Tender No. UGVCL/SP/III/1000/HT TVM with DLMS

ANNEXURE-K

GUARANTEED TECHNICAL PARTICULARS:

Sr. No.	Specification	UGVCL Requirement	Offered by Supplier	Deviation if any
1	SYSTEM : i) Voltage ii) Rated (Secondary) current iii) Max. Current iv) Frequency	 i) 11000/ √3 / 110 /√3 66000/√3/110/√3 ii) 5 Amps/1 Amp iii) 200% Ib iv) 50 Hz		
2	SYSTEM VARIATION: i) Voltage ii) Frequency iii) Temperature	 i) +20% to –30% ii) +/- 5% iii) +/-10 degree		
3	Class of Accuracy	0.2s for 1 Amp 0.5s for 5 Amp		
4	Applicable Standard	IS 14697, CBIP-325 & other relevant standards as per Specifications		
5	Meter System	Three Phase-4 wire N.B. Meter should work satisfactorily with combined CTPT unit having 3 Nos.		

		PTs/Three phase PT with neutral grounded or floated and 2 Nos. or 3 Nos of CTs with balanced or unbalanced load		
6	Diagram Marking & TERMINAL MARKING	It shall be clearly shown in inside portion of the terminal cover & shall be of permanent nature		
7	Display i) Type ii) Mode of display iii) Battery back up iv) Display digits & Height of characters	 i) STN (super twisted nematic type) LCD with Green Backlight ii) Cyclic Scrolling. Sequence of the display parameter must be as per ANNEXURE B. Scrolling should be continuously without any interval between two cycle iii) To read in absence of power iv) 8 digit & minimum height 10 mm		
8	i) Sampling Rate ii) Measurement of basic electrical quantities during presence of harmonics in supply wanes.	i) Minimum 3000 samples Per Second ii) Accuracy should be as per relevant standard, even when highest order of harmonics is present		

		in supply wave		
9	Meter Sealing arrangements a) Meter body b) Terminal block c) MD reset button d) Optical port	 a) 2 nos. b) 2 nos. c) 1 nos. d) 1 nos		
10	Recording & storing (memorizing) of measured quantities	- Billing parameters for current & last 12 billing cycle. - All instantaneous parameters		
11	TOD provision & timing	The meter shall have facility for measuring, monitoring and storing of electrical quantities in the memory for EIGHT zones & presently configured in three Zones: Zone:1 - (Peak Hours) 7:00 to 11:00 Hrs + 18:00 to22:00 Hrs Zone:2 - (Night Hours) 22:00 to 06:00 Hrs Zone:3 (Rest Hours) 11:00 to 18:00 Hrs + 06:00 to 07:00 Hrs		
12	Tamper & fraud Protection	To be provided as per technical specifications		
13	Potential Phase sequence rotation	Meter should record accurately irrespective of Potential Phase sequence rotation		
14	Voltage & current related tamper features	Meter should log/record all such following tamper events as per logic given in		

		Annexure C along with snap shot data a) Phase wise voltage failure b) Phase wise current failure c) Voltage unbalance d) Current unbalance e) Phase wise Current reversal f) Over voltage g) Low voltage h) Over current		
15	Unidirectional Feature	Meter shall record correct energy in case of current reversal of one or more phase. Also, meter shall record energy corresponding to such reversal of current in separate register & it should be available on meter display		
16	Indication for wrong phase association	Meter should indicate wrong connections if made to Association respective phase voltage and current		
17	Influence of Permanent Magnet or AC/ DC Electromagnet	Meter should log/record all such tamper events as per logic given annexure C along with snap shot data and energy to be recorded as per CBIP-325 and UGVCL requirement mentioned in cl. no. 5.9 of technical specification.		
20	Meter recording	Meter should be immune by application Jammer circuit i.e. device radiating different high frequency induction and spark discharges.		
21	Power consumption in	Power consumption should Not		

	i) voltage circuit ii) current circuit	more than limit specified in relevant IS (value to be specified by bidder)		
22	Expected life of Meter	20 Years		
23	Conformity to technical specification of this Tender	Bidders to certify that product offered is in conformity to technical specification of this Tender (Yes or No ?) If deviations expected, to be declare by bidder with brief write up against any of the clause of specification in the Proforma of Deviation attached.		
24	Conformity to Quality Assurance Plan attached with this specification?	Bidder has to agreed with Quality Assurance Plan attached with this specification (Yes or No) If no, Please attach separate sheet showing all deviation/ representation with brief write up		
25	Conformity to carry out Routine, Acceptance and Type tests as per relevant standards / attached Annexures	Bidder has to agreed to carry out Routine, Acceptance and Type tests as per relevant standards / attached Annexures. (Yes or No)		
26	Conformity to share/extend API / Protocol for any BCS as well as HES availed by UGVCL	Bidder should agreed for share/extend API / Protocol for any BCS as well as HE (Yes or No)		
27	Max Demand	Meter should record & display MD KW & MD KVA both		

28	Max Demand : integration period	15 minutes for class 0.2s 30 minutes for class 0.5s		
29	Capability of tamper events recording	Minimum 400 events (200 occurrence + 200 restoration)		
30	MD reset timing & incremental of reset count	Both Auto & manual reset facility to be provided. **Automatic resetting:** at the specified date and time of every month which is 00.00 hours of 15th date. However, this should be programmable through BCS/CMRI with due authentication of protected password. **Manual Reset:** by pressing of push button. Incremental of MD reset count on each reset		
31	Load survey facility	**0.2s Class Meters :** Load survey for minimum 45 days with 15 minutes integration **0.5s Class Meters :** Load survey for minimum 60 days with 30 min. integration		
32	DLMS compliance as per IS 15959: 2011, Caategory C1 meters	To be confirmed by bidder with DLMS certificate		
33	Communica tion Port	Optical & RS 232 Port		
34	Conformity for Remote metering communication to DLMS complied BCS as well as HES through any make of DLMS complied GPRS modem	To be confirmed by bidder for Remote metering communication to DLMS complied BCS as well as HES through any make of DLMS complied GPRS modem		