

MMD/T-NSC-02/0321/8042

Date: 09.04.2021

REPLY OF PRE-BID QUERIES

To,

All firms.

Sub: Supply of Three phase four wire CT/ PT operated 1 Amp & 5 Amp fully static AMR Compatible HT TOD Tri-Vector Energy Meter of 0.2S & 0.5S accuracy class as per category "C" of IS:15959/2011 against Tender No. MMD/T-NSC-02/0321.

--- Clarification to the queries raised during Pre-Bid Meeting.

Ref: Pre-Bid Meeting held on dtd. 09.03.2021

Dear Sirs,

The Pre-Bid Meeting of subject tender MMD/T-NSC-02/0321 for Three phase four wire CT/ PT operated 1 Amp & 5 Amp fully static AMR Compatible HT TOD Tri-Vector Energy Meter of 0.2S & 0.5S accuracy class as per category "C" of IS:15959/2011 was held on 09.03.2021.

The clarification to the queries raised by the bidders are attached herewith as Annexure - A (Commercial), Annexure - B (Technical) and Annexure - C (IT).

Yours faithfully,

Sd/-
Chief Engineer (MMD)

Copy s.w.rs. to:

- i) Director (Operations) / (Projects), MSEDCL, Mumbai.
- ii) Executive Director (O&M) / (B&R) / (Projects), MSEDCL, Mumbai.

Copy f.w.cs. to:

- i) Chief Engineer (Testing & QC) / (B&R), MSEDCL, Mumbai.
- ii) C.G.M.(IT), MSEDCL, Mumbai

Copy to:

- i) Supdt. Engineer (MSC), MSEDCL, Mumbai

ANNEXURE - A (Commercial)

A) M/s Secure Meters Ltd.

Sr. No.	Particulars	Query received	MSEDCL Reply
1.	Scope: Supply of 3P4W CT/PT operated meter 0.5s Class 1A or 5A energy meters as per Category C1	We will submit bid from our Udaipur plant. However, 0.5s (5A &1A) energy meters will be supplied from SML, Udaipur plant & 0.2s (5A &1A) energy meters from SML, Bated plant. The same may please be permitted.	Kindly refer clause no. VIII (Offering the material) of Section-I which is self-explanatory.

ANNEXURE - B (Technical)

A) M/s HPL Electric & Power Ltd

Sr. No.	Particulars (Clauses of Technical Specification)	Deviation received	Remark
1.	Clause No. 6.15 OUTPUT DEVICE Non specified display parameters in the meter shall be blocked and it shall not be accessible for reprogramming at site. However these parameters shall be programmable at site through representative of meter manufacturer	Sir, kindly note that the Display Parameters shall be Factory Programmable. We request you to kindly accept the same and amend the above clause	Not accepted
2.	Clause No. 6.28 The internal battery shall be Ni-mh or Li-ion or NI CD maintenance free battery of long life of 10 years	Sir, kindly note that the Primary Batteries are alternate to Re-chargeable Batteries since Ultra low Power Micro Controller are used and Primary Batteries of sufficient capacity may serve the purpose and more reliable. So, you are requested to kindly accept the Primary Battery alternatively	Non rechargeable Battery (Primary battery) for Display is accepted with battery life of minimum 15 years
3.	Clause No. 10.00 (10.01) (f) ANTI TAMPER FEATURES The separate slot with 10 no. occurrences of EMI/EMC tamper along with date & time stamp shall be provided	Sir, kindly note that the Meter shall either be Immune or shall log the Tamper Event only in case if Meter not immune. So, we request you to kindly accept and amend the same accordingly	Not accepted
4.	Clause No. 10.03 (8), TAMPER EVENTS Current Bypass: <u>Occurrence:</u> Bypass Current > 50 % Iref* for 15 min. <u>Restoration:</u> Bypass Current < 30 % Iref* for 15 min	Sir, kindly note that the CT Bypass Tamper is not applicable for HT Meters. So, please remove the same from specification	Not accepted
5.	Clause No. 12.02 The meter shall have 6 digits (with +/- indication), parameter identifier, permanently backlit Liquid Crystal Display (LCD) with wide viewing angle. The size of digit shall be minimum 8x5 mm	Sir, kindly note that the indication shall be provided for '-', value, without indication itself indicates '+'. So, you are requested to kindly accept the same	Accepted
6.	Clause No. 13.03	Sir, kindly note that in the Instant of	Not accepted

	The Block Load survey data shall be logged on non-time based basis, i.e. if there is no power for more than 24 hours the day shall not be recorded, however if there is no power for few block within one day those block should be displayed with 0 values with marking of power fail indication for that block i.e. for every day when there was power on, the meter must record 48 blocks	Power Fail, Blocks for Phase Wise Voltages and Currents shall be available with '0' values. This itself indicates Power Fail which meets the Utility purpose. You are requested to kindly remove the requirement of 'Power Fail indication for that Block' from the specification	
7.	Clause No. 26.00 TENDER SAMPLE Tenderer are required to submit 15 (Fifteen) nos. of sample meters and 1 (One) no. of sample HHU of offered type / item as per technical specifications from any one of the factories on or before the time & date stipulated for submission of offer for testing the sample meters in third party NABL Lab like ERDA, CPRI, CIPET, ERTL, etc GTP no. 161: 15 (FIFTEEN) NOS. OF SAMPLE METERS & 1 (ONE) HHU AS PER TECHNICAL SPECIFICATIONS ARE SUBMITTED ALONG WITH OFFER (YES/NO)	Sir, the Tender Sample Meter's quantity is not clear. So, we request you to kindly clarify the actual tender Sample Meter's quantity along with secondary current rating to be submitted along with the Offer. HHU tender Sample may be removed	Tender Sample Meter quantity shall be as per mentioned in tender document. (i.e. 5 nos.) HHU tender Sample not required.

B) Larsen& Toubro Ltd

Sr. No.	Particulars (Clauses of Technical Specification)	Deviation received	Remark
1.	Clause No. 6.21 For any higher signals than the present standards and MSEDCL technical specifications indicated above cl. 6.21, the energy meters shall be immune & the accuracy of energy meters shall not get affected.	Confirmation can be given for known signals e.g. 35KV spark discharge & Jammer device	Accepted
2.	Clause No. 12.02 Display: 6 digit & display digit size: 8x5 mm	Request to change it to Min. 6 digit & 8x5 mm. We will give 8 digit display & 10x5mm digit size which is better.	Accepted
3.	Clause No. 20.04 (a) Transportation test	Request to delete this as it was for electro-mechanical meters & not required for Electronic meters. Any way as per IS shock & vibration tests are done	Not accepted
4.	Clause No. 26.00 The required information such as Manufacturer's Name or Trade Name, Sr. No., ISI Certification No., etc. shall be on stickers to be affixed on outer portion of sample meters being submitted along with the offer. Such information shall not be embossed or printed on any part of the sample meter	Request to delete this requirement.	Not accepted.

5.	Clause No. 29.02. (d) Prior to final testing and calibration, all meters shall be subjected to ageing test (i.e. Meters shall be kept in ovens for 72 hours at 55 deg C temperature and atmospheric humidity under real life condition at its full load current. After 72 hours meters shall work satisfactory to eliminate infant mortality	Request you to please delete this requirement as manufacturers have changed this process over the years with experience. Manufacturers are giving 5.5 years guarantee	Not accepted
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C) Secure Meters Ltd.

Sr. No.	Particulars (Clauses of Technical Specification)	Deviation received	Remark
1.	Clause no 26.00 TENDER SAMPLE Tenderer are required to submit 15 (Fifteen) nos. of sample meters and 1 (One) no. of sample HHU of offered type / item as per technical specifications from any one of the factories on or before the time & date stipulated for submission of offer for testing the sample meters in third party NABL Lab like ERDA, CPRI, CIPET, ERTL, etc	Also as clarified by your good self we are going ahead with 5 Nos of Samples for each type. Kindly amend the qty in the GTP about sample requirement to 5 Instead of 15 nos	Tender Sample Meter quantity shall be as per mentioned in tender document. (i.e. 5 nos.)
2.	Clause No. 6.06.07 Proper size of grooves shall be provided at bottom of this terminal cover for incoming service connections.	Along with Groves, terminal cover with U cut should also be acceptable as these meters are installed in the kiosk and also same was accepted for order placed on us for similar meters last year. Tender samples will also be submitted with U cut. Request your kind consideration.	Tender samples and supplied meters can be accepted with terminal cover with U cut.
3.	Clause No. 6.20 The meter shall remain immune for the test of electromagnetic HF/RF defined under the test no. 4.0 for EMI/EMC of IS 14697:1999 amended up to date. Clause No. 6.21 For any higher signals than the present standards and MSEDCL technical specifications indicated above cl. 6.21, the energy meters shall be immune & the accuracy of energy meters shall not get affected. Clause No. Clause No. 10.01 ANTI TAMPER FEATURES. The meter shall detect and correctly register energy under following tamper conditions: (f) The meter shall remain immune for the test of electromagnetic HF/RF defined under the test no. 4.0 for EMI/EMC of IS	The meter will comply for EMI/EMC as per limit specified in IS14697. So event logging against the same is not required hence same is not provided. Also please clarify the requirement of any higher signals, so that our compliance against the same can be verified. Clause 6.21 is ambiguous as it says " any higher signals " In order to comply signal levels higher than defined in IS14697, need to have the signal strength level	Not accepted. Higher signals like confirmation for 35KV spark discharge & Jammer device is required in clause No. 6.21

	<p>14697:1999 amended up to date. For any higher signals than the present standards and MSEDCL technical specifications indicated above, the energy meters shall be immune & the accuracy of energy meter shall not get affected.</p> <p>The separate slot with 10 no. occurrences of EMI/EMC tamper along with date & time stamp shall be provided</p>		
4.	<p>Clause No. 12.03 The decimal units shall not be displayed in auto scroll mode. However it shall be displayed in push button mode or alternate mode for high resolution display for testing.</p>	<p>The resolution of energy will remain same in both Auto as well as manual mode. Moreover this will be required only during lab testing as HT meters are installed in Kiosk. In High resolution energy register 5+4 digits will be provided.</p>	Not accepted
5.	<p>Clause No. 9.00 MD RESET The meter shall have following MD resetting options. i) Communication driven reset; ii) Manual resetting arrangement with sealing facility; iii) Automatic reset at the end of certain predefined period (say, end of the month). Clause No. 12.04 The meters shall be pre-programmed for following details. c) MD resetting shall be auto as per clause no. 9.00 (iii).</p>	<p>Please clarify whether auto MD reset or auto as well as manual both MD reset is required. We will submit tender sample with auto as well as manual MD reset through the push button. Please confirm if the same is acceptable.</p>	<p>Both MD reset is required is required in tender samples. Manual MD reset through the push button can be accepted</p>
6.	<p>Clause No. 16.08 The HHU shall be type tested for (a) Tests of Mechanical requirement such as Free fall test, Shock Test, Vibration test, (b) Tests of Climatic influences such as Tests of Protection against Penetration of Dust and Water (IP 6X), Dry Heat test, Cold Test, Damp Heat Cyclic Test, (c) Tests for Electromagnetic Compatibility (EMC), (d) Test of Immunity to Electromagnetic HF Fields and (e) Radio Interference Measurement.</p> <p>Clause No. 16.09 The equipment's offered shall be fully type tested at approved laboratory by National Accreditation Board for Testing and Calibration Laboratories (NABL) as per relevant standards within last 5 years from the date of opening of tender & the type test reports shall be enclosed with the</p>	<p>Type Test report for Electromagnetic HF field is not available with CMRI manufacturer. Presently compliance to IP 54 or IP 65 is available. Compliance to IP 6X is not available with OEM. Hence the same may please be amended to IP54/65.</p>	IP 65 shall be accepted

	<p>offer. GTP serial no 118 Tests of Climatic influences such as Tests of Protection against Penetration of Dust and Water (IP 6X), Dry Heat test, Cold Test, Damp Heat Cyclic Test GTP serial no 121 Test of Immunity to Electromagnetic HF Fields</p>		
7.	<p>Clause No. 16.08 The manufacturer / supplier shall modify the compatibility of HHU with the meter and the base computer system due to any change in language or any other reasons at their own cost within guarantee period. Clause no. 24 The meter & HHU supplied shall be guaranteed for a period of 66 months from the date of supply or 60 months from the date of commissioning, whichever is earlier.</p>	<p>Requesting you to please amend the guarantee period of HHU to 12 month from date of supply as HHU is trading item & OEM offers 12 months warranty only.</p>	<p>Not accepted</p>
9.	<p>Clause No. 29.02 MANUFACTURING ACTIVITIES (d) Prior to final testing and calibration, all meters shall be subjected to ageing test (i.e. Meters shall be kept in ovens for 72 hours at 55 Degree C temperature and atmospheric humidity under real life condition at its full load current. After 72 hours meters shall work satisfactory to eliminate infant mortality.</p>	<p>As this clause is no more relevant to the present day practice of manufacturing, We request you to kindly remove this test as the same was mainly applicable for old manufacturing process.</p>	<p>Not accepted</p>
10.	<p>ANNEXURE II COMPONENT SPECIFICATION 3. Memory chips 4. Display modules 5. Communication Modules 6. Optical Port 10. Battery 11. RTC & Microcontroller</p>	<p>We wish to use some of the below makes & Request you to consider below makes as per the Annexure II Under the heading of "Equivalent reputed makes": 3. Memory Chips – Micron 4. Display Module - Truly semiconductor 5. Communication Modules Make- Everlight 6. Optical Port Make- Everlight 10. Battery – EVE, Xeno energy 11. RTC & Microcontroller- Make- RTC is inbuilt into controller of make free scale.</p>	<p>Your mentioned makes can be accepted under the heading of "Equivalent reputed makes"</p>
11.	<p>Clause No. 10.01 ANTI TAMPER FEATURES The meter shall remain immune for the test of electromagnetic HF/RF defined under the test no. 4.0 for EMI/EMC of IS 14697:1999 amended up to date. For any higher signals than the present standards and MSEDCL technical specifications</p>	<p>The meter will comply for EMI/EMC as per limit specified in is14697. So event logging against the same is not required hence same is not provided. Also please clarify & specify the requirement/limit of any higher signals so that our compliance against</p>	<p>This is nowhere mentioned in updated technical specifications.</p>

	<p>indicated above, if the accuracy of meter gets affected, it shall record energy considering meters maximum current(I_{max}), reference voltage & U.P.F. during such tampering events for defined period of 7 days. The same shall log the event with date and time stamping. The same shall be displayed in the scrolling mode. After that meter should record normal energy consumption. The separate slot with 10 no. occurrences of EMI/EMC tamper along with date & time stamp shall be provided.</p>	<p>the same can be verified.</p> <p>The highlighted portion has already been deleted in 1 Phase Tender.</p> <p>Request you to review and confirm whether same is required in HT Meters.</p>	
12	<p>Clause 24:- Guarantee</p>	<p>In its constant endeavor to improve its product quality & Services, Secure Meters Limited has enhanced its design, product and manufacturing capabilities.</p> <p>Secure meters will stand for life time warranty towards design, materials, workmanship & quality of process/ manufacturing of Energy meters under this contract for due and intended performance of the same, as delivered under this contract. In the event any defect is found by MSEDCL up to a period of 120 months from the date of supplies made under the contract, we will be liable to undertake to replace/rectify such defects at our own costs, within 60 days from the date of intimation or mutually agreed time frame. However, Security cum Performance Deposit will valid for 60 months from the date of supply plus one month claim period.</p> <p>We will further be responsible for providing free repair/replacement at designated stores against the defective materials. In case of replacement, replaced meter sr. no. will have new sr. no. different from defective meter. The warranty for such repaired/replaced material will be valid till the end of original warrantee period applicable for the remaining period from the date of original supply.</p> <p>In case the product got obsolete during warranty period, defective meter will be replaced with the equivalent product.</p> <p>Removal of defective product from site and re-installation of replaced product will not be in our scope</p>	Not accepted

		<p>including any incidental or consequential loss or damages.</p> <p>Exclusions: Lifetime warranty (120 months from the date of supply) will not be applicable in below cases:</p> <ul style="list-style-type: none"> • Defect in RTC/battery if meter not powered up or put in use within two years of Supply. • Reduced contrast of LCD displays with ageing of the Goods. • Mass failure arising from accident, abuse, misuse, problems with electrical power, negligence, abnormal working conditions or vandalism. • Mass failure due to modification, adjustment or attempt to repair/service products without Secure's approval, usage or storage or installation not in accordance with product instructions. • Any defects arising due to "Force Majeure" condition including fire, flood, war, earth quake, act of violence or any similar occurrence. <p>The above revised warranty terms may be treated as an integral part of our submitted offer against the above tender. We are sure that in this way we will enhance customer experience & TPDDL will benefit from our reliable and best in class quality products.</p>	
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D) Genus Power Infrastructure Ltd.

Sr. No.	Particulars (Clauses of Technical Specification)	Deviation received	Remark
1.	Clause No. 20.04 (a) Transportation test	We request your good self to remove this test.	Not accepted
2.	Clause No. 6.04.03 The Poly-carbonate opaque base and transparent top cover of meter shall be ultra-sonically welded (continuous welding) so that once the meter is manufactured and tested at factory; it shall not be possible to open the cover at site.	We request to amend this clause as "The Poly- carbonate opaque base and transparent top cover of meter shall be ultra-sonically welded (continuous welding) or Continuous Chemical Welding(break to open)" so that once the meter is manufactured and tested at factory; it shall not be possible to open the cover at site.	Not accepted

ANNEXURE – C (IT Related)

A) HPL Electric & Power Ltd.

Sr. No	Queries from bidders	Clarification
1.	<p>Point No. (A) 4 Please refer Clause No. 10.00 (10.02.06) 'TAMPER EVENTS' of TECHNICAL SPECIFICATION OF 0.5S CLASS METER (Page No. 73 of 201) vide which it is mentioned that: Minimum 200 numbers of events (occurrences & restoration with date & time) shall be available in the meter memory. The recording of abnormal events shall be on FIFO basis as per IS15959. The unrestored events shall be recorded separately and shall not be deleted till they get recovered (permissible up to 3 months).</p> <p>Our submission: Sir, the unrestored Event's separate report shall be available with Manufacturer specific OBIS Code. So, you are requested to kindly accept the same.</p>	<p>No modifications required.</p> <p>Clarification: All events (restored/unrestored) should be downloaded using event related OBIS codes given in IS15959. Manufacturer specific OBIS codes will not be accepted.</p>
2.	<p>Point No. (B) 4 Please refer Clause No. 10.00 (10.02.06) 'TAMPER EVENTS' of TECHNICAL SPECIFICATION OF 0.5S CLASS METER (Page No. 73 of 201) vide which it is mentioned that: Minimum 200 numbers of events (occurrences & restoration with date & time) shall be available in the meter memory. The recording of abnormal events shall be on FIFO basis as per IS15959. The unrestored events shall be recorded separately and shall not be deleted till they get recovered (permissible up to 3 months).</p> <p>Our submission: Sir, the unrestored Event's separate report shall be available with Manufacturer specific OBIS Code. So, you are requested to kindly accept the same.</p>	<p>No modifications required.</p> <p>Clarification: All events (restored/unrestored) should be downloaded using event related OBIS codes given in IS15959. Manufacturer specific OBIS codes will not be accepted.</p>

B) Secure Meters Ltd.

1.	<p>Point No.5 Clause No. 6.27 : COMMUNICATION CAPABILITY The meter shall be provided with two ports for communication of the measured / collected data as per IS: 15959 / 2011, i.e. a hardware port compatible with RS-232 specifications (RJ - 11 / RJ - 45 type is also acceptable) which shall be used for remote access through suitable pluggable Modem (4G/2G/2G/NB-IoT/PLCC/LPRF)</p> <p>The Meter will be suitable for remote data transfer through suitable NBIOT/GSM/GPRS Modem only. Request you to delete PLCC/LPRF</p>	<p>No modifications required.</p> <p>Clarification: Modem may use 4G/2G/2G/NB-IoT/PLCC/LPRF technologies for remote data transfer.</p>
3.	<p>Point No. 10 Clause No. 17.05 COMPUTER SOFTWARE : Downloading time of only Billing data shall be less than or equal to 20 secs</p> <p>Please mention the details of Billing data as the clause 13.000 page 70/201 has 32 parameters mentioned as billing data</p>	<p>No modifications required.</p> <p>Clarification : Please refer clause No. 13.01 Billing data of technical specifications.</p>
4.	Point No. 11	

<p>Clause No. 17.11 COMPUTER SOFTWARE : As and when the meter manufacturer releases new or latest or advanced versions of meter hardware / firmware / software, the same shall be made available to purchaser immediately on the release date free of cost. The latest version shall support all existing hardware / meters in the field.</p> <p>Only latest version of reading software will be provided. However. As your good self is aware that it is not possible to change H/W & Firmware in field w.r.t. new release, the subject clause may please be deleted.</p>	<p>No modifications required.</p> <p>Clarification: Latest versions of reading software should be made available to purchaser immediately after release. Such version should support all meter firmware in the field.</p>
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C) Schneider Electric India Private Limited

<p>Point No. 3 Clause No. 6.27 RS 232 should be RJ 11 with 4 pin with following termination: Pin 1- RTS Pin 2- Ground (GND) Pin 3- Tx Pin 4- Rx</p> <p>Request to accept 6 pin with manufacturer termination as last order. Change will create confusion & 2 sets of cables for two types of ports.</p>	<p>No modifications required.</p>
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