

TPCODL

TP Central Odisha Distribution Limited

TPNODL

TP Northern Odisha Distribution Limited

TPSODL

TP Southern Odisha Distribution Limited

TPWODL

TP Western Odisha Distribution Limited

CENTRALIZED CONTRACTS GROUP**NIT No.: TPCODL/CCG/24-25/1000000644 Dated. 29.04.2024****Corrigendum- I****NIT No. : TPCODL / CCG / 24-25 / 1000000644 Dated. 29.04.2024****Rate Contract - Supply of Three Phase Whole Current Smart Energy Meters for
Tata Power Odisha Discoms****Dated 20th May 2024****Following changes in Calendar of Events in page no 6 of tender document is made;****1.3 Revised Calendar of Events:**

(b)	Date by which Interested and Eligible Bidder to pay Tender Fee and confirm participation as mentioned in "Procedure to Participate in Tender"	21.05.2024 [15:00 hrs]
(e)	Due date and time of receipt of Bids	28.05.2024 [15:00 hrs]
(f)	Date & Time of opening technical bids	28.05.2024 [15:30 hrs]

All other terms and conditions of the above tender shall remain unaltered.

Yours faithfully,**-sd-****Head-Contracts
CCG, Bhubaneswar**

Format for Pre-Bid Queries

Tender No: TPCODL / CCG / 23-24 / 100000644

Tender Description: Rate Contract - Supply of Three Phase WC Smart Energy Meter for Tata Power Odisha Discoms

Bidder :

Sr. No.	Detailed Reference to NIT. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	Tata Power Response
1	2	3	4	5
1	Clause No. 1.0	Reference Conditions for testing the performance of the meter : Vref = 230 V	Meter may kindly be accepted with reference voltage of 240V however shall be suitable for 230V.	reference voltage -3 x 240V(complying to 230V)
2	Cl 4.23 Self Diagonos	The meter shall have indications on meter display, for anomaly/ unsatisfactory / non-functioning of (i) Real Time Clock (ii) RTC battery (iv) NIC card status	The meter will have indications on meter display, for anomaly/ unsatisfactory / non-functioning of (i) Real Time Clock (ii) RTC battery.... single status of RTC OK/fail for Real time clock & RTC battery (iii) Memory status (iv) Battery status	The meter will have indications on meter display & dump, for anomaly/ unsatisfactory / non-functioning of (i) Real Time Clock (ii) RTC battery.... single status of RTC OK/fail for Real time clock & RTC battery (iii) Memory status (iv) Battery status (v) NIC card status
3	Cl 4.25 Alternate mode of supply to the meters	In case of meter power failure, the reading/data should be retrieved with the help of battery or other power source	In case of Power failure, the meter data will be retrieved on battery by downloading through optical port only.	Noted
4	Cl 4.27 Minimum Internal diameter of the terminal holes & minimum Depth of the terminal holes	9.5mm(minimum) 20mm (minimum)	Minimum Internal diameter of the terminal holes : 9.5mm Minimum Depth of the terminal holes : 16 mm	Noted
5	4.36 Harmonics record	The meter should record the current and voltage THD. The meter should record harmonics up to 20th harmonic Average THD of all phase for voltage THD and current THD. THD values shall have 30 minutes integration period in load survey. Accuracy of harmonics recording shall be as per meter accuracy class. The meter shall generate a flag whenever the threshold (user configurable) of the 5% THD of the load current and voltage is breached.	Kindly accept The meter should record the current and voltage THD. The meter should record harmonics up to 11th harmonic Average THD of all phase for voltage THD and current THD.	specification to be complied
6	4.2 NIC MODULE DETAILS & INTEGRATION	a) The Network Interface Card for 4G shall be modular and pluggable. The NIC shall be interoperable for service provider	The communication module can not be interchanged with any other interface card.	specification to be complied
7	Cl 4.38 Ultrasonic welding / Chemical Bonding	Meter cover and body should be continuous & seamless ultrasonically welded only or should be chemically bonded.	You are requested to kindly accept chemically welded meters.	specification to be complied
8	Cl 4.1 DISCONNECT	The cumulative number of ON/OFF operations shall also be made available.	Each operation of the switches will be logged by the meter as an event with date, time stamp and snapshot parameters as per IS 16444. Cumulative number of operations will not be available	specification to be complied
9	Cl 4.1 DISCONNECT	The make of the load switch should be of reputed make like Grooner (German) or equivalent	CT+Relay-KG Tech,WANJIA, RAMWA	specification to be complied

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10	Cl 4.2 NIC MODULE DETAILS & INTEGRATION	TPNODL intends to leverage 4G as the primary communication technology with hot swappable 2G Interface Card as a fall back for meter data acquisition.	Meter communication module will be 4G network. The communication module can not be interchanged with any other interface card.	specification to be complied
11	Cl 4.3 Communication capabilities and software feasibilities	4.3.3 It shall be possible to reconfigure the meters for RTC,TOD slots reprogramming, DIP (Demand Integration period), billing date ,display parameters etc. through proper authentication process locally through MRI and remotely over the air (OTA). Meter data should remain intact with timings. And billing should be done whenever any above mentioned attribute is changed. The change should be recorded as upgrade event.	Billing will be done in case of TOD slots reprogramming only as the other parameters will not effect the calculation of the meter	specification to be complied
12	Cl 4.3 Communication capabilities and software feasibilities	4.3.5 Optical Communication port shall be available for communication. Communication ports shall not be affected by any type of injection /unauthenticated signals and having proper sealing arrangement. The complete data shall be downloaded within 5 minutes OTA.	The timing of Data download over the air depends on the network capability	specification to be complied
13	Cl 4.3 Communication capabilities and software feasibilities	4.3.18 Communication NIC/ network should be immune with any external Magnetic field/ESD/ Jammer/ HV voltage influence such that it shall not affect the normal overall functionality.	Meter immunity will be as per CBIP325	As per CBIP 325
14	Cl 4.3 Communication capabilities and software feasibilities	4.3.21 Meter display should have provision for showing if NIC card if: 1. Installed, 2. Getting Network, 3. Latched with HES, 4. Communicating with HES.	Signal Strength on display and LED's on module will be provided for the communication status	NIC error codes -12nos. To be provided. Signal strength (numerical value should be available in display & profile data
15	Cl 4.4 IMMUNITY AGAINST EXTERNAL INFLUENCING SIGNALS	4.4.1 Abnormal Magnetic field is defined as below; a) Continuous DC magnetic induction: >0.20 Tesla \pm 5% (Value of the magnetic motive force to be applied shall be generally >10000 AT. b) AC magnetic induction: >10 milli Tesla (if produced with circular metal core with square cross section as specified in CBIP latest report with 2800 AT) c) Permanent Magnet: Immune up to 0.5T and Event logging >0.5T.	Meter will comply the magnet clause as per CBIP325	As per CBIP 325

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16	Cl 4.4 IMMUNITY AGAINST EXTERNAL INFLUENCING SIGNALS	<p>4.4.2. Electrostatic Discharge (ESD) :Meter shall be immune up to 50 kV and shall record accurate energy as per IS- 13779:1999/CBIP-325. Meter shall log the event into memory as 'ESD' with date & time stamp for any ESD greater than 50 kVwith snap shot the event logging threshold values as per table no. 1 in 4.6</p> <p>4.4.4 Meter should be immune to high/low frequency jammer devices. Meter shall log the event in its memory as 'JAMMER' with date and time stamp, the threshold values as per table no. 1 in 4.6</p> <p>4.4.5 The meter should be immune or log the tamper on application of any other higher magnetic field of any frequency waves, micro waves like magnetron etc. the threshold values as per table no. 1 in 4.6.</p>	<p>Meter will be immune as per CBIP-325</p> <p>Meter will be immune as per CBIP-325</p> <p>Micro waves are not applicable on smart meters</p>	As per CBIP 325
17	Cl 4.5 Neutral Disturbance & other tampers	4.5.1 The meter shall not saturate on passage of direct current, which can cause the meter either to stop recording/ record inaccurately. DC injection shall be tested both in phase and neutral. Measurement by meter shall not get influenced by injection of Chopped signal/ DC signal/ DC pulse upto 330V and for any value beyond this. Meter shall log the event into memory as 'Neutral Disturbance' with date & time stamp the thresholds are as per table no. 1 in 4.6	Pls provide the testing circuit diagram for chopping	This shall be shared during detailed engineering
18	Cl 4.6 ABNORMAL TAMPER CONDITIONS	<p>4.6.3 During abnormal & tamper conditions, the current shall be recorded as active current and line current.</p> <p>4.6.6 All tamper/event logging thresholds values shall be configurable from remotes.</p>	<p>During abnormal & tamper conditions, the current will be recorded as IS15959 Part-2</p> <p>Tamper threshold will be factory configurable</p>	specification to be complied
19	Table No.1 Tamper ta	ESD/JAMMER	Meter immune as Per CBIP 325 , No tamper logging in this condition	No tamper logging if immune to ESD Jammer
20	Table No.1 Tamper ta	Microwave immediate	Not applicable as per IS 15959 Part-2	This clause is deleted
21	Table No.1 Tamper ta	Meter shall be provided with feature for terminal cover opening with time stamping.	Terminal cover Open tamper not applicable as per IS15959 Part2	Noted
22	Table No.1 Tamper ta	No Display	Not applicable as per IS 15959 Part-2	Noted
23	Table No.1 Tamper ta	Tampers Compartment Size	Tamper Compartment size will be provide as per running supply GTPW011.	This shall be discussed during detailed engineering.
24	Cl 4.6 ABNORMAL TAMPER CONDITIONS	4.6.10 The meter shall record in export registers in case of reversal of all CT terminals.The meters are to be used for registration of energy consumed by the consumer, as such the meters shall be programmed for import mode and in case of reversal of energy direction (reversal of all CT terminals) meter shall register energy separately in export mode i.e. in case of CT reversal, meter shall record scalar (not vector sum) sum of energy.	<p>The meter will register the energies in export register if the meter is in Net metering mode.</p> <p>The meter will register the energy in the forward register in CT reversal condition if the meter is in Forward mode</p>	<p>The meter will register the energies in export register if the meter is in Net metering mode.</p> <p>The meter will register the energy in the forward register in CT reversal condition if the meter is in Forward mode.However the reversal energy shall be retrievd from the dump data.</p>
25	Cl 4.7 EVENT COMP	Transaction events compartment size shall be minimum 100 events	Transaction events compartment size shall be provide previous supply GTPW011.	There are different HES at Odisha Discoms. The bidder has to integrate with the HES & ensure the data model /profiles according to the requirement shared during detailed engineering.
26	Cl 5 General Construc	Components make list	Component make list will be as per the the attcahed sheet in the mail.	specification to be complied

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27	Cl 5.1 METER BODY	5.1.9 The Meter body shall be such that the liquid or chemical shall not reach the electronic parts if liquid is injected from meter body such as meter terminals, push button, display, NIC card casing etc. Necessary protection and water tight sealing to be provided at terminals and Push buttons etc.	Pls mention the testing procedure.	specification to be complied
28	Cl 5.2 TERMINALS, TERMINAL BLOCK	5.2.1 Terminal block should be in single mould with meter body base. (Not separate)	Both Terminal block & meter body base are separate	specification to be complied
29	Cl 5.2 TERMINALS, TERMINAL BLOCK	5.2.6 To get the desired temp rise & avoid hot spots the design of the each terminal screw, terminal screw shall be an Allen screw head & shall be operated with allen key only. Size of the allen screw is 8mm dia. (OEM should supply one Allen Key for every 1000 meters supplies.	Terminal screws heads will be flat headed with minus shape	This shall be discussed during detailed engineering. MS screw is not acceptable
30	Cl 5.2 TERMINALS, TERMINAL BLOCK	5.2.10 Internal diameter of the terminal holes shall be minimum 9.5 mm; minimum clearance between adjacent terminals shall be 10 mm. Minimum Depth of the terminal holes shall be of 20 mm.	5.2.10 Internal diameter of the terminal holes shall be minimum 9.5 mm; minimum clearance between adjacent terminals shall be 10 mm. Minimum Depth of the terminal holes shall be of 16mm.	Noted
31	Cl 5.6 MD Integration	The MD integration period shall be 15 minutes (integration period programmable by MRI at site and also thru AMR with adequate security level). The MD resetting shall be automatic at the 1st of the month i.e. 0000 hours of 1st day of the month. Manual MD reset button shall not be available. Last six MD values shall be stored in the memory and one to be displayed in the Auto scroll mode. MD shall be recorded and displayed with minimum three digits before decimal and minimum two digits after decimal points. MD integration shall be of sliding Type at an interval of 10 min.	Sliding interval should be 5 minutes for 15 minutes MD IP and if sliding interval of 10 minute is required then the MD IP should be 30 minutes	MD Integration period 15mins/30mins programmable. In case of sliding interval is 5 minutes for 15 minutes MD IP and sliding interval of 10 minute for MD IP 30 minutes
32	Cl 5.7 Parameters in B	Fail to be log in memory in the following conditions only in BCS not in display a) RTC fail b) NVM memory fail c) Battery fail d) NIC card fail	Fail to be log in memory in the following conditions only in BCS not in display a) RTC fail b) NVM memory fail c) Battery fail	The meter will have indications on meter display & dump, for anomaly/ unsatisfactory / non-functioning of (i) Real Time Clock (ii) RTC battery.... single status of RTC OK/fail for Real time clock & RTC battery (iii) Memory status (iv) Battery status (v) NIC card status
33	Cl 5.7.1 Load Survey	Load Survey parameters for prepaid & postpaid mode	Parameters will be as per IS15959 Part-2 and last supply GTPW011.	There are different HES at Odisha Discoms. The bidder has to integrate with the HES & ensure the data model /profiles according to the requirement shared during detailed engineering.
34	Cl 5.7.2 INSTANTAN	INSTANTANEOUS PARAMETERS	The Instantaneous profile parameters will be previous supply GTPW011.	There are different HES at Odisha Discoms. The bidder has to integrate with the HES & ensure the data model /profiles according to the requirement shared during detailed engineering.

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35	Cl 5.8.1, 5.8.2 AUTO SCROLL/PUSH BUTTON MODE DISPLAY WITH POST-PAID PAYMENT MODE	Display for ESD Tamper Count Latest ESD tamper occurrence date Latest ESD tamper occurrence time	We will not provide Logging for ESD tamper; therefore the display will not be applicable	In case of immune logging of the event is not required
36	Please refer, Clause no. 5.1.3, "Meter Body"	Meter base shall be opaque with polycarbonate LEXAN 500R or equivalent on prior approval from the TPWODL. (If different material offered the bidders should submit material data sheet in technical bid)	Comment: - Please also accept equivalent material like, LEXAN 143/143R or Makrolon for Meter base, as the same material grade is also accepted for Meter Cover. Request you to please also consider the same.	specification to be complied
37	Please refer, "GENERAL TECHNICAL REQUIREMENTS" Sr. No. 4.27	Clearance between adjacent terminals 10 mm (minimum)	Comment:- We request you to kindly also accept clearance and Creepage distance between adjacent terminals as per clause no. 6.60 IS 13779 /CBIP 325. Please confirm the acceptability of the same.	As per IS
38	Please refer, "Terminals, Terminal Block" Sr. No. 5.2.1	Terminal block should be in single mould with meter body base. (Not separate)	Comment:- Kindly note that terminal block shall have top sliding arrangement with proper grooves and after fixing the meter cover it becomes integral part of the meter. We request you to kindly accept the same.	specification to be complied
39	Please refer, "Terminals, Terminal Block" Sr. No. 5.2.3	The material of which the terminal block is made shall be capable of passing the Heat Deflection temperature test given in ISO 75 for temperature of 180°C and pressure of 1.8 M Pa. Tested as per ISO 75-2/A or ASTM D648.	Comment: We request you please accept the properties with its typical values for Meter of polycarbonate material - Heat Deflection Temp. -135° C As per material manufacturers of transparent polycarbonate the HDT value of polycarbonate varies from 135° C as per IS 13779. We request you to kindly confirm the same.	specification to be complied
40	(TPCODL/CCG/24-25/100000644) / Cl. No. 4(4.03) / Pg no. 29 of 308	General Technical requirements: Basic Current (Ib) & rated Maximum current (Imax): Ib= 20A; Imax= 100 Amps (Meter shall be able to continuously carry 120% of Imax Meeting the accuracy requirements)	Kindly accept the meter rating with Ib = 10 Amps and Imax = 100 Amps which serves the utility purpose	Meter rating 10A-100A is acceptable meeting the requirements as per specification
41	(TPCODL/CCG/24-25/100000644) / Cl. No. 4(4.36) & 5.7.1 / Pg no. 32 of 308 & 48 of 308	General Technical requirements: Harmonics recording: The meter should record the current and voltage THD. The meter should record harmonics up to 20th harmonic Average THD of all phase for voltage THD and current THD. THD values shall have 30 minutes integration period in load survey . Accuracy of harmonics recording shall be as per meter accuracy class. Load survey (for pre-paid & postpaid meter mode): The meter shall be capable of recording 15 minutes average of the following parameters for at least last 45 power ON days	As per clause 4(4.36) Load Survey data required with 30 minutes interval, but in clause 5.7.1 it is mentioned as 15 minutes. Both the requirements are conflicting and you are requested to clarify which value is to be considered for Load Survey interval.	Load survey Integration period is 30mins/15mins programmable.

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42	(TPCODL/CCG/24-25/100000644) / Cl. No. 4.1 / Pg no. 33 of 308	<p>Disconnecter: 1. Operating voltage: 130V to 470V 6. Utilization category: UC2 or better</p>	Kindly note that the operating volage limit will be maximum 253V	specification to be complied
43	(TPCODL/CCG/24-25/100000644) / Cl. No. 4.2 / Pg no. 34 of 308	<p><u>NIC module details & integration:</u> m) Attributes such as Firmware version, Hardware version, Signal strength values, packet error rate, should be pushed periodically to HES for effective communication management. n) Data must be encrypted with AES-256 bit. o) LED indication for System, Power ON indicator. p) Colour coded LED (a) For latching on to the network (b) For latched on to the network (c) For data flow indication.</p>	<p>m) Kindly provide the detailed Data Model for implementation of specification requirements n) Data encryption shall be provided with AES-CGM-128. Kindly accept. o) LCD backlit Green color shall work as System, Power on indicator. Kindly accept p) NIC module will have Network LED, Data flow Tx & Rx LEDs. Kindly accept.</p>	There are different HES at Odisha Discoms. The bidder has to integrate with the HES & ensure the data model /profiles according to the requirement shared during detailed engineering. RELAY STATUS : - LED Indication & icon on LCD (switch symbol)
44	(TPCODL/CCG/24-25/100000644) / Cl. No. 4.3.10, 4.3.14, 4.3.19 / Pg no. 35, 36 of 308	<p><u>Communication capabilities and software feasibility:</u> 4.3.10: Power Restoration (First Breath) as event. Additional exceptional events should also be communicated to HES by meter immediately after the occurrence through RF / RF Mesh. 4.3.14: Also, the Bidder must ensure that, the mode of communication used for RF shall be consistent with the Government of India stipulations 4.3.19: Meter once powered up with NIC card should be self-detected by RF network and its basic name plate details & current readings are transferred to HES</p>	We understood that communication requirement is 4G fall back 2G only. Kindly confirm.	4G fall back to 2G.
45	(TPCODL/CCG/24-25/100000644) / Cl. No. 4.4.1 / Pg no. 37 of 308	<p><u>Immunity against external influencing signals:</u> Magnetic field: a) Continuous DC magnetic induction: >0.20 Tesla ± 5% (Value of the magneto motive force to be applied shall be generally >10000 AT. b) AC magnetic induction: >10 milli Tesla (if produced with circular metal core with square cross section as specified in CBIP latest report with 2800 AT) c) Permanent Magnet: Immune up to 0.5T and Event logging >0.5T</p>	Kindly accept the magnetic influence requirement as per the CBIP - 325	As per CBIP 325
46	(TPCODL/CCG/24-25/100000644) / Cl. No. 4.4.2 / Pg no. 37 of 308	<p><u>Electrostatic Discharge (ESD):</u> Meter, inside meter box, shall be immune up to 50 kV and shall record accurate energy as per IS 13779:1999 / CBIP-325. Meter shall log the event into memory as 'ESD' with date & time stamp for any ESD greater than 50 kV with snap shot the event logging threshold values as per table no. 1 in 4.6.</p>	Kindly note that meter shall be immune with application of ESD up to 35kV in line with CBIP-325. Kindly accept.	As per CBIP 325
47	(TPCODL/CCG/24-25/100000644) / Cl. No. 4.4.4 / Pg no. 37 of 308	<p>Meter inside meter box should be immune to high / low frequency Jammer devices. Meter shall log the event in its memory as 'JAMMER' with date and time stamp, the threshold values as per table no. 1 in 4.6.</p>	Kindly note that meter shall be immune to Jammer device, hence event logging is not required. Kindly accept.	Noted. In case of immine logging of the event is not required

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48	(TPCODL/CCG/24-25/100000644) / Cl. No. 4.6.8 Table no. 1 / Pg no. 39 of 308	Low Power Factor = 0 Hr 30 Min 0 sec (LPF) Threshold Value for Restoration of Events: I > 1% of Ib and Power Factor 0.7 in respective phase	We understood that power factor logic for 'Low Power factor' event restoration is 'Power Factor ≥ 0.7'. Kindly confirm.	This shall be discussed during detailed engineering.
49	(TPCODL/CCG/24-25/100000644) / Cl. No. 4.4.5 / Pg no. 37 of 308 (TPCODL/CCG/24-25/100000644) / Cl. No. 4.6.8 Table no. 1 / Pg no. 40 of 308	The meter inside meter box should be immune or log the tamper on application of any other higher magnetic field of any frequency waves, micro waves like magnetron etc. the threshold values as per table no. 1 in 4.6. Abnormal and Tamper conditions: Microwave tamper : immediate (record only 1 event on first application & only one event for next 1min)	Kindly note that magnetron is a non-standard device and behavior of meter with application of magnetron cannot be guaranteed. Also it may be hazardous to the person who perform the testing. Kindly accept the same.	This clause is deleted
50	(TPCODL/CCG/24-25/100000644) / Cl. No. 4.6.8 Table no. 1 / Pg no. 40 of 308	Abnormal and Tamper conditions: No display	Kindly note that this requirement of logging event for non-functional display is not clear. Kindly elaborate the same.	No display event not required
51	(TPCODL/CCG/24-25/100000644) / Cl. No. 4.6.3 / Pg no. 37 of 308	Abnormal and Tamper conditions: During abnormal & tamper conditions, the current shall be recorded as active current and line current.	Kindly accept currents in snapshot parameters as per the captured parameter list given in IS 15959 Part-2.	specification to be complied
52	(TPCODL/CCG/24-25/100000644) / Cl. No. 4.6.16 / Pg no. 41 of 308	The Cover Open tamper detection should be through heavy duty, sturdy two number micro switches with OR gate logic such that it should not log false event on vibration or impact during handling or testing	Kindly accept the push button switch alternatively which is heavy duty, sturdy, withstands vibration and serves the purpose of utility.	specification to be complied
53	(TPCODL/CCG/24-25/100000644) / Cl. No. 5 / Pg no. 42, 43 & 44 of 308	General construction: 1. Measurement / computing chip: USA: Analog Devices, Cyrus Logic, Atmel, Phillips, Freescale semiconductor South Africa: SAMES Japan: NEC 3. Display modules makes: Taiwan: Holtek Singapore: Bonafied Technologies Korea: Advantek China: Xiamen, Trullysemiconductor 7. Battery: Varta / Tedirun/Vitrocell / Sanyo or equivalent 8. Micro controller and RTC having separate battery: USA: Philips , Dallas, Atmel, Motorola Japan: NEC or Oki 9. Temperature sensor: SA: Philips , Dallas, Atmel, Motorola Japan: NEC or Oki	Kindly include the below mentioned reputed equivalent components 1. Renesas, Texas instruments 3. Holitek, Pixel 7. EVE, Panasonic, Mitsubishi 8. Renesas, Texas instruments 9. The temperature sensor is in-built Micro controller.	Noted

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54	(TPCODL/CCG/24-25/100000644) / Cl. No. 5.2.6, 5.2.9 / Pg no. 45 of 308	<p>Terminals, Terminal block: To get the desired temp rise & avoid hot spots the design of the each terminal screw, terminal screw shall be an Allen screw head & shall be operated with allen key only. Size of the allen screw is 8mm dia. (OEM should supply one Allen Key for every 1000 meters supplies)</p> <p>Terminals shall be preferably with Allen screw with at least 8 mm dia for better contact area.</p>	Request to kindly consider the Star slotted grub screws alternatively which serves the purpose of utility.	This shall be discussed during detailed engineering.
55	(TPCODL/CCG/24-25/100000644) / Cl. No. 5.2.8 / Pg no. 45 of 308	Temperature sensor to be provided from inside near the terminal block of the energy meter for sensing the temperature and meter should be programmed in such way that on reaching the threshold value set (as per tamper table no. 1) the event/alert should go to the HES/MDMS.	Temperature sensor is in-built Microcontroller. Kindly accept.	Noted
56	(TPCODL/CCG/24-25/100000644) / Cl. No. 5.9 / Pg no. 55 of 308	<p>Output device: 1. Pulse rate: The test output device shall have constant pulse rate of (preferred value- 400) pulse / kWh & pulse/kVArh. Meter constant shall be indelibly printed on the name plate as imp / kWh & imp/kVArh.</p>	1. Kindly note that pulse rate shall be manufacturer specific. Kindly accept the same.	Noted
57	(TPCODL/CCG/24-25/100000644) / Cl. No. 6.0 / Pg no. 55 of 308	<p>Name plate and Marking: The name plate data shall be laser printed iv. Serial number (Meter serial number shall be laser printed on name plate instead of sticker). However the following shall be printed in bar code on the meter nameplate (shall be laser printed on name plate instead of sticker) All data shall be laser printed on meter along with Sr. NO and date of manufacturing. No sticker to be used to avoid loss of data in event of fire.</p>	Kindly accept Name plate details with indelible pad printing alternatively which serves the purpose of utility	specification to be complied
58	(TPCODL/CCG/24-25/100000644) / Cl. No. 6.0 / Pg no. 55, 56 of 308	Bidder should ensure that each NIC provided in meter is having laser printed Sr. No., MFG date, 'Property of TPWODL' marking, PO / RO no. & date (same as that of meter PO)	Kindly accept details on NIC with Sticker / indelible pad printing alternatively which serves the purpose of utility	specification to be complied
59	(TPCODL/CCG/24-25/100000644) / Cl. No. 7.3 / Pg no. 56 of 308	<p>Acceptance Test: 12. Error measurements with all abnormal condition along with magnet, ESD</p>	Kindly accept the error measurement with all abnormal conditions without magnet, ESD.	specification to be complied
60		Address for Sample submission		Please submit the samples at below address; MRT Division, TP Central Odisha Distribution Limited Power House Colony, Unit-8, Bhubaneswar, Pin-751012, Odisha