

## पावरग्रिड एनर्जी सर्विसेज लिमिटेड

(पावर ग्रिंड कार्पोरेशन ऑफ इंडिया लिमिटेड की पूर्ण स्वामित्व वाली सहायक कंपनी) (भारत सरकार का उद्यम)

## POWERGRID Energy Services Limited

(A Wholly Owned Subsidiary of Power Grid Corporation of India Limited)

(A Government of India Enterprise)

Ref. No.: CC/NT/W-MISC/DOM/T00/25/07704/ Amend2 Clari 2

Date 09/07/2025

## << TO ALL THE BIDDERS THROUGH PORTAL>>

Sub.: **Amendment No-02 and Clarification No-02 to** Bidding Documents for "APPOINTMENT OF ADVANCED METERING INFRASTRUCTURE (AMI) SERVICE PROVIDER FOR SMART PREPAID METERING IN ELECTRICITY DEPARTMENT OF ANDAMAN & NICOBAR ISLANDS ADMINISTRATION (EDANA) ON DBFOOT BASIS."

Spec. No. CC/NT/W-MISC/DOM/T00/25/07704 (Rfx No 5002004541).

## Dear Sir,

- 1.0 This has reference to the bidding documents for the subject Packages uploaded in the portal <a href="https://etender.powergrid.in">https://etender.powergrid.in</a> for the subject packages.
- 2.0 Please find enclosed herewith **Amendment No-02 and Clarification No-02 dated** 09/07/2025 to the aforesaid Bidding Documents, which shall form an integral part of the Bidding Documents.
- 3.0 Save and except the above, all other terms and conditions of the Bidding Documents remain unchanged.

Thanking you,

Yours faithfully,

(Shivendra Sharma) DGM(CS)

S.	Clause Ref.	Existing Provision	Amended Provision
No.			
1	Section-6, Project Requirements, clause 1.4, A (iv) & (v)	1.4 Brief Scope of Work iv. Additional Service Cable if required shall be provided by AMISP on reimbursement basis v. CTPT units as required for HTCT Meters of Feeders/DTs shall be in scope of AMISP for which payment to be made separately from AMISP Service Charges	1.4 Brief Scope of Work iv. [DELETED] v. [DELETED]
2	Section 6- Project Requirements, Annexure-P, Specifications of LTCT Meter Box	Material of Meter Box:Material of meter box should not get soften on heating. (Heat distortion temperature should be above 1702 C.)	Material of Meter Box:Material of meter box should not soften on heating. (Heat distortion temperature should be above 170 degree Celsius.)

S.N.	Clause Ref.	<b>Provisions of Bidding Documents</b>	Bidder's Query	Clarification/Reply
1	Section 6 Project Requirements Single Phase 5-30A/10- 60A meter: Page 147 of 442 /Sr.No.38, Page 296 of 442/Annexure-A 3 Phase 10-60A/20-100A meter: Page 151 of 442 /Sr.No.38, Page 309 of 442/Annexure-B	The Smart Meters shall be have a dedicated sealable slot for accommodating plug-in type bi - directional communication module which shall integrate the respective communication technology (RF / Cellular) with the Smart Meters, leading to easy adaptability for network interfaces (WAN/NAN).	Adaptability between NAN and WAN communication is possible through firmware upgradation. We request you to kindly accept the same.	If communication module provided by OEM is capable of adaptability between NAN and WAN through firmware same may be accepted during Engineering. However, Common Pluggable Module specifications as mentioned in Annexure F has to be adhered to in this regard as per the applicability &timeline mentioned in the bidding documents
2	Section 6: Project Requirements Single Phase 5-30A/10- 60A meter: Page 147 of 442 /Sr.No.38, Page 296 of 442/Annexure-A 3 Phase 10-60A/20-100A meter: Page 151 of 442 /Sr.No.38, Page 309 of 442/Annexure-B	The Plug-In module shall be field hot swappable/ replaceable.	Kindly note that plug-in communication module shall be replaceable with same make. Kindly we request you to accept the same.	Provisions of Bidding Documents shall prevail. Common Pluggable Module specifications as mentioned in Annexure F shall has to be adhered to in this regard as per the applicability & timeline mentioned in the bidding documents

S.N.	Clause Ref.	<b>Provisions of Bidding Documents</b>	Bidder's Query	Clarification/Reply
3	Section 6: Project Requirements Single Phase 5-30A/10- 60A meter: Page 295 of 442 /Annexure-A	Current Rating: 5-30A 10-60A	Kindly we request to provide the confirmation on meter rating 5-30A OR 10-60A. The same is essential for the BOM. In page number 121 of spec was mentioned 10-60A. kindly confirm.	As per site requirements and same shall be finalized during engineering
4	Section 6: Project Requirements 3 Phase 10-60A/20-100A meter: Page 308 of 442 /Annexure-B	Current Rating: 10-60A/20-100A	Kindly we request to provide the confirmation on meter rating 10-60A OR 20-100A. The same is essential for the BOM. In page number 125 of spec was mentioned rating as 20-100A. kindly confirm.	As per site requirements and same shall be finalized during engineering

S.N.	Clause Ref.	<b>Provisions of Bidding Documents</b>	Bidder's Query	Clarification/Reply
5	Section 6: Project Requirements Single Phase 5-30A/10-60A meter: Page 296 of 442 /Annexure-A 3 Phase 10-60A/20-610A meter: Page 308 of 442 /Annexure-B HT meter: Page 274 of 402 /Annexure-D	In case of Cellular based meter, the meter shall accommodate SIM card/e-SIM of any service provider	Kindly accept physical SIM card of any service provider alternatively	Provisions of Bidding documents shall prevail.
6	Section 6: Project Requirements Page 205 of 442 / Clause 2.3 - HES	The suggested functions of HES (not exhaustive) may be: a) On power up after installation, Smart Meter shall register itself automatically into the HES along with its metering profile. The HES shall store meter profile status by meter type, hardware & software versions, device IDs, logged in / logged out details etc.	We need to manually enter the details of all the Smart Meters into HES. Profile shall be downloaded automatically at the time of schedule. HES shall store meter profile status by meter type, software versions, device IDs. Hardware version, logged in / logged out requirements are not understood, kindly we request to clarify the same.	Provisions of Bidding documents shall prevail.
7	Section 6: Project Requirements Page 205 of 442 / Clause 2.3 - HES	HES shall be developed on open platform based on distributed architecture for scalability without degradation of the performance using additional hardware.	Our HES developed on windows- based platform. Kindly we request you to provide the acceptability of the same.	Provisions of Bidding Document shall prevail. Suitability of HES including Design review shall be done during detailed engineering stage.

S.N.	Clause Ref.	Provisions of Bidding Documents	Bidder's Query	Clarification/Reply
8	Section 6: Project Requirements Page 205 of 442 / Clause 2.3 - HES	The scalability shall ensure the ability to handle applicable workloads including the following:  b) 15 min interval meter reads	This is not practicable to read meter data with a frequency of 15 minutes interval. Please accept meter data reading frequency for every 4 hours alternatively.	Provisions of bidding documents under this clause indicates interval size for Smart Meter data (i.e. for Block Load Profile)
9	Section 6: Project Requirements Page 206 of 442 / Clause 2.3.1 – HES – Configuration	p) Setting threshold limits for monitored parameters	Kindly provide the list of monitored parameters and please note that same parameter can be configured in HES only. However programmable parameters shall be in line with IS 15959 Part 2 or 3 depend on meter category	List of parameters to be decided during Engineering
10	Section 6: Project Requirements Page 252 of 442 / Clause 3.2_HES Integration with Field Devices	HES should conform to IEC 61968- 9 as well as support CIM 2.0 / MultiSpeak v3.0 standards	We will provide HES as per relevant IS 15959 and MIOS standards. Kindly we request you to provide the acceptability of the same.	Provisions of Bidding document shall prevail.
11	Section 6: Project Requirements Page 324 of 442 / Annexure F	Section 6: Project Requirements General Requirements for Common pluggable communication module for Smart Meters	Kindly accept manufacturers design instead of module design mentioned here under, considering the following drawbacks with change in module design.  1. Design evaluation shall be affected.  2. Cost reduction shall be affected.  3. Product reliability shall be affected.  4. Distractive tests compatibility may affect the module.  5. BIS certification for Smart Meter shall be provided for the complete unit including the communication	Provisions of Bidding Documents shall prevail. Common Pluggable Module specifications as mentioned in Annexure F shall has to be adhered to in this regard as per the applicability &timeline mentioned in the bidding documents

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			module. If the communication module is changed then existing BIS shall not be valid. 6. No BIS standard exists for common communication module at present.	
12	Section 6: Project Requirements LTCT meter: Page 314 of 442/ Annexure-C  HT meter: Page 319 of 442 / Annexure-D	In case of cellular based meter, the meter shall accommodate dual SIM card / e-SIM of any service provider. For installation on Feeders, if cellular, the meter shall accommodate dual SIM card / e-SIM of any service provider/multi-network or dual-profile SIM.	Kindly note that recurring cost will be more with two SIM cards. Hence, kindly we request you to accept single SIM card alternatively.	Provisions of bidding document shall prevail.

S.N.	Clause Ref.	Provisions of Bidding Documents	Bidder's Query	Clarification/Reply
13	Section 6: Project Requirements Single Phase 5-30A/10- 60A meter: Tamper Condition Page 305 of 442 3 Phase 10-60A/20-100A meter: Page 312 of 442 /Annexure-B LTCT meter: Page 317 of 442 / Annexure-D	Immunity up to 50 KV with NIC and logging of event >50 KV	Meter will be Immune up to 50KV. Kindly we request to accept the same.	Provided Tamper list is indicative and actual tamper conditions shall be finalized during detailed engineering
14	Section 6: Project Requirements Single Phase 5-30A/10- 60A meter: Tamper Condition Page 305 of 442	Single Wire:- Restore condition:- Voltage > 190 V	Under normal condition will restore the tamper (recovery snaps will be logged only in power on mode).	Provided Tamper list is indicative and actual tamper conditions shall be finalized during detailed engineering
15	Section 6: Project Requirements Single Phase 5-30A/10- 60A meter: Tamper Condition Page 305 of 442 3 Phase 10-60A/20-100A meter: Page 312 of 442 /Annexure-B LTCT meter: Page 318 of 442 / Annexure-D	Microwave:- Any higher frequency magnetic waves, micro waves > 10 Mt	Meter is immune from high frequency electromagnetic HF field and abnormal magnetic field as defined in IS 16444 (Which refers to IS 13779). Microwave field is neither defined in standard nor do any test labs have facility to test it. Kindly delete this requirement.	Provided Tamper list is indicative and actual tamper conditions shall be finalized during detailed engineering

S.N.	Clause Ref.	<b>Provisions of Bidding Documents</b>	Bidder's Query	Clarification/Reply
16	Section 6: Project Requirements LTCT meter: Page 316 of 442 / Annexure-D	Digital Input (DI):- The Smart meter should have the provision of sensing digital inputs via DI (Digital Input) port provided at the terminal block. The smart meter should register the digital input(s) sensed, upon reaching respective threshold (configurable) and the event shall be communicated to HES. The OBIS code required for this shall be provided during detailed engineering.	We are unable to understand of threshold (configurable), need to more clarification. We request you to provide the same	Provided Tamper list is indicative and actual tamper conditions shall be finalized during detailed engineering
17	Section-6, Project Requirements, clause 1.2	AMI Project Area Table 1: Scope for New Smart Meters as per Schedule A of BoQ	Kindly provide the detailed latitude and longitude for the areas where the work execution shall take place.	Refer Clarification-1 Serial Nos. 61 For additional details, if required, Bidders are advised to visit sites (at their own expense), prior to the submission of the proposal, and make surveys and assessments as deemed necessary for proposal submission as per ITB, Section 3-7.11.
18	Section-6, Project Requirements, clause 1.2	AMI Project Area Table 1: Scope for New Smart Meters as per Schedule A of BoQ	Kindly provide the list of the Feeder, DT, Consumer meter details.	To be decided during detailed Engineering.
19	Section-6, Project Requirements, clause 1.4, A (iv)	Additional Service Cable if required shall be provided by AMISP on reimbursement basis	Kindly clarify the reimbursement process for such cables, which will be supplied additionally.	Refer Amendment-2 Serial no. 1
20	Section-6, Project Requirements, clause 1.4, A (v)	CTPT units as required for HTCT Meters of Feeders/DTs shall be in scope of AMISP for which payment to be made separately from AMISP Service Charges.	Kindly provide the details of the quantities along with the CTPT units with their respective ratings. Further, kindly provide the technical specification for the CT PT metering units.	Refer Amendment-2 Serial no. 1

S.N.	Clause Ref.	Provisions of Bidding Documents	Bidder's Query	Clarification/Reply
21	Section-6, Project Requirements, clause 1.4, A (v)	CTPT units as required for HTCT Meters of Feeders/DTs shall be in scope of AMISP for which payment to be made separately from AMISP Service Charges.	Kindly clarify what will be the process for payments to be received against the supply of the CT PT metering units.	Refer Amendment-2 Serial no. 1
22	General	Regarding requirement of the contact person from the Electricity Department of Andaman and Nicobar Islands Administration	Kindly provide the contact details of the responsible person.	Following is the contact details of officers at EDANA:  1. Nodal Officer: Ms. Suman Kishan, Assistant Engineer (works)  Email: <a href="mailto:aeworkselect@rediffmail.com">aeworkselect@rediffmail.com</a> Contact: +91 7063998395  2. Technical Officer: Sh. Badal Dev Roy, Junior Engineer Contact: +91 9531883960
23	Section 2 -Eligibility and Qualification Requirements 1.1 (2)	Sole/ Lead Bidder/ any other Consortium Member must have experience of integration of head-end system with MDM on standard interfaces and data exchange models for at least [20,000] consumers / end points (cumulatively) in an Indian/ Global Utility (power/ water/ natural gas/ telecom) in the last 7 (seven) years which are in operation for at least 1 (one) year as on originally scheduled last date of bid submission as mentioned above	We have successfully integrated 20,000 consumers with the HeadEnd System and MDM. Request to consider our experience till bid submission in this specific integration. We kindly request you to amend this clause to enable our participation.	Provisions of Bidding documents shall prevail
24	Section 2 -Eligibility and Qualification Requirements 1.1 (1)	Sole/ Lead Bidder in the last 7 (seven) Financial Years as on originally scheduled last date of bid submission (soft copy) i.e.	We request to clarify the means of "Eligible Project(s)" so that it is easily submit relevant document against this clause.	Please refer Section 2- Qualification Requirements 1.3 (e) of Bidding documents

S.N.	Clause Ref.	Provisions of Bidding Documents	Bidder's Query	Clarification/Reply
25	Section 6- Project Requirements- Annexures-F "General requirement for common pluggable communication module for Smart Meters"	10.07.2025 must have either: (a) paid for, or received payments for, construction of Eligible Project(s) with aggregate project value# of not less than INR 67.78 Crore; Or (b) paid for development of Eligible project(s) in the infrastructure sector with aggregate project value# of not less than INR 67.78 Crore #value of works/projects exclusive of taxes and duties.  Considering that the new Smart Meters may use different types of communication technologies(RF/PLCC/Cellular/NB-IoT, etc.), thus in order to enable different communication modules to be used in the same meter, it is necessary to use a universal interface and a particular size irrespective of the choice of communication technology that defines the dimensions of the communication slot as well as physical placement and location of connectors. The following example recommendations will go a long way in assuring interoperability whilst still complying with the provisions of IS 16444 and IS 15959 standards	Since every meter manufacturer has its own size of meters and their respective modules therefore size of module may vary according to the different manufacturers. We request you to kindly delete the requirement of NIC module size and kindly confirm the acceptability of the same.	Annexure F is example recommendations of Common Pluggable Module in line with SBD and as per TS same shall be firmed up after one year of BIS certification.

S.N.	Clause Ref.	<b>Provisions of Bidding Documents</b>	Bidder's Query	Clarification/Reply
26	Section 6- Project Requirements, Annexures-O "Specifications of 1-ph and 3-ph Polycarbonate Meter Box and 2:1 & 4:1 Meter Box for 1-ph Consumers	This specification covers the technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at store/site and performance of single phase meter box intended to contain one number single phase whole current energy meter complete with all accessories for trouble free and efficient operation.  AND (Page 167) The bidder shall provide the design specification for the arrangement of 1:1 Meter box for 1-ph Consumers in Polycarbonate meeting the quality requirements as mentioned in the specification for Polycarbonate boxes.	From both clauses, we understand that you need only 1:1 meter box arrangement i.e. one meter box shall contain one meter only and another arrangements of 2:1 and 4:1 are not required. Kindly reconfirm	Generally 1:1 polycarbonate boxes shall be required for Single Phase Smart Meters. However, 2:1 & 4:1 Smart Meter boxes may be required during implementation as per site requirements and same shall be in line with specifications.
27	Section 6- Project Requirements, Annexure- P, Specifications of LTCT Meter Box	Meter boxes shall consist of two separate chambers, one suitable to accommodate LT TVM and other suitable for installation of 4 nos. single core, single ratio, ring type Current Transformers (CTs) of current ratios as per requirement in the RfP.	Please also specify Quantity wise LT CTs Ratios.	To be decided during detailed Engineering as per site conditions
28	Section 6- Project Requirements, Annexure- P, Specifications of LTCT Meter Box	Constructional Features of Meter Box:  • LTCT SMC Box: Meter Box shall be made of minimum 2.5 mm. thick Glass reinforced Polyester sheet moulding compound	As the Meter Box shall have two chambers, upper chamber to house 3 phase meter and lower chamber to house 04 nos. ring type LT CTs. So in that case, as per specification requirement of both chambers	As per TS, LTCT SMC box shall be moulded in a single piece forming the body of the Meter Box and shall have two separate chambers as per provisions of Technical Specifications

S.N.	Clause Ref.	<b>Provisions of Bidding Documents</b>	Bidder's Query	Clarification/Reply
		(SMC) conforming to IS:13410:1992 with latest amendments thereof.  • LT meter box shall contain two separate chambers. The upper chamber shall be suitable to house 3 phase 4 wire energy meter. The lower chamber of the box is intended for housing 04 nos. ring type LT CTs. Both the chambers of box shall be independent from each other.  • The appropriate size of cables from the secondary of distribution transformer shall pass through ring type LT CTs.  • If any portion of box is closed, it shall not be possible to approach it by opening the other portion and vice-versa. It shall be moulded in a single piece forming the body of the Meter Box and CT chamber with SMC lid/shed fitted with the base by two nos. concealed brass hinges	independent from each other is not safe for ingress of protection (IP). We shall provide the Meter Box with upper chamber overlapped on the lower chamber, for ingress protection of dust and water. So we request you to please delete these clauses and kindly confirm	
29	Section 6- Project Requirements, Annexure- P, Specifications of LTCT Meter Box	It shall be moulded in a single piece forming the body of the Meter Box and CT chamber with SMC lid/shed fitted with the base by two nos. concealed brass hinges.	Please also accept Stainless steel / MS with good plating hinges to be fitted with the meter Box body base and the cover. Stainless steel/ MS with good plating hinges also have sufficient strength. So, kindly confirm the acceptance	Provisions of Bidding document shall prevail.

S.N.	Clause Ref.	Provisions of Bidding Documents	Bidder's Query	Clarification/Reply
30	Section 6- Project Requirements, Annexure- P, Specifications of LTCT Meter Box	The box should have a front door opening with a window provided with toughened glass of minimum 4.0 mm. thickness for viewing and taking meter reading.	Please also accept the viewing Window in polycarbonate material having minimum thickness of 2.0mm. Kindly confirm the acceptability of the same	Provisions of Bidding document shall prevail.
31	Section 6- Project Requirements, Annexure- P, Specifications of LTCT Meter Box	The meter box should neither melt nor become soft or distort when tested up to temperatures 2500C.	Its seems typographical error ,we think it should be 250°C instead of 2500C. Please re-confirm your requirement.	Please refer Amendment-1 Serial nos. 4
32	Section 6- Project Requirements, Annexure- P, Specifications of LTCT Meter Box	-	As per Annexure-P, Specification of LTCT Meter Box in "Construction feature of meter box" it is mention that meter box shall be made of SMC material. Whereas in same Annexure-P, on Page no 169, in Material of meter box LTCT Polycarbonate Boxes is also defined.	LTCT Meter box shall be made of Sheet Moulding Compound (SMC) as per Section 6- Project Requirements- Annexure P-Scope. SMC Box specification as stipulated in Technical Specification in this regard shall be applicable.
33	Section 6- Project Requirements, Annexure- P, Specifications of LTCT Meter Box	Material of meter box should not get soften on heating. (Heat distortion temperature should be above 1702 C.)	Its seems typographical error ,we think it should be 170°C instead of 1702C. Please reconfirm your requirement.	Please refer Amendment-2 Serial nos. 2
34	Section 6- Project Requirements, Annexure- P, Specifications of LTCT Meter Box	Manufacturers should Screen Print the following information on each meter box.  • Name of Manufacturer  • Year of manufacturing  • Type of Meter  • PO NO with Date	Following details shall be provided as printed on metallic name plate duly riveted on meter box cover.  • Name of Manufacturer  • Year of manufacturing	Provision of bidding document shall prevail.

S.N.	Clause Ref.	Provisions of Bidding Documents	Bidder's Query	Clarification/Reply
		Meter Box Number     Property of "Utility"	• Type of Meter • PO NO with Date • Property of "Utility" Also, please delete the requirement of the printing of "Meter Box Serial number" on the meter box cover. And, we cannot understand the requirement of the detail of 'Type of Meter' on the SMC box. Please clarify. OR 'Type of Meter' should be replaced by 'Rating of CTs'. Kindly confirm the acceptance.	
35	Section 5: Annexure: Quoted prices for the Financial Bid. S.no:- 5 & 6	Three phase HTCT operated Smart Meter (0.2s, -/1A) or (0.2s, -/5A) or (0.5s, -/5A) – DT Meter control cables, with DI provisions and Backend IT Infra with associated works and requisite no. of polycarbonate seal and Meter box as per Specifications	Please clarify that for HT-CT Meters whether Meter boxes are required or not . Since, meter box technical specification is not received with Tender.If meter box is required kindly provide technical specification for same.	Three Phase HTCT Smart Meters are to be provided with Polycarbonate meter boxes as per Technical Specifications of Meter Boxes (Section 6- Project Requirements) Annexure O