEC 61235

7.0 GENERAL & CONSTRUCTIONAL REQUIREMENTS:

- 7.1 HVD shall be designed and constructed in such a way so as to avoid any danger to the operating personnel during use and under normal conditions.
- 7.2 The HVD shall sense liveness of the system in non-contact condition. However, even if the HVD comes in contact with live part, its functionalities shall remain unaltered and safety of the user shall not be affected.
- 7.3 The HVD shall intelligently sense the presence of voltage without any adjustable pot setting.
- 7.4 It shall have the capability to warn the user with audio annunciation as well as with visual indication about liveness of the system from a safe distance as per IE rule1956.
- 7.5 A buzzer shall produce a loud beep which shall be audible even in noisy back grounds.
- 7.6 Bright high intensity Red LEDs shall provide clear visual indication even in unfavourable daylight conditions.
- 7.7 The HVD shall have self-test button to diagnose the battery and proper functioning of the HVD.
- 7.8 The HVD shall have facility of replacement of the power supply battery easily.
- 7.9 The HVD shall have universal connecting link for the attachment of the Telescopic Rod.
- 7.10 The Telescopic Rod shall be of electrically non-conducting, non-allergic, non-hygroscopic, non-ageing material of tested quality with piece to piece self-locking arrangement.
- 7.11 All insulating materials used in the construction of HVD shall be non-hygroscopic, non-ageing and of tested quality.

- ### 8.0 DETECTION INDICATION:

- ## 9.0 DIMENSIONS:

- ### 10.0 SUITABLE CARRYING CASE:

The High Voltage Detector with accessories shall be supplied with the carrying case so as to be carried by the operating person easily & individually.